KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Scott W. Rungren

- **26.** Reference the testimony and schedules of Mr. Scott W. Rungren to answer the following questions:
 - a. Provide a copy of Mr. Rungren's testimony in Microsoft Word.
 - b. Provide copies of all source documents, articles, cited documents listed in footnotes, regulatory decisions, work papers, and other sources used in the development and preparation of the testimony of Mr. Rungren.
 - c. With respect to Exhibit SWR-1 and Exhibit 37, Schedules J-1 thru J-5, provide (1) all data, work papers, and copies of source documents used in the development of the capitalization amounts (13 Month Average Amounts, and Add adjustments and Adjusted Capital), (2) all data, work papers, assumptions, and calculations used to determine the costs and interest rates for pro forma financings, and other data used to determine the cost rates for short-term debt, long-term debt, and preferred stock; and (3) an electronic version (Microsoft Excel) of Exhibit 37, and Schedules J-1 J-5 and work papers used to determine the 13-month capitalization amounts and capital costs, with all data and equations left intact.
 - d. With respect to Exhibits SWR-2, provide (1) all data, work papers, assumptions, and calculations associated with the short-term interest rates projections; and (2) an electronic version (Microsoft Excel) of Exhibits SWR and work papers used to determine the short-term interest rate projections, with all data and equations left intact.

Response:

- a. The Word file will be provided by e-mail from KAW counsel as the Commission's uploading process does not accept Word documents.
- b. Please see the attachments.
- c. Please see KAW_R_AGDR1_NUM026_032416_Attachment 1.
- d. Please see KAW_R_AGDR1_NUM026_032416_Attachment 2. Bloomberg screen shots showing nine of the monthly interest rate projections are included in the Excel file.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE JOINT PETITION OF KENTUCKY-AMERICAN)	
WATER COMPANY, THAMES WATER AQUA	
HOLDINGS GMBH, RWE AKTIENGESELLSCHAFT,)	
THAMES WATER AQUA US HOLDINGS, INC.,) (CASE NO. 2006-00197
AND AMERICAN WATER WORKS COMPANY, INC.)	
FOR APPROVAL OF A CHANGE IN CONTROL OF)	
KENTUCKY-AMERICAN WATER COMPANY)	

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KENTUCKY-AMERICAN WATER COMPANY)

ORDER

Joint Petitioners¹ have applied to the Commission for approval of Thames Water Aqua Holdings GmbH's ("Thames GmbH") sale of the common stock of American Water Works Company ("AWWC") to the public. The proposed transaction will effectively transfer indirect control of Kentucky-American Water Company ("Kentucky-American") from its current owner to unknown persons. At issue is whether the proposed transaction meets the requirements of KRS 278.020(5). Finding that, with the imposition of conditions to protect the public interest, the proposed transaction meets these requirements, the Commission approves the proposed transfer subject to certain conditions.

PROCEDURE

On May 10, 2006, Joint Petitioners advised the Commission of their intent to apply for Commission approval of Thames GmbH's sale of its common stock of AWWC

¹ The "Joint Petitioners" are: Kentucky-American Water Company; American Water Works Company; Thames Water Aqua US Holdings, Inc.; Thames Water Aqua Holdings GmbH; and RWE Aktiengesellschaft.

and the merger of Thames Water Aqua US Holdings, Inc. ("TWAUSHI") with AWWC. On May 11, 2006, the Commission established a docket to review the proposed transaction and further established procedures for the electronic filing of documents and pleadings in this docket. On June 5, 2006, Joint Petitioners filed their application.

On June 19, 2006, the Commission established a procedural schedule for this docket and directed the submission of memoranda upon the applicability of KRS 278.020(5) and (6) to the proposed transaction. On August 14, 2006, after all parties had submitted written memoranda, the Commission held that only KRS 278.020(5) was applicable to the proposed transaction.

The following parties have been granted leave to intervene in this proceeding: Attorney General's Office of Rate Intervention ("AG") and Lexington-Fayette Urban County Government ("LFUCG").

Following extensive discovery by the parties in this matter, the Commission held a public hearing on August 16, 2006, at its offices in Frankfort, Kentucky. Testifying at this hearing were: Nick O. Rowe, president of Kentucky-American; Jens Gemmecke, Senior Project Manager in the RWE Mergers and Acquisitions Department; John S. Young, Jr., Chief Operations Officer, AWWC; Ellen C. Wolf, AWWC Senior Vice President and Chief Financial Officer; Michael A. Miller, Kentucky-American Treasurer/Comptroller; J. Randall Woolridge, consultant; and Scott J. Rubin, attorney and consultant.² Following the hearing, all parties submitted written briefs.

² Although the Commission provided an opportunity for public comment at this hearing, no members of the public appeared and presented comments.

THE PROPOSED TRANSACTION: AN OVERVIEW

Kentucky-American, a Kentucky corporation, owns and operates facilities that are used in the distribution of water to the public in Bourbon, Clark, Fayette, Gallatin, Grant, Harrison, Jessamine, Owen, Scott and Woodford counties. It also owns and operates facilities for the collection and treatment of sewage for the public in Clark and Owen counties. It is a utility subject to Commission jurisdiction and regulation.³

AWWC, a Delaware corporation, and its operating subsidiaries employ approximately 6,000 persons and provide water, wastewater and other water resource management services to approximately 18 million persons in 29 states and Canada. From 1947 until 2003, it was one of the largest publicly-traded water companies in the United States and was listed on the New York Stock Exchange. It currently owns all outstanding shares of Kentucky-American stock. It neither conducts nor is authorized to conduct business within the Commonwealth.

TWAUSHI, a Delaware corporation, is AWWC's direct parent company. It neither conducts nor is authorized to conduct business within the Commonwealth. It owns subsidiaries that provide water, wastewater services and other water resource management services to approximately 18 million customers in 29 states and Canada.

Thames GmbH is a foreign corporation that is organized and exists under the laws of the Federal Republic of Germany. It is a wholly-owned subsidiary of RWE Aktiengesellschaft ("RWE") and is the holding company for most of RWE's water operations throughout the world. Thames GmbH owns all of the outstanding stock of

³ KRS 278.010(3)(d) and (3)(e); KRS 278.040(1).

TWAUSHI. It neither conducts nor is authorized to conduct business within the Commonwealth.

In February 2003, after obtaining Commission approval, RWE and Thames GmbH acquired AWWC's outstanding stock and effectively obtained control of Kentucky-American and all of AWWC's other operating companies. Two years after acquiring AWWC and its operating subsidiaries, however, RWE chose to focus upon its electric and natural gas operations and to divest itself of its water operations. One of AWWC's witnesses testified as to RWE's reasoning:

RWE has revised its core business focus to be on the European power and energy markets, where historically its roots lie. In the last two years, in order to become a more market-oriented and focused company, RWE had already divested non-core activities such as its environmental business. In order to maintain its position among Europe's leading integrated electricity and gas companies, in response to fierce competition, growing customer needs, and rising costs both for energy production facilities and many other energy production inputs, RWE is forced to concentrate on its power and energy markets. As a result of these developments, RWE's ability to maintain competitiveness in its core European businesses is proving far more capital intensive than RWE could have predicted when it acquired American Water. Consequently, RWE decided that it intends to sell the water operations of Thames Water in the U.K. and to return American Water to its status as a U.S. publicly-traded company. The Proposed Transaction will allow RWE to focus on its core businesses in its home region 4

RWE's planned divesture of its North American water operations involves two steps. First, TWAUSHI will merge with and into AWWC. AWWC will be the surviving corporation. This merger will consolidate all of RWE's water-related assets in the

⁴ Direct Testimony of Ellen C. Wolf at 10.

United States into one entity.⁵ Thereafter, Thames GmbH will sell up to 100 percent of the common stock of AWWC. These shares will be sold through one or more public offerings to a broad group of investors, including institutional and retail investors. If less than 100 percent of the AWWC stock is sold in the initial offering, then subsequent public offerings of AWWC stock will be conducted. The identities of the stock purchasers will not be known until the public offerings are complete.

An initial step in the proposed transaction is the preparation and filing of a registration statement with the U.S. Securities and Exchange Commission ("SEC"). This statement will contain AWWC's "audited financial statements, descriptions of its business, financial performance, management and risk factors that investors may consider in deciding to buy the shares." This statement will also set forth the principal risks in investing in AWWC. The SEC will review and comment upon this statement. AWWC must address these comments with amendments to the initial registration statement.

Upon submission of a registration statement that is acceptable to the SEC, AWWC, Thames GmbH, and the underwriters will market the stock issuance. Once this marketing process is completed, AWWC will request the SEC to declare the registration statement effective. The underwriters and Thames GmbH will then agree upon a price per share at which the shares will be sold to the public.

When the public sale occurs, Thames will sell its shares of AWWC stock to the underwriters who will then resell these shares to the subscribed purchasers. Both sales

⁵ Joint Petition at ¶ 16.

⁶ Direct Testimony of Ellen C. Wolf at 7.

should occur within the same day. The closing of the stock offering will occur at the settlement of purchases, which is expected to occur within 3 or 4 days of the pricing. At settlement, shares are transferred directly to the investors. On the date of closing, AWWC's stock will begin regular trading on the New York Stock Exchange.

The proposed transaction will have no immediate or direct effect upon Kentucky-American. None of its stock or debt is involved. No change in Kentucky-American's financial or management structure will occur. As AWWC owns all of Kentucky-American's outstanding common stock, however, the initial public offering ("IPO") of AWWC stock will effectively transfer control of Kentucky-American when the IPO is completed.

STANDARD OF REVIEW

KRS 278.020 requires Commission review and approval of any change in or transfer of control of a utility. KRS 278.020(5) provides:

No person shall acquire or transfer ownership of, or control, or the right to control, any utility under the jurisdiction of the commission by sale of assets, transfer of stock, or otherwise, or abandon the same, without prior approval by the commission. The commission shall grant its approval if the person acquiring the utility has the financial, technical, and managerial abilities to provide reasonable service.

KRS 278.020(6) provides in part:

No individual, group, syndicate, general or limited partnership, association, corporation, joint stock company, trust, or other entity ("an acquirer"), whether or not organized under the laws of this state, shall acquire control, either directly or indirectly, of any utility furnishing utility service in this state, without having first obtained the approval of the commission. Any acquisition of control without prior

⁷ Joint Petitioners' Post-Hearing Brief at 13; Direct Testimony of Nick O. Rowe at 4-5.

authorization shall be void and of no effect....The commission shall approve any proposed acquisition when it finds that the same is to be made in accordance with law, for a proper purpose and is consistent with the public interest.

Subsections 5 and 6 are not dependent. Subsection 5 represents the codification of the holding of <u>Public Service Commission v. Cities of Southgate</u>, <u>Highland Heights</u>, 268 S.W.2d 19, 21 (Ky. 1954),⁸ and addresses the transfer of ownership or control of a utility. Subsection 6 focuses more narrowly on the "acquisition of control" of a utility. While a transaction that results in a transfer of control may trigger both subsections, it does not necessarily do so.

The proposed transaction will result in a transfer of control, but as presently described will not result in an "acquisition of control" for purposes of KRS 278.020(6). Upon its completion, RWE, the entity that currently controls AWWC and Kentucky-American, will no longer control either entity. As the proposed transaction results in the transfer of RWE's ability to control AWWC and Kentucky-American, Subsection 5 is applicable. As there is no evidence that at the proposed transaction's completion any entity will possess a sufficient quantity of AWWC stock to control AWWC, and thereby Kentucky-American, Subsection 6 is not applicable at this time.

KRS 278.020(6).

⁸ <u>See also Public Service Commission v. City of Paris</u>, 299 S.W.2d 811 (Ky. 1957); <u>South Central Rural Tel. Co-op. Corp. v. Public Service Commission of Ky.</u>, 453 S.W.2d 257 (Ky. 1970).

Control shall be presumed to exist if any individual or entity, directly or indirectly, owns ten percent (10%) or more of the voting securities of the utility. This presumption may be rebutted by a showing that ownership does not in fact confer control. . . .

While Subsection 6 is not applicable, the Commission's review in this case is not limited merely to the examination of the acquirer's financial, technical, and managerial abilities to provide utility service. As Kentucky's highest court noted in <u>Southgate</u>, the Commission has always possessed the implied power to review and hear evidence on utility transfers, including the authority to examine the effects of the proposed transfer on the adequacy of utility service, to determine if the proposed transfer is in the public interest, and to impose conditions upon the proposed transfer to ensure that it will not adversely affect utility service. ¹⁰ KRS 278.020(5) codified this implied power. ¹¹

In reviewing Joint Petitioners' application, the Commission must first determine if the persons who are acquiring control of Kentucky-American have the requisite abilities to provide reasonable utility service. Next, we must determine whether the proposed transfer is consistent with the "public interest."

The Commission has previously held that a proposed transfer is in the public interest if it will not adversely affect the existing level of utility service or rates <u>or</u> that any potentially adverse effects can be avoided through the Commission's imposition of

Southgate at 21 ("[W]here an existing utility proposes to sell its system, the [C]ommission, in order to carry out its responsibility, must have the opportunity to determine whether the purchaser is ready, willing and able to continue providing adequate service."). See, e.g., Blue Grass State Tel. Co. v. Public Service Commission, 382 S.W.2d. 81, 82 (Ky. 1964) ("The sole issue for [the Commission] to decide was whether the operation of this system by Blue Grass was in the public interest.")

¹¹ <u>See also</u> KRS 278.280 (permitting the Commission to determine and fix the just, proper, adequate, reasonable or sufficient practices, services and methods to ensure the proper delivery of utility service).

reasonable conditions on the acquiring party.¹² The Commission has further required a showing that the proposed transfer is likely to benefit the public through improved service quality, enhanced service reliability, the availability of additional services, lower rates, or a reduction in utility expenses to provide present services.¹³ Such benefits, however, need not be immediate or readily quantifiable.¹⁴

ACQUIRING PARTIES' ABILITY TO PROVIDE REASONABLE UTILITY SERVICE

Joint Petitioners argue that, upon completion of the proposed transaction, no material changes will occur in Kentucky-American's operation and that the provision of service will be unaffected. They note that after the IPO, Kentucky-American will continue to operate with its current employees and will continue to contract with American Water Works Service Company ("AWWSC") for additional services. Kentucky-American currently employs directly or through AWWSC an experienced engineering staff that has been nationally recognized.¹⁵

They further note that AWWC will remain a source of equity capital for Kentucky-American and that Kentucky-American will continue to be able to access the debt

¹² Case No. 2002-00018, Application for Approval of the Transfer of Control of Kentucky-American Water Company to RWE Aktiengesellschaft and Thames Water Aqua Holdings GmbH (Ky. PSC May 30, 2002) at 7.

¹³ Case No. 2002-00317, The Joint Petition of Kentucky-American Water Company, Thames Water Aqua Holdings GmbH, RWE Aktiengesellschaft, Thames Water Aqua US Holdings, Inc., Apollo Acquisition Company and American Water Works Company, Inc. for Approval of a Change of Control of Kentucky-American Water Company (Ky. PSC Dec. 20, 2002) at 10.

¹⁴ <u>See, e.g.</u>, Case No. 2000-00129, Joint Application of NiSource, Inc., New NiSource, Inc., Columbia Energy Group, and Columbia Gas of Kentucky for Approval of a Merger (Ky. PSC June 30, 2000).

¹⁵ Direct Testimony of Nick O. Rowe at 4-6.

market through American Water Capital Company ("AWCC"). Acting as the financing arm of AWWC since 2000,¹⁶ AWCC borrows money for AWWC and its operating subsidiaries and then loans those monies to the operating subsidiaries at cost. This arrangement enables each operating subsidiary to share any benefits from a greater economy of scale.

Finally, Joint Petitioners assert that the management that is currently operating Kentucky-American will continue to remain in place after the IPO of AWWC stock. They further note that upon completion of the IPO, a majority of AWWC's directors, and all members of the audit, compensation and nominating committees of AWWC's board of directors will be independent directors.¹⁷ "The seasoned management team at American Water will continue to have the background necessary to run a large, publicly traded water company."¹⁸

LFUCG argues that, as the identity of those persons acquiring AWWC stock through the IPO is currently unknown, the record is devoid of any evidence of their ability to provide reasonable utility service. Given that the Commission lacks any ability to assess and determine an unknown entity's ability to provide reasonable utility service, LFUCG argues, the General Assembly through its enactment of KRS

¹⁶ <u>See</u> Case No. 2000-00189, The Application of Kentucky-American Water Company for Approval for Participation in Borrowing Program (Ky. PSC July 21, 2000).

¹⁷ Direct Testimony of Ellen C. Wolf at 18.

¹⁸ Joint Petitioners' Post-Hearing Brief at 13.

¹⁹ Although he devotes little attention to it, the AG also makes this argument. <u>See</u> Office of Attorney General Post-Hearing Brief at 4 ("Given the identification of any actual owner that will succeed RWE, there is no basis in the record for the premise that the new owners will supply any financial, technical, or managerial expertise.")

278.020(5) clearly intended to prohibit the use of IPOs of stock to transfer ownership or control of a utility.²⁰ Accordingly, it argues, Joint Petitioners' application should be denied or, in the alternative, be held in abeyance until such time as AWWC files its registration statement with the SEC.

The plain language of KRS 278.020(5) does not support LFUCG's position. The statute addresses transfers of control or ownership "by sale of assets, transfer of stock, or otherwise, [emphasis added] " The use of the phrase "or otherwise" suggests an intent on the General Assembly's part to include all means of transfer of ownership or control. The statute does not exclude IPOs.²¹

The Commission acknowledges that lack of the acquiring party's identity renders any determination of that party's abilities more difficult and less reliable. The proposed transaction, however, assumes the issuance of stock to a broad range of the public and does not envision any of the purchasing parties acquiring sufficient stock to direct the utility's management and activities. As a practical matter, these purchasers are acquiring the stock as a passive investment and will rely upon the management already

²⁰ LFUCG's Brief at 8-9. <u>See also</u> LFUCG's Memorandum in Response to the Commission's June 19, 2006 Order at 3.

²¹ We find no support for LFUCG's assertion that the acquiring party must personally demonstrate its ability to provide reasonable service. LFUCG's Brief at 9 ("The express language of this statute is that the **acquirer** (and not AWW, for instance) **must demonstrate the abilities** that the Kentucky legislature has determined are required for such a transfer of ownership [emphasis added].") KRS 278.020(5) merely requires the Commission to determine if the acquirer has such abilities and, if it does, to approve the transfer. See also Case No. 2002-00018, Order of May 30, 2002 at 11 (holding that KRS 278.020 "does not expressly require that a transferor or acquirer apply for Commission approval nor does it prohibit a corporate subsidiary from doing so on behalf of a corporate parent").

in place to operate the utility. Should this change and one or more investors seek to acquire "control" of AWWC, the requirements of KRS 278.020(6) would be triggered.

The Commission finds that an accurate assessment of the acquiring parties' ability to provide utility service can be made through an examination of the abilities of the management that is currently in place and will remain in place after the transaction is completed.²² Based upon this examination, the Commission finds that, the acquiring parties using the current management of AWWC and Kentucky-American, will have the requisite abilities to provide reasonable utility service.

PUBLIC INTEREST ANALYSIS

Joint Petitioners argue that the proposed transaction will result in several benefits for Kentucky-American's ratepayers and the public at large. First, they point to AWWC's enhanced access to public debt and equity capital markets in the United States. They note that RWE currently does not have access to such markets. This access, they further note, "is a significant benefit when compared to what . . . [AWWC] could face if it were forced to remain a fourth tier subsidiary of a foreign corporation which has refocused its core business on the European energy market" and subject to "increased competition for scarce capital funds which would increase constraints on the availability of capital for discretionary purposes."²³

²² An acquirer's reliance upon existing management is not unusual and has previously served as the basis for a determination of the acquiring party's ability to provide utility service. See, e.g., Case No. 2005-00433, The Joint Application of Nuon Global Solutions USA, BV, Nuon Global Solutions USA, Inc., AIG Highstar Capital II, LP, Hydro Star, LLC, Utilities, Inc. and Water Service Corporation of Kentucky for Approval of an Indirect Change in Control of a Certain Kentucky Utility Pursuant to the Provisions of KRS 278.020(5) and (6) and 807 KAR 5:001, Section 8 (Ky. PSC Mar. 8, 2006).

²³ Joint Petitioners' Post-Hearing Brief at 16.

Second, Joint Petitioners note that, upon completion of the transaction, AWWC will be "subject to the SEC laws and regulations, including the Sarbanes-Oxley legislation, and the rules of the stock exchange on which it is traded." They further note that RWE is not currently subject to these laws. Joint Petitioners suggest that the application of these laws will create investor confidence in AWWC and will better enable it to attract capital at reasonable rates.

Third, Joint Petitioners assert that the proposed transaction will enable Kentucky-American customers and Kentucky-American employees to invest in AWWC and thus have an ownership interest in their water supplier or employer. Kentucky-American officials testified that employee ownership of AWWC stock would strengthen employee-employer relations and potentially improve employee productivity.²⁵

Joint Petitioners assert that there are no known potential adverse effects on Kentucky-American from the proposed transaction.²⁶ They note that none of the proposed transaction costs will be recovered from Kentucky-American ratepayers;²⁷ that Kentucky-American will continue to honor its collective bargaining agreements;²⁸ that Kentucky-American's rates, operating policies, and current investment and capital programs will not change;²⁹ and that Kentucky-American will continue its contributions

²⁴ <u>ld.</u>

²⁵ Joint Petition at ¶ 23.

²⁶ Direct Testimony of Nick O. Rowe at 8.

²⁷ Joint Petition at ¶ 46.

²⁸ Direct Testimony of Nick O. Rowe at 8.

²⁹ <u>ld.</u>

and commitment to local communities.³⁰ They expect no adverse change in either AWWC or Kentucky-American's cost of capital.³¹

The AG and LFUCG do not share this view. They find no significant benefits resulting from the proposed transaction. LFUCG argues that the proposed transaction will eliminate all purported benefits from RWE's acquisition of AWWC, which included access to Thames GmbH resources and expertise, a sharing of Thames GmbH's best operating practices, and greater availability to technical resources, capital markets, and Thames GmbH's research and development programs.³²

The AG argues that the proposed transaction will increase AWWC's capital costs. He notes 3 factors in support of his position: (1) Standard and Poor's downgrading its rating of AWWC's debt to A- after the announcement of the proposed transaction; (2) AWWC's need to refinance \$2.65 billion of existing debt that RWE currently holds; and (3) the effective conversion of \$1.75 billion of AWWC preferred stock, which RWE holds, to common equity.³³

The AG further argues that the proposed transaction will expose AWWC to significant auditing and reporting costs associated with the Sarbanes-Oxley Act of 2002.³⁴ Upon completion of the proposed transaction, AWWC will be a publicly traded corporation and will be subject to the requirements of the Sarbanes-Oxley Act.

³⁰ <u>Id.</u>

³¹ Direct Testimony of Ellen C. Wolf at 17.

³² LFUCG's Brief at 12-13.

³³ Direct Testimony of J. Randall Woolridge at 12.

³⁴ Pub.L. No. 107-204, 116 Stat. 745.

Although AWWC estimates these costs at one million dollars annually after the first year following the proposed transaction, the AG asserts that the financial cost of compliance will be much greater. These costs, the AG suggests, will be pushed down to Kentucky-American and its ratepayers.

The AG expresses great concern that the AWWC which RWE and Thames GmbH leave behind will be a significantly weakened entity that faces major financial challenges. He notes that AWWC's pension fund and other post-employment benefit plans are currently underfunded by \$277 million and \$177 million respectively. As compared to an industry average of 90 percent, AWWC's funding ratio was only 60 percent. Under a recently enacted federal law, this funding shortfall must be corrected by 2015. The AG asserts that such a shortfall can only be corrected through higher rates or delay of needed capital and maintenance expenditures.

In addition to addressing its pension fund shortages, AWWC will need to maintain a high level of capital expenditure spending to upgrade and maintain its existing utility plant to meet present and expected regulatory standards. The AG notes that AWWC expects capital expenditures for maintenance to increase at a rate of 15 percent annually from 2011 through 2020. He further notes that AWWC's capital expenditure averaged close to \$500 million over the past 3 years and its capital spending is expected to markedly increase in the next 5 years.³⁷

³⁵ Direct Testimony of Scott J. Rubin at 12.

³⁶ Pension Protection Act of 2006, Pub. L. No. 109-280, 120 Stat. 780.

³⁷ Direct Testimony of Scott J. Rubin at 10-12.

Based upon our review of the record, we find few benefits from the proposed transaction that will accrue to Kentucky-American ratepayers. We agree with the AG and LFUCG that the proposed transaction will eliminate virtually all benefits that were to have resulted from RWE's acquisition of AWWC. It will eliminate Kentucky-American's access to world capital markets through Thames GmbH and RWE.³⁸ It will end Kentucky-American's ability to draw upon Thames GmbH's research and development programs and its resources and expertise, including those in the critical area of infrastructure security.³⁹

While the proposed transaction provides some benefits, these are of limited value. Any benefit resulting from AWWC's access to public debt and equity capital markets in the United States occurs at the expense of AWWC's access to foreign debt and equity capital markets. Joint Petitioners, moreover, have failed to provide

³⁸ The result is likely to be higher capital costs. <u>See</u> Case No. 2002-00018, Petitioners' Post-Hearing Brief at 19-20 (citations omitted) ("[S]ince RWE's bond ratings are higher than American's, capital will be available at a cost lower than American's cost. No longer confined to domestic markets, Kentucky-American will have access to capital markets from around the world. This expansion of financial sources should bring down Kentucky-American's cost of capital and position the Company to both grow and enhance services.").

In his direct testimony, Mr. Rowe insists that Kentucky-American has benefited greatly from its current relationship with Thames GmbH and that these benefits will remain with the utility. Direct Testimony of Nick O. Rowe at 8-9. While nothing in the record indicates that these benefits will disappear, the transfer of ideas, practices, and experiences between AWWC and Thames GmbH will cease. In Case No. 2002-00018, Kentucky-American asserted that this constant sharing of ideas would provide future benefits long after the transaction had been consummated. See Case No. 2002-00018, Joint Applicants' Response to Attorney General's Initial Requests for Information, Item 118 ("Through the potential exchange of personnel and information that will result from the merger, the management of KAWC will have access to this increased breadth of experience. Over time, this exchange of information will result in more rapid application of new methods and technologies to KAWC than KAWC would be able to effect without the transaction.")

convincing evidence that access to domestic public debt and equity capital markets will result in lower capital costs.

We find very limited value in the ability of Kentucky-American customers and employees to invest in AWWC. While such ability may have a positive effect on the utility's relations with labor and the public, the record is devoid of any specific evidence that it will produce greater employee productivity, reduce management-labor disputes, or otherwise benefit the public or Kentucky-American's ratepayers who do not choose to invest in AWWC.

The Commission recognizes that enhanced regulatory review and scrutiny of AWWC results from the proposed transaction. The SEC will again exercise regulatory oversight of certain aspects of AWWC's operations. Moreover, the reporting requirements of federal securities laws and SEC regulations provide greater and timelier access to information about AWWC's operations to this Commission and the general public. For Kentucky-American ratepayers, the benefit of such requirements is much less significant. As this Commission and other state utility regulatory commissions have imposed significant reporting requirements as a condition to RWE's acquisition of AWWC, most of the relevant information necessary for review and supervision of AWWC's regulated subsidiaries and AWWC's interactions with those subsidiaries is already available. ⁴⁰

⁴⁰ Joint Petitioners contend that the applicability of the Sarbanes-Oxley Act and the regulations of the New York Stock Exchange will enable AWWC to attract capital at reasonable rates. While the Commission does not dispute this assertion, we find no compelling evidence on this point. Moreover, while the overall effect of the Sarbanes-Oxley Act on domestic public debt and equity capital markets may be a reduction in the cost of capital, it is unclear whether this reduction would produce a lower cost of capital for AWWC than remaining as a subsidiary of RWE.

The most compelling benefit from the proposed transaction is AWWC's removal from a large, multi-national entity that has operations in several different business sectors and is no longer interested in the water industry. RWE has clearly chosen to focus its resources and attention upon the European energy market. If Kentucky-American and AWWC were to remain in such an organization, their capital and resource requirements would likely be given lower priority than those sectors upon which RWE has chosen to focus. At a minimum, Kentucky-American would be less likely to improve the quality of its service and meet the growing demand for water. At worst, it might experience deterioration in the quality of its service and lack the resources to make important infrastructure replacements. With AWWC as an independent entity, Kentucky-American would be much better positioned to address its capital requirements and to take the necessary actions to maintain and improve the quality of its service.

The record indicates that, upon completion of the proposed transaction, AWWC will face significant capital expenditures to replace and improve the infrastructure of its regulated subsidiaries. It also apparently faces a significant shortfall in its pension funding. Concurrent with the proposed transaction, it must refinance its existing debt as RWE and Thames GmbH divest themselves of any interest in AWWC. Prior to completion of the proposed transaction, AWWC will undergo significant management changes as the composition of its Board of Directors changes with the addition of several independent members.⁴² Accordingly, we find that, in light of the lack of any significant benefit that the proposed transaction will bring to Kentucky-American

⁴¹ The AG and LFUCG share this view. <u>See, e.g.</u>, Direct Testimony of Scott J. Rubin at 21; LFUCG Brief at 19.

⁴² Joint Petitioners' Post-Hearing Brief at 4.

ratepayers and the significant risk and uncertainty that it will create, the proposed transaction is in the public interest only under the conditions described below and more fully set forth in Appendix A to this Order.

CONDITIONS TO APPROVAL OF PROPOSED TRANSACTION

Based upon our review of the proposed transaction, we find that our approval must be conditioned upon the inclusion of certain protections for Kentucky-American ratepayers. Many of these conditions are similar to those placed upon our approval of RWE's acquisition of AWWC and merely restate AWWC and Kentucky-American's existing obligations.

Service Quality

Our principal concern is the possible degradation of service quality after the public offering. To ensure that the proposed transaction will not unduly disrupt Kentucky-American's operations or adversely affect the quality of its service, we have expressly conditioned our approval upon Kentucky-American customers experiencing no material adverse change in utility service as a result of the proposed transaction.⁴³

To guard against immediate and drastic changes in Kentucky-American's management after the public offering of AWWC common stock, we have further conditioned our approval upon retention of the current Kentucky-American management for one year following completion of the IPO and required AWWC and Kentucky-American to provide us with written notification of any changes in management

⁴³ Appendix A, Condition No. 22.

personnel.⁴⁴ Similar conditions have been placed on reductions of non-management employee positions.⁴⁵

The Commission has further imposed several conditions that restate and emphasize Kentucky-American's primary duty to provide reasonable utility service. The provision of utility service must be Kentucky-American's highest priority. Kentucky-American will not be used as an employer or purchaser of last resort for employees, assets, and products associated with any failed or troubled AWWC affiliated venture. Kentucky-American and AWWC must adequately fund and maintain Kentucky-American's facilities to ensure their compliance with all state and federal requirements and their ability to meet the current and future demands of Kentucky-American customers.

We have also extended the requirement that we imposed in Cases No. 2002-00018 and No. 2002-00317 for an annual report on Kentucky-American's water quality standards, number of water service interruptions, average employee response time to water service interruptions, number of customer complaints, and customer inquiry time.⁴⁹ We will continue to use these reports as a tool to monitor the quality of Kentucky-American's service and detect any decline in that quality.

⁴⁴ Appendix A, Conditions No. 12 and No. 13.

⁴⁵ Appendix A, Condition No. 41.

⁴⁶ Appendix A, Condition No. 18.

⁴⁷ Appendix A, Condition No. 17.

⁴⁸ Appendix A, Condition No. 24.

⁴⁹ Appendix A, Condition No. 23.

Transaction Costs

Thames GmbH and AWWC expect to incur costs related to the proposed transaction of \$12 million and \$11 million, respectively.⁵⁰ The Commission finds that Kentucky-American should not bear any of these costs. Joint Petitioners have represented that none of the costs of the proposed transaction will be recovered from Kentucky-American.⁵¹ We have incorporated their representations into our conditions for approving the proposed transaction⁵² and have further required that no costs related to early termination costs, retention bonuses or change in control payments resulting from the proposed transaction will be allocated to Kentucky-American.⁵³ We have further prohibited the payment for the redemption of AWWC's preferred stock to be recorded on Kentucky-American's books.⁵⁴

Local Control/Local Concerns

While the Commission recognizes that the proposed transaction is likely to reduce the distance between Kentucky-American's operations and its ultimate owners, we are of the opinion that the public interest requires that Kentucky-American's local management have the necessary authority and autonomy to make decisions on a local level. To ensure that Kentucky-American remains responsive and retains some measure of local autonomy, we have required Kentucky-American to:

⁵⁰ Joint Petitioners' Response to Commission Staff's First Information Request, Item 10(c) and (d).

⁵¹ Joint Petition at ¶ 46.

⁵² Appendix A, Condition No. 3.

⁵³ Appendix A, Condition No. 7.

⁵⁴ Appendix A, Condition No. 5.

- Actively support economic development and social and charitable activities throughout the areas in which it serves.
- Maintain a substantial level of involvement in community activities, through annual charitable and other contributions, on a level comparable to or greater than the participation levels experienced prior to the proposed transaction.
- Ensure that at least 40 percent of the members of its board of directors are persons who reside within the area that Kentucky-American serves and are not employees or officers of AWWC or any AWWC affiliated entity.

We have further conditioned our approval upon Kentucky-American's headquarters remaining in Lexington and the utility's books and records remaining within the state.⁵⁵ We have also conditioned our approval upon Kentucky-American honoring all existing contracts and agreements with local governments and negotiating renewal of those agreements in good faith.⁵⁶

Sarbanes-Oxley Act of 2002 Compliance Costs

AWWC estimates that it will incur approximately \$2 million to comply with the Sarbanes-Oxley Act in the year following the proposed transaction and \$1 million annually thereafter.⁵⁷ A portion of these costs will be apportioned to Kentucky-American in accordance with its agreement with AWWSC. The AG proposes that Kentucky-

⁵⁵ Appendix A, Condition No. 1.

⁵⁶ Appendix A, Condition No. 36.

 $^{^{\}rm 57}$ Joint Petitioners' Response to Commission Staff's First Information Request, Item 3.

American's recovery of these costs through general rates be limited to an amount no greater than Kentucky-American's pro rata share of \$1.0 million of such costs.⁵⁸

While we find few benefits accruing to Kentucky-American's ratepayers as a result of AWWC being subject to the requirements of the Sarbanes-Oxley Act, we will not place any specific restriction on Kentucky-American's recovery of those costs through the rate-making process. Such compliance costs may be a reasonable and a necessary cost of providing utility service. We place Kentucky-American on notice, however, that in any general rate proceeding in which it seeks recovery of any Sarbanes-Oxley Act compliance costs, it must clearly demonstrate not only that these costs were reasonably incurred but that Kentucky-American ratepayers receive a specific and definite benefit from these costs. Generalities without specific empirical support will not suffice.

Increased Capital Costs

Asserting that the proposed transaction will increase Kentucky-American's capital costs, the AG urges the Commission to condition our approval of the proposed transaction on Joint Petitioners' agreement that AWWC and Kentucky-American hold Kentucky-American's ratepayers harmless for 5 years for the proposed transaction's adverse effects on AWWC's cost of capital.⁵⁹

In light of our general rate-making powers that permit the disallowance of any unreasonable expenses, we find such condition to be unnecessary. In any general rate-making proceeding in which substantial evidence is presented to demonstrate that

⁵⁸ AG Post-Hearing Brief at 10.

⁵⁹ Direct Testimony of Scott J. Rubin at 26.

Kentucky-American is experiencing higher capital costs as a result of the proposed transaction, the Commission may disallow the portion of such costs that are due solely to the proposed transaction.⁶⁰ The party seeking disallowance of any capital costs for this reason must clearly demonstrate that the increased costs result directly from the proposed transaction.

Capital Contribution

In light of AWWC's significant need for capital in the upcoming years, the AG and LFUCG urge that the proposed transaction be conditioned upon requiring Thames GmbH to contribute to AWWC 20 percent of the proceeds of the public stock offering. This required contribution, they argue, would improve AWWC's credit rating, make funds available for necessary capital expenditures, reduce the total amount of debt that must be issued, and cover some of the initial costs associated with compliance with the Sarbanes-Oxley Act. It would force Thames GmbH to "make good on some of the commitments it [and RWE] made when it acquired AWW[C]."61

Characterizing this proposal as the assessment of an "exit fee," Joint Petitioners voice strong policy and legal objections. First, they contend that the purpose of the proposed condition is improper as it seeks to penalize Thames GmbH and RWE for their alleged failure to meet certain commitments made at the time of their acquisition of AWWC.⁶² Conditions should only be used, they argue, "to mitigate any adverse effect

⁶⁰ The Commission places all parties on notice that our approval of the transfer of control with conditions does not constitute a finding that all costs related to the proposed transaction or that ultimately result from the proposed transaction are reasonable.

⁶¹ Joint Petitioners' Post-Hearing Brief at 22.

⁶² Joint Petitioners' Brief at 26.

of the proposed transfer of control, not as a means to assess punitive damages for alleged past actions by a shareholder." The proposed condition, the Joint Petitioners assert, is unrelated to the provision of service. They further deny that Thames GmbH or RWE have failed to meet any of their commitments.

Joint Petitioners also contend that the proposal constitutes an improper and inappropriate taking of Thames GmbH's proceeds. Citing previous legal precedent, they assert that RWE and Thames GmbH solely bore the risk of their investment and should not be required to share a portion of the proceeds with others. As AWWC did not bear any risk with the value of its stock, they argue, it is not entitled to share in any proceeds from the sale of its stock.

Joint Petitioners argue that the AG's proposal constitutes an exaction, a concession made in order to receive a governmental permit or approval. In effect, the proposal, if accepted, would require RWE and Thames GmbH to surrender 20 percent of the stock sale proceeds to obtain Commission approval for the proposed transaction. Such conditioning, they argue, may result in a regulatory taking and be prohibited by the Federal Constitution.

While Joint Petitioners object to the AG's assertion that AWWC's capital needs are the result of poor planning or neglect, they acknowledge that "all [water] systems in the United States face high levels of capital expenditure now and in the future to replace aging infrastructure." They further note that this need alone is not a sufficient basis to impose any conditions on the proposed transaction.

⁶³ <u>Id.</u> at 26.

⁶⁴ Joint Petitioners' Post-Hearing Brief at 23.

While the Commission agrees that AWWC must have adequate capital if its regulated subsidiaries are to provide adequate service, neither the AG nor LFUCG has provided any legal authority to support this proposal nor have they explained how this required level of capitalization was determined or identified RWE and Thames GmbH's responsibility to provide it. Accordingly, we decline to accept this proposal.

The Commission is not unmindful of AWWC and Kentucky-American's significant capital needs. To the extent that RWE and Thames GmbH during their ownership of AWWC failed to ensure adequate funding of AWWC's pension fund and other postemployment benefit plans to prevent increases in the level of unfunded liabilities, they must bear responsibility for such increases and should not be allowed to foist that responsibility onto the shoulders of AWWC's new owners and ultimately on the ratepayers of AWWC's regulated utilities. As they divest themselves of their interests in AWWC, RWE and Thames GmbH should be required to make the equity capital infusions necessary to render AWWC's current pension funding ratio at the same level that existed when they acquired AWWC.⁶⁵ This condition is not an exaction but merely eliminates the effects of a departing owner's budgetary decisions, and is consistent with that departing owner's commitments to this Commission at the time of the acquisition.

⁶⁵ Mr. Rubin testified that AWWC's pension funding ratio was 77 percent as of December 31, 2001 and was only 60 percent as of December 31, 2004. The record does not contain any information regarding this level for the past 2 years. Any contribution to restore AWWC's pension ratio to the December 31, 2002 level should be computed using the pension funding ratios that existed on December 31, 2002 and December 31, 2006.

Avoiding Unauthorized Acquisitions of Control

While Joint Petitioners represent that they have no intention of permitting any person to acquire control⁶⁶ of AWWC through the proposed transaction,⁶⁷ the Commission remains concerned that the proposed transaction could result in such acquisition. KRS 278.020(6) requires that such acquisition be made only with prior Commission approval. To prevent any violation of this statute, we condition our approval of the proposed transaction upon AWWC's filling of a registration statement with the SEC in connection with the proposed transaction that contains a clear disclosure that no person may acquire control of AWWC without obtaining necessary regulatory approvals pursuant to applicable state laws, including KRS 278.020. We have further required that any agreements that Thames GmbH or AWWC have with the transaction's underwriters require the underwriters to report to AWWC and the Commission all instances in which a person or entity has acquired directly or indirectly 10 percent or more of AWWC stock through the IPO.

Most Favored Nations Clause

The Commission finds that since AWWC has operating subsidiaries in numerous jurisdictions, a "most favored nations clause" would ensure that Kentucky-American ratepayers receive all of the benefits that RWE, Thames GmbH, and AWWC make available to other jurisdictions. We find that the public interest requires our approval of the proposed merger be conditioned upon RWE, Thames GmbH, AWWC, and Kentucky-American extending to Kentucky-American ratepayers proportionate net

⁶⁶ For a definition of "control," <u>see supra</u> note 9.

⁶⁷ Joint Petition at ¶ 50.

benefits of each condition imposed by another state regulatory commission that will benefit ratepayers in another jurisdiction.

Intervenor Proposed Conditions

The AG has proposed 47 conditions to be placed upon any approval of the proposed transaction. Many of these conditions are similar to those that we placed upon RWE and Thames GmbH's acquisition of AWWC.⁶⁸ Some of these have been discussed previously in this Order and have been incorporated into those set forth in Appendix A. Of the 47 conditions that the AG proposed, we have accepted 35 conditions in toto or with modifications.

The AG proposes that the Commission require Kentucky-American to adopt new procedures to closely monitor lost water and to file quarterly water loss reports with the Commission.⁶⁹ He argues that such procedures would address one of the reasons for Thames GmbH's divesture of AWWC and would assist in resolving Kentucky-American's source of supply concerns. As Kentucky-American already must file a report of its water loss with its annual report and as Kentucky-American's current water losses do not appear excessive,⁷⁰ we decline to impose this condition. We will,

⁶⁸ LFUCG also urges the Commission to apply the same conditions that we attached to RWE's acquisition of AWWC. LFUCG Brief at 1 and 18.

⁶⁹ Direct Testimony of Scott J. Rubin at 26.

⁷⁰ For the calendar year ending December 31, 2005, Kentucky-American has a water loss percentage of 13.1399 percent. <u>See</u> Annual Report of Kentucky-American Water Company to the Public Service Commission of Kentucky for the Calendar Year Ended December 31, 2005 at 35. The Commission's regulations consider any water loss in excess of 15 percent as unreasonable for rate-making purposes. <u>See</u> 807 KAR 5:066, Section 6.

however, continue to monitor Kentucky-American's water losses. If they worsen, we will consider additional remedies.⁷¹

The AG further requests that all AWWC or Kentucky-American unregulated activities⁷² be conducted through a separate corporate entity and that any services that Kentucky-American provides be charged at no less than Kentucky-American's fully embedded cost.⁷³ In light of existing statutory restrictions on non-regulated utility transacations,⁷⁴ we find no need for this condition. We, however, continue to insist that AWWC and Kentucky-American retain separate books for each corporate entity operating within Kentucky and follow appropriate state cost allocation guidelines.⁷⁵

The AG proposes that AWWC report to the Commission in writing on several aspects of its operations.⁷⁶ The Commission declines to accept these proposals. The requested information will be available through filings that AWWC must make to the SEC or easily obtained through the use of publicly available documents.

The AG also proposes that AWWC be required to appoint an agent in Kentucky for the limited purpose of accepting service of process of any enforcement action that

 $^{^{71}}$ Our authority to order remedial action is independent of any condition to the proposed transfer of control. See KRS 278.280(1).

The AG's reference to unregulated activities presumably refers to Kentucky-American's operation of non-public utilities. Kentucky-American has previously operated water treatment and production facilities for several Kentucky municipalities. These operations are not subject to Commission jurisdiction.

⁷³ Direct Testimony of Scott J. Rubin at 26.

⁷⁴ <u>See</u> KRS 278.2201-.2219.

⁷⁵ Appendix A, Condition No. 14.

⁷⁶ These proposals are virtually identical to Conditions No. 31 and No. 34 that we imposed in Case No. 2002-00317.

the Commission may bring and to consent to the personal jurisdiction of Franklin Circuit Court to hear and consider any legal action or proceeding that the Commission may bring against AWWC to enforce the provisions of this Order.

We find these proposals unworkable and unnecessary. Kentucky law makes no provisions for the appointment of an agent for the sole purpose of accepting service of process for a Commission enforcement action. As AWWC is a party to this proceeding and has sought relief from this Commission, it has already consented to the jurisdiction of the courts of this Commonwealth for any action to enforce the provisions of this Order.

MONITORING THE PROPOSED TRANSACTION

The AG urges the Commission to continue monitoring the proposed transaction until its completion to ensure that ratepayers "will not be harmed by a change in the transaction after any approval under this proceeding but subsequent to the actual implementation of the plan." The Commission concurs with this proposal and has in this Order directed Joint Petitioners to submit monthly written reports on the progress of the proposed transaction and to file simultaneously with the Commission any documents that they file with the SEC in connection with the proposed transaction. These requirements will ensure that the Commission remains abreast of all developments and can take any necessary actions to protect Kentucky-American's ratepayers.

⁷⁷ AG Post-Hearing Brief at 15.

RELEASE OF RWE AND THAMES GmbH FROM PRIOR CONDITIONS

Joint Petitioners have requested that RWE and Thames GmbH be released from all conditions set forth in our Orders of December 19, 2002 and January 21, 2003 in Case No. 2002-00317 in which we approved RWE and Thames GmbH's acquisition of indirect control over Kentucky-American. These conditions were intended to protect Kentucky-American ratepayers and the public interest. Upon the completion of the proposed transaction, at which time RWE and Thames GmbH will cease to hold any beneficial interest, direct or indirect, in any class of securities of AWWC, these conditions will no longer serve that purpose. At that time, RWE and Thames GmbH should be released from the conditions set forth in those Orders.

<u>SUMMARY</u>

Having considered the evidence of record and being otherwise sufficiently advised, the Commission finds that:

- 1. Kentucky-American owns and operates facilities that are used in the distribution of water to the public in Bourbon, Clark, Fayette, Gallatin, Grant, Harrison, Jessamine, Owen, Scott and Woodford counties and owns and operates facilities for the collection and treatment of sewage for the public in Clark and Owen counties. Kentucky-American is a utility subject to the Commission's jurisdiction.
 - 2. AWWC owns and controls Kentucky-American.
 - 3. TWAUSHI currently owns all of AWWC's common stock.
 - 4. Thames GmbH currently owns all of TWAUSHI's common stock.
- 5. By virtue of its ownership of TWAUSHI, Thames GmbH possesses indirect control of Kentucky-American.

- 6. Joint Petitioners propose to merge TWAUSHI and AWWC and then to conduct a public offering of AWWC's common stock. Upon completion of the proposed transaction, Thames GmbH will possess less than 10 percent of AWWC's common stock and will no longer exercise direct control over AWWC or indirect control of Kentucky-American.
- 7. The proposed transaction will result in a transfer of indirect control of Kentucky-American and will require Commission approval.
- 8. The identities of those persons who will acquire AWWC's common stock are currently unknown and will not be known until completion of the public offering of AWWC common stock.
- 9. Upon completion of the public offering and transfer of AWWC's common stock, the management that currently manages AWWC and Kentucky-American will continue to be in place and will continue to manage those entities' day-to-day operations.
- 10. The current management has the managerial, technical and financial abilities to provide reasonable utility service.
- 11. As those persons who are acquiring AWWC common stock will continue to use AWWC's management immediately following the public offering, these persons will possess the managerial, technical and financial abilities to provide reasonable utility service.
- 12. The proposed transaction may have potentially adverse effects on the quality of service that Kentucky-American provides and will be consistent with the public interest only under the conditions set forth in Appendix A to this Order.

IT IS THEREFORE ORDERED that:

- 1. The transfer of control of Kentucky-American resulting from the merger of AWWC and TWAUSHI and the proposed public offering of AWWC common stock is approved, subject to the conditions set forth in Appendix A of this Order.
- 2. The proposed transfer of control shall not proceed unless, within 20 days of the date of this Order, the written acknowledgements on behalf of RWE, Thames GmbH, TWAUSHI, AWWC, and Kentucky-American by each entity's chief executive officer that these entities each accept and agree to be bound by the commitments set forth in Appendix A to this Order are filed with the Commission.
- 3. Within 10 days of the date of this Order, Joint Petitioners shall advise the Commission in writing of the following:
- a. AWWC's total liability for pension and other post-retirement benefit plans as of December 31, 2002;
- b. The fair value of AWWC's plan assets for pension and other postretirement benefit plans as of December 31, 2001;
- c. The percentage of AWWC's pension and other post-retirement benefit plans that was funded as of December 31, 2002;
- d. AWWC's total liability for pension and other post-retirement benefit plans as of December 31, 2006;
- e. The fair value of AWWC's plan assets for pension and other postretirement benefit plans as of December 31, 2006;
- f. The percentage of AWWC's pension and other post-retirement benefit plans that was funded as of December 31, 2006;

- g. The amount of capital necessary to bring AWWC's plan assets for pension and other post-retirement benefit plans as of December 31, 2006 to the same percentage level of funding that existed for AWWC's plan assets and other post-retirement benefits as of December 31, 2002.
- 4. Within 10 days of the date of this Order, Joint Petitioners shall file with the Commission the financial statements of AWWC for the calendar years ending December 31, 2002 and December 31, 2006.
- 5. AWWC shall not impair Kentucky-American's capacity to meet its obligations to provide adequate, efficient, and reasonable utility service.
- 6. Kentucky-American is prohibited from guaranteeing the debt of RWE, Thames GmbH, TWAUSHI, AWWC, or any of their affiliates or subsidiaries without the prior approval of the Commission.
- 7. Joint Petitioners shall file with the Commission a copy of the final decision or order or other forms of regulatory notification regarding the proposed transfer of control that each state regulatory authority with jurisdiction over the proposed IPO of AWWC stock issues within 20 days of the issuance of such order or notification.
- 8. Kentucky-American shall include with its annual report to the Commission a report in table format that shows each water quality standard imposed by law, the number of water service interruptions, the average employee response time to water service interruptions, the number of customer complaints, and the customer inquiry response time for that year.
- 9. Kentucky-American shall report with its annual report to the Commission its actual expenditure levels for economic development activities and civic and charitable activities for the past calendar year.

- 10. AWWC and Kentucky-American shall comply with all reporting and filing requirements set forth herein. Unless otherwise noted, all quarterly reports shall be filed within 45 days of the close of the reporting quarter, and all annual reports shall be filed by March 31 of the year following the reporting period.
- 11. AWWC shall, at 6-month intervals, submit to the Commission written reports on the actual cumulative costs of the proposed IPO of AWWC common stock until all transaction costs have been incurred. These reports shall be for periods ending June 30 and December 31 and shall be submitted within 45 days of the end of the reporting period.
- 12. On the last day of each month following the issuance of this Order and continuing until the proposed transaction is completed, Joint Petitioners shall submit a written report of current status of the proposed transaction. This report shall, at a minimum, address Joint Petitioners' progress in obtaining the approval of all state utility regulatory commissions that must review the proposed transaction and the status of all filings with the SEC.
- 13. Should the Joint Petitioners receive any information or notice that a person or persons have purchased or otherwise acquired 10 percent or more of AWWC's common stock through the IPO, they shall advise the Commission in writing of this information or notice within 72 hours of its receipt.
- 14. Thames GmbH and AWWC shall in their agreements with all persons that are underwriting the IPO of AWWC common stock require that those persons report to AWWC and the Commission all instances in which a person or entity has acquired directly or indirectly 10 percent or more of AWWC stock through the IPO and to identify such persons or entities.

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15. Joint Petitioners shall simultaneously with each filing made to the SEC in

connection with the proposed transaction file with the Commission a copy of such filing.

16. At such time as RWE and Thames GmbH cease to have any beneficial

interest, direct or indirect, in any class of securities of AWWC, all terms and conditions

set forth in the Commission's Orders of December 19, 2002 and January 21, 2003 in

Case No. 2002-00317 shall terminate.

17. Within 10 days of completion of RWE and Thames GmbH's transfer of all

interests in AWWC, they shall notify the Commission is writing that such transfer has

occurred.

Done at Frankfort, Kentucky, this 16th day of April, 2007.

By the Commission

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2006-00197 DATED April 16, 2007

The proposed IPO of AWWC common stock and the transfer of indirect control of Kentucky-American from TWAUSHI, Thames GmbH and RWE to unknown persons are approved upon the following conditions:

- Kentucky-American's books and records will be maintained and housed in Kentucky.
- 2. AWWC and Kentucky-American will not assert in any judicial or administrative proceeding that the Commission lacks for rate-making purposes jurisdiction over Kentucky-American's capital structure, financing, and cost of capital.
- 3. Neither Kentucky-American nor its ratepayers, directly or indirectly, will incur any additional costs, liabilities, or obligations in conjunction with Thames GmbH and RWE's divesture of AWWC.
- 4. AWWC and Kentucky-American will obtain Commission approval prior to the transfer of any Kentucky-American asset with an original book value in excess of \$1 million or real property or real estate with a net original book value in excess of \$200,000.
- 5. The payment for redemption of AWWC's preferred stock will not be recorded on Kentucky-American's books.
- 6. RWE and Thames GmbH's divesture of AWWC will not affect the accounting and rate-making treatments of Kentucky-American's excess deferred income taxes.

- 7. No early termination costs, change in control payments, or retention bonuses paid to a Kentucky-American or AWWC employee as a result of the proposed transaction will be allocated to Kentucky-American or recovered from Kentucky-American's ratepayers.
- 8. Kentucky-American will not bear any costs incurred to comply with any law, regulation, standard, or practice of the United Kingdom, Federal Republic of Germany, or European Community necessary to complete the proposed transaction.
- 9. AWWC and Kentucky-American will not assert in any Commission proceeding that Commission review of the reasonableness of any cost has been or is preempted by any other governmental regulator.
- 10. The prospectus within the registration statement to be filed with the Commission in connection with the proposed transaction will include a clear statement that no person may acquire control of AWWC without obtaining necessary regulatory approvals pursuant to applicable state laws, including KRS 278.020.
- 11. Thames GmbH and AWWC will require in their agreements with the underwriters of the IPO of AWWC stock that the underwriters report to AWWC and the Commission all instances in which a person or entity has acquired directly or indirectly 10 percent or more of AWWC stock through the IPO and to identify such persons or entities.
- 12. RWE and/or Thames GmbH will infuse equity capital into AWWC prior to the proposed transaction sufficient to render AWWC's pension funding ratio on December 31, 2006 at the same level that existed on December 31, 2002.

- 13. For at least one year from the date of the IPO of AWWC stock, each of Kentucky-American's current corporate officers will continue in his or her current position and perform his or her current duties unless he or she requests reassignment or retirement, resigns on his or her own volition, is unable to continue to perform the duties of that position due to some physical, mental, or civil disability, or has engaged in some misconduct that requires his or her removal or reassignment.
- 14. For at least one year from the date of the IPO of AWWC stock, AWWC or Kentucky-American will notify the Commission in writing within 10 days of any changes in Kentucky-American's corporate officers and management personnel.
- 15. AWWC and Kentucky-American will retain separate books for each corporate entity operating within Kentucky and will follow state cost-allocation guidelines, as well as all applicable codes of conduct.
- 16. Kentucky-American's equity-to-capital ratio will be maintained between 35 to 45 percent. If the equity-to-capital ratio falls outside this range, AWWC and Kentucky-American will notify the Commission in writing within 30 days of this development and will submit to the Commission a detailed plan of action to return Kentucky-American's equity-to-capital ratio to this range.
- 17. AWWC and Kentucky-American will notify the Commission in writing within 30 days of any downgrading of the bonds of AWWC or any AWWC subsidiary and will include with such notice the complete report of the issuing bonding agency.
- 18. Kentucky-American will not be the employer or purchaser of last resort for employees, assets, and products associated with any failed or troubled AWWC affiliate or venture.

- 19. Kentucky-American's utility operations will be Kentucky-American's highest priority and will not be used to solely benefit non-utility affiliates.
- 20. If AWWC issues new debt or equity in excess of \$100 million, it will notify the Commission in writing 30 days prior to such issuance.
- 21. Kentucky-American will file with its annual report to the Commission a report of its dividend payments and other funds transfers to AWWC. This report will list the date of each dividend payment or other funds transfer made to AWWC during the calendar year, the amount of each payment, and the amount of net income available at the time of each payment.
- 22. AWWC will semi-annually submit written reports to the Commission on the actual cumulative costs of the proposed divesture. The reports should be for reporting periods ending June 30 and December 31 and submitted within 45 days of the end of the reporting period.
- 23. Kentucky-American customers will experience no material adverse change in utility service due to the divesture.
- 24. Beginning for calendar year 2007 and for the next 5 years thereafter, Kentucky-American will include in its annual report to the Commission in table format a report that shows each water quality standard, the number of water service interruptions, the average employee response time to water service interruptions, the number of customer complaints, and the customer inquiry response time for that calendar year.
- 25. AWWC and Kentucky-American will adequately fund and maintain Kentucky-American's treatment, transmission, and distribution systems; comply with all

applicable Kentucky statutes and administrative regulations; and supply the service needs of Kentucky-American customers.

- 26. At least 30 days prior to any planned reduction of 5 percent or more in Kentucky-American's workforce, AWWC or Kentucky-American will notify the Commission in writing of the planned reduction and will include with such notice a written study of the reduction's expected effects on service and Kentucky-American's plan for maintaining service quality at the reduced workforce level.
- 27. AWWC will maintain Kentucky-American's levels of commitment to high quality utility service and will fully support maintaining Kentucky-American's record for service quality.
- 28. Kentucky-American will continue to protect and safeguard the condition of all of its watershed land holdings surrounding its reservoirs and well fields in Kentucky.
- 29. AWWC and Kentucky-American will actively support economic development and social and charitable activities throughout the areas in which Kentucky-American serves for as long as Kentucky-American continues to serve those areas.
- 30. Kentucky-American will maintain a substantial level of involvement in community activities, through annual charitable and other contributions, on a level comparable to or greater than the participation levels experienced prior to the date of the IPO of AWWC stock.
- 31. AWWC will maintain and support the relationship between Kentucky-American and the communities that it serves.

- 32. At least 40 percent of the members of Kentucky-American's Board of Directors will be persons who reside within the area that Kentucky-American serves and who are not employees or officers of AWWC or any AWWC affiliated entity.
- 33. AWWC will hold all of Kentucky-American's common stock and will not transfer any of that stock without prior Commission approval even if the transfer is pursuant to a corporate reorganization as defined in KRS 278.020(7)(b).
- 34. If any state regulatory commission imposes conditions on RWE, Thames GmbH, TWAUSHI, or AWWC as a condition for its approval of the proposed divesture and IPO of AWWC common stock and those conditions would benefit ratepayers in any other jurisdiction, proportionate net benefits and conditions will be extended to Kentucky-American ratepayers.
- 35. Kentucky-American will retain its current name and will continue as a corporation organized under Kentucky law.
 - 36. Kentucky-American's headquarters will remain in Lexington, Kentucky.
- 37. AWWC and Kentucky-American will honor all existing Kentucky-American contracts, easements, or other agreements with local governments, and will negotiate with those local governments in good faith regarding the renewal of those agreements.
- 38. Kentucky-American will not, for at least one year from the date of the IPO of AWWC common stock, eliminate any non-management or union employee positions.
- 39. AWWC and Kentucky-American will maintain a sound and constructive relationship with those labor organizations that may represent certain AWWC or Kentucky-American employees, will remain neutral respecting an individual's right to choose to be a trade union member, will continue to recognize the unions that currently

have collective bargaining agreements with Kentucky-American, and will honor any agreements with those unions.

Appendix A

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COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AMERICAN WATER WORKS COMPANY, INC. AND)	
KENTUCKY AMERICAN WATER COMPANY MOTION)	CASE NO.
FOR RELEASE OF CONDITIONS)	2014-00362

ORDER

On October 9, 2014, Kentucky-American Water Company ("Kentucky-American") and American Water Works Company, Inc. ("AWWC") (jointly "Movants") filed a motion for release from seven conditions set forth in the Final Order in Case No. 2006-00197, dated April 16, 2007 ("2006-00197 Order"), which is the proceeding whereby the Commission approved the change in control of Kentucky-American. As a basis for this motion, Movants assert that the conditions at issue are no longer necessary, and, in one case, impose an obligation that is inconsistent with the Commission's regulation of other utilities.

On December 2, 2014, the Commission notified Lexington-Fayette Urban County Government, an intervenor in Case No. 2006-00197, that Movants filed a motion for release of several conditions set forth in the Order in that matter. There are no intervenors in this matter.

¹ Case No. 2006-00197, The Joint Petition Of Kentucky-American Water Company, Thames Water Aqua Holdings Gmbh, RWE Aktiengesellschaft, Thames Water Aqua US Holdings, Inc., and American Water Works Company, Inc. for Approval of a Change in Control of Kentucky-American Water Company (Ky. PSC Apr. 16, 2007), Final Order.

BACKGROUND

Kentucky-American is a water and sewer utility subject to Commission jurisdiction and regulation.² AWWC, a Delaware corporation, currently owns all outstanding shares of Kentucky-American stock. AWWC neither conducts nor is authorized to conduct business within the Commonwealth.

In the 2006-00197 Order, the Commission imposed certain requirements as conditions to approving the change in control of Kentucky-American. Kentucky-American's then ultimate parent company, RWE Aktiengesellschaft ("RWE"), sought Commission approval to sell all of AWWC's common stock ("stock sale"). After the stock sale, AWWC became an independent entity. Because AWWC owned all outstanding shares of Kentucky-American, the stock sale effectively transferred indirect control of Kentucky-American from RWE to persons who acquired AWWC common stock.

In the 2006-00197 Order, the Commission found that the transaction created significant financial risk and uncertainty, and thus, the transaction was in the public interest only if approval was conditioned upon certain protections for Kentucky-American ratepayers. Many of the conditions imposed in the 2006-00197 Order were similar to conditions imposed in the Commission's approval of RWE's acquisition of AWWC and Kentucky-American in Case Nos. 2002-00018 and 2002-00317.

² KRS 278.010(3)(d) and (f).

Case No. 2002-00018, Application for Approval of the Transfer of Control of Kentucky-American Water Company to RWE Aktiengesellschaft and Thames Water Aqua Holdings Gmbh (Ky. PSC May 30, 2002), Final Order ("2002-00018 Order"); and Case No. 2002-00317, The Joint Petition of Kentucky-American Water Company, Thames Water Aqua Holdings Gmbh, RWE Aktiengesellschaft, Thames Water Aqua US Holdings, Inc., Apollo Acquisition Company and American Water Works Company, Inc. for Approval of a Change of Control of Kentucky-American Water Company (Ky. PSC Dec. 20, 2002), Final Order ("2002-00317 Order").

The conditions set forth in the 2006-00197 Order were designed to ensure that Kentucky-American's service and operations were adequately funded and maintained, and thus safeguard Kentucky-American ratepayers from any adverse effect that might result from the transaction. AWWC and Kentucky-American agreed to be bound by the conditions set forth in the 2006-00197 Order. Kentucky-American now requests to be released from certain of the conditions on the basis that the conditions are no longer necessary and, in some instances, could become detrimental to customers.

DISCUSSION

In the 2006-00197 Order, as in other cases approving the transfer of control for similarly situated investor-owned utilities, the Commission imposed conditions upon Kentucky-American and AWWC for the purpose of safeguarding public interest and service quality by preserving utility resources, and establishing reporting requirements to assist the Commission in monitoring the corporate activities of the utility and its holding company.⁴ The conditions were set forth in the ordering paragraphs and Appendix A to the Order. Twenty-three conditions expired due to express or implied terminating events. Thirty-two conditions continue in force until revoked or modified by the Commission pursuant to KRS 278.390.

⁴ See Case No. 2010-00204, Joint Application of PPL Corporation, E.On Ag, E.On US Investments Corp., E.On U.S. LLC, Louisville Gas and Electric Company, and Kentucky Utilities Company for Approval of an Acquisition of Ownership and Control of Utilities (Ky. PSC Sept. 30, 2010); Case No. 2005-00228, Joint Application of Duke Energy Corporation, Duke Energy Holding Corp., Deer Acquisition Corp., Cougar Acquisition Corp., Cinergy Corp., the Cincinnati Gas & Electric Company, and the Union Light, Heat and Power Company for Approval of a Transfer and Acquisition of Control (Ky. PSC Nov. 29, 2005); Case No. 2000-00129, Joint Application of NiSource Inc., New NiSource Inc., Columbia Energy Group and Columbia Gas of Kentucky for Approval of a Merger (Ky. PSC June 30, 2000).

Kentucky-American is requesting release from seven of the 32 conditions that did not contain express or implied termination dates or events.

1. 2006-00197 Order, ordering paragraph 9 ("Ordering Paragraph 9"):

Kentucky-American shall report with its annual report to the Commission its actual expenditure levels for economic development activities and civic and charitable activities for the past calendar year.⁵

The Commission set forth this requirement to ensure that Kentucky-American was responsive to and involved in the communities that it served. The Commission deemed that public interest required that Kentucky-American management have sufficient authority and autonomy to address local concerns.⁶

The reporting requirement set forth in Ordering Paragraph 9 effectuates two conditions in Appendix A to the Order, Conditions 29 and 30, which require Kentucky-American to actively support economic development, civic, and charitable activities, for as long as Kentucky-American continues to serve the areas that it served at the time of the issuance of the Order at a level comparable to or greater than levels prior to the date of the transfer. In its motion, Kentucky-American requests release from the reporting requirement only, and not the expenditure requirement.

In its motion, Kentucky-American argues that it should be released from Ordering Paragraph 9 because it is no longer necessary. Kentucky-American asserts that its record of economic development, civic, and charitable activities are evidence that Kentucky-American meaningfully contributes to the communities it serves.

A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

^{6 2006-00197} Order at 21.

Kentucky-American further asserts that its support of these activities before and after the transaction has remained constant because its local management maintains control over these activities.

2006-00197 Order, Appendix A, condition 4 ("Condition 4"):

AWWC and Kentucky-American will obtain Commission approval prior to the transfer of any Kentucky-American asset with an original book value in excess of \$1 million or real property or real estate with a net original book value in excess of \$200,000.⁷

The Commission set forth this requirement to ensure that Kentucky-American was adequately funded to prevent a possible degradation of service quality.⁸ The provision requiring Commission approval prior to the transfer of an asset with original book value in excess of \$1 million enables the Commission to monitor post-transaction activity to prevent misuse of utility resources. The provision that Kentucky-American obtain Commission approval prior to the transfer of real property or real estate with a net original book value in excess of \$200,000 was related to concerns raised by Lexington-Fayette Urban County Government ("LFUCG") regarding Kentucky-American's plans for Jacobson Park.⁹ LFUCG leased the property on which the park is located until 2011, when the park was transferred to LFUCG pursuant to

A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

^{8 2006-00197} Order at 19-20.

^{9 2002-00018} Order at 25.

Commission approval.¹⁰ LFUCG expended a great deal of resources to develop the park and was concerned it would lose the benefit if the property were sold to a third party.

In its motion, Kentucky-American argues that it should be released from Condition 4 because continuing oversight is unnecessary. Kentucky-American contends that it is subject to statutes and regulations that are sufficient for the Commission to monitor Kentucky-American's financial information. As an example, Kentucky-American points to 807 KAR 5:006, Sections 4(2) and 4(3), which require Kentucky-American to file annual financial reports and financial statement audit reports. Kentucky-American further argues that the information it has provided since the conditions were imposed demonstrate that Kentucky-American's management retained and exercises local control over finances.

3. 2006-00197 Order, Appendix A, condition 16 ("Condition 16"):

Kentucky-American's equity-to-capital ratio will be maintained between 35 to 45 percent. If the equity to capital ratio falls outside this range, AWWC and Kentucky-American will notify the Commission in writing within 30 days of this development and will submit to the Commission a detailed plan of action to return Kentucky-American's equity-to-capital ratio to this range.¹¹

The Commission set forth this requirement to ensure that Kentucky-American is adequately funded to prevent a possible degradation of service quality.¹² This

¹⁰ Case No. 2005-00214, *Petition of Kentucky-American Water Company for Approval of the Transfer of Control and Ownership of Jacobson Park* (Ky. PSC Apr. 28, 2006). The transfer approved in 2006 did not take effect until 2011, pursuant to the terms of the transfer agreement

¹¹ A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

^{12 2006-00197} Order at 19-20.

requirement was imposed in the 2002-00018 Order as part of the suite of conditions to monitor post-transaction financial activity to prevent misuse of Kentucky-American financial resources.¹³

In its motion, Kentucky-American argues to be released from Condition 16 because it restricts Kentucky-American's ability to improve its capital structure, lower its weighted cost of capital, and reduce its level of financial risk. Kentucky-American further argues that the required equity ratio falls "well below" that of its peers. Lastly, Kentucky-American asserts that it is unable to find any other jurisdictional utility for which the Commission imposed a maximum equity-to-capital ratio.

2006-00197 Order, Appendix A, condition 17 ("Condition 17"):

AWWC and Kentucky-American will notify the Commission in writing within 30 days of any downgrading of the bonds of AWWC or any AWWC subsidiary and will include with such notice the complete report of the issuing bonding agency.¹⁵

The Commission set forth this requirement to ensure that Kentucky-American is adequately funded to prevent a possible degradation of service quality. This requirement was first imposed in the 2002-00018 Order as part of the suite of conditions

^{13 2002-00018} Order at 20-22.

Kentucky-American reviewed the equity ratios of Water Service Corporation of Kentucky, Columbia Gas of Kentucky, Atmos Energy Corporation, Louisville Gas and Electric Company, and Kentucky Utilities Company.

A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

¹⁶ 2006-00197 Order at 19-20.

to monitor post-transaction financial activity to prevent misuse of Kentucky-American financial resources.¹⁷

In its motion, Kentucky-American argues it should be released from Condition 17 because continuing oversight is unnecessary. Kentucky-American contends that it is subject to statutes and regulations that are sufficient to monitor Kentucky-American's financial information. As an example, Kentucky-American points to 807 KAR 5:006, Sections 4(2) and 4(3), which require Kentucky-American to file annual financial reports and financial statement audit reports. Kentucky-American further argues that the information it has provided since the conditions were imposed demonstrates that Kentucky-American's management retained and exercises local control over finances.

2006-00197 Order, Appendix A, condition 20 ("Condition 20"):

If AWWC issues new debt or equity in excess of \$100 million, it will notify the Commission in writing 30 days prior to such issuance.¹⁸

The Commission set forth this requirement to ensure that Kentucky-American is adequately funded to prevent a possible degradation of service quality.¹⁹ This condition was first imposed in 2002-00018 Order as part of the suite of conditions to monitor post-transaction financial activity to prevent misuse of Kentucky-American financial resources.²⁰

¹⁷ 2002-00018 Order at 20-22.

A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

¹⁹ 2006-00197 Order at 19-20.

²⁰ 2002-00018 Order at 20-22.

In its motion, Kentucky-American argues it should be released from Condition 20 because continuing oversight is unnecessary. Kentucky-American contends that it is subject to statutes and regulations that are sufficient to monitor Kentucky-American's financial information. As an example, Kentucky-American points to 807 KAR 5:006, Section 4(2) and 4(3), which require Kentucky-American to file annual financial reports and financial statement audit reports. Kentucky-American further argues that the information it has provided since the conditions were imposed demonstrate that Kentucky-American's management retained and exercises local control over finances.

2006-00197 Order, Appendix A, condition 21 ("Condition 21"):

Kentucky-American will file with its annual report to the Commission a report of its dividend payments and other funds transfers to AWWC. This report will list the date of each dividend payment or other funds transfers made to AWWC during the calendar year, the amount of each payment, and the amount of net income available at the time of each payment.²¹

The Commission set forth this requirement to ensure that Kentucky-American is adequately funded to prevent a possible degradation of service quality.²² This requirement was first imposed in 2002-00018 Order as part of the suite of conditions to monitor post-transaction financial activity to prevent misuse of Kentucky-American financial resources.²³

²¹ A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

²² 2006-00197 Order at 19-20.

^{23 2002-00018} Order at 20-22.

In its motion, Kentucky-American argues it should be released from Condition 21 because it is unnecessary. Kentucky-American notes that this requirement was intended to safeguard against any attempt to deprive Kentucky-American of necessary financial resources. Kentucky-American asserts that the record since imposition of this requirement demonstrates that it has not unnecessarily transferred funds to AWWC. In addition, Kentucky-American asserts that it is subject to statutes and regulations that are sufficient for the Commission to monitor dividend payments and other funds transfers. As an example, Kentucky-American points to 807 KAR 5:001, Section 12, and 807 KAR 5:006, Sections 4(2) and 4(3), which require reporting of dividend payments.

7. 2006-00197 Order, Appendix A, condition 26 ("Condition 26"):

At least 30 days prior to any planned reduction of 5 percent or more in Kentucky-American's workforce, AWWC or Kentucky-American will notify the Commission in writing of the planned reduction and will include with such notice a written study of the reduction's expected effects on service and Kentucky-American's plan for maintaining service quality at the reduced workforce level.²⁴

The Commission set forth these requirements to ensure that service quality was not degraded through drastic changes in workforce levels.²⁵ This condition was first imposed in 2002-00018 Order to address concerns regarding potential post-transaction reductions in the workforce, and the subsequent impact upon service.²⁶

A similar requirement was imposed on Kentucky-American in the 2002-00018 and 2002-00317 Orders.

²⁵ 2006-00197 Order at 19-20.

²⁶ 2002-00018 Order at 20-22.

In its motion, Kentucky-American argues it should be released from Condition 26 requirements because Kentucky-American has demonstrated that it maintains a workforce that provides high-quality service. Kentucky-American further argues that any positions that were eliminated were in response to operational efficiencies and technological improvements. Lastly, Kentucky-American asserts that the Commission retains the statutory authority to monitor or investigate the level and quality of Kentucky-American's workforce. Kentucky-American notes that it does not anticipate any workforce reduction.

FINDINGS

Having considered the evidence of record and being otherwise sufficiently advised, the Commission finds that:

- 1. Kentucky-American's request to be released from Ordering Paragraph 9, which requires Kentucky-American to report its economic development, civic, and social expenditures, should be denied. The reporting requirement was agreed to as part of the transfer case. Kentucky-American has not demonstrated that complying with the requirement is either burdensome or onerous, and it has not set forth sufficient cause to support a release of the condition imposed in Ordering Paragraph 9. Further, the reporting requirement assists the Commission in monitoring Kentucky-American's financial support for economic development, civic, and social activities pursuant to Conditions 29 and 30.
- 2. Kentucky-American's request to be released from Condition 4 should be granted in part and denied in part. The Commission finds that Kentucky-American

should be released from the requirement to obtain prior approval from the Commission for transfers of real property with a net original book value in excess of \$200,000, which was imposed to monitor the sale of Jacobson Park. In 2006, the Commission approved Kentucky-American's transfer of Jacobson Park to LFUCG, which was finalized in 2011. Once the real property transfer was approved and completed, the rationale for this condition became moot and continued oversight became unnecessary. The Commission further finds that Kentucky-American's request to be released from the requirement to obtain prior approval for the transfer of any asset with an original book value in excess of \$1 million should be denied. Kentucky-American has failed to set forth good cause for the Commission to release Kentucky-American from this requirement, which has been imposed upon and continues to be in effect for similarly situated utilities to monitor activity that could affect the quality of service provided to ratepayers.²⁷

3. Kentucky-American's request to be released from Condition 16 should be denied without prejudice. Condition 16 imposes an equity floor and equity ceiling on Kentucky-American. The equity floor was requested by intervenors in Case No. 2006-00197 to ensure that Kentucky-American maintained a level of equity investment that was sufficient to prevent excessive debt leveraging that could limit its access to capital and increase its cost of debt. Similarly, the intervenors requested an equity ceiling to prevent excessive equity funding of capital investment that may unnecessarily increase

Similar requirements were imposed in the following cases: Case No. 2010-00204, *Joint Application of PPL Corporation, E.On Ag, E.On US Investments Corp., E.On U.S. LLC, Louisville Gas and Electric Company, and Kentucky Utilities Company* (Ky. PSC Sept. 30, 2010), Final Order, Appendix C, Regulatory Commitments, Item 6; and 2000-00129, *Joint Application of NiSource Inc., New NiSource Inc., Columbia Energy Group, and Columbia Gas of Kentucky* (Ky. PSC June 30, 2000), Final Order, Appendix A, Item 13.

Kentucky American's revenue requirement and, thus, increase consumer rates. The Commission recognizes that Kentucky-American agreed to Condition 16 at the request of the intervening parties in that case. Because those parties did not intervene in this proceeding and have not stated their position on Kentucky-American's request, and because removal of the condition may impact rates, Kentucky-American's request for removal of Condition 16 could be included in its next rate case filing where the impact to its rates and capital structure can be addressed by all stakeholders.

- 4. Kentucky-American's request to be released from Condition 17 should be granted. The filing of information regarding the downgrade of the bonds of AWWC or any AWWC subsidiary is no longer necessary.
- 5. Kentucky-American's request to be released from Condition 20 should be denied. Kentucky-American has not set forth sufficient cause to support a release of the requirement that Kentucky-American notify the Commission of significant issuances of securities by AWWC, Kentucky-American's parent company. These capital additions are not detailed in other reports filed with the Commission by Kentucky-American as suggested by Kentucky-American. Significant issuances of securities by a parent company are of particular interest to the Commission as the financial health of a parent company has a direct impact on its subsidiaries. Absent this condition, the Commission cannot reliably track and monitor significant capital additions of AWWC.
- Kentucky-American's request to be released from Condition 21 should be denied. This condition was imposed to monitor financial activity that could affect the

quality of service provided to ratepayers. Kentucky-American has failed to set forth good cause for the Commission to release Kentucky-American from the requirement to report dividend payments or other funds transferred to AWWC.

7. Kentucky-American's request to be released from Condition 26 should be denied. This condition is neither burdensome nor onerous, and was agreed to as part of the transfer case. If, as Kentucky-American states in its motion, it does not anticipate any workforce reduction, then it will never have to file such a notice and study. However, if Kentucky-American ever does intend to reduce its workforce by 5 percent or more, the Commission should have the ability to review the anticipated impacts on service and service quality before the reduction takes place.

IT IS THEREFORE ORDERED that:

- Kentucky-American's request to be released from Ordering Paragraph 9 of the 2006-00197 Order, and Conditions 16, 20, 21, and 26 in Appendix A to that Order, are denied without prejudice.
- 2. Kentucky-American's request to be released from Condition 4 in Appendix A of the 2006-00197 Order is granted to the extent that the requirement to obtain prior approval for transfers of real property or real estate with a net original book value in excess of \$200,000 is terminated and is denied to the extent that the requirement to obtain prior approval for transfers of any asset with an original book value in excess of \$1 million shall remain in full force and effect.
- Kentucky-American's request to be released from Condition 17 in
 Appendix A of the 2006-00197 Order is granted.

By the Commission

ENTERED

MAY 15 2015

KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

Executive Director

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*Honorable Lindsey W Ingram, III Attorney at Law STOLL KEENON OGDEN PLLC 300 West Vine Street Suite 2100 Lexington, KENTUCKY 40507-1801

*Kentucky-American Water Company aka 2300 Richmond Road Lexington, KY 40502



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Criteria | Corporates | General:

Methodology: Business Risk/Financial Risk Matrix Expanded

Criteria Officer:

Mark Puccia, Managing Director, New York (1) 212-438-7233; mark.puccia@standardandpoors.com

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Methodology: Business Risk/Financial Risk Matrix Expanded

(Editor's Note: We originally published this criteria article on Sept. 18, 2012. We're republishing it following our periodic review completed on August 21, 2015. This article has been partially superseded by the article titled, "Corporate Methodology," published on Nov. 19, 2013, for issuers within the scope of that criteria, but remains in effect for the following sectors or entities: project developers, transportation equipment leasing, auto rentals, investment holding companies and companies that maximize their returns by buying and selling equity holdings over time, corporate securitizations, and other entities whose cash flows are primarily derived from partially owned equity holdings.

Table 1 in this criteria article supersedes table 1 in the articles titled: Key Credit Factors: "Global Criteria For Rating Real Estate Companies," published on June 21, 2011; "Methodology And Assumptions On Risks In The Global High Technology Industry," published Oct. 15, 2009; "Methodology And Assumptions On Business And Financial Risks In The U.S. Movie Exhibitors Industry," published Aug. 28, 2009; "Methodology And Assumptions On Risks In The Hotel And Lodging Industry," published Aug. 11, 2009; "Methodology And Assumptions On Risks In The Aerospace And Defense Industries," published June 24, 2009; "Methodology And Assumptions On Risks In The Mining Industry," published June 23, 2009; "Business And Financial Risks In The Global Pharmaceutical Industry," published Jan. 28, 2009; "Business And Financial Risks In The U.S. For-Profit Health Care Facilities Industry," published Jan. 21, 2009; "Business And Financial Risks In The Investor-Owned Utilities Industry," Nov. 26, 2008; "Business And Financial Risks In The Global Building Products And Materials Industry," Nov. 19, 2008; and "Business And Financial Risks In The Retail Industry," published Sept. 18, 2008.)

- 1. Standard & Poor's Ratings Services is refining its methodology for corporate ratings related to its business risk/financial risk matrix, which we published as part of "2008 Corporate Ratings Criteria" on April 15, 2008. We subsequently updated this matrix in the article "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," published May 27, 2009. In order to provide greater transparency on the methodology used to evaluate corporate ratings, this article updates table 1 of the May 27, 2009, article to reflect how we analyze companies with an excellent business risk profile and minimal financial risk profile, as well as companies with a vulnerable business risk profile and a highly leveraged financial risk profile. This article amends and supersedes both the 2008 and 2009 articles mentioned above. This article is related to "Principles Of Credit Ratings," published on Feb. 16, 2011.
- 2. We introduced the business risk/financial risk matrix in 2005. The relationships depicted in the matrix represent an essential element of our corporate analytical methodology (see table 1).

Table 1

Business And Financial Risk Profile Matrix						
Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA/AA+	AA	A	A-	BBB	-
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+

Table 1

Business And Financial Risk Profile Matrix (cont.)						
Fair	-	BBB-	BB+	ВВ	BB-	В
Weak	_	-	ВВ	BB-	B+	B-
Vulnerable	**			B+	В	B- or below

These rating outcomes are shown for guidance purposes only. Actual rating should be within one notch of indicated rating outcomes.

3. The rating outcomes refer to issuer credit ratings. The ratings indicated in each cell of the matrix are the midpoints of a range of likely rating possibilities. This range would ordinarily span one notch above and below the indicated rating.

Business Risk/Financial Risk Framework

- 4. Our corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; the financial analysis categories follow.
- 5. Our ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics can be rated very differently, to the extent that their business challenges and prospects differ. The categories underlying our business and financial risk assessments are:

Business risk

- · Country risk
- Industry risk
- Competitive position
- · Profitability/Peer group comparisons

Financial risk

- Accounting
- Financial governance and policies/risk tolerance
- Cash flow adequacy
- Capital structure/asset protection
- Liquidity/short-term factors
- 6. We do not have any predetermined weights for these categories. The significance of specific factors varies from situation to situation.

Updated Matrix

- 7. We developed the matrix to make explicit the rating outcomes that are typical for various business risk/financial risk combinations. It illustrates the relationship of business and financial risk profiles to the issuer credit rating.
- 8. We tend to weight business risk slightly more than financial risk when differentiating among investment-grade ratings. Conversely, we place slightly more weight on financial risk for speculative-grade issuers (see table 1, again).
- 9. This version of the matrix represents a refinement--not any change in rating criteria or standards--and, consequently,

no rating changes are expected. However, the expanded matrix should enhance the transparency of the analytical process.

Financial Benchmarks

Table 2

Financial Risk Indicative Ratios (Corporates)				
	FFO/Debt (%)	Debt/EBITDA (x)	Debt/Capital (%)	
Minimal	greater than 60	less than 1.5	less than 25	
Modest	45-60	1.5-2.0	25-35	
Intermediate	30-45	2-3	35-45	
Significant	20-30	3-4	45-50	
Aggressive	12-20	4-5	50-60	
Highly Leveraged	less than 12	greater than 5	greater than 60	

How To Use The Matrix--And Its Limitations

- 10. The rating matrix indicative outcomes are what we typically observe--but are not meant to be precise indications or guarantees of future rating opinions. Positive and negative nuances in our analysis may lead to a notch higher or lower than the outcomes indicated in the various cells of the matrix.
- 11. In certain situations there may be specific, overarching risks that are outside the standard framework, e.g., a liquidity crisis, major litigation, or large acquisition. This often is the case regarding issuers at the lowest end of the credit spectrum--i.e., the 'CCC' category and lower. These ratings, by definition, reflect some impending crisis or acute vulnerability, and the balanced approach that underlies the matrix framework just does not lend itself to such situations.
- 12. Similarly, some matrix cells are blank because the underlying combinations are highly unusual--and presumably would involve complicated factors and analysis.
- 13. The following hypothetical example illustrates how the tables can be used to better understand our rating process (see tables 1 and 2).
- 14. We believe that Company ABC has a satisfactory business risk profile, typical of a low investment-grade industrial issuer. If we believed its financial risk were intermediate, the expected rating outcome should be within one notch of 'BBB'. ABC's ratios of cash flow to debt (35%) and debt leverage (total debt to EBITDA of 2.5x) are indeed characteristic of intermediate financial risk.
- 15. It might be possible for Company ABC to be upgraded to the 'A' category by, for example, reducing its debt burden to the point that financial risk is viewed as minimal. Funds from operations (FFO) to debt of more than 60% and debt to EBITDA of only 1.5x would, in most cases, indicate minimal financial risk.
- 16. Conversely, ABC may choose to become more financially aggressive--perhaps it decides to reward shareholders by

Criteria | Corporates | General: Methodology: Business Risk/Financial Risk Matrix Expanded

borrowing to repurchase its stock. It is possible that the company may fall into the 'BB' category if we view its financial risk as significant. FFO to debt of 20% and debt to EBITDA of 4x would, in our view, typify the significant financial risk category.

- 17. Still, it is essential to realize that the financial benchmarks are guidelines, neither gospel nor guarantees. They can vary in nonstandard cases: For example, if a company's financial measures exhibit very little volatility, benchmarks may be somewhat more relaxed.
- 18. Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios. It encompasses:
 - · A view of accounting and disclosure practices;
 - A view of corporate governance, financial policies, and risk tolerance;
 - The degree of capital intensity, flexibility regarding capital expenditures and other cash needs, including acquisitions and shareholder distributions; and
 - · Various aspects of liquidity--including the risk of refinancing near-term maturities.
- 19. The matrix addresses a company's standalone credit profile, and does not take account of external influences, which would pertain in the case of government-related entities or subsidiaries that in our view may benefit or suffer from affiliation with a stronger or weaker group. The matrix refers only to local-currency ratings, rather than foreign-currency ratings, which incorporate additional transfer and convertibility risks. Finally, the matrix does not apply to project finance or corporate securitizations.

Related Criteria And Research

- Principles Of Credit Ratings, Feb. 16, 2011
- Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, May 27, 2009
- 2008 Corporate Ratings Criteria, April 15, 2008
- 20. These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

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Corporate Methodology

Global Criteria Officer, Corporate Ratings:

Mark Puccia, New York (1) 212-438-7233; mark.puccia@standardandpoors.com

Chief Credit Officer, Americas:

Lucy A Collett, New York (1) 212-438-6627; lucy.collett@standardandpoors.com

European Corporate Ratings Criteria Officer:

Peter Kernan, London (44) 20-7176-3618; peter.kernan@standardandpoors.com

Criteria Officer, Asia Pacific:

Andrew D Palmer, Melbourne (61) 3-9631-2052; andrew.palmer@standardandpoors.com

Criteria Officer, Corporate Ratings:

Gregoire Buet, New York (1) 212-438-4122; gregoire.buet@standardandpoors.com

Primary Credit Analysts:

Mark S Mettrick, CFA, Toronto (1) 416-507-2584; mark.mettrick@standardandpoors.com Guy Deslondes, Milan (39) 02-72111-213; guy.deslondes@standardandpoors.com

Secondary Contacts:

Michael P Altberg, New York (1) 212-438-3950; michael.altberg@standardandpoors.com David C Lundberg, CFA, New York (1) 212-438-7551; david.lundberg@standardandpoors.com Anthony J Flintoff, Melbourne (61) 3-9631-2038; anthony.flintoff@standardandpoors.com Pablo F Lutereau, Buenos Aires (54) 114-891-2125; pablo.lutereau@standardandpoors.com

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Corporate Methodology

(**Editor's Note:** We've republished this article on Dec. 16, 2013 to make some adjustments to language. These adjustments have no impact on our ratings or the effective date of the criteria.)

- 1. Standard & Poor's Ratings Services is updating its criteria for rating corporate industrial companies and utilities. The criteria organize the analytical process according to a common framework and articulate the steps in developing the stand-alone credit profile (SACP) and issuer credit rating (ICR) for a corporate entity.
- 2. This article is related to our criteria article "Principles Of Credit Ratings," which we published on Feb. 16, 2011.

SUMMARY OF THE CRITERIA

- 3. The criteria describe the methodology we use to determine the SACP and ICR for corporate industrial companies and utilities. Our assessment reflects these companies' business risk profiles, their financial risk profiles, and other factors that may modify the SACP outcome (see "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, for the definition of SACP). The criteria provide clarity on how we determine an issuer's SACP and ICR and are more specific in detailing the various factors of the analysis. The criteria also provide clear guidance on how we use these factors as part of determining an issuer's ICR. Standard & Poor's intends for these criteria to provide the market with a framework that clarifies our approach to fundamental analysis of corporate credit risks.
- 4. The business risk profile comprises the risk and return potential for a company in the markets in which it participates, the competitive climate within those markets (its industry risk), the country risks within those markets, and the competitive advantages and disadvantages the company has within those markets (its competitive position). The business risk profile affects the amount of financial risk that a company can bear at a given SACP level and constitutes the foundation for a company's expected economic success. We combine our assessments of industry risk, country risk, and competitive position to determine the assessment for a corporation's business risk profile.
- 5. The financial risk profile is the outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to the company's financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.
- 6. We then combine an issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor (see table 3). Additional rating factors can modify the anchor. These are: diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance. Comparable ratings analysis is the last analytical factor under the criteria to determine the final SACP on a company.
- 7. These criteria are complemented by industry-specific criteria called Key Credit Factors (KCFs). The KCFs describe the industry risk assessments associated with each sector and may identify sector-specific criteria that supersede certain

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sections of these criteria. As an example, the liquidity criteria state that the relevant KCF article may specify different standards than those stated within the liquidity criteria to evaluate companies that are part of exceptionally stable or volatile industries. The KCFs may also define sector-specific criteria for one or more of the factors in the analysis. For example, the analysis of a regulated utility's competitive position is different from the methodology to evaluate the competitive position of an industrial company. The regulated utility KCF will describe the criteria we use to evaluate those companies' competitive positions (see "Key Credit Factors For The Regulated Utility Industry," published Nov. 19, 2013).

SCOPE OF THE CRITERIA

8. This methodology applies to nonfinancial corporate issuer credit ratings globally. Please see "Criteria Guidelines For Recovery Ratings On Global Industrial Issuers' Speculative-Grade Debt," published Aug. 10, 2009, and "2008 Corporate Criteria: Rating Each Issue," published April 15, 2008, for further information on our methodology for determining issue ratings. This methodology does not apply to the following sectors, based on the unique characteristics of these sectors, which require either a different framework of analysis or substantial modifications to one or more factors of analysis: project finance entities, project developers, transportation equipment leasing, auto rentals, commodities trading, investment holding companies and companies that maximize their returns by buying and selling equity holdings over time, Japanese general trading companies, corporate securitizations, nonprofit and cooperative organizations, master limited partnerships, general partnerships of master limited partnerships, and other entities whose cash flows are primarily derived from partially owned equity holdings.

IMPACT ON OUTSTANDING RATINGS

9. We expect about 5% of corporate industrial companies and utilities ratings within the scope of the criteria to change. Of that number, we expect approximately 90% to receive a one-notch change, with the majority of the remainder receiving a two-notch change. We expect the ratio of upgrades to downgrades to be around 3:1.

EFFECTIVE DATE AND TRANSITION

10. These criteria are effective immediately on the date of publication. We intend to complete our review of all affected ratings within the next six months.

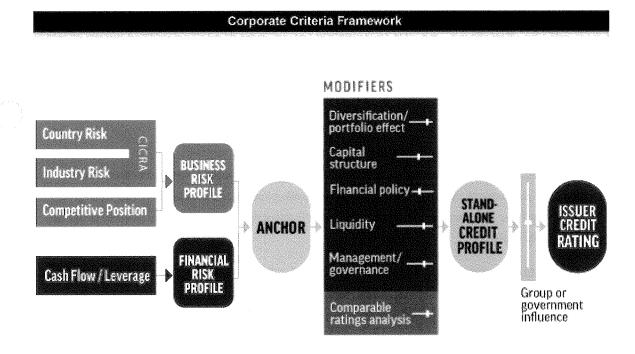
METHODOLOGY

A. Corporate Ratings Framework

11. The corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several factors so that Standard & Poor's considers all salient issues. First we analyze the company's business risk profile, then evaluate its financial risk profile, then combine those to determine an issuer's

anchor. We then analyze six factors that could potentially modify our anchor conclusion.

- 12. To determine the assessment for a corporate issuer's business risk profile, the criteria combine our assessments of industry risk, country risk, and competitive position. Cash flow/leverage analysis determines a company's financial risk profile assessment. The analysis then combines the corporate issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor. In general, the analysis weighs the business risk profile more heavily for investment-grade anchors, while the financial risk profile carries more weight for speculative-grade anchors.
- 13. After we determine the anchor, we use additional factors to modify the anchor. These factors are: diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance. The assessment of each factor can raise or lower the anchor by one or more notches--or have no effect. These conclusions take the form of assessments and descriptors for each factor that determine the number of notches to apply to the anchor.
- 14. The last analytical factor the criteria call for is comparable ratings analysis, which may raise or lower the anchor by one notch based on a holistic view of the company's credit characteristics.



15. The three analytic factors within the business risk profile generally are a blend of qualitative assessments and quantitative information. Qualitative assessments distinguish risk factors, such as a company's competitive advantages, that we use to assess its competitive position. Quantitative information includes, for example, historical cyclicality of revenues and profits that we review when assessing industry risk. It can also include the volatility and level of profitability we consider in order to assess a company's competitive position. The assessments for business risk profile

are: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; and 6, vulnerable.

- 16. In assessing cash flow/leverage to determine the financial risk profile, the analysis focuses on quantitative measures. The assessments for financial risk profile are: 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged.
- 17. The ICR results from the combination of the SACP and the support framework, which determines the extent of the difference between the SACP and the ICR, if any, for group or government influence. Extraordinary influence is then captured in the ICR. Please see "Group Rating Methodology," published Nov. 19, 2013, and "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, for our methodology on group and government influence.
- 18. Ongoing support or negative influence from a government (for government-related entities), or from a group, is factored into the SACP (see "SACP criteria"). While such ongoing support/negative influence does not affect the industry or country risk assessment, it can affect any other factor in business or financial risk. For example, such support or negative influence can affect: national industry analysis, other elements of competitive position, financial risk profile, the liquidity assessment, and comparable ratings analysis.
- 19. The application of these criteria will result in an SACP that could then be constrained by the relevant sovereign rating and transfer and convertibility (T&C) assessment affecting the entity when determining the ICR. In order for the final ICR to be higher than the applicable sovereign rating or T&C assessment, the entity will have to meet the conditions established in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013.

1. Determining the business risk profile assessment

- 20. Under the criteria, the combined assessments for country risk, industry risk, and competitive position determine a company's business risk profile assessment. A company's strengths or weaknesses in the marketplace are vital to its credit assessment. These strengths and weaknesses determine an issuer's capacity to generate cash flows in order to service its obligations in a timely fashion.
- 21. Industry risk, an integral part of the credit analysis, addresses the relative health and stability of the markets in which a company operates. The range of industry risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. The treatment of industry risk is in section B.
- 22. Country risk addresses the economic risk, institutional and governance effectiveness risk, financial system risk, and payment culture or rule of law risk in the countries in which a company operates. The range of country risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. The treatment of country risk is in section C.
- 23. The evaluation of an enterprise's competitive position identifies entities that are best positioned to take advantage of key industry drivers or to mitigate associated risks more effectively--and achieve a competitive advantage and a stronger business risk profile than that of entities that lack a strong value proposition or are more vulnerable to industry risks. The range of competitive position assessments is: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak;

and 6, vulnerable. The full treatment of competitive position is in section D.

24. The combined assessment for country risk and industry risk is known as the issuer's Corporate Industry and Country Risk Assessment (CICRA). Table 1 shows how to determine the combined assessment for country risk and industry risk.

Table 1

1. 0

Determining The CICRA						
			Country risk	assessment		
Industry risk assessment	1 (very low risk)	2 (low risk)	3 (intermediate risk)	4 (moderately high risk)	5 (high risk)	6 (very high risk)
1 (very low risk)	1	1	1	2	4	5
2 (low risk)	2	2	2	3	4	5
3 (intermediate risk)	3	3	3	3	4	6
4 (moderately high risk)	4	4	4	4	5	6
5 (high risk)	5	5	5	5	5	6
6 (very high risk)	6	6	6	6	6	6

25. The CICRA is combined with a company's competitive position assessment in order to create the issuer's business risk profile assessment. Table 2 shows how we combine these assessments.

Table 2

			CICRA	1		
Competitive position assessment	1	2	3	4	5	6
1 (excellent)	1	1	1	2	3*	5
2 (strong)	1	2	2	3	4	5
3 (satisfactory)	2	3	3	3	4	6
4 (fair)	3	4	4	4	5	6
5 (weak)	4	5	5	5	5	6
6 (vulnerable)	5	6	6	6	6	6

^{*}See paragraph 26.

- 26. A small number of companies with a CICRA of 5 may be assigned a business risk profile assessment of 2 if all of the following conditions are met:
 - The company's competitive position assessment is 1.
 - The company's country risk assessment is no riskier than 3.
 - The company produces significantly better-than-average industry profitability, as measured by the level and volatility of profits.
 - The company's competitive position within its sector transcends its industry risks due to unique competitive advantages with its customers, strong operating efficiencies not enjoyed by the large majority of the industry, or scale/scope/diversity advantages that are well beyond the large majority of the industry.
- 27. For issuers with multiple business lines, the business risk profile assessment is based on our assessment of each of the factors--country risk, industry risk, and competitive position--as follows:

- Country risk: We use the weighted average of the country risk assessments for the company across all countries where companies generate more than 5% of sales or EBITDA, or where more than 5% of fixed assets are located.
- Industry risk: We use the weighted average of the industry risk assessments for all business lines representing more than 20% of the company's forecasted earnings, revenues or fixed assets, or other appropriate financial measures if earnings, revenue, or fixed assets do not accurately reflect the exposure to an industry.
- Competitive position: We assess all business lines identified above for the components competitive advantage, scope/scale/diversity, and operating efficiency (see section D). They are then blended using a weighted average of revenues, earnings, or assets to form the preliminary competitive position assessment. The level of profitability and volatility of profitability are then assessed based on the consolidated financials for the enterprise. The preliminary competitive position assessment is then blended with the profitability assessment, as per section D.5, to assess competitive position for the enterprise.

2. Determining the financial risk profile assessment

28. Under the criteria, cash flow/leverage analysis is the foundation for assessing a company's financial risk profile. The range of assessments for a company's cash flow/leverage is 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged. The full treatment of cash flow/leverage analysis is the subject of section E.

3. Merger of financial risk profile and business risk profile assessments

29. An issuer's business risk profile assessment and its financial risk profile assessment are combined to determine its anchor (see table 3). If we view an issuer's capital structure as unsustainable or if its obligations are currently vulnerable to nonpayment, and if the obligor is dependent upon favorable business, financial, and economic conditions to meet its commitments on its obligations, then we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012. If the issuer meets the conditions for assigning 'CCC+', 'CCC-', and 'CC' ratings, we will not apply Table 3.

Table 3

	Financial risk profile						
Business risk profile	1 (minimal)	2 (modest)	3 (intermediate)	4 (significant)	5 (aggressive)	6 (highly leveraged)	
1 (excellent)	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+	
2 (strong)	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb	
3 (satisfactory)	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+	
4 (fair)	bbb/bbb-	bbb-	bb+	bb	bb-	b	
5 (weak)	bb+	bb+	bb	bb-	b+	b/b-	
6 (vulnerable)	bb-	bb-	bb-/b+	b+	b	b-	

- 30. When two anchor outcomes are listed for a given combination of business risk profile assessment and financial risk profile assessment, an issuer's anchor is determined as follows:
 - When a company's financial risk profile is 4 or stronger (meaning, 1-4), its anchor is based on the comparative strength of its business risk profile. We consider our assessment of the business risk profile for corporate issuers to be points along a possible range. Consequently, each of these assessments that ultimately generate the business risk profile for a specific issuer can be at the upper or lower end of such a range. Issuers with stronger business risk profiles for the range of anchor outcomes will be assigned the higher anchor. Those with a weaker business risk profile for the range of anchor outcomes will be assigned the lower anchor.

• When a company's financial risk profile is 5 or 6, its anchor is based on the comparative strength of its financial risk profile. Issuers with stronger cash flow/leverage ratios for the range of anchor outcomes will be assigned the higher anchor. Issuers with weaker cash flow/leverage ratios for the range of anchor outcomes will be assigned the lower anchor. For example, a company with a business risk profile of (1) excellent and a financial risk profile of (6) highly leveraged would generally be assigned an anchor of 'bb+' if its ratio of debt to EBITDA was 8x or greater and there were no offsetting factors to such a high level of leverage.

4. Building on the anchor

1 0

- 31. The analysis of diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance may raise or lower a company's anchor. The assessment of each modifier can raise or lower the anchor by one or more notches--or have no effect in some cases (see tables 4 and 5). We express these conclusions using specific assessments and descriptors that determine the number of notches to apply to the anchor. However, this notching in aggregate can't lower an issuer's anchor below 'b-' (see "Criteria For Assigning 'CCC+', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, for the methodology we use to assign 'CCC' and 'CC' category SACPs and ICRs to issuers).
- 32. The analysis of the modifier diversification/portfolio effect identifies the benefits of diversification across business lines. The diversification/portfolio effect assessments are 1, significant diversification; 2, moderate diversification; and 3, neutral. The impact of this factor on an issuer's anchor is based on the company's business risk profile assessment and is described in Table 4. Multiple earnings streams (which are evaluated within a firm's business risk profile) that are less-than-perfectly correlated reduce the risk of default of an issuer (see Appendix D). We determine the impact of this factor based on the business risk profile assessment because the benefits of diversification are significantly reduced with poor business prospects. The full treatment of diversification/portfolio effect analysis is the subject of section F.

Table 4

Modifier Step 1: Impact Of Diversification/Portfolio Effect On The Anchor						
			-Business risk pro	file assessm	ent	
Diversification/portfolio effect	1 (excellent)	2 (strong)	3 (satisfactory)	4 (fair)	5 (weak)	6 (vulnerable)
1 (significant diversification)	+2 notches	+2 notches	+2 notches	+1 notch	+1 notch	0 notches
2 (moderate diversification)	+1 notch	+1 notch	+1 notch	+1 notch	0 notches	0 notches
3 (neutral)	0 notches	0 notches	0 notches	0 notches	0 notches	0 notches

33. After we adjust for the diversification/portfolio effect, we determine the impact of the other modifiers: capital structure, financial policy, liquidity, and management and governance. We apply these four modifiers in the order listed in Table 5. As we go down the list, a modifier may (or may not) change the anchor to a new range (one of the ranges in the four right-hand columns in the table). We'll choose the appropriate value from the new range, or column, to determine the next modifier's effect on the anchor. And so on, until we get to the last modifier on the list—management and governance. For example, let's assume that the anchor, after adjustment for diversification/portfolio effect but before adjusting for the other modifiers, is 'a'. If the capital structure assessment is very negative, the indicated anchor drops two notches, to 'bbb+'. So, to determine the impact of the next modifier—financial policy—we go to the column 'bbb+ to bbb-' and find the appropriate assessment—in this theoretical example, positive. Applying that assessment moves the anchor up one notch, to the 'a- and higher' category. In our example, liquidity is strong, so the impact is zero notches and the anchor remains unchanged. Management and

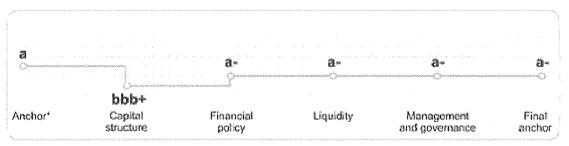
governance is satisfactory, and thus the anchor remains 'a-' (see chart following table 5).

Table 5

			Anchor range	
	'a-' and higher	'bbb+' to 'bbb-'	'bb+' to 'bb-'	'b+' and lower
Factor/Assessment				
Capital structure (see section G)				
1 (Very positive)	2 notches	2 notches	2 notches	2 notches
2 (Positive)	1 notch	1 notch	1 notch	1 notch
3 (Neutral)	0 notches	0 notches	0 notches	0 notches
4 (Negative)	-1 notch	-1 notch	-1 notch	-1 notch
5 (Very negative)	-2 or more notches	-2 or more notches	-2 or more notches	-2 notches
Financial policy (FP; see section H)				
1 (Positive)	+1 notch if M&G is at least satisfactory	+1 notch if M&G is at least satisfactory	+1 notch if liquidity is at least adequate and M&G is at least satisfactory	+1 notch if liquidity is at least adequate and M&G is at least satisfactory
2 (Neutral)	0 notches	0 notches	0 notches	0 notches
3 (Negative)	-1 to -3 notches(1)	-1 to -3 notches(1)	-1 to -2 notches(1)	-1 notch
4 (FS-4, FS-5, FS-6, FS-6 [minus])	N/A(2)	N/A(2)	N/A(2)	N/A(2)
Liquidity (see section I)				
1 (Exceptional)	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4, or FS-5 (3)
2 (Strong)	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4, or FS-5 (3)
3 (Adequate)	0 notches	0 notches	0 notches	0 notches
4 (Less than adequate [4])	N/A	N/A	-1 notch(5)	0 notches
5 (Weak)	N/A	N/A	N/A	'b-' cap on SACP
Management and governance (M&G see section J)				
1 (Strong)	0 notches	0 notches	0, +1 notches(6)	0, +1 notches(6)
2 (Satisfactory)	0 notches	0 notches	0 notches	0 notches
3 (Fair)	-1 notch	0 notches	0 notches	0 notches
4 (Weak)	-2 or more notches(7)	-2 or more notches(7)	-1 or more notches(7)	-1 or more notches(7)

⁽¹⁾ Number of notches depends on potential incremental leverage. (2) See "Financial Policy," section H.2. (3) Additional notch applies only if we expect liquidity to remain exceptional or strong. (4) See "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013. SACP is capped at 'bb+.' (5) If issuer SACP is 'bb+' due to cap, there is no further notching. (6) This adjustment is one notch if we have not already captured benefits of strong management and governance in the analysis of the issuer's competitive position. (7) Number of notches depends upon the degree of negative effect to the enterprise's risk profile.

Example: How Remaining Modifiers Can Change The Anchor



[&]quot;After adjusting for diversification/portfolio effect. See paragraph 33.

- 34. Our analysis of a firm's capital structure assesses risks in the firm's capital structure that may not arise in the review of its cash flow/leverage. These risks include the currency risk of debt, debt maturity profile, interest rate risk of debt, and an investments subfactor. We assess a corporate issuer's capital structure on a scale of 1, very positive; 2, positive; 3, neutral; 4, negative; and 5, very negative. The full treatment of capital structure is the subject of section G.
- 35. Financial policy serves to refine the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage, capital structure, and liquidity analyses. Those assumptions do not always reflect or adequately capture the long-term risks of a firm's financial policy. The financial policy assessment is, therefore, a measure of the degree to which owner/managerial decision-making can affect the predictability of a company's financial risk profile. We assess financial policy as 1) positive, 2) neutral, 3) negative, or as being owned by a financial sponsor. We further identify financial sponsor-owned companies as "FS-4", "FS-5", "FS-6", or "FS-6 (minus)." The full treatment of financial policy analysis is the subject of section H.
- 36. Our assessment of liquidity focuses on the monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis also assesses the potential for a company to breach covenant tests tied to declines in earnings before interest, taxes, depreciation, and amortization (EBITDA). The methodology incorporates a qualitative analysis that addresses such factors as the ability to absorb high-impact, low-probability events, the nature of bank relationships, the level of standing in credit markets, and the degree of prudence of the company's financial risk management. The liquidity assessments are 1, exceptional; 2, strong; 3, adequate; 4, less than adequate; and 5, weak. An SACP is capped at 'bb+' for issuers whose liquidity is less than adequate and 'b-' for issuers whose liquidity is weak, regardless of the assessment of any modifiers or comparable ratings analysis. (For the complete methodology on assessing corporate issuers' liquidity, see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013.)
- 37. The analysis of management and governance addresses how management's strategic competence, organizational effectiveness, risk management, and governance practices shape the company's competitiveness in the marketplace, the strength of its financial risk management, and the robustness of its governance. The range of management and governance assessments is: 1, strong; 2, satisfactory; 3, fair; and 4, weak. Typically, investment-grade anchor outcomes reflect strong or satisfactory management and governance, so there is no incremental benefit. Alternatively, a fair or weak assessment of management and governance can lead to a lower anchor. Also, a strong assessment for management and governance for a weaker entity is viewed as a favorable factor, under the criteria, and can have a

positive impact on the final SACP outcome. For the full treatment of management and governance, see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," published Nov. 13, 2012.

5. Comparable ratings analysis

38. The anchor, after adjusting for the modifiers, could change one notch up or down in order to arrive at an issuer's SACP based on our comparable ratings analysis, which is a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate. A positive assessment leads to a one-notch improvement, a negative assessment leads to a one-notch reduction, and a neutral assessment indicates no change to the anchor. The application of comparable ratings analysis reflects the need to 'fine-tune' ratings outcomes, even after the use of each of the other modifiers. A positive or negative assessment is therefore likely to be common rather than exceptional.

B. Industry Risk

39. The analysis of industry risk addresses the major factors that Standard & Poor's believes affect the risks that entities face in their respective industries. (See "Methodology: Industry Risk," published Nov. 19, 2013.)

C. Country Risk

40. The analysis of country risk addresses the major factors that Standard & Poor's believes affect the country where entities operate. Country risks, which include economic, institutional and governance effectiveness, financial system, and payment culture/rule of law risks, influence overall credit risks for every rated corporate entity. (See "Country Risk Assessment Methodology And Assumptions," published Nov. 19, 2013.)

1. Assessing country risk for corporate issuers

- 41. The following paragraphs explain how the criteria determine the country risk assessment for a corporate entity. Once it's determined, we combine the country risk assessment with the issuer's industry risk assessment to calculate the issuer's CICRA (see section A, table 1). The CICRA is one of the factors of the issuer's business risk profile. If an issuer has very low to intermediate exposure to country risk, as represented by a country risk assessment of 1, 2, or 3, country risk is neutral to an issuer's CICRA. But if an issuer has moderately high to very high exposure to country risk, as represented by a country risk assessment of 4, 5, or 6, the issuer's CICRA could be influenced by its country risk assessment.
- 42. Corporate entities operating within a single country will receive a country risk assessment for that jurisdiction. For entities with exposure to more than one country, the criteria prospectively measure the proportion of exposure to each country based on forecasted EBITDA, revenues, or fixed assets, or other appropriate financial measures if EBITDA, revenue, or fixed assets do not accurately reflect the exposure to that jurisdiction.
- 43. Arriving at a company's blended country risk assessment involves multiplying its weighted-average exposures for each country by each country's risk assessment and then adding those numbers. For the weighted-average calculation, the criteria consider countries where the company generates more than 5% of its sales or where more than 5% of its fixed assets are located, and all weightings are rounded to the nearest 5% before averaging. We round the assessment to the

nearest integer, so a weighted assessment of 2.2 rounds to 2, and a weighted assessment of 2.6 rounds to 3 (see table 6).

Table 6

Hypothetical Example Of Weighted-Average Country Risk For A Corporate Entity				
Country	Weighting (% of business*)	Country risk§	Weighted country risk	
Country A	45	1	0.45	
Country B	20	2	0.4	
Country C	15	1	0.15	
Country D	10	4	0.4	
Country E	10	2	0.2	
Weighted-average country risk assessment (rounded to the nearest whole number)			2	

^{*}Using EBITDA, revenues, fixed assets, or other financial measures as appropriate. §On a scale from 1-6, lowest to highest risk.

- 44. A weak link approach, which helps us calculate a blended country risk assessment for companies with exposure to more than one country, works as follows: If fixed assets are based in a higher-risk country but products are exported to a lower-risk country, the company's exposure would be to the higher-risk country. Similarly, if fixed assets are based in a lower-risk country but export revenues are generated from a higher-risk country and cannot be easily redirected elsewhere, we measure exposure to the higher-risk country, and its supply needs cannot be easily redirected elsewhere, we measure exposure to the higher-risk country. Conversely, if the supply chain can be re-sourced easily to another country, we would not measure exposure to the higher risk country.
- 45. Country risk can be mitigated for a company located in a single jurisdiction in the following narrow case. For a company that exports the majority of its products overseas and has no direct exposure to a country's banking system that would affect its funding, debt servicing, liquidity, or ability to transfer payments from or to its key counterparties, we could reduce the country risk assessment by one category (e.g., 5 to 4) to determine the adjusted country risk assessment. This would only apply for countries where we considered the financial system risk subfactor a constraint on the overall country risk assessment for that country. For such a company, other country risks are not mitigated: Economic risk still applies, albeit less of a risk than for a company that sells domestically (potential currency volatility remains a risk for exporters); institutional and governance effectiveness risk still applies (political risk may place assets at risk); and payment culture/rule of law risk still applies (legal risks may place assets and cross-border contracts at risk).
- 46. Companies will often disclose aggregated information for blocks of countries, rather than disclosing individual country information. If the information we need to estimate exposure for all countries is not available, we use regional risk assessments. Regional risk assessments are calculated as averages of the unadjusted country risk assessments, weighted by gross domestic product of each country in a defined region. The criteria assess regional risk on a 1-6 scale (strongest to weakest). Please see Appendix A, Table 26, which lists the constituent countries of the regions.
- 47. If an issuer does not disclose its country-level exposure or regional-level exposure, individual country risk exposures or regional exposures will be estimated.

2. Adjusting the country risk assessment for diversity

- 48. We will adjust the country risk assessment for a company that operates in multiple jurisdictions and demonstrates a high degree of diversity of country risk exposures. As a result of this diversification, the company could have less exposure to country risk than the rounded weighted average of its exposures might indicate. Accordingly, the country risk assessment for a corporate entity could be adjusted if an issuer meets the conditions outlined in paragraph 49.
- 49. The preliminary country risk assessment is raised by one category to reflect diversity if all of the following four conditions are met:
 - If the company's head office, as defined in paragraph 51, is located in a country with a risk assessment stronger than the preliminary country risk assessment;
 - If no country, with a country risk assessment equal to or weaker than the company's preliminary country risk assessment, represents or is expected to represent more than 20% of revenues, EBITDA, fixed assets, or other appropriate financial measures;
 - If the company is primarily funded at the holding level, or through a finance subsidiary in a similar or stronger country risk environment than the holding company, or if any local funding could be very rapidly substituted at the holding level; and
 - If the company's industry risk assessment is '4' or stronger.
- 50. The country risk assessment for companies that have 75% or more exposure to one jurisdiction cannot be improved and will, in most instances, equal the country risk assessment of that jurisdiction. But the country risk assessment for companies that have 75% or more exposure to one jurisdiction can be weakened if the balance of exposure is to higher risk jurisdictions.
- 51. We consider the location of a corporate head office relevant to overall risk exposure because it influences the perception of a company and its reputation--and can affect the company's access to capital. We determine the location of the head office on the basis of 'de facto' head office operations rather than just considering the jurisdiction of incorporation or stock market listing for public companies. De facto head office operations refers to the country where executive management and centralized high-level corporate activities occur, including strategic planning and capital raising. If such activities occur in different countries, we take the weakest country risk assessment applicable for the countries in which those activities take place.

D. Competitive Position

- 52. Competitive position encompasses company-specific factors that can add to, or partly offset, industry risk and country risk--the two other major factors of a company's business risk profile.
- 53. Competitive position takes into account a company's: 1) competitive advantage, 2) scale, scope, and diversity, 3) operating efficiency, and 4) profitability. A company's strengths and weaknesses on the first three components shape its competitiveness in the marketplace and the sustainability or vulnerability of its revenues and profit. Profitability can either confirm our initial assessment of competitive position or modify it, positively or negatively. A stronger-than-industry-average set of competitive position characteristics will strengthen a company's business risk profile. Conversely, a weaker-than-industry-average set of competitive position characteristics will weaken a

company's business risk profile.

54. These criteria describe how we develop a competitive position assessment. They provide guidance on how we assess each component based on a number of subfactors. The criteria define the weighting rules applied to derive a preliminary competitive position assessment. And they outline how this preliminary assessment can be maintained, raised, or lowered based on a company's profitability. Standard & Poor's competitive position analysis is both qualitative and quantitative.

1. The components of competitive position

- 55. A company's competitive position assessment can be: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; or 6, vulnerable.
- 56. The analysis of competitive position includes a review of:
 - Competitive advantage;
 - Scale, scope, and diversity;
 - Operating efficiency; and
 - Profitability.
- 57. We follow four steps to arrive at the competitive position assessment. First, we separately assess competitive advantage; scale, scope, and diversity; and operating efficiency (excluding any benefits or risks already captured in the issuer's CICRA assessment). Second, we apply weighting factors to these three components to derive a weighted-average assessment that translates into a preliminary competitive position assessment. Third, we assess profitability. Finally, we combine the preliminary competitive position assessment and the profitability assessment to determine the final competitive position assessment. Profitability can confirm, or influence positively or negatively, the competitive position assessment.
- 58. We assess the relative strength of each of the first three components by reviewing a variety of subfactors (see table 7). When quantitative metrics are relevant and available, we use them to evaluate these subfactors. However, our overall assessment of each component is qualitative. Our evaluation is forward-looking; we use historical data only to the extent that they provide insight into future trends.
- 59. We evaluate profitability by assessing two subcomponents: level of profitability (measured by historical and projected nominal levels of return on capital, EBITDA margin, and/or sector-specific metrics) and volatility of profitability (measured by historically observed and expected fluctuations in EBITDA, return on capital, EBITDA margin, or sector specific metrics). We assess both subcomponents in the context of the company's industry.

Table 7

Component	Explanation	Subfactors
1. Competitive advantage {see Appendix B, section 1}	The strategic positioning and attractiveness to customers of a company's products or services, and the fragility or sustainability of its business model	Strategy Differentiation/uniqueness/product positioning/bundling Brand reputation and marketing Product and/or service quality Barriers to entry and customers' switching costs Technological advantage and capabilities and vulnerability to/ability to drive technological displacement Asset base characteristics
2. Scale, scope, and diversity (see Appendix B, section 2)	The concentration or diversification of business activities	 Diversity of products or services Geographic diversity Volumes, size of markets and revenues, and market share Maturity of products or services
3. Operating efficiency (see Appendix B, section 3)	The quality and flexibility of a company's asset base and its cost management and structure	Cost structure Manufacturing processes Working capital management Technology
4. Profitability		 Level of profitability (historical and projected return on capital, EBITDA margin, and/or sector-relevant measure) Volatility of profitability

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2. Assessing competitive advantage, scale, scope, and diversity, and operating efficiency

- 60. We assess competitive advantage; scale, scope, and diversity; and operating efficiency as: 1, strong; 2, strong/adequate; 3, adequate; 4, adequate/weak; or 5, weak. Tables 8, 9, and 10 provide guidance for assessing each component.
- 61. In assessing the components' relative strength, we place significant emphasis on comparative analysis. Peer comparisons provide context for evaluating the subfactors and the resulting component assessment. We review company-specific characteristics in the context of the company's industry, not just its narrower subsector. (See list of industries and subsectors in Appendix B, table 27.) For example, when evaluating an airline, we will benchmark the assessment against peers in the broader transportation-cyclical industry (including the marine and trucking subsectors), and not just against other airlines. Likewise, we will compare a home furnishing manufacturer with other companies in the consumer durables industry, including makers of appliances or leisure products. We might occasionally extend the comparison to other industries if, for instance, a company's business lines cross several industries, or if there are a limited number of rated peers in an industry, subsector, or region.

- 62. An assessment of strong means that the company's strengths on that component outweigh its weaknesses, and that the combination of relevant subfactors results in lower-than-average business risk in the industry. An assessment of adequate means that the company's strengths and weaknesses with respect to that component are balanced and that the relevant subfactors add up to average business risk in the industry. A weak assessment means that the company's weaknesses on that component override any strengths and that its subfactors, in total, reveal higher-than-average business risk in the industry.
- 63. Where a component is not clearly strong or adequate, we may assess it as strong/adequate. A component that is not clearly adequate or weak may end up as adequate/weak.
- 64. Although we review each subfactor, we don't assess each individually--and we seek to understand how they may reinforce or weaken each other. A component's assessment combines the relative strengths and importance of its subfactors. For any company, one or more subfactors can be unusually important--even factors that aren't common in the industry. Industry KCF articles identify subfactors that are consistently more important, or happen not to be relevant, in a given industry.
- 65. Not all subfactors may be equally important, and a single one's strength or weakness may outweigh all the others. For example, if notwithstanding a track record of successful product launches and its strong brand equity, a company's strategy doesn't appear adaptable, in our view, to changing competitive dynamics in the industry, we will likely not assess its competitive advantage as strong. Similarly, if its revenues came disproportionately from a narrow product line, we might view this as compounding its risk of exposure to a small geographic market and, thus, assess its scale, scope, and diversity component as weak.
- 66. From time to time companies will, as a result of shifting industry dynamics or strategies, expand or shrink their product or service lineups, alter their cost structures, encounter new competition, or have to adapt to new regulatory environments. In such instances, we will reevaluate all relevant subfactors (and component assessments).

2.4

Table 2

Competitive Advantage Assessment

What it means Qualifier

Strong

- · The company has a major competitive advantage due to one or a combination of factors that supports revenue and profit growth, combined with lower-than-average volatility of profits.
- There are strong prospects that the company can sustain this advantage over the long term.
- · This should enable the company to withstand economic downturns and competitive and technological threats better than its competitors can.
- Any weaknesses in one or more subfactors are more than offset by strengths in other subfactors that produce sustainable and profitable revenue growth.

Guidance

- · The company's business strategy is highly consistent with, and adaptable to, industry trends and conditions and supports its leadership in the marketplace
- It consistently develops and markets well-differentiated products or services, aligns products with market demand, and enhances the attractiveness or uniqueness of its value proposition through bundling.
- Its superior track record of product development, service quality, and customer satisfaction and retention support its ability to maintain or improve its market share.
- Its products or services command a clear price premium relative to its competitors' thanks to its brand equity. technological leadership, or quality of service; it is able to sustain this advantage with innovation and effective marketing.
- It benefits from barriers to entry from regulation, market characteristics, or intrinsic benefits (such as patents, technology, or customer relationships) that effectively reduce the threat of new competition.
- It has demonstrated a commitment and ability to effectively reinvest in its asset base, as evidenced by a continuous pipeline of new products and/or improvement in key capabilities, such as employee retention, customer care, distribution, and supplier relations. These tangible and intangible assets support long term prospects of sustainable and profitable growth.

- Adequate . The company has some competitive advantages, but not so large as to create a superior business model or durable benefit compared to its peers'.
 - · It has some but not all drivers of competitiveness. Certain factors support the business' long-term viability and should result in average profitability and average profit volatility during recessions or periods of increased competition. However, these drivers are partially offset by the company's disadvantages or lack of sustainability of other factors.
- · The company's strategy is well adapted to marketplace conditions, but it is not necessarily a leader in setting industry trends.
- · It exhibits neither superior nor subpar abilities with respect to product or service differentiation and positioning.
- Its products command no price premium or advantage relative to competing brands as a result of its brand equity or its technological positioning.
- · It may enjoy some barriers to entry that provide some defense against competitors but don't overpower them. It faces some risk of product/service displacement or substitution longer term.
- Its metrics of product or service quality and customer satisfaction or retention are in line with its industry's average. The company could lose customers to competitors if it makes operational missteps.
- Its asset profile does not exhibit particularly superior or inferior characteristics compared to other industry participants. These assets generate consistent revenue and profit growth although long-term prospects are subject to some uncertainty.

Weak

- The company has few, if any, competitive advantages and a number of competitive disadvantages.
- Because the company lacks many competitive advantages, its longterm prospects are uncertain, and its profit volatility is likely to be higher than average for its industry.
- The company is less likely than its competitors to withstand economic, competitive, or technological threats.
- Alternatively, the company has weaknesses in one or more subfactors that could keep its profitability below average and its profit volatility above average during economic downturns or periods of increased competition.

- The company's strategy is inconsistent with, or not well adapted to, marketplace trends and conditions.
- There is evidence of little innovation, slowness in developing and marketing new products, an inability to raise prices, and/or ineffective bundling.
- Its products generally enjoy no price premium relative to competing brands and it often has to sell its products at a lower price than its peers can command.
- It has suffered or is at risk of suffering customer defections due to falling quality and because customers perceive its products or services to be less valuable than those of its competitors.
- Its revenues and market shares are vulnerable to aggressive pricing by existing or new competitors or to technological displacement risks over the near to medium term.
- Its metrics of product or service quality and customer satisfaction or retention are weaker than the industry average.
- Its reinvestment in its business is lower than its peers', its ability to retain operational talent is limited, its distribution network is inefficient, and its revenue could stagnate or decline as result.

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Table 9

Scale, Scope, And Diversity

What It means

Strong

Qualifier

The company's overall scale, scope, and diversity supports stable revenues and profits by rendering it essentially invulnerable to all but the most disruptive combinations of 🗼

adverse factors, events, or trends.

its significant advantages in scale, scope, and diversity enable it to withstand economic, regional, competitive, and technological threats better than its competitors

Guidance

- The company's range of products or services is among the most comprehensive in its sector. It derives its revenue and profits from a broader set of products or services than the industry average.
- its products and services enjoy industry-leading market shares relative to other participants in its industry.
- . It does not rely on a particular customer or small group of customers. If it does, the customer(s) is/are of high credit quality, their demand is highly sustainable, or the company and its customer(s) have significant interdependence.
- · It does not depend on any particular supplier or related group of suppliers that it could not easily replace. If it does, the supplier(s) is/are of high credit quality, or the company and its supplier(s) have significant interdependence.
- · It enjoys broader geographic diversity than its peers and doesn't overly depend on a single regional or local market. If it does, the market is local, often for regulatory reasons. The company's production or service centers are diversified across several locations.
- It holds a strategic investment that provides positive business diversification.

- Adequate . The company's overall scale, scope, and diversity is comparable to its peers'.
 - · Its ability to withstand economic, competitive, or technological threats is comparable to the ability of others within its sector.
- The company has a broad range of products or services compared with its competitors and doesn't depend on a particular product or service for the majority of its revenues and profits.
- · Its market share is average compared with that of its competitors.
- Its dependence on or concentration of key customers is no higher than the industry average, and the loss of a top customer would be unlikely to pose a high risk to its business stability.
- It isn't overly dependent on any supplier or regional group. of suppliers that it couldn't easily replace.
- It doesn't depend excessively on a single local or regional market, and its geographic footprint of production and revenue compares with that of other industry participants.

Weak

- The company's lack of scale, scope, and diversity compromises the stability and sustainability of its revenues and profits.
- The company's vulnerability to, or reliance on, various elements of scale, scope, and diversity leaves it less likely than its competitors to withstand economic, competitive, or technological threats.
- The company's product or service lineup is somewhat limited compared to those of its sector peers. The company derives its profits from a narrow group of products or services, and has not achieved significant market share compared with its peers.
- Demand for its products or services is lower than for its competitors', and this trend isn't improving.
- It relies heavily on a particular customer or small group of customers, and the characteristics of the customer base do not mitigate this risk.
- It depends on a particular supplier or group of suppliers, which it would not be able to easily replace without incurring high switching costs.
- It depends disproportionately on a single local or regional economy for selling its goods or services, and the company's industry is global.
- Key production assets are concentrated by location, and the company has limited ability to quickly replace them without incurring high costs relative to its profits.

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Table 10

Operati	ng Efficiency Assessment	
Qualifier	What it means	Guidance
Strong	 The company maximizes revenues and profits via intelligent use of assets and by minimizing costs and increasing efficiency. 	 The company has a lower cost structure than its peers resulting in higher profits or margins even if capacity utilization or demand are well below ideal levels and during down economic and industry cycles.
	 The company's cost structure should enable it to withstand economic downturns better than its peers. 	 It has demonstrated its ability to efficiently manage fixed and variable costs in cyclical downturns, and has a history of successful and often ongoing cost reductions programs.
		 Its capacity utilization is close to optimal at the peak of the industry cycle and outperforms the industry average over the cycle.
	 It has demonstrated that it can pass along increases in input costs and we expect this will continue. 	
	 It has a very high ability to adjust production and labor costs in response to changes in demand without repercussions for product quality, or has demonstrated the ability to operate very profitably in a more costly or less flexible labor environment. 	
		 Its suppliers have demonstrated an ability to meet swings in demand without causing bottlenecks or quality issues, and can absorb all but the most severe supply chain disruptions.
		 It has superior working capital management, as evidenced by a consistently better-than-average "cash conversion cycle" and other working capital metrics, supporting higher cash flow and lower funding costs.
		 Its investments in technology are likely to increase revenue growth and/or improve its cost structure and operating efficiency.

Criteria | Corporates | General: Corporate Methodology

Adequate • A combination of cost structure and • The company has demonstrated the ability to manage efficiency should support sustainable profits with average profit volatility relative to the company's peers. Its cost structure is similar to its peers'.

- some fixed and most variable costs except during periods of extremely weak demand, and has some history of cutting costs in good and bad times.
- Its cost structure permits some profitability even if capacity utilization or customer demand is well below ideal levels. The company can at least break even during most of the industry/demand cycle.
- Its cost structure is in line with its peers'. For example, its selling, general, and administrative (SG&A) expense as a percent of revenue is similar to its peers' and is likely to be stable.
- It has demonstrated an ability to adjust labor costs in most scenarios without hurting product output and quality, or can operate profitability in a more costly or less flexible labor environment; it has some success passing on input cost increases, although perhaps only partially or with time lae.
- Its suppliers have met typical swings in demand without causing widespread bottlenecks or quality issues, and the company has some capacity to withstand limited supply chain disruptions.
- It has good working capital management, evidenced by its cash conversion cycle and working capital metrics that are on par with its peers'.
- Its investments in technology are likely to help it at least maintain its cost structure and current level of operating efficiency.

Weak

· The company's operating efficiency leaves it with lower profitability than its peers' due to lower asset utilization and/or a higher, less flexible cost structure.

- The company's cost structure permits better-than-marginal profitability only if capacity utilization is at the top of the cycle or during periods of strong demand. The company needs solid and sustained industry conditions to generate fair profitability.
- It has limited success or capability of managing fixed costs and even most typically variable costs are fixed in the next two to three years.
- It has a limited track record of successful cost reductions. such as reducing labor costs in the face of swings in demand, or it has limited ability to pass along increases in input costs.
- · Its costs are higher than its peers'. For example, the company's SG&A expense as a percent of revenue is above that of its peers, and likely to remain so.
- · Its suppliers may face bottlenecks or quality issues in the event of modest swings in demand, or have limited technological capabilities. There is evidence that a limited supply chain disruption would make it difficult for suppliers to meet their commitments to the company.
- its working capital management is weak, as evidenced by working capital metrics that are significantly worse than those of its peers, resulting in lower cash flow and higher funding costs.
- It lacks investments in technology, which could hurt is revenue growth and/or result in a higher cost structure and less efficient operations relative to its peers'.

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3. Determining the preliminary competitive position assessment: Competitive position group profile and category weightings

- 67. After assessing competitive advantage; scale, scope, and diversity; and operating efficiency, we determine a company's preliminary competitive position assessment by ascribing a specific weight to each component. The weightings depend on the company's Competitive Position Group Profile (CPGP).
- 68. There are six possible CPGPs: 1) services and product focus, 2) product focus/scale driven, 3) capital or asset focus, 4) commodity focus/cost driven, 5) commodity focus/scale driven, and 6) national industry and utilities (see table 11 for definitions and characteristics).

Table 11

Competitive	Position Group Profile (CPGP)	
	Definition and characteristics	Examples
Services and product focus	Brands, product quality or technology, and service reputation are typically key differentiating factors for competing in the industry. Capital intensity is typically low to moderate, although supporting the brand often requires ongoing reinvestment in the asset base.	Typically, these are companies in consumer-facing light manufacturing or service industries. Examples include branded drug manufacturers, software companies, and packaged food.
Product focus/scale driven	Product and geographic diversity, as well as scale and market position are key differentiating factors. Sophisticated technology and stringent quality controls heighten risk of product concentration. Product preferences or sales relationships are more important than branding or pricing. Cost structure is relatively unimportant.	The sector most applicable is medical device/equipment manufacturers, particularly at the higher end of the technology scale. These companies largely sell through intermediaries, as opposed to directly to the consumer.
Capital or asset focus	Sizable capital investments are generally required to sustain market position in the industry. Brand identification is of limited importance, although product and service quality often remain differentiating factors.	Heavy manufacturing industries typically fall into this category. Examples include telecom infrastructure manufacturers and semiconductor makers.
Commodity focus/cost driven	Cost position and efficiency of production assets are more important than size, scope, and diversification. Brand identification is of limited importance	Typically, these are companies that manufacture products from natural resources that are used as raw materials by other industries. Examples include forest and paper products companies that harvest timber or produce pulp, packaging paper, or wood products.
Commodity focus/scale driven	Pure commodity companies have little product differentiation, and tend to compete on price and availability. Where present, brand recognition or product differences are secondary or of less importance.	Examples range from pure commodity producers and most oil and gas upstream producers, to some producers with modest product or brand differentiation, such as commodity foods.
National industries and utilities	Government policy or control, regulation, and taxation and tariff policies significantly affect the competitive dynamics of the industry (see paragraphs 72-73).	An example is a water-utility company in an emerging market.

69. The nature of competition and key success factors are generally prescribed by industry characteristics, but vary by company. Where service, product quality, or brand equity are important competitive factors, we'll give the competitive advantage component of our overall assessment a higher weighting. Conversely, if the company produces a commodity product, differentiation comes less into play, and we will more heavily weight scale, scope, and diversity as well as operating efficiency (see table 12).

Table 12

Competitive Positi	Competitive Position Group Profiles (CPGPs) And Category Weightings					
	•			(%)		
Component	Services and product focus	Product focus/scale driven	Capital or asset focus	Commodity focus/cost driven	Commodity focus/scale driven	National industries and utilities
1. Competitive advantage	45	35	30	15	10	60
2. Scale, scope, and diversity	30	50	30	35	55	20
3. Operating efficiency	25	15	40	50	35	20
Total	100	100	100	100	100	100
Weighted-average assessment*	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0

^{*1 (}strong), 2 (strong/adequate), 3 (adequate), 4 (adequate/weak), 5 (weak).

- 70. We place each of the defined industries (see Appendix B, table 27) into one of the six CPGPs (see above and Appendix B, table 27). This is merely a starting point for the analysis, since we recognize that some industries are less homogenous than others, and that company-specific strategies do affect the basis of competition.
- 71. In fact, the criteria allow for flexibility in selecting a company's group profile (with its category weightings). Reasons for selecting a profile different than the one suggested in the guidance table could include:
 - The industry is heterogeneous, meaning that the nature of competition differs from one subsector to the next, and possibly even within subsectors. The KCF article for the industry will identify such circumstances.
 - A company's strategy could affect the relative importance of its key factors of competition.
- 72. For example, the standard CPGP for the telecom and cable industry is services and product focus. While this may be an appropriate group profile for carriers and service providers, an infrastructure provider may be better analyzed under the capital or asset focus group profile. Other examples: In the capital goods industry, a construction equipment rental company may be analyzed under the capital or asset focus group profile, owing to the importance of efficiently managing the capital spending cycle in this segment of the industry, whereas a provider of hardware, software, and services for industrial automation might be analyzed under the services and product focus group profile, if we believe it can achieve differentiation in the marketplace based on product performance, technology innovation, and service.
- 73. In some industries, the effects of government policy, regulation, government control, and taxation and tariff policies can significantly alter the competitive dynamics, depending on the country in which a company operates. That can alter our assessment of a company's competitive advantage; scale, size, and diversity; or operating efficiency. When industries in given countries have risks that differ materially from those captured in our global industry risk profile and assessment (see "Methodology: Industry Risk," published Nov. 19, 2013, section B), we will weight competitive advantage more heavily to capture the effect, positive or negative, on competitive dynamics. The assessment of competitive advantage; scale, size, and diversity; and operating efficiency will reflect advantages or disadvantages based on these national industry risk factors. Table 13 identifies the circumstances under which national industry risk factors are positive or negative.

Table 13

National Industry Risk Factors	
National industry risk factors are positive	 Government policy including regulation, ownership, and taxation is supportive and has a good track record of mitigating risks to the stability of industry margins.
	 Any government ownership, tariff, and taxation policy supports growth prospects for revenues and profit generation.
	 There is very little discernible risk of negative policy, regulatory, ownership, or taxation changes that could threaten business stability.
National industry risk factors are negative	 Government policy and regulation has a weak track record of stabilizing margins and reducing industry risks.
	 Any government ownership, tariff, and taxation policy undermine growth prospects for revenues and profit generation.
	 There is an increasing risk of negative policy, ownership, and taxation changes that could undermine industry stability.

- © Standard & Poor's 2013.
- 74. When national industry risk factors are positive for a company, typically they support revenue growth, profit growth, higher EBITDA margins, and/or lower-than-average volatility of profits. Often, these benefits provide barriers to entry that impede or even bar new market entrants, which should be reflected in the competitive advantage assessment. These benefits may also include risk mitigants that enable a company to withstand economic downturns and competitive and technological threats better in its local markets than its global competitors can. The scale, scope, and diversity assessment might also benefit from these policies if the company is able to withstand economic, regional, competitive, and technological threats better than its global competitors can. Likewise, the company's operating efficiency assessment may improve if, as a result, it is better able than its global competitors to withstand economic downturns, taking into account its cost structure.
- 75. Conversely, when national industry risk factors are negative for a company, typically they detract from revenue growth and profit growth, shrink EBITDA margins, and/or increase the average volatility of profits. The company may also have less protection against economic downturns and competitive and technological threats within its local markets than its global competitors do. We may also adjust the company's scale, scope, and diversity assessment lower if, as a result of these policies, it is less able to withstand economic, regional, competitive, and technological threats than its global competitors can. Likewise, we may adjust its operating efficiency assessment lower if, as a result of these policies, it is less able to withstand economic downturns, taking into account the company's cost structure.
- 76. An example of when we might use a national industry risk factor would be for a telecommunications network owner that benefits from a monopoly network position, supported by substantial capital barriers to entry, and as a result is subject to regulated pricing for its services. Accordingly, in contrast to a typical telecommunications company, our analysis of the company's competitive position would focus more heavily on the monopoly nature of its operations, as well as the nature and reliability of the operator's regulatory framework in supporting future revenue and earnings. If we viewed the regulatory framework as being supportive of the group's future earnings stability, and we considered its

monopoly position to be sustainable, we would assess these national industry risk factors as positive in our assessment of the group's competitive position.

77. The weighted average assessment translates into the preliminary competitive position assessment on a scale of 1 to 6, where one is best. Table 14 describes the matrix we use to translate the weighted average assessment of the three components into the preliminary competitive position assessment.

Table 14

Translation Table For Converting Weighted-Average Assessments Into Preliminary Competitive Position Assessments				
Weighted average assessment range	Preliminary competitive position assessment			
1.00 - 1.50	1			
>1.50 - 2.25	2			
>2.25 – 3.00	3			
>3.00 – 3.75	4			
>3.75 – 4.50	5			
>4.50 – 5.00	6			

4. Assessing profitability

- 78. We assess profitability on the same scale of 1 to 6 as the competitive position assessment.
- 79. The profitability assessment consists of two subcomponents: level of profitability and the volatility of profitability, which we assess separately. We use a matrix to combine these into the final profitability assessment.

a) Level of profitability

- 80. The level of profitability is assessed in the context of the company's industry. We most commonly measure profitability using return on capital (ROC) and EBITDA margins, but we may also use sector-specific ratios. Importantly, as with the other components of competitive position, we review profitability in the context of the industry in which the company operates, not just in its narrower subsector. (See list of industries and subsectors in Appendix B, table 27.)
- 81. We assess level of profitability on a three-point scale: above average, average, and below average. Industry KCF articles may establish numeric guidance, for instance by stating that an ROC above 12% is considered above average, between 8%-12% is average, and below 8% is below average for the industry, or by differentiating between subsectors in the industry. In the absence of numeric guidance, we compare a company against its peers across the industry.
- 82. We calculate profitability ratios generally based on a five-year average, consisting of two years of historical data, our projections for the current year (incorporating any reported year-to-date results and estimates for the remainder of the year), and the next two financial years. There may be situations where we consider longer or shorter historical results or forecasts, depending on such factors as availability of financials, transformational events (such as mergers or acquisitions [M&A]), cyclical distortion (such as peak or bottom of the cycle metrics that we do not deem fully representative of the company's level of profitability), and we take into account improving or deteriorating trends in profitability ratios in our assessment.

b) Volatility of profitability

- 3. We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA, EBITDA margins, or return on capital. The KCF articles provide guidance on which measures are most appropriate for a given industry or set of companies. For each of these measures, we divide the standard error by the average of that measure over the time period in order to ensure better comparability across companies.
- 84. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' linear trend line. We regress the company's EBITDA, EBITDA margins, or return on capital against time. A key advantage of SER over standard deviation or coefficient of variation is that it doesn't view upwardly trending data as inherently more volatile. At the same time, we recognize that SER, like any statistical measure, may understate or overstate expected volatility and thus we will make qualitative adjustments where appropriate (see paragraphs 86-90). Furthermore, we only calculate SER when companies have at least seven years of historical annual data and have not significantly changed their line of business during the timeframe, to ensure that the results are meaningful.
- 85. As with the level of profitability, we evaluate a company's SER in the context of its industry group. For most industries, we establish a six-point scale with 1 capturing the least volatile companies, i.e., those with the lowest SERs, and 6 identifying companies whose profits are most volatile. We have established industry-specific SER parameters using the most recent seven years of data for companies within each sector. We believe that seven years is generally an adequate number of years to capture a business cycle. (See Appendix B, section 4 for industry-specific SER parameters.) For companies whose business segments cross multiple industries, we evaluate the SER in the context of the organization's most dominant industry--if that industry represents at least two-thirds of the organization's EBITDA, sales, or other relevant metric. If the company is a conglomerate and no dominant industry can be identified, we will evaluate its profit volatility in the context of SER guidelines for all nonfinancial companies.
- 86. In certain circumstances, the SER derived from historical information may understate--or overstate--expected future volatility, and we may adjust the assessment downward or upward. The scope of possible adjustments depends on certain conditions being met as described below.
- 87. We might adjust the SER-derived volatility assessment to a worse assessment (i.e., to a higher assessment for greater volatility) by up to two categories if the expected level of volatility isn't apparent in historical numbers, and the company either:
 - Has a weighted country risk assessment of 4 or worse, which may, notwithstanding past performance, result in a less stable business environment going forward;
 - Operates in a subsector of the industry that may be prone to higher technology or regulation changes, or other potential disruptive risks that have not emerged over the seven year period;
 - · Is of limited size and scope, which will often result in inherently greater vulnerability to external changes; or
 - Has pursued material M&A or internal growth projects that obscure the company's underlying performance trend line. As an example, a company may have consummated an acquisition during the trough of the cycle, masking what would otherwise be a significant decline in performance.
- 88. The choice of one or two categories depends on the degree of likelihood that the related risks will materialize and our view of the likely severity of these risks.

- 89. Conversely, we may adjust the SER-derived volatility assessment to a better assessment (i.e., to a lower assessment reflecting lower volatility) by up to two categories if we observe that the conditions historically leading to greater volatility have receded and are misrepresentative. This will be the case when:
 - The company grew at a moderately faster, albeit more uneven, pace relative to the industry. Since we measure volatility around a linear trend line, a company growing at a constant percentage of moderate increase (relative to the industry) or an uneven pace (e.g., due to "lumpy" capital spending programs) could receive a relatively unfavorable assessment on an unadjusted basis, which would not be reflective of the company's performance in a steady state. (Alternatively, those companies that grow at a significantly higher-than-average industry rate often do so on unsustainable rates of growth or by taking on high-risk strategies. Companies with these high-risk growth strategies would not receive a better assessment and could be adjusted to a worse assessment;)
 - The company's geographic, customer, or product diversification has increased in scope as a result of an acquisition or rapid expansion (e.g. large, long-term contracts wins), leading to more stability in future earnings in our view; or
 - The company's business model is undergoing material change that we expect will benefit earnings stability, such as a new regulatory framework or major technology shift that is expected to provide a significant competitive hedge and margin protection over time.
- 90. The choice of one or two categories depends on the degree of likelihood that the related risks will materialize and our view of the likely severity of these risks.
- 91. If the company either does not have at least seven years of annual data or has materially changed its business lines or undertaken abnormally high levels of M&A during this time period, then we do not use its SER to assess the volatility of profitability. In these cases, we use a proxy to establish the volatility assessment. If there is a peer company that has, and is expected to continue having, very similar profitability volatility characteristics, we use the SER of that peer entity as a proxy.
- 92. If no such matching peer exists, or one cannot be identified with enough confidence, we perform an assessment of expected volatility based on the following rules:
 - An assessment of 3 if we expect the company's profitability, supported by available historical evidence, will exhibit a volatility pattern in line with, or somewhat less volatile than, the industry average.
 - An assessment of 2 based on our confidence, supported by available historical evidence, that the company will exhibit lower volatility in profitability metrics than the industry's average. This could be underpinned by some of the factors listed in paragraph 89, whereas those listed in paragraph 87 would typically not apply.
 - An assessment of 4 or 5 based on our expectation that profitability metrics will exhibit somewhat higher (4), or meaningfully higher (5) volatility than the industry, supported by available historical evidence, or because of the applicability of possible adjustment factors listed in paragraph 87.
 - Assessments of either 1 or 6 are rarely assigned and can only be achieved based on a combination of data evidence and very high confidence tests. For an assessment of 1, we require strong evidence of minimal volatility in profitability metrics compared with the industry, supported by at least five years of historical information, combined with a very high degree of confidence that this will continue in the future, including no country risk, subsector risk or size considerations that could otherwise warrant a worse assessment as per paragraph 87. For an assessment of 6 we require strong evidence of very high volatility in profitability metrics compared with the industry, supported by at least five years of historical information and very high confidence that this will continue in the future.
- 93. Next, we combine the level of profitability assessment with the volatility assessment to determine the final profitability

assessment using the matrix in Table 15.

Table 15

Profitability Assessment								
	Volati	lity of p	profital	oility a	ssessm	ent		
Level of profitability assessment	1	2	3	4	5	6		
Above average	1	1	2	3	4	5		
Average	1	2	3	4	5	6		
Below average	2	3	4	5	6	6		

5. Combining the preliminary competitive position assessment with profitability

94. The fourth and final step in arriving at a competitive position assessment is to combine the preliminary competitive position assessment with the profitability assessment. We use the combination matrix in Table 16, which shows how the profitability assessment can confirm, strengthen, or weaken (by up to one category) the overall competitive position assessment.

Table 16

Combining The Preliminary Competitive Position Assessment And Profitability Assessment								
	Preliminary competitive position assessment							
Profitability assessment	1	2	3	4	5	6		
1	1	2	2	3	4	5		
2	1	2	3	3	4	5		
3	2	2	3	4	4	5		
4	2	3	3	4	5	5		
5	2	3	4	4	5	6		
6	2	3	4	5	5	6		

- 95. We generally expect companies with a strong preliminary competitive position assessment to exhibit strong and less volatile profitability metrics. Conversely, companies with a relatively weaker preliminary competitive position assessment will generally have weaker and/or more volatile profitability metrics. Our analysis of profitability helps substantiate whether management is translating any perceived competitive advantages, diversity benefits, and cost management measures into higher earnings and more stable return on capital and return on sales ratios than the averages for the industry. When profitability differs markedly from what the preliminary/anchor competitive position assessment would otherwise imply, we adjust the competitive position assessment accordingly.
- 96. Our method of adjustment is biased toward the preliminary competitive position assessment rather than toward the profitability assessment (e.g., a preliminary competitive assessment of 6 and a profitability assessment of 1 will result in a final assessment of 5).

E. Cash Flow/Leverage

97. The pattern of cash flow generation, current and future, in relation to cash obligations is often the best indicator of a company's financial risk. The criteria assess a variety of credit ratios, predominately cash flow-based, which

complement each other by focusing on the different levels of a company's cash flow waterfall in relation to its obligations (i.e., before and after working capital investment, before and after capital expenditures, before and after dividends), to develop a thorough perspective. Moreover, the criteria identify the ratios that we think are most relevant to measuring a company's credit risk based on its individual characteristics and its business cycle.

- 98. For the analysis of companies with intermediate or stronger cash flow/leverage assessments (a measure of the relationship between the company's cash flows and its debt obligations as identified in paragraphs 106 and 124), we primarily evaluate cash flows that reflect the considerable flexibility and discretion over outlays that such companies typically possess. For these entities, the starting point in the analysis is cash flows before working capital changes plus capital investments in relation to the size of a company's debt obligations in order to assess the relative ability of a company to repay its debt. These "leverage" or "payback" cash flow ratios are a measure of how much flexibility and capacity the company has to pay its obligations.
- 99. For entities with significant or weaker cash flow/leverage assessments (as identified in paragraphs 105 and 124), the criteria also call for an evaluation of cash flows in relation to the carrying cost or interest burden of a company's debt. This will help us assess a company's relative and absolute ability to service its debt. These "coverage"- or "debt service"-based cash flow ratios are a measure of a company's ability to pay obligations from cash earnings and the cushion the company possesses through stress periods. These ratios, particularly interest coverage ratios, become more important the further a company is down the credit spectrum.

1. Assessing cash flow/leverage

100. Under the criteria, we assess cash flow/leverage as 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; or 6, highly leveraged. To arrive at these assessments, the criteria combine the assessments of a variety of credit ratios, predominately cash flow-based, which complement each other by focusing attention on the different levels of a company's cash flow waterfall in relation to its obligations. For each ratio, there is an indicative cash flow/leverage assessment that corresponds to a specified range of values in one of three given benchmark tables (see tables 17, 18, and 19). We derive the final cash flow/leverage assessment for a company by determining the relevant core ratios, anchoring a preliminary cash flow assessment based on the relevant core ratios, determining the relevant supplemental ratio(s), adjusting the preliminary cash flow assessment according to the relevant supplemental ratio(s), and, finally, modifying the adjusted cash flow/leverage assessment for any material volatility.

2. Core and supplemental ratios

a) Core ratios

101. For each company, we calculate two core credit ratios--funds from operations (FFO) to debt and debt to EBITDA--in accordance with Standard & Poor's ratios and adjustments criteria (see "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013). We compare these payback ratios against benchmarks to derive the preliminary cash flow/leverage assessment for a company. These ratios are also useful in determining the relative ranking of the financial risk of companies.

b) Supplemental ratios

102. The criteria also consider one or more supplemental ratios (in addition to the core ratios) to help develop a fuller understanding of a company's financial risk profile and fine-tune our cash flow/leverage analysis. Supplemental ratios

could either confirm or adjust the preliminary cash flow/leverage assessment. The confirmation or adjustment of the preliminary cash flow/leverage assessment will depend on the importance of the supplemental ratios as well as any difference in indicative cash flow/leverage assessment between the core and supplemental ratios as described in section E.3.b.

- 103. The criteria typically consider five standard supplemental ratios, although the relevant KCF criteria may introduce additional supplemental ratios or focus attention on one or more of the standard supplemental ratios. The standard supplemental ratios include three payback ratios--cash flow from operations (CFO) to debt, free operating cash flow (FOCF) to debt, and discretionary cash flow (DCF) to debt--and two coverage ratios, FFO plus interest to cash interest and EBITDA to interest.
- 104. The criteria provide guidelines as to the relative importance of certain ratios if a company exhibits characteristics such as high leverage, working capital intensity, capital intensity, or high growth.
- 105. If the preliminary cash flow/leverage assessment is significant or weaker (see section E.3), then two coverage ratios, FFO plus interest to cash interest and EBITDA to interest, will be given greater importance as supplemental ratios. For the purposes of calculating the coverage ratios, "cash interest" includes only cash interest payments (i.e., interest excludes noncash interest payable on, for example, payment-in-kind [PIK] instruments) and does not include any Standard & Poor's adjusted interest on such items as leases, while "interest" is the income statement figure plus Standard & Poor's adjustments to interest (see "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013).
- supplemental ratios of CFO to debt, FOCF to debt, and DCF to debt. When FOCF to debt and DCF to debt indicate a cash flow/leverage assessment that is lower than the other payback-ratio-derived cash flow/leverage assessments, it signals that the company has either larger than average capital spending or other non-operating cash distributions (including dividends). If these differences persist and are consistent with a negative trend in overall ratio levels, which we believe is not temporary, then these supplemental leverage ratios will take on more importance in the analysis.
- 107. If the supplemental ratios indicate a cash flow/leverage assessment that is different than the preliminary cash flow/leverage assessment, it could suggest an unusual debt service or fixed charge burden, working capital or capital expenditure profile, or unusual financial activity or policies. In such cases, we assess the sustainability or persistence of these differences. For example, if either working capital or capital expenditures are unusually low, leading to better indicated assessments, we examine the sustainability of such lower spending in the context of its impact on the company's longer term competitive position. If there is a deteriorating trend in the company's asset base, we give these supplemental ratios less weight. If either working capital or capital expenditures are unusually high, leading to weaker indicated assessments, we examine the persistence and need for such higher spending. If elevated spending levels are required to maintain a company's competitive position, for example to maintain the company's asset base, we give more weight to these supplemental ratios.
- 108. For capital-intensive companies, EBITDA and FFO may overstate financial strength, whereas FOCF may be a more accurate reflection of their cash flow in relation to their financial obligations. The criteria generally consider a

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capital-intensive company as having ongoing capital spending to sales of greater than 10%, or depreciation to sales of greater than 8%. For these companies, the criteria place more weight on the supplementary ratio of FOCF to debt. Where we place more analytic weight on FOCF to debt, we also seek to estimate the amount of maintenance or full cycle capital required (see Appendix C) under normal conditions (we estimate maintenance or full-cycle capital expenditure required because this is not a reported number). The FOCF figure may be adjusted by adding back estimated discretionary capital expenditures. The adjusted FOCF to debt based on maintenance or full cycle capital expenditures often helps determine how much importance to place on this ratio. If both the FOCF to debt and the adjusted (for estimated discretionary capital spending) FOCF to debt derived assessments are different from the preliminary cash/flow leverage assessment, then these supplemental leverage ratios take on more importance in the analysis.

- 109. For working-capital-intensive companies, EBITDA and FFO may also overstate financial strength, and CFO may be a more accurate measure of the company's cash flow in relation to its financial risk profile. Under the criteria, if a company has a working capital-to-sales ratio that exceeds 25% or if there are significant seasonal swings in working capital, we generally consider it to be working-capital-intensive. For these companies, the criteria place more emphasis on the supplementary ratio of CFO to debt. Examples of companies that have working-capital-intensive characteristics can be found in the capital goods, metals and mining downstream, or the retail and restaurants industries. The need for working capital in those industries reduces financial flexibility and, therefore, these supplemental leverage ratios take on more importance in the analysis.
- 110. For all companies, when FOCF to debt or DCF to debt is negative or indicates materially lower cash flow/leverage assessments, the criteria call for an examination of management's capital spending and cash distribution strategies. For high-growth companies, typically the focus is on FFO to debt instead of FOCF to debt because the latter ratio can vary greatly depending on the growth investment the company is undergoing. The criteria generally consider a high-growth company one that exhibits real revenue growth in excess of 8% per year. Real revenue growth excludes price or foreign exchange related growth, under these criteria. In cases where FOCF or DCF is low, there is a greater emphasis on monitoring the sustainability of margins and return on capital and the overall financing mix to assess the likely trend of future debt ratios. In addition, debt service ratio analysis will be important in such situations. For companies with more moderate growth, the focus is typically on FOCF to debt unless the capital spending is short term or is not funded with debt.
- 111. For companies that have ongoing and well entrenched banking relationships we can reflect these relationships in our cash flow/leverage analysis through the use of the interest coverage ratios as supplemental ratios. These companies generally have historical links and a strong ongoing relationship with their main banks, as well as shareholdings by the main banks, and management influence and interaction between the main banks and the company. Based on their bank relationships, these companies often have lower interest servicing costs than peers, even if the macro economy worsens. In such cases, we generally use the interest coverage ratios as supplemental ratios. This type of banking relationship occurs in Japan, for example, where companies that have the type of bank relationship described in this paragraph tend to have a high socioeconomic influence within their country by way of their revenue size, total debt quantum, number of employees, and the relative importance of the industry.

c) Time horizon and ratio calculation

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- 2. A company's credit ratios may vary, often materially, over time due to economic, competitive, technological, or investment cycles, the life stage of the company, and corporate or strategic actions. Thus, we evaluate credit ratios on a time series basis with a clear forward-looking bias. The length of the time series is dependent on the relative credit risk of the company and other qualitative factors and the weighting of the time series varies according to transformational events. A transformational event is any event that could cause a material change in a company's financial profile, whether caused by changes to the company's capital base, capital structure, earnings, cash flow profile, or financial policies. Transformational events can include mergers, acquisitions, divestitures, management changes, structural changes to the industry or competitive environment, and/or product development and capital programs. This section provides guidance on the timeframe and weightings the criteria apply to calculate the indicative ratios.
- 113. The criteria generally consider the company's credit ratios for the previous one to two years, current-year forecast, and the two subsequent forecasted financial years. There may be situations where longer--or even shorter--historical results or forecasts are appropriate, depending on such factors as availability of financials, transformational events, or relevance. For example, a utility company with a long-term capital spending program may lend itself to a longer-term forecast, whereas for a company experiencing a near-term liquidity squeeze even a two-year forecast will have limited value. Alternatively, for most commodities-based companies we emphasize credit ratios based on our forward-looking view of market conditions, which may differ materially from the historical period.
- Historical patterns in cash flow ratios are informative, particularly in understanding past volatility, capital spending, growth, accounting policies, financial policies, and business trends. Our analysis starts with a review of these historical patterns in order to assess future expected credit quality. Historical patterns can also provide an indication of potential future volatility in ratios, including that which results from seasonality or cyclicality. A history of volatility could result in a more conservative assessment of future cash flow generation if we believe cash flow will continue to be volatile.
- 115. The forecast ratios are based on an expected base-case scenario developed by Standard & Poor's, incorporating current and near-term economic conditions, industry assumptions, and financial policies. The prospective cyclical and longer-term volatility associated with the industry in which the issuer operates is addressed in the industry risk criteria (see section B) and the longer-term directional influence or event risk of financial policies is addressed in our financial policy criteria (see section H).
- 116. The criteria generally place greater emphasis on forecasted years than historical years in the time series of credit ratios when calculating the indicative credit ratio. For companies where we have five years of ratios as described in section E.3, generally we calculate the indicative ratio by weighting the previous two years, the current year, and the forecasted two years as 10%, 15%, 25%, 25%, and 25%, respectively.
- 117. This weighting changes, however, to place even greater emphasis on the current and forecast years when:
 - The issuer meets the characteristics described in paragraph 113, and either shorter- or longer-term forecasts are
 applicable. The weights applied will generally be quite forward weighted, particularly if a company is undergoing a
 transformational event and there is moderate or better cash flow certainty.
 - The issuer is forecast to generate negative cash flow available for debt repayment, which we believe could lead to

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deteriorating credit metrics. Forecast negative cash flows could be generated from operating activities as well as capital expenditures, share buybacks, dividends, or acquisitions, as we forecast these uses of cash based on the company's track record, market conditions, or financial policy. The weights applied will generally be 30%, 40%, and 30% for the current and two subsequent years, respectively.

- The issuer is in an industry that is prospectively volatile or that has a high degree of cash flow uncertainty. Industries that are prospectively volatile are industries whose competitive risk and growth assessments are either high risk (5) or very high risk (6) or whose overall industry risk assessments are either high risk (5) or very high risk (6). The weights applied will generally be 50% for the current year and 50% for the first subsequent forecast year.
- 118. When the indicative ratio(s) is borderline (i.e., less than 10% different from the threshold in relative terms) between two assessment thresholds (as described in section E.3 and tables 17, 18, and 19) and the forecast points to a switch in the ratio between categories during the rating timeframe, we will weigh the forecast even more heavily in order to prospectively capture the trend.
- 119. For companies undergoing a transformational event, the weighting of the time series could vary significantly.
- 120. For companies undergoing a transformational event and with significant or weaker cash flow/leverage assessments, we place greater weight on near-term risk factors. That's because overemphasis on longer-term (inherently less predictable) issues could lead to some distortion when assessing the risk level of a speculative-grade company. We generally analyze a company using the arithmetic mean of the credit ratios expected according to our forecasts for the current year (or pro forma current year) and the subsequent financial year. A common example of this is when a private equity firm acquires a company using additional debt leverage, which makes historical financial ratios meaningless. In this scenario, we weight or focus the majority of our analysis on the next one or two years of projected credit measures.

3. Determining the cash flow/leverage assessment

a) Identifying the benchmark table

- 121. Tables 17, 18, and 19 provide benchmark ranges for various cash flow ratios we associate with different cash flow/leverage assessments for standard volatility, medial volatility, and low volatility industries. The tables of benchmark ratios differ for a given ratio and cash flow/leverage assessment along two dimensions: the starting point for the ratio range and the width of the ratio range.
- 122. If an industry exhibits low volatility, the threshold levels for the applicable ratios to achieve a given cash flow/leverage assessment are less stringent than those in the medial or standard volatility tables, although the range of the ratios is narrower. Conversely, if an industry exhibits medial or standard levels of volatility, the threshold for the applicable ratios to achieve a given cash flow/leverage assessment are elevated, albeit with a wider range of values.
- 123. The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA (see section A, table 1). The low volatility table (table 19) will generally apply when a company's CICRA is 1, unless otherwise indicated in a sector's KCF criteria. The medial volatility table (table 18) will be used under certain circumstances for companies with a CICRA of 1 or 2. Those circumstances are described in the respective sectors' KCF criteria. The standard volatility table (table 17) serves as the relevant benchmark table for companies with a CICRA of 2 or worse, and we will always use it for companies with a CICRA of 1 or 2 and whose competitive position is assessed 5 or 6. Although infrequent, we will use the low volatility table when

a company's CICRA is 2 for companies that exhibit or are expected to exhibit low levels of volatility. The choice of volatility tables for companies with a CICRA of 2 is addressed in the respective sector's KCF article.

Table 17

	Core ratios		Supplementary coverage ratios		Supplementary payback ratios		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest(x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	60+	Less than 1.5	More than 13	More than 15	More than 50	40+	25+
Modest	45-60	1.5-2	9-13	10-15	35-50	25-40	15-25
Intermediate	30-45	2-3	6-9	6-10	25-35	15-25	10-15
Significant	20-30	3-4	4-6	3-6	15-25	10-15	5-10
Aggressive	12-20	4-5	2-4	2-3	10-15	5-10	2-5
Highly leveraged	Less than 12	Greater than 5	Less than 2	Less than 2	Less than 10	Less than 5	Less than 2

Table 18

	Core ratios		Supplementary coverage ratios		Supplementary payback ratios		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	50+	less than 1.75	10.5+	14+	40+	30+	18+
Modest	35-50	1.75-2.5	7.5-10.5	9-14	27.5-40	17.5-30	11-18
Intermediate	23-35	2.5-3.5	5-7.5	5-9	18.5-27.5	9.5-17.5	6.5-11
Significant	13-23	3.5-4.5	3-5	2.75-5	10.5-18.5	5-9.5	2.5-6.5
Aggressive	9-13	4.5-5.5	1.75-3	1.75-2.75	7-10.5	0-5	(11)-2.5
Highly leveraged	Less than 9	Greater than 5.5	Less than 1.75	Less than 1.75	Less than 7	Less than 0	Less than (11)

Table 19

Cash Flow/Leverage Analysis RatiosLow Volatility							
- Application of prescription	Core ratios		Supplementary coverage ratios		Supplementary payback ratios		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	35+	Less than 2	More than 8	More than 13	More than 30	20+	11+
Modest	23-35	2-3	5-8	7-13	20-30	10-20	7-11
Intermediate	13-23	3-4	3-5	4-7	12-20	4-10	3-7
Significant	9-13	4-5	2-3	2.5-4	8-12	0-4	0-3
Aggressive	6-9	5-6	1.5-2	1.5-2.5	5-8	(10)-0	(20)-0
Highly leveraged	Less than 6	Greater than 6	Less than 1.5	Less than 1.5	Less than 5	Less than (10)	Less than (20)

b) Aggregating the credit ratio assessments

^{124.} To determine the final cash flow/leverage assessment, we make these calculations:
1) First, calculate a time series of standard core and supplemental credit ratios, select the relevant benchmark table, and determine the appropriate time weighting of the credit ratios.

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- Calculate the two standard core credit ratios and the five standard supplemental credit ratios over a five-year time horizon.
- Consult the relevant industry KCF article (if applicable), which may identify additional supplemental ratio(s). The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA.
- Calculate the appropriate weighted average cash flow/leverage ratios. If the company is undergoing a transformational event, then the core and supplemental ratios will typically be calculated based on Standard &
- Poor's projections for the current and next one or two financial years.

 2) Second, we use the core ratios to determine the preliminary cash flow assessment.
- Compare the core ratios (FFO to debt and debt to EBITDA) to the ratio ranges in the relevant benchmark table.
- If the core ratios result in different cash flow/leverage assessments, we will select the relevant core ratio based on which provides the best indicator of a company's future leverage. 3) Third, we review the supplemental ratio(s).
- Determine the importance of standard or KCF supplemental ratios based on company-specific characteristics, namely, leverage, capital intensity, working capital intensity, growth rate, or industry. 4) Fourth, we calculate the adjusted cash flow/leverage assessment.
- If the cash flow/leverage assessment(s) indicated by the important supplemental ratio(s) differs from the preliminary cash flow/leverage assessment, we might adjust the preliminary cash flow/leverage assessment by one category in the direction of the cash flow/leverage assessment indicated by the supplemental ratio(s) to derive the adjusted cash flow/leverage assessment. We will make this adjustment if, in our view, the supplemental ratio provides the best indicator of a company's future leverage.
- If there is more than one important supplemental ratio and they result in different directional deviations from the preliminary cash flow/leverage assessment, we will select one as the relevant supplemental ratio based on which, in our opinion, provides the best indicator of a company's future leverage. We will then make the adjustment outlined above if the selected supplemental ratio differs from the preliminary cash flow/leverage assessment and the
- selected supplemental ratio provides the best overall indicator of a company's future leverage. 5) Lastly, we determine the final cash flow/leverage assessment based on the volatility adjustment.
- We classify companies as stable for these cash flow criteria if cash flow/leverage ratios are expected to move up by one category during periods of stress based on their business risk profile. The final cash flow/leverage assessment for these companies will not be modified from the adjusted cash flow/leverage assessment.
- We classify companies as volatile for these cash flow criteria if cash flow/leverage ratios are expected to move one or two categories worse during periods of stress based on their business risk profiles. Typically, this is equivalent to EBITDA declining about 30% from its current level. The final cash flow/leverage assessment for these companies will be modified to one category weaker than the adjusted cash flow/leverage assessment; the adjustment will be eliminated if cash flow/leverage ratios, as evaluated, include a moderate to high level of stress already.
- We classify companies as highly volatile for these cash flow criteria if cash flow/leverage ratios are expected to move two or three categories worse during periods of stress, based on their business risk profiles. Typically, this is equivalent to EBITDA declining about 50% from its current level. The final cash flow/leverage assessment for these companies will be modified to two categories weaker than the adjusted cash flow/leverage assessment; the adjustment will be eliminated or reduced to one category if cash flow/leverage ratios, as evaluated, include a moderate to high level of stress already.
- 125. The volatility adjustment is the mechanism by which we factor a "cushion" of medium-term variance to current financial performance not otherwise captured in either the near-term base-case forecast or the long-term business risk

assessment. We make this adjustment based on the following:

- The expectation of any potential cash flow/leverage ratio movement is both prospective and dependent on the current business or economic conditions.
- Stress scenarios include, but are not limited to, a recessionary economic environment, technology or competitive shifts, loss or renegotiation of major contracts or customers, and key product or input price movements, as typically defined in the company's industry risk profile and competitive position assessment.
- The volatility adjustment is not static and is company specific. At the bottom of an economic cycle or during periods of stressed business conditions, already reflected in the general industry risk or specific competitive risk profile, the prospect of weakening ratios is far less than at the peak of an economic cycle or business conditions.
- The expectation of prospective ratio changes may be formed by observed historical performance over an economic, business, or product cycle by the company or by peers.
- The assessment of which classification to use when evaluating the prospective number of scoring category moves will be guided by how close the current ratios are to the transition point (i.e. "buffer" in the current scoring category) and the corresponding amount of EBITDA movement at each scoring transition.

F. Diversification/Portfolio Effect

- 126. Under the criteria, diversification/portfolio effect applies to companies that we regard as conglomerates. They are companies that have multiple core business lines that may be operated as separate legal entities. For the purpose of these criteria, a conglomerate would have at least three business lines, each contributing a material source of earnings and cash flow.
- 127. The criteria aim to measure how diversification or the portfolio effect could improve the anchor of a company with multiple business lines. This approach helps us determine how the credit strength of a corporate entity with a given mix of business lines could improve based on its diversity. The competitive position factor assesses the benefits of diversity within individual lines of business. This factor also assesses how poorly performing businesses within a conglomerate affect the organization's overall business risk profile.
- 128. Diversification/portfolio effect could modify the anchor depending on how meaningful we think the diversification is, and on the degree of correlation we find in each business line's sensitivity to economic cycles. This assessment will have either a positive or neutral impact on the anchor. We capture any potential factor that weakens a company's diversification, including poor management, in our management and governance assessment.
- 129. We define a conglomerate as a diversified company that is involved in several industry sectors. Usually the smallest of at least three distinct business segments/lines would contribute at least 10% of either EBITDA or FOCF and the largest would contribute no more than 50% of EBITDA or FOCF, with the long-term aim of increasing shareholder value by generating cash flow. Industrial conglomerates usually hold a controlling stake in their core businesses, have highly identifiable holdings, are deeply involved in the strategy and management of their operating companies, generally do not frequently roll over or reshuffle their holdings by buying and selling companies, and therefore have high long-term exposure to the operating risks of their subsidiaries.
- ^o0. In rating a conglomerate, we first assess management's commitment to maintain the diversified portfolio over a

longer-term horizon. These criteria apply only if the company falls within our definition of a conglomerate.

1. Assessing diversification/portfolio effect

- 131. A conglomerate's diversification/portfolio effect is assessed as 1, significant diversification; 2, moderate diversification; or 3, neutral. An assessment of moderate diversification or significant diversification potentially raises the issuer's anchor. To achieve an assessment of significant diversification, an issuer should have uncorrelated diversified businesses whose breadth is among the most comprehensive of all conglomerates'. This assessment indicates that we expect the conglomerate's earnings volatility to be much lower through an economic cycle than an undiversified company's. To achieve an assessment of moderate diversification, an issuer typically has a range of uncorrelated diversified businesses that provide meaningful benefits of diversification with the expectation of lower earnings volatility through an economic cycle than an undiversified company's.
- 132. We expect that a conglomerate will also benefit from diversification if its core assets consistently produce positive cash flows over our rating horizon. This supports our assertion that the company diversifies to take advantage of allocating capital among its business lines. To this end, our analysis focuses on a conglomerate's track record of successfully deploying positive discretionary cash flow into new business lines or expanding capital-hungry business lines. We assess companies that we do not expect to achieve these benefits as neutral.

2. Components of correlation and how it is incorporated into our analysis

133. We determine the assessment for this factor based on the number of business lines in separate industries (as described in table 27) and the degree of correlation between these business lines as described in table 20. There is no rating uplift for an issuer with a small number of business lines that are highly correlated. By contrast, a larger number of business lines that are not closely correlated provide the maximum rating uplift.

Table 20

Assessing Diversification/Portfolio Effect						
	Number of business lines					
Degree of correlation of business lines	3	4	5 or more			
High	Neutral	Neutral	Neutral			
Medium	Neutral	Moderately diversified	Moderately diversified			
Low	Moderately diversified	Significantly diversified	Significantly diversified			

- 134. The degree of correlation of business lines is high if the business lines operate within the same industry, as defined by the industry designations in Appendix B, table 27. The degree of correlation of business lines is medium if the business lines operate within different industries, but operate within the same geographic region (for further guidance on defining geographic regions, see Appendix A, table 26). An issuer has a low degree of correlation across its business lines if these business lines are both a) in different industries and b) either operate in different regions or operate in multiple regions.
- 135. If we believe that a conglomerate's various industry exposures fail to provide a partial hedge against the consolidated entity's volatility because they are highly correlated through an economic cycle, then we assess the diversification/portfolio effect as neutral.

G. Capital Structure

136. Standard & Poor's uses its capital structure criteria to assess risks in a company's capital structure that may not show up in our standard analysis of cash flow/leverage. These risks may exist as a result of maturity date or currency mismatches between a company's sources of financing and its assets or cash flows. These can be compounded by outside risks, such as volatile interest rates or currency exchange rates.

1. Assessing capital structure

- 137. Capital structure is a modifier category, which adjusts the initial anchor for a company after any modification due to diversification/portfolio effect. We assess a number of subfactors to determine the capital structure assessment, which can then raise or lower the initial anchor by one or more notches--or have no effect in some cases. We assess capital structure as 1, very positive; 2, positive; 3, neutral; 4, negative; or 5, very negative. In the large majority of cases, we believe that a firm's capital structure will be assessed as neutral. To assess a company's capital structure, we analyze four subfactors:
 - · Currency risk associated with debt,
 - Debt maturity profile (or schedule),
 - Interest rate risk associated with debt, and
 - Investments.
- 138. Any of these subfactors can influence a firm's capital structure assessment, although some carry greater weight than others, based on a tiered approach:
 - Tier one risk subfactors: Currency risk of debt and debt maturity profile, and
 - Tier two risk subfactor: Interest rate risk of debt.
- 139. The initial capital structure assessment is based on the first three subfactors (see table 21). We may then adjust the preliminary assessment based on our assessment of the fourth subfactor, investments.

Table 21

Preliminary Capital Structure Asses	ssment
Preliminary capital structure assessment	Subfactor assessments
Neutral	No tier one subfactor is negative.
Negative	One tier one subfactor is negative, and the tier two subfactor is neutral.
Very negative	Both tier one subfactors are negative, or one tier one subfactor is negative and the tier two subfactor is negative.

- 140. Tier one subfactors carry the greatest risks, in our view, and, thus, could have a significant impact on the capital structure assessment. This is because, in our opinion, these factors have a greater likelihood of affecting credit metrics and potentially causing liquidity and refinancing risk. The tier two subfactor is important in and of itself, but typically less so than the tier one subfactors. In our view, in the majority of cases, the tier two subfactor in isolation has a lower likelihood of leading to liquidity and default risk than do tier one subfactors.
- 141. The fourth subfactor, investments, as defined in paragraph 153, quantifies the impact of a company's investments on

its overall financial risk profile. Although not directly related to a firm's capital structure decisions, certain investments could provide a degree of asset protection and potential financial flexibility if they are monetized. Thus, the fourth subfactor could modify the preliminary capital structure assessment (see table 22). If the subfactor is assessed as neutral, then the preliminary capital structure assessment will stand. If investments is assessed as positive or very positive, we adjust the preliminary capital structure assessment upward (as per table 22) to arrive at the final assessment.

Table 22

Final Capital Structure Assessment						
	Investme	r assessment				
Preliminary capital structure assessment	Neutral	Positive	Very positive			
Neutral	Neutral	Positive	Very positive			
Negative	Negative	Neutral	Positive			
Very negative	Very negative	Negative	Negative			

- 2. Capital structure analysis: Assessing the subfactors
- a) Subfactor 1: Currency risk of debt
- 142. Currency risk arises when a company borrows without hedging in a currency other than the currency in which it generates revenues. Such an unhedged position makes the company potentially vulnerable to fluctuations in the exchange rate between the two currencies, in the absence of mitigating factors. We determine the materiality of any mismatch by identifying situations where adverse exchange-rate movements could weaken cash flow and/or leverage ratios. We do not include currency mismatches under the following scenarios:
 - The country where a company generates its cash flows has its currency pegged to the currency in which the company has borrowed, or vice versa (or the currency of cash flows has a strong track record and government policy of stability with the currency of borrowings), examples being the Hong Kong dollar which is pegged to the U.S. dollar, and the Chinese renminbi which is managed in a narrow band to the U.S. dollar (and China's foreign currency reserves are mainly in U.S. dollars). Moreover, we expect such a scenario to continue for the foreseeable future;
 - A company has the proven ability, through regulation or contract, to pass through changes in debt servicing costs to its customers; or
 - A company has a natural hedge, such as where it may sell its product in a foreign currency and has matched its debt in that same currency.
- 143. We also recognize that even if an entity generates insufficient same-currency cash flow to meet foreign currency-denominated debt obligations, it could have substantial other currency cash flows it can convert to meet these obligations. Therefore, the relative amount of foreign denominated debt as a proportion of total debt is an important factor in our analysis. If foreign denominated debt, excluding fully hedged debt principal, is 15% or less of total debt, we assess the company as neutral on currency risk of debt. If foreign-denominated debt, excluding fully hedged debt principal, is greater than 15% of total debt, and debt to EBITDA is greater than 3.0x, we evaluate currency risks through further analysis.
- 144. If an entity's foreign-denominated debt in a particular currency represents more than 15% of total debt, and if its debt to EBITDA ratio is greater than 3.0x, we identify whether a currency-specific interest coverage ratio indicates potential

currency risk. The coverage ratio divides forecasted operating cash flow in each currency by interest payments over the coming 12 months for that same currency. It is often easier to ascertain the geographic breakdown of EBITDA as opposed to operating cash flow. So in situations where we don't have sufficient cash flow information, we may calculate an EBITDA to interest expense coverage ratio in the relevant currencies. If neither cash flow nor EBITDA information is disclosed, we estimate the relevant exposures based on available information.

145. In such an instance, our assessment of this subfactor is negative if we believe any appropriate interest coverage ratio will fall below 1.2x over the next 12 months.

b) Subfactor 2: Debt maturity profile

- 146. A firm's debt maturity profile shows when its debt needs to be repaid, or refinanced if possible, and helps determine the firm's refinancing risk. Lengthier and more evenly spread out debt maturity schedules reduce refinancing risk, compared with front-ended and compressed ones, since the former give an entity more time to manage business- or financial market-related setbacks.
- 147. In evaluating debt maturity profiles, we measure the weighted average maturity (WAM) of bank debt and debt securities (including hybrid debt) within a capital structure, and make simplifying assumptions that debt maturing beyond year five matures in year six. WAM = (Maturity1/Total Debt)*tenor1 + (Maturity2/Total Debt)* tenor2 +... (Thereafter/Total Debt)* tenor6
- In evaluating refinancing risk, we consider risks in addition to those captured under the 12-month to 24-month time-horizons factored in our liquidity criteria (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013). While we recognize that investment-grade companies may have more certain future business prospects and greater access to capital than speculative-grade companies, all else being equal, we view a company with a shorter maturity schedule as having greater refinancing risk compared to a company with a longer one. In all cases, we assess a company's debt maturity profile in conjunction with its liquidity and potential funding availability. Thus, a short-dated maturity schedule alone is not a negative if we believe the company can maintain enough liquidity to pay off debt that comes due in the near term.
- Our assessment of this subfactor is negative if the WAM is two years or less, and the amount of these near-term maturities is material in relation to the issuer's liquidity so that under our base-case forecast, we believe the company's liquidity assessment will become less than adequate or weak over the next two years due to these maturities. In certain cases, we may assess a debt maturity profile as negative regardless of whether or not the company passes the aforementioned test. We expect such instances to be rare, and will include scenarios where we believed a concentration of debt maturities within a five-year time horizon poses meaningful refinancing risk, either due to the size of the maturities in relation to the company's liquidity sources, the company's leverage profile, its operating trends, lender relationships, and/or credit market standings.

c) Subfactor 3: Interest rate risk of debt

150. The interest rate risk of debt subfactor analyzes the company's mix of fixed-rate and floating-rate debt. Generally, a higher proportion of fixed-rate debt leads to greater predictability and stability of interest expense and therefore cash flows. The exception would be companies whose operating cash flows are to some degree correlated with interest rate movements--for example, a regulated utility whose revenues are indexed to inflation--given the typical correlation

between nominal interest rates and inflation.

- 151. The mix of fixed versus floating-rate debt is usually not a significant risk factor for companies with intermediate or better financial profiles, strong profitability, and high interest coverage. In addition, the interest rate environment at a given point in time will play a role in determining the impact of interest rate movements. Our assessment of this subcategory will be negative if a 25% upward shift (e.g., from 2.0% to 2.5%) or a 100 basis-point upward shift (e.g., 2% to 3%) in the base interest rate of the floating rate debt will result in a breach of interest coverage covenants or interest coverage rating thresholds identified in the cash flow/leverage criteria (see section E.3).
- 152. Many loan agreements for speculative-grade companies contain a clause requiring a percentage of floating-rate debt to be hedged for a period of two to three years to mitigate this risk. However, in many cases the loan matures after the hedge expires, creating a mismatched hedge. We consider only loans with hedges that match the life of the loan to be-effectively--fixed-rate debt.

d) Subfactor 4: Investments

- 153. For the purposes of the criteria, investments refer to investments in unconsolidated equity affiliates, other assets where the realizable value isn't currently reflected in the cash flows generated from those assets (e.g. underutilized real-estate property), we do not expect any additional investment or support to be provided to the affiliate, and the investment is not included within Standard & Poor's consolidation scope and so is not incorporated in the company's business and financial risk profile analysis. If equity affiliate companies are consolidated, then the financial benefits and costs of these investments will be captured in our cash flow and leverage analysis. Similarly, where the company's ownership stake does not qualify for consolidation under accounting rules, we may choose to consolidate on a pro rata basis if we believe that the equity affiliates' operating and financing strategy is influenced by the rated entity. If equity investments are strategic and provide the company with a competitive advantage, or benefit a company's scale, scope, and diversity, these factors will be captured in our competitive position criteria and will not be used to assess the subfactor investments as positive. Within the capital structure criteria, we aim to assess nonstrategic financial investments that could provide a degree of asset protection and financial flexibility in the event they are monetized. These investments must be noncore and separable, meaning that a potential divestiture, in our view, has no impact on the company's existing operations.
- 154. In many instances, the cash flows generated by an equity affiliate, or the proportional share of the associate company's net income, might not accurately reflect the asset's value. This could occur if the equity affiliate is in high growth mode and is currently generating minimal cash flow or net losses. This could also be true of a physical asset, such as real estate. From a valuation standpoint, we recognize the subjective nature of this analysis and the potential for information gaps. As a result, in the absence of a market valuation or a market valuation of comparable companies in the case of minority interests in private entities, we will not ascribe value to these assets.
- 155. We assess this subfactor as positive or very positive if three key characteristics are met. First, an estimated value can be ascribed to these investments based on the presence of an existing market value for the firm or comparable firms in the same industry. Second, there is strong evidence that the investment can be monetized over an intermediate timeframe--in the case of an equity investment, our opinion of the marketability of the investment would be enhanced by the presence of an existing market value for the firm or comparable firms, as well as our view of market liquidity.

Third, monetization of the investment, assuming proceeds would be used to repay debt, would be material enough to positively move existing cash flow and leverage ratios by at least one category and our view on the company's financial policy, specifically related to financial discipline, supports the assessment that the potential proceeds would be used to pay down debt. This subfactor is assessed as positive if debt repayment from the investment sale has the potential to improve cash flow and leverage ratios by one category. We assess investments as very positive if proceeds upon sale of the investment have the potential to improve cash flow and leverage ratios by two or more categories. If the three characteristics are not met, this subfactor will be assessed as neutral and the preliminary capital structure assessment will stand.

- 156. We will not assess the investments subfactor as positive or very positive when the anchor is 'b+' or lower unless the three conditions described in paragraph 155 are met, and:
 - For issuers with less than adequate or weak liquidity, the company has provided a credible near-term plan to sell the investment.
 - For issuers with adequate or better liquidity, we believe that the company, if needed, could sell the investment in a relatively short timeframe.

H. Financial Policy

157. Financial policy refines the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage assessment (see section E). Those assumptions do not always reflect or entirely capture the short-to-medium term event risks or the longer-term risks stemming from a company's financial policy. To the extent movements in one of these factors cannot be confidently predicted within our forward-looking evaluation, we capture that risk within our evaluation of financial policy. The cash flow/leverage assessment will typically factor in operating and cash flows metrics we observed during the past two years and the trends we expect to see for the coming two years based on operating assumptions and predictable financial policy elements, such as ordinary dividend payments or recurring acquisition spending. However, over that period and, generally, over a longer time horizon, the firm's financial policies can change its financial risk profile based on management's or, if applicable, the company's controlling shareholder's (see Appendix E, paragraphs 254-257) appetite for incremental risk or, conversely, plans to reduce leverage. We assess financial policy as 1) positive, 2) neutral, 3) negative, or as being owned by a financial sponsor. We further identify financial sponsor-owned companies as "FS-4", "FS-5", "FS-6", or "FS-6 (minus)" (see section H.2).

1. Assessing financial policy

- 158. First, we determine if a company is owned by a financial sponsor. Given the intrinsic characteristics and aggressive nature of financial sponsor's strategies (i.e. short- to intermediate-term holding periods and the use of debt or debt-like instruments to maximize shareholder returns), we assign a financial risk profile assessment to a firm controlled by a financial sponsor that reflects the likely impact on leverage due to these strategies and we do not separately analyze management's financial discipline or financial policy framework.
- 159. If a company is not controlled by a financial sponsor, we evaluate management's financial discipline and financial policy framework. Management's financial discipline measures its tolerance for incremental financial risk or,

conversely, its willingness to maintain the same degree of financial risk or to lower it compared with recent cash flow/leverage metrics and our projected ratios for the next two years. The company's financial policy framework assesses the comprehensiveness, transparency, and sustainability of the entity's financial policies. We do not assess these factors for financial sponsor controlled firms.

- 160. The financial discipline assessments can have a positive or negative influence on an enterprise's overall financial policy assessment, or can have no net effect. Conversely, the financial policy framework assessment cannot positively influence the overall financial policy assessment. It can constrain the overall financial policy assessment to no greater than neutral.
- 161. The separate assessments of a company's financial policy framework and financial discipline determine the financial policy adjustment.
- 162. We assess management's financial discipline as 1, positive; 2, neutral; or 3, negative. We determine the assessment by evaluating the predictability of an entity's expansion plans and shareholder return strategies. We take into account, generally, management's tolerance for material and unexpected negative changes in credit ratios or, instead, its plans to rapidly decrease leverage and keep credit ratios within stated boundaries.
- 163. A company's financial policy framework assessment is: 1, supportive or 2, non-supportive. We make the determination by assessing the comprehensiveness of a company's financial policy framework and whether financial targets are clearly communicated to a large number of stakeholders, and are well defined, achievable, and sustainable.

Table 23

Financial Policy	7 Assessments	
Assessment	What it means	Guidance
Positive	Indicates that we expect management's financial policy decisions to have a positive impact on credit ratios over the time horizon, beyond what can be reasonably built in our forecasts on the basis of normalized operating and cash flow assumptions. An example would be when a credible management team commits to dispose of assets or raise equity over the short to medium term in order to reduce leverage. A company with a 1 financial risk profile will not be assigned a positive assessment.	If financial discipline is positive, and the financial policy framework is supportive
Neutral	Indicates that, in our opinion, future credit ratios won't differ materially over the time horizon beyond what we have projected, based on our assessment of management's financial policy, recent track record, and operating forecasts for the company. A neutral financial policy assessment effectively reflects a low probability of "event risk," in our view.	If financial discipline is positive, and the financial policy framework is non-supportive. Or when financial discipline is neutral, regardless of the financial policy framework assessment.
Negative	Indicates our view of a lower degree of predictability in credit ratios, beyond what can be reasonably built in our forecasts, as a result of management's financial discipline (or lack of it). It points to high event risk that management's financial policy decisions may depress credit metrics over the time horizon, compared with what we have already built in our forecasts based on normalized operating and cash flow assumptions.	If financial discipline is negative, regardless of the financial policy framework assessment
Financial Sponsor*	We define a financial sponsor as an entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Accordingly, the financial risk profile we assign to companies that are controlled by financial sponsors ordinarily reflects our presumption of some deterioration in credit quality in the medium term. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.	We define financial sponsor-owned companies as companies that are owned 40% or more by a financial sponsor or a group of three or less financial sponsors and where we consider that the sponsor(s) exercise control of the company solely or together.

^{*}Assessed as FS-4, FS-5, FS-6, or FS-6 (minus).

2. Financial sponsor-controlled companies

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- .. We define a financial sponsor as an entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short-to-intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.
- 165. We define financial sponsor-owned companies as companies that are owned 40% or more by a financial sponsor or a group of three or less financial sponsors and where we consider that the sponsor(s) exercise control of the company solely or together.
- 166. We differentiate between financial sponsors and other types of controlling shareholders and companies that do not have controlling shareholders based on our belief that short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.
- 167. Financial sponsors often dictate policies regarding risk-taking, financial management, and corporate governance for the companies that they control. There is a common pattern of these investors extracting cash in ways that increase the companies' financial risk by utilizing debt or debt like instruments. Accordingly, the financial risk profile we assign to companies that are controlled by financial sponsors ordinarily reflect our presumption of some deterioration in credit quality or steadily high leverage in the medium term.
- 168. We assess the influence of financial sponsor ownership as "FS-4", "FS-5", "FS-6", and "FS-6 (minus)" depending on how aggressive we assume the sponsor will be and assign a financial risk profile accordingly (see table 24).
- 169. Generally, financial sponsor-owned issuers will receive an assessment of "FS-6" or "FS-6 (minus)", leading to a financial risk profile assessment of '6', under the criteria. A "FS-6" assessment indicates that, in our opinion, forecasted credit ratios in the medium term are likely be to be consistent with a '6' financial risk profile, based on our assessment of the financial sponsor's financial policy and track record. A "FS-6 (minus)" will likely be applied to companies that we forecast to have near-term credit ratios consistent with a '6' financial risk profile, but we believe the financial sponsor to be very aggressive and that leverage could increase materially even further from our forecasted levels.
- 170. In a small minority of cases, a financial sponsor-owned entity could receive an assessment of "FS-5". This assessment will apply only when we project that the company's leverage will be consistent with a '5' (aggressive) financial risk profile (see tables 17, 18, and 19), we perceive that the risk of releveraging is low based on the company's financial policy and our view of the owner's financial risk appetite, and liquidity is at least adequate.
- 171. In even rarer cases, we could assess the financial policy of a financial sponsor-owned entity as "FS-4". This assessment will apply only when all of the following conditions are met: other shareholders own a material (generally, at least 20%) stake, we expect the sponsor to relinquish control over the intermediate term, we project that leverage is currently consistent with a '4' (significant) financial risk profile (see tables 17, 18, and 19), the company has said it will maintain leverage at or below this level, and liquidity is at least adequate.

Table 24

Assessment	What it Means	Guidance
FS-4	Financial risk profile set at '4'	Issuer must meet all of the following conditions:
		Other shareholders must own a material (no less than 20%) stake;
		 We anticipate that the sponsor will relinquish control over the medium term;
		 For issuers subject to Table 17 (standard volatility), debt to EBITDA is less than 4x, and we estimate that it will remain less than 4x. For issuers that are subject to Table 18 (medial volatility), debt to EBITDA is below 4.5x and we forecast it to remain below that level. Or for issuers subject to Table 19 (low volatility), debt to EBITDA is less than 5x and our estimation is it will remain below that level;
		 The company has indicated a financial policy stipulating a level of leverage consistent with a significant or better financial risk profile (that is, debt to EBITDA of less than 4x when applying standard volatility tables, 4.5x when applying medial volatility tables, or less than 5x when applying low volatility tables) and
		 We assess liquidity to be at least adequate, with adequate covenant headroom.
FS-5	Financial risk profile set at '5'	Issuer must meet all of the following conditions:
		 For issuers subject to the standard volatility table, debt to EBITDA iless than 5x, and we estimate that it will remain less than 5x. For issuers that are subject to the medial volatility table, debt to EBITDA is below 5.5x and we forecast it to remain below that leve Or for issuers subject to the low volatility table, debt to EBITDA is less than 6x and our estimation is it will remain below that level;
		 We believe the risk of releveraging beyond 5x (standard volatility issuer), 5.5x (medial volatility issuer), or 6x (low volatility issuer) is low; and
		 We assess liquidity to be at least adequate, with adequate covenant headroom.
FS-6	Financial risk profile set at '6'	Standard & Poor's debt to EBITDA is greater than 5x (when applying the standard volatility table), greater than 5.5x (when applying the medial volatility table), or greater than 6x (when applying the low volatility table). However, we believe leverage is unlikely to increase meaningfully beyond these levels.
FS-6 (minus)	Financial risk profile set at '6', and anchor reduced by one notch (unless this results in a final rating below '8-')	In determining the anchor the financial risk profile is a '6', but we believe the track record of the financial sponsor indicates that leverage could increase materially from already high levels.

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3. Companies not controlled by a financial sponsor

- 172. For companies not controlled by a financial sponsor we evaluate management's financial discipline and financial policy framework to determine the influence on an entity's financial risk profile beyond what is implied by recent credit ratios and our cash flow and leverage forecasts. This influence can be positive, neutral, or negative.
- 173. We do not distinguish between management and a controlling shareholder that is not a financial sponsor when assessing these subfactors, as the controlling shareholder usually has the final say on financial policy.

a) Financial discipline

- 4. The financial discipline assessment is based on management's leverage tolerance and the likelihood of event risk. The criteria evaluate management's potential appetite to incur unforeseen, higher financial risk over a prolonged period and the associated impact on credit measures. We also assess management's capacity and commitment to rapidly decrease debt leverage to levels consistent with its credit ratio targets.
- 175. This assessment therefore seeks to determine whether unforeseen actions by management to increase, maintain, or reduce financial risk are likely to occur during the next two to three years, with either a negative or positive effect, or none at all, on our baseline forecasts for the period.
- 176. This assessment is based on the leverage tolerance of a company's management, as reflected in its plans or history of acquisitions, shareholder remuneration, and organic growth strategies (see Appendix E, paragraphs 258 to 263).
- 177. We assess financial discipline as positive, neutral, or negative, based on its potential impact on our forward-looking assessment of a firm's cash flow/leverage, as detailed in table 25. For example, a neutral assessment for leverage tolerance reflects our expectation that management's financial policy will unlikely lead to significant deviation from current and forecasted credit ratios. A negative assessment acknowledges a significant degree of event risk of increased leverage relative to our base-case forecast, resulting from the company's acquisition policy, its shareholder remuneration policy, or its organic growth strategy. A positive assessment indicates that the company is likely to take actions to reduce leverage, but we cannot confidently incorporate these actions into our baseline forward-looking assessment of cash flow/leverage.
 - 3. A positive assessment indicates that management is committed and has the capacity to reduce debt leverage through the rapid implementation of credit enhancing measures, such as asset disposals, rights issues, or reductions in shareholder returns. In addition, management's track record over the past five years shows that it has taken actions to rapidly reduce unforeseen increases in debt leverage and that there have not been any prolonged periods when credit ratios were weaker than our expectations for the rating. Management, even if new, also has a track record of successful execution. Conversely, a negative assessment indicates management's financial policy allows for significant increase in leverage compared with both current levels and our forward-looking forecast under normal operating/financial conditions or does not have observable time limits or stated boundaries. Management has a track record of allowing for significant and prolonged peaks in leverage and there is no commitment or track record of management using mitigating measures to rapidly return to credit ratios consistent with our expectations.
- 179. As evidence of management's leverage tolerance, we evaluate its track record and plans regarding acquisitions, shareholder remuneration, and organic growth strategies (see Appendix E, paragraphs 258 to 263). Acquisitions could increase the risk that leverage will be higher than our base-case forecast if we view management's strategy as opportunistic or if its financial policy (if it exists) provides significant headroom for debt-financed acquisitions. Shareholder remuneration could also increase the risk of leverage being higher than our base-case forecast if management's shareholder reward policies are not particularly well defined or have no clear limits, management has a tolerance for shareholder returns exceeding operating cash flow, or has a track record of sustained cash returns despite weakening operating performance or credit ratios. Organic growth strategies can also result in leverage higher than our base-case forecast if these plans have no clear focus or investment philosophy, capital spending is fairly unpredictable,

or there is a track record of overspending or unexpected or rapid shifts in plans for new markets or products.

180. We also take into account management's track record and level of commitment to its stated financial policies, to the extent a company has a stated policy. Historical evidence and any deviations from stated policies are key elements in analyzing a company's leverage tolerance. Where material and unexpected deviation in leverage may occur (for example, on the back of operating weakness or acquisitions), we also assess management's plan to restore credit ratios to levels consistent with previous expectations through rapid and proactive non-organic measures. Management's track record to execute its deleveraging plan, its level of commitment, and the scope and timeframe of debt mitigating measures will be key differentiators in assessing a company's financial policy discipline.

Table 25

Assessing	Financial Discipline	
Descriptor	What it means	Guidance
Positive	Management is likely to take actions that result in leverage that is lower than our base-case forecast, but can't be confidently included in our base-case assumptions. Event risk is low.	Management is committed and has capacity to reduce debt leverage and increase financial headroom through the rapid implementation of credit enhancing measures, in line with its stated financial policy, if any. This relates primarily to management's careful and moderate policy with regard to acquisitions and shareholder remuneration as well as to its organic growth strategy. The assessments are supported by historical evidence over the past five years of not showing any prolonged weakening in the company's credit ratios, or relative to our base-case credit metrics' assumptions. Management, even if new, has a track record of successful execution.
Neutral	Leverage is not expected to deviate materially from our base-case forecast. Event risk is moderate.	Management's financial discipline with regard to acquisitions, shareholder remuneration, as well as its organic growth strategy does not result in significantly different leverage as defined in its stated financial policy framework.
Negative	Leverage could become materially higher than our base-case forecast. Event risk is high.	Management's financial policy framework does not explicitly rule out a significant increase in leverage compared to our base-case assumptions, possibly reflecting a greater event risk with regard to its M&A and shareholder remuneration policy as well as to its organic growth strategy. These points are supported by historical evidence over the past five years of allowing for significant and prolonged peaks in leverage, which remained unmitigated by credit supporting measures by management.

b) Financial policy framework

- 181. The company's financial policy framework assesses the comprehensiveness, transparency, and sustainability of the entity's financial policies (see Appendix E, paragraphs 264-268). This will help determine whether there is a satisfactory degree of visibility into the issuer's future financial risk profile. Companies that have developed and sustained a comprehensive set of financial policies are more likely to build long-term, sustainable credit quality than those that do not.
- 182. We will assess a company's financial policy framework as supportive or non-supportive based on evidence that supports the characteristics listed below. In order for an entity to receive a supportive assessment for financial policy framework, there must be sufficient evidence of management's financial policies to back that assessment.
- 183. A company assessed as supportive will generally exhibit the following characteristics:
 - Management has a comprehensive set of financial policies covering key areas of financial risk, including debt leverage and liability management. Financial targets are well defined and quantifiable.
 - Management's financial policies are clearly articulated in public forums (such as public listing disclosures and investor presentations) or are disclosed to a limited number of key stakeholders such as main creditors or to the credit rating agencies. The company's adherence to these policies is satisfactory.

- Management's articulated financial policies are considered achievable and sustainable. This assessment takes into
 consideration historical adherence to articulated policies, existing financial risk profile, capacity to sustain capital
 structure through nonorganic means, demands of key stakeholders, and the stability of financial policy parameters
 over time.
- 184. A company receives a non-supportive assessment if it does not meet all the conditions for a supportive assessment. We expect a non-supportive assessment to be uncommon.

I. Liquidity

185. Our assessment of liquidity focuses on monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis assesses the potential for a company to breach covenant tests related to declines in EBITDA, as well as its ability to absorb high-impact, low-probability events, the nature of the company's bank relationships, its standing in credit markets, and how prudent (or not) we believe its financial risk management to be (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013).

J. Management And Governance

186. The analysis of management and governance addresses how management's strategic competence, organizational effectiveness, risk management, and governance practices shape the issuer's competitiveness in the marketplace, the strength of its financial risk management, and the robustness of its governance. Stronger management of important strategic and financial risks may enhance creditworthiness (see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," published Nov. 13, 2012).

K. Comparable Ratings Analysis

- 187. The comparable ratings analysis is our last step in determining a SACP on a company. This analysis can lead us to raise or lower our anchor, after adjusting for the modifiers, on a company by one notch based on our overall assessment of its credit characteristics for all subfactors considered in arriving at the SACP. This involves taking a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate. A positive assessment leads to a one-notch upgrade, a negative assessment leads to a one-notch downgrade, and a neutral assessment indicates no change to the anchor.
- 188. The application of comparable ratings analysis reflects the need to "fine-tune" ratings outcomes, even after the use of each of the other modifiers. A positive or negative assessment is therefore likely to be common rather than exceptional.
- 189. We consider our assessments of each of the underlying subfactors to be points within a possible range. Consequently, each of these assessments that ultimately generate the SACP can be at the upper or lower end, or at the mid-point, of such a range:

- A company receives a positive assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the higher end of the range;
- A company receives a negative assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the lower end of the range;
- A company receives a neutral assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be in line with the middle of the range.
- 190. The most direct application of the comparable ratings analysis is in the following circumstances:
 - Business risk assessment. If we expect a company to sustain a position at the higher or lower end of the ranges for the business risk category assessment, the company could receive a positive or negative assessment, respectively.
 - Financial risk assessment and financial metrics. If a company's actual and forecasted metrics are just above (or just below) the financial risk profile range, as indicated in its cash flow/leverage assessment, we could assign a positive or negative assessment.
- 191. We also consider additional factors not already covered, or existing factors not fully captured, in arriving at the SACP. Such factors will generally reflect less frequently observed credit characteristics, may be unique, or may reflect unpredictability or uncertain risk attributes, both positive and negative.
- 192. Some examples that we typically expect could lead to a positive or negative assessment using comparable ratings analysis include:
 - Short operating track record. For newly formed companies or companies that have experienced transformational events, such as a significant acquisition, a lack of an established track record of operating and financial performance could lead to a negative assessment until such a track record is established.
 - Entities in transition. A company in the midst of changes that we anticipate will strengthen or weaken its creditworthiness and that are not already fully captured elsewhere in the criteria could receive a positive or negative assessment. Such a transition could occur following major divestitures or acquisitions, or during a significant overhaul of its strategy, business, or financial structure.
 - Industry or macroeconomic trends. When industry or macroeconomic trends indicate a strengthening or weakening
 of the company's financial condition that is not already fully captured elsewhere in the criteria, the company could
 receive a positive or negative assessment, respectively.
 - Unusual funding structures. A company with exceptional financial resources that the criteria do not capture in the traditional ratio or liquidity analysis, or in capital structure analysis, could receive a positive assessment.
 - Contingent risk exposures. How well (or not) a company identifies, manages, and reserves for contingent risk
 exposures that can arise if guarantees are called, derivative contract break clauses are activated, or substantial
 lawsuits are lost could lead to a negative assessment.

SUPERSEDED CRITERIA FOR ISSUERS WITHIN THE SCOPE OF THESE CRITERIA

- Companies Owned By Financial Sponsors: Rating Methodology, March 21, 2013
- Methodology: Business Risk/Financial Risk Matrix Expanded, Sept. 18, 2012
- How Stock Prices Can Affect An Issuer's Credit Rating, Sept. 26, 2008
- 2008 Corporate Criteria: Analytical Methodology, April 15, 2008
- Credit FAQ: Knowing The Investors In A Company's Debt And Equity, April 4, 2006

RELATED CRITERIA

- Methodology: Industry Risk, Nov. 19, 2013
- Corporate Criteria: Ratios And Adjustments, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Nov. 19, 2013
- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Principles Of Credit Ratings, published Feb. 16, 2011
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- Criteria Guidelines For Recovery Ratings On Global Industrial Issuers' Speculative-Grade Debt, Aug. 10, 2009
- 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

APPENDIXES

A. Country Risk

Table 26

Table 20		
Country And Regional	Kusk	
Region		
Western Europe		
Southern Europe		
Western + Southern Europe		
East Europe		
Central Europe		
Eastern Europe and Central As	ia	
Middle East		
Africa		
North America		
Central America		
Latin America		
The Caribbean		**************************************
Asia-Pacific		
Central Asia		
East Asia		A SWA A A A A A A A A A A A A A A A A A
Australia NZ		
Country	Region	GDP weighting (%)
South Africa	Africa	30.2
Egypt	Africa	28.0
Nigeria	Africa	23.5
Morocco	Africa	8.9

Table 26

Country And Region		
Tunisia	Africa	5.4
Senegal	Africa	1.4
Mozambique	Africa	1.4
Zambia	Africa	1.2
Indonesia	Asia-Pacific	27.1
Taiwan	Asia-Pacific	20.1
Thailand	Asia-Pacific	14.4
Malaysia	Asia-Pacific	11.0
Philippines	Asia-Pacific	9.5
Vietnam	Asia-Pacific	7.1
Bangladesh	Asia-Pacific	6.8
Sri Lanka	Asia-Pacific	2.8
Laos	Asia-Pacific	0.4
Papua New Guinea	Asia-Pacific	0.4
Mongolia	Asia-Pacific	0.3
Australia	Australia NZ	88.2
New Zealand	Australia NZ	11.8
Guatemala	Central America	40.5
Costa Rica	Central America	30.2
Panama	Central America	29.3
India	Central Asia	86.5
Pakistan	Central Asia	9.3
Kazakhstan	Central Asia	4.2
Poland	Central Europe	46.3
Czech Republic	Central Europe	16.6
Hungary	Central Europe	11.3
Slovakia	Central Europe	7.7
Bulgaria	Central Europe	6.0
Croatia	Central Europe	4.6
Lithuania	Central Europe	3.8
Latvia	Central Europe	2.1
Estonia	Central Europe	1.6
China	East Asia	64.5
Japan	East Asia	23.6
Korea	East Asia	8.4
Hong Kong	East Asia	1.9
Singapore	East Asia	1.7
Greece	East Europe	77.5
Slovenia	East Europe	16.0
Cyprus	East Europe	6.5
Russia	Eastern Europe and Central Asia	80.4
Ukraine	Eastern Europe and Central Asia	10.8

Table 26

Belarus	Eastern Europe and Central Asia	4.8
Azerbaijan	Eastern Europe and Central Asia	3.2
Georgia	Eastern Europe and Central Asia	0.9
Brazil	Latin America	35.3
Mexico	Latin America	26.3
Argentina	Latin America	11.1
Colombia	Latin America	7.5
Venezuela	Latin America	6.0
Peru	Latin America	4.9
Chile	Latin America	4.8
Ecuador	Latin America	2.0
Uruguay	Latin America	0.8
El Salvador	Latin America	0.7
Paraguay	Latin America	0.6
Belize	Latin America	0.0
Turkey	Middle East	42.8
Saudi Arabia	Middle East	28.2
Israel	Middle East	9.4
Qatar	Middle East	7.2
Kuwait	Middle East	6.3
Oman	Middle East	3.4
Jordan	Middle East	1.5
Bahrain	Middle East	1.2
United States	North America	91.5
Canada	North America	8.8
Italy	Southern Europe	52.6
Spain	Southern Europe	40.4
Portugal	Southern Europe	7.0
Dominican Republic	The Caribbean	75.4
Jamaica	The Caribbean	19.2
Barbados	The Caribbean	5.4
Germany	Western Europe	28.7
United Kingdom	Western Europe	21.3
France	Western Europe	20.7
Netherlands	Western Europe	6.5
Belgium	Western Europe	3.9
Sweden	Western Europe	3.6
Switzerland	Western Europe	3.3
Austria	Western Europe	3.3
Norway	Western Europe	2.6
Denmark	Western Europe	1.9
Finland	Western Europe	1.8

Table 26

Country And Reg	ional Risk (cont.)	
Ireland	Western Europe	1.8
Luxembourg	Western Europe	0.4
Iceland	Western Europe	, 0.1
Malta	Western Europe	0.1

B. Competitive Position

Table 27

Industry	Subsector	Competitive position group profile
Transportation cyclical	Airlines	Capital or asset focus
	Marine	Capital or asset focus
	Trucking	Capital or asset focus
Auto OEM	Automobile and truck manufacturers	Capital or asset focus
Metals and mining downstream	Aluminum	Commodity focus/cost driven
	Steel	Commodity focus/cost driven
Metals and mining upstream	Coal and consumable fuels	Commodity focus/cost driven
	Diversified metals and mining	Commodity focus/cost driven
	Gold	Commodity focus/cost driven
	Precious metals and minerals	Commodity focus/cost driven
Homebuilders and developers	Homebuilding	Capital or asset focus
Oil and gas refining and marketing	Oil and gas refining and marketing	Commodity focus/scale driver
Forest and paper products	Forest products	Commodity focus/cost driven
	Paper products	Commodity focus/cost driven
Building Materials	Construction materials	Capital or asset focus
Oil and gas integrated, exploration and production	Integrated oil and gas	Commodity focus/scale driver
	Oil and gas exploration and production	Commodity focus/scale driver
Agribusiness and commodity foods	Agricultural products	Commodity focus/scale driver
Real estate investment trusts (REITs)	Diversified REITs	Real-estate specific*
	Health care REITS	Real-estate specific*
	Industrial REITs	Real-estate specific*
	Office REITs	Real-estate specific*
	Residential REITs	Real-estate specific*
	Retail REITs	Real-estate specific*
	Specialized REITs	Not appplicable**
	Self-storage REITs	Real-estate specific*
	Net lease REITs	Real-estate specific*
	Net lease REI Is	Titour country of course
	Real estate operating companies	Real-estate specific*
Leisure and sports		

Table 27

	Leisure facilities	Services and product focus
Commodity chemicals	Commodity chemicals	Commodity focus/cost driven
	Diversified chemicals	Commodity focus/cost driven
	Fertilizers and agricultural chemicals	Commodity focus/cost driven
Auto suppliers	Auto parts and equipment	Capital or asset focus
	Tires and rubber	Capital or asset focus
	Vehicle-related suppliers	Capital or asset focus
Aerospace and defense	Aerospace and defense	Services and product focus
Technology hardware and semiconductors	Communications equipment	Capital or asset focus
	Computer hardware	Capital or asset focus
	Computer storage and peripherals	Capital or asset focus
	Consumer electronics	Capital or asset focus
	Electronic equipment and instruments	Capital or asset focus
	Electronic components	Capital or asset focus
	Electronic manufacturing services	Capital or asset focus
	Technology distributors	Capital or asset focus
	Office electronics	Capital or asset focus
	Semiconductor equipment	Capital or asset focus
	Semiconductors	Capital or asset focus
Specialty Chemicals	Industrial gases	Capital or asset focus
	Specialty chemicals	Capital or asset focus
Capital Goods	Electrical components and equipment	Capital or asset focus
	Heavy equipment and machinery	Capital or asset focus
	Industrial componentry and consumables	Capital or asset focus
	Construction equipment rental	Capital or asset focus
	Industrial distributors	Services and product focus
Engineering and construction	Construction and engineering	Services and product focus
Railroads and package express	Railroads	Capital or asset focus
	Package express	Services and product focus
	Logistics	Services and product focus
Business and consumer services	Consumer services	Services and product focus
	Distributors	Services and product focus
	Facilities services	Services and product focus
	General support services	Services and product focus
	Professional services	Services and product focus
Midstream energy	Oil and gas storage and transportation	Commodity focus/scale driven
Technology software and services	Internet software and services	Services and product focus
	IT consulting and other services	Services and product focus
	Data processing and outsourced services	Services and product focus
	Application software	Services and product focus
	Systems software	Services and product focus
	Consumer software	Services and product focus

Table 27

Consumer durables	Home furnishings	Services and product focus
	Household appliances	Services and product focus
	Housewares and specialties	Services and product focus
	Leisure products	Services and product focus
	Photographic products	Services and product focus
	Small appliances	Services and product focus
Containers and packaging	Metal and glass containers	Capital or asset focus
	Paper packaging	Capital or asset focus
Media and entertainment	Ad agencies and marketing services companies	Services and product focus
	Ad-supported internet content platforms	Services and product focus
	Broadcast TV networks	Services and product focus
	Cable TV networks	Services and product focus
	Consumer and trade magazines	Services and product focus
	Data/professional publishing	Services and product focus
	Directories	Services and product focus
	E-Commerce (services)	Services and product focus
	Educational publishing	Services and product focus
	Film and TV programming production	Capital or asset focus
	Miscellaneous media and entertainment	Services and product focus
	Motion picture exhibitors	Services and product focus
	Music publishing	Services and product focus
	Music recording	Services and product focus
	Newspapers	Services and product focus
	Outdoor advertising	Services and product focus
	Printing	Commodity focus/scale driven
	Radio broadcasters	Services and product focus
	Trade shows	Services and product focus
	TV stations	Services and product focus
Oil and gas drilling, equipment and services	Onshore contract drilling	Commodity focus/scale driven
	Offshore contract drilling	Capital or Asset Focus
	Oil and gas equipment and services (oilfield services)	Commodity focus/scale driven
Retail and restaurants	Catalog retail	Services and product focus
	Internet retail	Services and product focus
	Department stores	Services and product focus
	General merchandise stores	Services and product focus
	Apparel retail	Services and product focus
	Computer and electronics retail	Services and product focus
	Home improvement retail	Services and product focus
	Specialty stores	Services and product focus
	Automotive retail	Services and product focus
	Home furnishing retail	Services and product focus

Table 27

List Of Industries, Subsectors, A	and Standard Competitive Position Group Profile	es (cont.)
Health care services	Health care services	Commodity focus/scale driven
Transportation infrastructure	Airport services	National industries and utilities
	Highways	National industries and utilities
	Railtracks	National industries and utilities
	Marine ports and services	National industries and utilities
Environmental services	Environmental and facilities services	Services and product focus
Regulated utilities	Electric utilities	National industries and utilities
	Gas utilities	National industries and utilities
	Multi-utilities	National industries and utilities
	Water utilities	National industries and utilities
Unregulated power and gas	Independent power producers and energy traders	Capital or asset focus
	Merchant power	Capital or asset focus
Pharmaceuticals	Branded pharmaceuticals	Services and product focus
	Generic pharmaceuticals	Commodity focus/scale driven
Health care equipment	High-tech health care equipment	Product focus/scale driven
	Low-tech health care equipment	Commodity focus/scale driven
Branded nondurables	Brewers	Services and product focus
	Distillers and vintners	Services and product focus
	Soft drinks	Services and product focus
	Packaged foods and meats	Services and product focus
	Tobacco	Services and product focus
	Household products	Services and product focus
	Apparel, footwear, accessories, and luxury goods	Services and product focus
	Personal products	Services and product focus
Telecommunications and cable	Cable and satellite	Services and product focus
	Alternative carriers	Services and product focus
	Integrated telecommunication services	Services and product focus
	Wireless towers	Capital or asset focus
	Data center operators	Capital or asset focus
	Fiber-optic carriers	Capital or asset focus
	Wireless telecommunication services	Services and product focus
,		

^{*}See "Key Credit Factors For The Real Estate Industry," published Nov. 19, 2013. **For specialized REITs, there is no standard CPGP, as the CPGP will vary based on the underlying industry exposure (e.g. a forest and paper products REIT).

1. Analyzing subfactors for competitive advantage

- 193. Competitive advantage is the first component of our competitive position analysis. Companies that possess a sustainable competitive advantage are able to capitalize on key industry factors or mitigate associated risks more effectively. When a company operates in more than one business, we analyze each segment separately to form an overall view of its competitive advantage. In assessing competitive advantage, we evaluate the following subfactors:
 - Strategy;
 - Differentiation/uniqueness, product positioning/bundling;

Criteria | Corporates | General: Corporate Methodology

- Brand reputation and marketing;
- Product/service quality;
- Barriers to entry, switching costs;
- Technological advantage and capabilities, technological displacement; and
- Asset profile.

a) Strategy

- 194. A company's business strategy will enhance or undermine its market entrenchment and business stability. Compelling business strategies can create a durable competitive advantage and thus a relatively stronger competitive position. We form an opinion as to the source and sustainability (if any) of the company's competitive advantage relative to its peers'. The company may have a differentiation advantage (i.e., brand, technology, regulatory) or a cost advantage (i.e., lower cost producer/servicer at the same quality level), or a combination.
- 195. Our assessment of a company's strategy is informed by a company's historical performance and how realistic we view its forward-looking business objectives to be. These may include targets for market shares, the percentage of revenues derived from new products, price versus the competition's, sales or profit growth, and required investment levels. We evaluate these objectives in the context of industry dynamics and the attractiveness of the markets in which the company participates.

b) Differentiation/uniqueness, product positioning/bundling

- 196. The attributes of product or service differentiation vary by sector, and may include product or services features, performance, durability, reliability, delivery, and comprehensiveness, among other measures. The intensity of competition may be lower where buyers perceive the product or service to be highly differentiated or to have few substitutes. Conversely, products and services that lack differentiation, or offer little value-added in the eyes of customers, are generally commodity-type products that primarily compete on price. Competition intensity will often be highest where limited or moderate investment (R&D, capital expenditures, or advertising) or low employee skill levels (for service businesses) are required to compete. Independent market surveys, media commentaries, market share trends, and evidence of leading or lagging when it comes to raising or lowering prices can indicate varying degrees of product differentiation.
- 197. Product positioning influences how companies are able to extend or protect market shares by offering popular products or services. A company's abilities to replace aging products with new ones, or to launch product extensions, are important elements of product positioning. In addition, the ability to sell multiple products or services to the same customer, known as bundling or cross-selling, (for instance, offering an aftermarket servicing contract together with the sale of a new appliance) can create a competitive advantage by increasing customers' switching costs and fostering loyalty.

c) Brand reputation and marketing

- 198. Brand equity measures the price premium a company receives based on its brand relative to the generic equivalent. High brand equity typically translates into customer loyalty, built partially via marketing campaigns. One measure of advertising effectiveness can be revenue growth compared with the increase in advertising expenses.
- 199. We also analyze re-investment and advertising strategies to anticipate potential strengthening or weakening of a

company's brand. A company's track record of boosting market share and delivering attractive margins could indicate its ability to build and maintain brand reputation.

d) Product/service level quality

 $t_0 = j'$

- 200. The strength and consistency of a value proposition is an important factor contributing to a sustainable competitive advantage. Value proposition encompasses the key features of a product or a service that convince customers that their purchase has the right balance between price and quality. Customers generally perceive a product or a service to be good if their expectations are consistently met. Quality, both actual and perceived, can help a company attract and retain customers. Conversely, poor product and service quality may lead to product recalls, higher-than-normal product warnings, or service interruptions, which may reduce demand. Measures of customer satisfaction and retention, such as attrition rates and contract renewal rates, can help trace trends in product/service quality.
- 201. Maintaining the value proposition requires consistency and adaptability around product design, marketing, and quality-related operating controls. This is pertinent where product differentiation matters, as is the case in most noncommodity industries, and especially so where environmental or human health (concerns for the chemical, food, and pharmaceutical industries) adds a liability dimension to the quality and value proposition. Similarly, regulated utilities (which often do not set their own prices) typically focus on delivering uninterrupted service, often to meet the standards set by their regulator.

e) Barriers to entry, switching costs

- 202. Barriers to entry can reduce or eliminate the threat of new market entrants. Where they are effective, these barriers can lead to more predictable revenues and profits, by limiting pricing pressures and customer losses, lowering marketing costs, and improving operating efficiency. While barriers to entry may enable premium pricing, a dominant player may rationally choose pricing restraint to further discourage new entrants.
- 203. Barriers to entry can be one or more of: a natural or regulatory monopoly; supportive regulation; high transportation costs; an embedded customer base that would incur high switching costs; a proprietary product or service; capital or technological intensiveness.
- 204. A natural monopoly may result from unusually high requirements for capital and operating expenditures that make it uneconomic for a market to support more than a single, dominant provider. The ultimate barrier to entry is found among regulated utilities, which provide an essential service in their 'de juris' monopolies and receive a guaranteed rate of return on their investments. A supportive regulatory regime can include rules and regulations with high hurdles that discourage competitors, or mandate so many obligations for a new entrant as to make market entry financially unviable.
- 205. In certain industrial sectors, proprietary access to a limited supply of key raw materials or skilled labor, or zoning laws that effectively preclude a new entrant, can provide a strong barrier to entry. Factors such as relationships, long-term contracts or maintenance agreements, or exclusive distribution agreements can result in a high degree of customer stickiness. A proprietary product or service that's protected by a copyright or patent can pose a significant hurdle to new competitors.

f) Technological advantage and capabilities, technological displacement

- 206. A company may benefit from a proprietary technology that enables it to offer either a superior product or a commodity-type product at a materially lower cost. Proven research and development (R&D) capabilities can deliver a differentiated, superior product or service, as in the pharmaceutical or high tech sectors. However, optimal R&D strategies or the importance or effectiveness of patent protection differ by industry, stage of product development, and product lifecycle.
- 207. Technological displacement can be a threat in many industries; new technologies or extensions of current ones can effectively displace a significant portion of a company's products or services.

g) Asset profile

- 208. A company's asset profile is a reflection of its reinvestment, which creates tangible or intangible assets, or both. Companies in similar sectors and industries usually have similar reinvestment options and, thus, their asset profiles tend to be comparable. The reinvestment in "heavy" industries, such as oil and gas, metals and mining, and automotive, tends to produce more tangible assets, whereas the reinvestment in certain "light" industries, such as services, media and entertainment, and retail, tends to produce more intangible assets.
- 209. We evaluate how a company's asset profile supports or undermines its competitive advantage by reviewing its manufacturing or service creation capabilities and investment requirements, its distribution capabilities, and its track record and commitment to reinvesting in its asset base. This may include a review of the company's ability to attract and retain a talented workforce; its degree of vertical integration and how that may help or hinder its ability to secure supply sources, control the value-added part of its production chain, or adjust to technological developments; or its ability develop a broad and strong distribution network.

2. Analyzing subfactors for scale, scope, and diversity

- 210. In assessing the relative strength of this component, we evaluate four subfactors:
 - Diversity of product or service range;
 - Geographic diversity;
 - · Volumes, size of markets and revenues, and market shares; and
 - Maturity of products or services.
- 211. In a given industry, entities with a broader mix of business activities are typically lower risk, and entities with a narrower mix are higher risk. High concentration of business volumes by product, customer, or geography, or a concentration in the production footprint or supplier base, can lead to less stable and predictable revenues and profits. Comparatively broader diversity helps a company withstand economic, competitive, or technological threats better than its peers.
- 212. There is no minimum size criterion, although size often provides a measure of diversification. Size and scope of operations is important relative to those of industry peers, though not in absolute terms. While relatively smaller companies can enjoy a high degree of diversification, they will likely be, almost by definition, more concentrated in terms of product, number of customers, or geography than their larger peers in the same industry.
- 213. Successful and continuing diversification supports a stronger competitive position. Conversely, poor diversification

weakens overall competitive position. For example, a company will weaken its overall business position if it enters new product lines and countries where it has limited expertise and lacks critical mass to be a real competitor to the incumbent market leaders. The weakness is greater when the new products or markets are riskier than the traditional core business.

214. Where applicable, we also include under scale, scope, and diversity an assessment of the potential benefits derived from unconsolidated (or partially consolidated) investments in strategic assets. The relative significance of such an investment and whether it is in an industry that exhibits high or, conversely, low correlation with the issuer's businesses would be considered in determining its potential benefits to scale, scope, and diversity. This excludes nonstrategic, financial investments, the analysis of which does not fall under the competitive position criteria but, instead, under the capital structure criteria.

a) Diversity of product or service range

- 215. The concentration of business volumes or revenues in a particular or comparatively small set of products or services can lead to less stable revenues and profits. Even if this concentration is in an attractive product or service, it may be a weakness. Likewise, the concentration of business volumes with a particular customer or a small group of customers, or the reliance on one or a few suppliers, can expose the company to a potentially greater risk of losing and having to replace related revenues and profits. On the other hand, successful diversification across products, customers, and/or suppliers can lead to more stable and predictable revenues and profits, which supports a stronger assessment of scale, scope, and diversity.
 - 3. The relative contribution of different products or services to a company's revenues or profits helps us gauge its diversity. We also evaluate the correlation of demand between product or services lines. High correlation in demand between seemingly different product or service lines will accentuate volume declines during a weak part of the business cycle.
- 217. In most sectors, the share of revenue a company receives from its largest five to 10 customers or counterparties reveals how diversified its customer base is. However, other considerations such as the stability and credit quality of that customer base, and the company's ability to retain significant customers, can be mitigating or accentuating factors in our overall evaluation. Likewise, supplier dependency can often be measured based on a supplier's share of a company's operating or capital costs. However, other factors, such as the degree of interdependence between the company and its supplier(s), the substitutability of key supply sources, and the company's presumed ability to secure alternative supply without incurring substantial switching costs, are important considerations. Low switching costs (i.e. limited impact on input price, quality, or delivery times as a result of having to adapt to a new supply chain partner) can mitigate a high level of concentration.

b) Geographic diversity

- 218. We assess geographic diversity both from the standpoint of the breadth of the company's served or addressable markets, and from the standpoint of how geographically concentrated its facilities are.
- 219. The concentration of business volumes and revenues within a particular region can lead to greater exposure to economic factors affecting demand for a company's goods or services in that region. Even if the company's volumes and revenues are concentrated in an attractive region, it may still be vulnerable to a significant drop in demand for its

c) Working capital management

232. Working capital management--of current or short-term assets and liabilities--is a key factor in our evaluation of operating efficiency. In general, companies with solid working capital management skills exhibit shorter cash conversion cycles (defined as days' investment in inventory and receivables less days' investment in accounts payable) than their lower-skilled peers. Short cash-conversion cycles could, for instance, demonstrate that a company has a stronger position in the supply chain (for example, requiring suppliers or dealers to hold more of its inventory). This allows a company to direct more capital than its peers can to other areas of investment.

d) Technology

- 233. Technology can play an important role in achieving superior operating efficiency through effective yield management (by improving input/output ratios), supply chain automation, and cost optimization.
- 234. Achieving high yield management is particularly important in industries with limited inventory and high fixed costs, such as transportation, lodging, media, and retail. The most efficient airlines can achieve higher revenue per available seat mile than their peers, while the most efficient lodging companies can achieve a higher revenue per available room than their peers. Both industries rely heavily on technology to effectively allocate inventory (seats and rooms) to maximize sales and profitability.
- 235. Effective supply chain automation systems enable companies to reduce investments in inventory and better forecast future orders based on current trends. By enabling electronic data interchange between supplier and retailer, such systems help speed orders and reorders for goods by quickly pinpointing which merchandise is selling well and needs restocking. They also identify slow moving inventory that needs to be marked down, making space available for fresh merchandise.
- 236. Effective use of technology can also help hold down costs by improving productivity via automation and workflow management. This can reduce selling, general, and administrative costs, which usually represent a substantial portion of expenditures for industries with high fixed costs, thus boosting earnings.

4. Industry-specific SER parameters Table 28

d On EBITDA					
	Volatility of profitability assessment*				
1	2	3	4	5	6
=<10%	>10%-14%	>14%-22%	>22%-33%	>33%-76%	>76%
=<25%	>25%-33%	>33%-35%	>35%-40%	>40%-46%	>46%
=<16%	>16%-31%	>31%-42%	>42%-53%	>53%-82%	>82%
=<16%	>16%-23%	>23%-28%	>28%-34%	>34%-59%	>59%
=<19%	>19%-33%	>33%-46%	>46%-65%	>65%-95%	>95%
=<14%	>14%-21%	>21%-35%	>35%-46%	>46%-82%	>82%
=<9%	>9%-18%	>18%-26%	>26%-51%	>51%-114%	>114%
=<9%	>9%-16%	>16%-19%	>19%-24%	>24%-33%	>33%
=<12%	>12%-19%	>19%-22%	>22%-28%	>28%-38%	>38%
=<12%	>12%-19%	>19%-25%	>25%-39%	>39%-57%	>57%
	1 =<10% =<25% =<16% =<16% =<19% =<14% =<9% =<9% =<12%	1 2 =<10% >10%-14% =<25% >25%-33% =<16% >16%-31% =<16% >16%-23% =<19% >19%-33% =<14% >14%-21% =<9% >9%-18% =<9% >9%-16% =<12% >12%-19%	Volatility of profitable 1 2 3 =<10% >10%-14% >14%-22% =<25% >25%-33% >33%-35% =<16% >16%-31% >31%-42% =<16% >16%-23% >23%-28% =<19% >19%-33% >33%-46% =<14% >14%-21% >21%-35% =<9% >9%-18% >18%-26% =<9% >9%-16% >16%-19% =<12% >12%-19% >19%-22%	Volatility of profitability assessment 1 2 3 4 =<10% >10%-14% >14%-22% >22%-33% =<25% >25%-33% >33%-35% >35%-40% =<16% >16%-31% >31%-42% >42%-53% =<16% >16%-23% >23%-28% >28%-34% =<19% >19%-33% >33%-46% >46%-65% =<14% >14%-21% >21%-35% >35%-46% =<9% >9%-18% >18%-26% >26%-51% =<9% >9%-16% >16%-19% >19%-24% =<12% >12%-19% >19%-22% >22%-28%	Volatility of profitability assessment* 1 2 3 4 5 =<10%

Table 28

SER Calibration By Industry Based	On EBITDA	(cont.)				
Real estate investment trusts (REITs)	=<5%	>5%-9%	>9%-13%	>13%-20%	>20%-32%	>32%
Leisure and sports	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-24%	>24%
Commodity chemicals	=<14%	>14%-19%	>19%-28%	>28%-37%	>37%-51%	>51%
Auto suppliers	=<15%	>15%-20%	>20%-26%	>26%-32%	>32%-45%	>45%
Aerospace and defense	=<6%	>6%-9%	>9%-15%	>15%-24%	>24%-41%	>41%
Technology hardware and semiconductors	=<11%	>11%-15%	>15%-22%	>22%-31%	>31%-58%	>58%
Specialty chemicals	=<5%	>5%-10%	>10%-14%	>14%-23%	>23%-36%	>36%
Capital goods	=<12%	>12%-16%	>16%-21%	>21%-30%	>30%-45%	>45%
Engineering and construction	=<9%	>9%-14%	>14%-20%	>20%-28%	>28%-39%	>39%
Railroads and package express	=<5%	>5%-8%	>8%-10%	>10%-13%	>13%-22%	>22%
Business and consumer services	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-30%	>30%
Midstream energy	=<5%	>5%-9%	>9%-11%	>11%-15%	>15%-31%	>31%
Technology software and services	=<4%	>4%-9%	>9%-14%	>14%-19%	>19%-33%	>33%
Consumer durables	=<7%	>7%-10%	>10%-13%	>13%-19%	>19%-35%	>35%
Containers and packaging	=<5%	>5%-7%	>7%-12%	>12%-18%	>18%-26%	>26%
Media and entertainment	=<6%	>6%-10%	>10%-14%	>14%-20%	>20%-29%	>29%
Oil and gas drilling, equipment and services	=<16%	>16%-22%	>22%-28%	>28%-44%	>44%-62%	>62%
Retail and restaurants	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-26%	>26%
Health care services	=<4%	>4%-5%	>5%-9%	>9%-12%	>12%-19%	>19%
Transportation infrastructure	=<2%	>2%-4%	>4%-7%	>7%-12%	>12%-19%	>19%
Environmental services	=<5%	>5%-9%	>9%-13%	>13%-22%	>22%-29%	>29%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-26%	>26%
Unregulated power and gas	=<7%	>7%-16%	>16%-20%	>20%-29%	>29%-47%	>47%
Pharmaceuticals	=<5%	>5%-8%	>8%-11%	>11%-17%	>17%-32%	>32%
Health care equipment	=<3%	>3%-5%	>5%-6%	>6%-10%	>10%-25%	>25%
Branded nondurables	=<4%	>4%-7%	>7%-10%	>10%-15%	>15%-43%	>43%
Telecommunications and cable	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-23%	>23%
Overall	=<5%	>5%-9%	>9%-15%	>15%-23%	>23%-43%	>43%

^{*}The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 29

SER Calibration By Industry Based On EBITDA Margin									
		Volatility of profitability assessment*							
	1	2	3	4	5	6			
Transportation cyclical	=<4%	>4%-8%	>8%-16%	>16%-28%	>28%-69%	>69%			
Auto OEM	=<15%	>15%-19%	>19%-29%	>29%-31%	>31%-45%	>45%			
Metals and mining downstream	=<10%	>10%-18%	>18%-26%	>26%-36%	>36%-56%	>56%			
Metals and mining upstream	=<8%	>8%-10%	>10%-14%	>14%-19%	>19%-31%	>31%			
Homebuilders and developers	=<10%	>10%-18%	>18%-30%	>30%-56%	>56%-114%	>114%			
Oil and gas refining and marketing	=<12%	>12%-22%	>22%-28%	>28%-42%	>42%-71%	>71%			
Forest and paper products	=<8%	>8%-13%	>13%-21%	>21%-41%	>41%-117%	>117%			
Building materials	=<4%	>4%-8%	>8%-13%	>13%-18%	>18%-23%	>23%			

Table 29

Oil and gas integrated, exploration and	=<4%	>4%-6%	>6%-8%	>8%-13%	>13%-22%	>22%
production						
Agribusiness and commodity foods	=<9%	>9%-14%	>14%-18%	>18%-27%	>27%-100%	>100%
Real estate investment trusts (REITs)	=<2%	>2%-5%	>5%-8%	>8%-13%	>13%-34%	>34%
Leisure and sports	=<3%	>3%-5%	>5%-6%	>6%-9%	>9%-18%	>18%
Commodity chemicals	=<9%	>9%-14%	>14%-18%	>18%-25%	>25%-37%	>37%
Auto suppliers	=<9%	>9%-13%	>13%-18%	>18%-23%	>23%-40%	>40%
Aerospace and defense	=<3%	>3%-6%	>6%-7%	>7%-12%	>12%-24%	>24%
Technology hardware and semiconductors	=<7%	>7%-10%	>10%-15%	>15%-21%	>21%-62%	>62%
Specialty chemicals	=<3%	>3%-6%	>6%-10%	>10%-19%	>19%-28%	>28%
Capital goods	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-33%	>33%
Engineering and construction	=<6%	>6%-8%	>8%-12%	>12%-17%	>17%-26%	>26%
Railroads and package express	=<2%	>2%-6%	>6%-8%	>8%-10%	>10%-17%	>17%
Business and consumer services	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-22%	>22%
Midstream energy	=<3%	>3%-6%	>6%-9%	>9%-14%	>14%-28%	>28%
Technology software and services	=<3%	>3%-6%	>6%-10%	>10%-15%	>15%-30%	>30%
Consumer durables	=<4%	>4%-8%	>8%-11%	>11%-15%	>15%-26%	>26%
Containers and packaging	=<5%	>5%-7%	>7%-9%	>9%-15%	>15%-22%	>22%
Media and entertainment	=<4%	>4%-6%	>6%-9%	>9%-14%	>14%-24%	>24%
Oil and gas drilling, equipment and services	=<6%	>6%-12%	>12%-16%	>16%-22%	>22%-32%	>32%
Retail and restaurants	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-21%	>21%
Health care services	=<3%	>3%-5%	>5%-6%	>6%-8%	>8%-15%	>15%
Transportation infrastructure	=<1%	>1%-3%	>3%-5%	>5%-7%	>7%-15%	>15%
Environmental services	=<3%	>3%-4%	>4%-6%	>6%-10%	>10%-24%	>24%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-24%	>24%
Unregulated power and gas	=<6%	>6%-10%	>10%-15%	>15%-23%	>23%-41%	>41%
Pharmaceuticals	=<4%	>4%-5%	>5%-7%	>7%-10%	>10%-21%	>21%
Health care equipment	=<2%	>2%-4%	>4%-5%	>5%-10%	>10%-16%	>16%
Branded nondurables	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-28%	>28%
Telecommunications and cable	=<2%	>2%-4%	>4%-5%	>5%-7%	>7%-13%	>13%
Overall	=<3%	>3%-6%	>6%-10%	>10%-16%	>16%-32%	>32%

 $^{^*}$ The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 30

	Volatility of profitability assessment*						
	1	2	3	4	5	6	
Transportation cyclical	=<14%	>14%-28%	>28%-39%	>39%-53%	>53%-156%	>156%	
Auto OEM	=<42%	>42%-64%	>64%-74%	>74%-86%	>86%-180%	>180%	
Metals and mining downstream	=<25%	>25%-32%	>32%-43%	>43%-53%	>53%-92%	>92%	
Metals and mining upstream	=<22%	>22%-30%	>30%-38%	>38%-45%	>45%-93%	>93%	
Homebuilders and developers	=<12%	>12%-31%	>31%-50%	>50%-70%	>70%-88%	>88%	

Table 30

SER Calibration By Industry Based	On Return	On Capital (c	ont.)			
Oil and gas refining and marketing	=<14%	>14%-30%	>30%-48%	>48%-67%	>67%-136%	>136%
Forest and paper products	=<10%	>10%-22%	>22%-40%	>40%-89%	>89%-304%	>304%
Building materials	=<13%	>13%-20%	>20%-26%	>26%-36%	>36%-62%	>62%
Oil and gas integrated, exploration and production	=<16%	>16%-22%	>22%-31%	>31%-43%	>43%-89%	>89%
Agribusiness and commodity foods	=<12%	>12%-15%	>15%-29%	>29%-55%	>55%-111%	>111%
Real estate investment trusts (REITs)	=<8%	>8%-14%	>14%-20%	>20%-26%	>26%-116%	>116%
Leisure and sports	=<11%	>11%-17%	>17%-26%	>26%-34%	>34%-64%	>64%
Commodity chemicals	=<19%	>19%-28%	>28%-41%	>41%-50%	>50%-73%	>73%
Auto suppliers	=<20%	>20%-39%	>39%-50%	>50%-67%	>67%-111%	>111%
Aerospace and defense	=<7%	>7%-13%	>13%-19%	>19%-27%	>27%-61%	>61%
Technology hardware and semiconductors	=<8%	>8%-21%	>21%-34%	>34%-49%	>49%-113%	>113%
Specialty chemicals	=<5%	>5%-18%	>18%-28%	>28%-43%	>43%-64%	>64%
Capital goods	=<15%	>15%-24%	>24%-31%	>31%-45%	>45%-121%	>121%
Engineering and construction	=<12%	>12%-21%	>21%-23%	>23%-33%	>33%-54%	>54%
Railroads and package express	=<3%	>3%-11%	>11%-17%	>17%-20%	>20%-27%	>27%
Business and consumer services	=<9%	>9%-17%	>17%-23%	>23%-40%	>40%-87%	>87%
Midstream energy	=<5%	>5%-11%	>11%-17%	>17%-22%	>22%-34%	>34%
Technology software and services	=<8%	>8%-21%	>21%-35%	>35%-65%	>65%-105%	>105%
Consumer durables	=<8%	>8%-13%	>13%-20%	>20%-35%	>35%-60%	>60%
Containers and packaging	=<6%	>6%-14%	>14%-23%	>23%-35%	>35%-52%	>52%
Media and entertainment	=<9%	>9%-17%	>17%-26%	>26%-40%	>40%-86%	>86%
Oil and gas drilling, equipment and services	=<25%	>25%-33%	>33%-45%	>45%-65%	>65%-90%	>90%
Retail and restaurants	=<6%	>6%-14%	>14%-18%	>18%-26%	>26%-69%	>69%
Health care services	=<6%	>6%-10%	>10%-15%	>15%-25%	>25%-44%	>44%
Transportation infrastructure	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-27%	>27%
Environmental Services	=<7%	>7%-12%	>12%-24%	>24%-35%	>35%-72%	>72%
Regulated utilities	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-36%	>36%
Unregulated power and gas	=<14%	>14%-19%	>19%-29%	>29%-55%	>55%-117%	>117%
Pharmaceuticals	=<6%	>6%-8%	>8%-15%	>15%-20%	>20%-33%	>33%
Health care equipment	=<4%	>4%-8%	>8%-19%	>19%-31%	>31%-81%	>81%
Branded nondurables	=<6%	>6%-10%	>10%-17%	>17%-29%	>29%-63%	>63%
Telecommunications and cable	=<7%	>7%-13%	>13%-19%	>19%-26%	>26%-60%	>60%
Overall	=<7%	>7%-15%	>15%-23%	>23%-38%	>38%-81%	>81%

^{*}The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

C. Cash Flow/Leverage Analysis

1. The merits and drawbacks of each cash flow measure

Criteria | Corporates | General: Corporate Methodology

a) EBITDA

237. EBITDA is a widely used, and therefore a highly comparable, indicator of cash flow, although it has significant limitations. Because EBITDA derives from the income statement entries, it can be distorted by the same accounting issues that limit the use of earnings as a basis of cash flow. In addition, interest can be a substantial cash outflow for speculative-grade companies and therefore EBITDA can materially overstate cash flow in some cases. Nevertheless, it serves as a useful and common starting point for cash flow analysis and is useful in ranking the financial strength of different companies.

b) Funds from operations (FFO)

- 238. FFO is a hybrid cash flow measure that estimates a company's inherent ability to generate recurring cash flow from its operations independent of working capital fluctuations. FFO estimates the cash flow available to the company before working capital, capital spending, and discretionary items such as dividends, acquisitions, etc.
- 239. Because cash flow from operations tends to be more volatile than FFO, FFO is often used to smooth period-over-period variation in working capital. We consider it a better proxy of recurring cash flow generation because management can more easily manipulate working capital depending on its liquidity or accounting needs. However, we do not generally rely on FFO as a guiding cash flow measure in situations where assessing working capital changes is important to judge a company's cash flow generating ability and general creditworthiness. For example, for working-capital-intensive industries such as retailing, operating cash flow may be a better indicator than FFO of the firm's actual cash generation.
- 240. FFO is a good measure of cash flow for well-established companies whose long-term viability is relatively certain (i.e., for highly rated companies). For such companies, there can be greater analytical reliance on FFO and its relation to the total debt burden. FFO remains very helpful in the relative ranking of companies. In addition, more established, healthier companies usually have a wider array of financing possibilities to cover potential short-term liquidity needs and to refinance upcoming maturities. For marginal credit situations, the focus shifts more to free operating cash flow--after deducting the various fixed uses such as working capital investment and capital expenditures--as this measure is more directly related to current debt service capability.

c) Cash flow from operations (CFO)

- 241. The measurement and analysis of CFO forms an important part of our ratings assessment, in particular for companies that operate in working-capital-intensive industries or industries in which working capital flows can be volatile. CFO is distinct from FFO as it is a pure measure of cash flow calculated after accounting for the impact on earnings of changes in operating assets and liabilities. CFO is cash flow that is available to finance items such as capital expenditures, repay borrowing, and pay for dividends and share buybacks.
- 242. In many industries, companies shift their focus to cash flow generation in a downturn. As a result, even though they typically generate less cash from ordinary business activities because of low capacity utilization and relatively low fixed-cost absorption, they may generate cash by reducing inventories and receivables. Therefore, although FFO is likely to be lower in a downturn, the impact on CFO may not be as great. In times of strong growth the opposite will be true, and consistently lower CFO compared to FFO without a corresponding increase in revenue and profitability can indicate an untenable situation.

- 243. Working capital is a key element of a company's cash flow generation. While there tends to be a need to build up working capital and therefore to consume cash in a growth or expansion phase, changes in working capital can also act as a buffer in case of a downturn. Many companies will sell off inventories and invest a lower amount in raw materials because of weaker business activities, both of which reduce the amount of capital and cash that is tied up in working capital. Therefore, working capital fluctuations can occur both in periods of revenue growth and contraction and analyzing a company's near-term working capital needs is crucial for estimating future cash flow developments.
- 244. Often, businesses that are capital intensive are not working-capital-intensive: most of the capital commitment is upfront in equipment and machinery, while asset-light businesses may have to invest proportionally more in inventories and receivables. That also affects margins, because capital-intensive businesses tend to have proportionally lower operating expenses (and therefore higher EBITDA margins), while working-capital-intensive businesses usually report lower EBITDA margins. The resulting cash flow volatility can be significant: because all investment is made upfront in a capital-intensive business, there is usually more room to absorb subsequent EBITDA volatility because margins are higher. For example, a capital-intensive company may remain reasonably profitable even if its EBITDA margin declines from 30% to 20%. By contrast, a working-capital-intensive business with a lower EBITDA margin (due to higher operating expenses) of 8% can post a negative EBITDA margin if EBITDA volatility is large.

d) Free operating cash flow (FOCF)

 $e^{-\frac{1}{2}ki} = -\frac{1}{\sqrt{k}}e^{ik}$

- 245. By deducting capital expenditures from CFO, we arrive at FOCF, which can be used as a proxy for a company's cash generated from core operations. We may exclude discretionary capital expenditures for capacity growth from the FOCF calculation, but in practice it is often difficult to discriminate between spending for expansion and replacement. And, while companies have some flexibility to manage their capital budgets to weather down cycles, such flexibility is generally temporary and unsustainable in light of intrinsic requirements of the business. For example, companies can be compelled to increase their investment programs because of strong demand growth or technological changes. Regulated entities (for example, telecommunications companies) might also face significant investment requirements related to their concession contracts (the understanding between a company and the host government that specifies the rules under which the company can operate locally).
- 246. Positive FOCF is a sign of strength and helpful in distinguishing between two companies with the same FFO. In addition, FOCF is helpful in differentiating between the cash flows generated by more and less capital-intensive companies and industries.
- 247. In highly capital-intensive industries (where maintenance capital expenditure requirements tend to be high) or in other situations in which companies have little flexibility to postpone capital expenditures, measures such as FFO to debt and debt to EBITDA may provide less valuable insight into relative creditworthiness because they fail to capture potentially meaningful capital expenditures. In such cases, a ratio such as FOCF to debt provides greater analytical insight.
- 248. A company serving a low-growth or declining market may exhibit relatively strong FOCF because of diminishing fixed and working capital needs. Growth companies, in contrast, exhibit thin or even negative FOCF because of the investment needed to support growth. For the low-growth company, credit analysis weighs the positive, strong current cash flow against the danger that this high level of cash flow might not be sustainable. For the high-growth company,

the opposite is true: weighing the negatives of a current cash deficit against prospects of enhanced cash flow once current investments begin yielding cash benefits. In the latter case, if we view the growth investment as temporary and not likely to lead to increased leverage over the long-term, we'll place greater analytical importance on FFO to debt rather than on FOCF to debt. In any event, we also consider the impact of a company's growth environment in our business risk analysis, specifically in a company's industry risk analysis (see section B).

e) Discretionary cash flow (DCF)

- 249. For corporate issuers primarily rated in the investment-grade universe, DCF to debt can be an important barometer of future cash flow adequacy as it more fully reflects a company's financial policy, including decisions regarding dividend payouts. In addition, share buybacks and potential M&A, both of which can represent very significant uses of cash, are important components in cash flow analysis.
- 250. The level of dividends depends on a company's financial strategy. Companies with aggressive dividend payout targets might be reluctant to reduce dividends even under some liquidity pressure. In addition, investment-grade companies are less likely to reduce dividend payments following some reversals--although dividends ultimately are discretionary. DCF is the truest reflection of excess cash flow, but it is also the most affected by management decisions and, therefore, does not necessarily reflect the potential cash flow available.

D. Diversification/Portfolio Effect

1. Academic research

- Academic research recently concluded that, during the global financial crisis of 2007-2009, conglomerates had the advantage over single sector-focused firms because they had better access to the credit markets as a result of their debt co-insurance and used the internal capital markets more efficiently (i.e., their core businesses had stronger cash flows). Debt co-insurance is the view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the crisis. (Source: "Does Diversification Create Value In The Presence Of External Financing Constraints? Evidence From The 2007-2009 Financial Crisis," Venkat Kuppuswamy and Belen Villalonga, Harvard Business School, Aug. 19, 2011.)
- 252. In addition, fully diversified, focused companies saw more narrow credit default swap spreads from 2004-2010 vs. less diversified firms. This highlighted that lenders were differentiating for risk and providing these companies with easier and cheaper access to capital. (Source: "The Power of Diversified Companies During Crises," The Boston Consulting Group and Leipzig Graduate School of Management, January 2012.)
- 253. Many rated conglomerates are either country- or region-specific; only a small percentage are truly global. The difference is important when assessing the country and macroeconomic risk factors. Historical measures for each region, based on volatility and correlation, reflect regional trends that are likely to change over time.

E. Financial Policy

1. Controlling shareholders

- 254. Controlling shareholder(s)--if they exist--exert significant influence over a company's financial risk profile, given their ability to use their direct or indirect control of the company's financial policies for their own benefit. Although the criteria do not associate the presence of controlling shareholder(s) to any predefined negative or positive impact, we assess the potential medium- to long-term implications for a company's credit standing of these strategies. Long-term ownership--such as exists in many family-run businesses--is often accompanied by financial discipline and reluctance to incur aggressive leverage. Conversely, short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.
- 255. The criteria define controlling shareholder(s) as:
 - A private shareholder (an individual or a family) with majority ownership or control of the board of directors;
 - A group of shareholders holding joint control over the company's board of directors through a shareholder agreement. The shareholder agreement may be comprehensive in scope or limited only to certain financial aspects; and
 - A private equity firm or a group of private equity firms holding at least 40% in a company or with majority control of its board of directors.
- A company is not considered to have a controlling shareholder if it is publicly listed with more than 50% of voting interest listed or when there is no evidence of a particular shareholder or group of shareholders exerting 'de facto' control over a company.
- 257. Companies that have as their controlling shareholder governments or government-related entities, infrastructure and asset-management funds, and diversified holding companies and conglomerates are assessed in separate criteria.

2. Financial discipline

a) Leverage influence from acquisitions

- 258. Companies may employ more or less acquisitive growth strategies based on industry dynamics, regulatory changes, market opportunities, and other factors. We consider management teams with disciplined, transparent acquisition strategies that are consistent with their financial policy framework as providing a high degree of visibility into the projected evolution of cash flow and credit measures. Our assessment takes into account management's track record in terms of acquisition strategy and the related impact on the company's financial risk profile. Historical evidence of limited management tolerance for significant debt-funded acquisitions provides meaningful support for the view that projected credit ratios would not significantly weaken as a result of the company's acquisition policy. Conversely, management teams that pursue opportunistic acquisition strategies, without well-defined parameters, increase the risks that the company's financial risk profile may deteriorate well beyond our forecasts.
- 259. Acquisition funding policies and management's track record in this respect also provide meaningful insight in terms of credit ratio stability. In the criteria, we take into account management's willingness and capacity to mobilize all funding resources to restore credit quality, such as issuing equity or disposing of assets, to mitigate the impact of sizable

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acquisitions on credit ratios. The financial policy framework and related historical evidence are key considerations in our assessment.

b) Leverage influence from shareholder remuneration policies

- 260. A company's approach to rewarding shareholders demonstrates how it balances the interests of its various stakeholders over time. Companies that are consistent and transparent in their shareholder remuneration policies, and exhibit a willingness to adjust shareholder returns to mitigate adverse operating conditions, provide greater support to their long-term credit quality than other companies. Conversely, companies that prioritize cash returns to shareholders in periods of deteriorating economic, operating, or share price performance can significantly undermine long-term credit quality and exacerbate the credit impact of adverse business conditions. In assessing a company's shareholder remuneration policies, the criteria focus on the predictability of shareholder remuneration plans, including how a company builds shareholder expectations, its track record in executing shareholder return policies over time, and how shareholder returns compare with industry peers'.
- 261. Shareholder remuneration policies that lack transparency or deviate meaningfully from those of industry peers introduce a higher degree of event risk and volatility and will be assessed as less predictable under the criteria. Dividend and capital return policies that function primarily as a means to distribute surplus capital to shareholders based on transparent and stable payout ratios--after satisfying all capital requirements and leverage objectives of the company, and that support stable to improving leverage ratios--are considered the most supportive of long term credit quality.

c) Leverage influence from plans regarding investment decisions or organic growth strategies

- 262. The process by which a company identifies, funds, and executes organic growth, such as expansion into new products and/or new markets, can have a significant impact on its long-term credit quality. Companies that have a disciplined, coherent, and manageable organic growth strategy, and have a track record of successful execution are better positioned to continue to attract third-party capital and maintain long-term credit quality. By contrast, companies that allocate significant amounts of capital to numerous, unrelated, large and/or complex projects and often incur material overspending against the original budget can significantly increase their credit risk.
- 263. The criteria assess whether management's organic growth strategies are transparent, comprehensive, and measurable. We seek to evaluate the company's mid- to long-term growth objectives--including strategic rationales and associated execution risks--as well as the criteria it uses to allocate capital. Effective capital allocation is likely to include guidelines for capital deployment, including minimum return hurdles, competitor activity analysis, and demand forecasting. The company's track record will provide key data for this assessment, including how well it executes large and/or complex projects against initial budgets, cost overruns, and timelines.

3. Financial policy framework

a) Comprehensiveness of financial policy framework

264. Financial policies that are clearly defined, unambiguous, and provide a tight framework around management behavior are the most reliable in determining an issuer's future financial risk profile. We assess as consistent with a supportive assessment, policies that are clear, measurable, and well understood by all key stakeholders. Accordingly, the financial policy framework must include well-defined parameters regarding how the issuer will manage its cash flow protection

strategies and debt leverage profile. This includes at least one key or a combination of financial ratio constraints (such as maximum debt to EBITDA threshold) and the latter must be relevant with respect to the issuer's industry and/or capital structure characteristics.

265. By contrast, the absence of established financial policies, policies that are vague or not quantifiable, or historical evidence of significant and unexpected variation in management's long-term financial targets could contribute to an overall assessment of a non-supportive financial policy framework.

b) Transparency of financial policies

- 266. We assess as supportive financial policy objectives that are transparent and well understood by all key stakeholders and we view them as likely to influence an issuer's financial risk profile over time. Alternatively, financial policies, if they exist, that are not communicated to key stakeholders and/or where there is limited historical evidence to support the company's commitment to these policies, are non-supportive, in our view. We consider the variety of ways in which a company communicates its financial policy objectives, including public disclosures, investor presentation materials, and public commentary.
- 267. In some cases, however, a company may articulate its financial policy objectives to a limited number of key stakeholders, such as its main creditors or to credit rating agencies. In these situations, a company may still receive a supportive classification if we assess that there is a sufficient track record (more than three years) to demonstrate a commitment to its financial policy objectives.

c) Achievability and sustainability of financial policies

3. To assess the achievability and sustainability of a company's financial policies, we consider a variety of factors, including the entity's current and historical financial risk profile; the demands of its key stakeholders (including dividend and capital return expectations of equity holders); and the stability of the company's financial policies that we have observed over time. If there is evidence that the company is willing to alter its financial policy framework because of adverse business conditions or growth opportunities (including M&A), this could support an overall assessment of non-supportive.

4. Financial policy adjustments--examples

- 269. Example 1: A moderately leveraged company has just been sold to a new financial sponsor. The financial sponsor has not leveraged the company yet and there is no stated financial policy at the outset. We expect debt leverage to increase upon refinancing, but we are not able to factor it precisely in our forecasts yet. Likely outcome: FS-6 financial policy assessment, implying that we expect the new owner to implement an aggressive financial policy in the absence of any other evidence.
- 270. Example 2: A company has two owners—a family owns 75%, a strategic owner holds the remaining 25%. Although the company has provided Standard & Poor's with some guidance on long-term financial objectives, the overall financial policy framework is not sufficiently structured nor disclosed to a sufficient number of stakeholders to qualify for a supportive assessment. Recent history, however, does not provide any evidence of unexpected, aggressive financial transactions and we believe event risk is moderate. Likely outcome: Neutral financial policy impact, including an assessment of neutral for financial discipline. Although the company's financial framework does not support long-term visibility, historical evidence and stability of management suggest that event risk is not significant. The unsupportive financial framework assessment, however,

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prevents the company from qualifying for an overall positive financial policy assessment, should the conditions for positive financial discipline be met.

- 271. Example 3: A company (not owned by financial sponsors) has stated leverage targets equivalent to a significant financial risk profile assessment. The company continues to make debt-financed acquisitions yet remains within its leverage targets, albeit at the weaker end of these. Our forecasts are essentially built on expectations that excess cash flow will be fully used to fund M&A or, possibly pay share repurchases, but that management will overall remain within its leverage targets. Likely outcome: Neutral financial policy impact. Although management is fairly aggressive, the company consistently stays within its financial policy targets. We think our forecasts provide a realistic view of the evolution of the company's credit metrics over the next two years. No event risk adjustment is needed.
- 272. Example 4: A company (not owned by a financial sponsor) has just made a sizable acquisition (consistent with its long-term business strategy) that has brought its credit ratios out of line. Management expressed its commitment to rapidly improve credit ratios back to its long-term ratio targets—representing an acceptable range for the SACP--through asset disposals or a rights issue. We see their disposal plan (or rights issue) as realistic but precise value and timing are uncertain. At the same time, management has a supportive financial policy framework, a positive track record of five years, and assets are viewed as fairly easily tradable. Likely outcome: Positive financial policy impact. Although forecast credit ratios will remain temporarily depressed, as we cannot fully factor in asset disposals (or rights issue) due to uncertainty on timing/value, or without leaking confidential information, the company's credit risk should benefit from management's positive track record and a supportive financial policy framework. The anchor will be better by one notch if management and governance is at least satisfactory and liquidity is at least adequate.
- Example 5: A company (not owned by a financial sponsor) has very solid financial ratios, providing it with meaningful flexibility for M&A when compared with management's long-term stated financial policy. Also, its stock price performance is somewhat below that of its closest industry peers. Although we have no recent evidence of any aggressive financial policy steps, we fundamentally believe that, over the long-term term, the company will end up using its financial flexibility for the right M&A opportunity, or alternatively return cash to shareholders. Likely outcome: Negative financial policy impact. Long-term event risk derived from M&A cannot be built into forecasts nor shareholder returns (share buybacks or one-off dividends) be built into forecasts to attempt aligning projected ratios with stated long-term financial policy levels. This is because our forecasts are based on realistic and reasonably predictable assumptions for the medium term. The anchor will be adjusted down, by one notch or more, because of the negative financial policy assessment.

F. Corporate Criteria Glossary

Anchor: The combination of an issuer's business risk profile assessment and its financial risk profile assessment determine the anchor. Additional rating factors can then modify the anchor to determine the final rating or SACP.

Asset profile: A descriptive way to look at the types and quality of assets that comprise a company (examples can include tangible versus intangible assets, those assets that require large and continuing maintenance, upkeep, or

reinvestment, etc.).

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Business risk profile: This measure comprises the risk and return potential for a company in the market in which it participates, the country risks within those markets, the competitive climate, and the competitive advantages and disadvantages the company has. The criteria combine the assessments for Corporate Industry and Country Risk Assessment (CICRA), and competitive position to determine a company's business risk profile assessment.

Capital-intensive company: A company exhibiting large ongoing capital spending to sales, or a large amount of depreciation to sales. Examples of capital-intensive sectors include oil production and refining, telecommunications, and transportation sectors such as railways and airlines.

Cash available for debt repayment: Forecast cash available for debt repayment is defined as the net change in cash for the period before debt borrowings and debt repayments. This includes forecast discretionary cash flow adjusted for our expectations of: share buybacks, net of any share issuance, and M&A. Discretionary cash flow is defined as cash flow from operating activities less capital expenditures and total dividends.

Competitive position: Our assessment of a company's: 1) competitive advantage; 2) operating efficiency; 3) scale, scope, and diversity; and 4) profitability.

- Competitive advantage--The strategic positioning and attractiveness to customers of the company's products or services, and the fragility or sustainability of its business model.
- Operating efficiency--The quality and flexibility of the company's asset base and its cost management and structure.
- Scale, scope, and diversity--The concentration or diversification of business activities.
- Profitability--Our assessment of both the company's level of profitability and volatility of profitability.

Competitive Position Group Profile (CPGP): Used to determine the weights to be assigned to the three components of competitive position other than profitability. While industries are assigned to one of the six profiles, individual companies and industry subsectors can be classified into another CPGP because of unique characteristics. Similarly, national industry risk factors can affect the weighing. The six CPGPs are:

- Services and product focus,
- Product focus/scale driven,
- · Capital or asset focus,
- Commodity focus/cost driven,
- · Commodity focus/scale driven, and
- National industry and utilities.

Conglomerate: Companies that have at least three distinct business segments, each contributing between 10%-50% of EBITDA or FOCF. Such companies may benefit from the diversification/portfolio effect.

Controlling shareholders: Equity owners who are able to affect decisions of varying effect on operations, leverage, and shareholder reward without necessarily being a majority of shareholders.

Corporate Industry and Country Risk Assessment (CICRA): The result of the combination of an issuer's country risk assessment and industry risk assessment.

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Debt co-insurance: The view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the global financial crisis of 2007-2009.

Financial headroom: Measure of deviation tolerated in financial metrics without moving outside or above a pre-designated band or limit typically found in loan covenants (as in a debt to EBITDA multiple that places a constraint on leverage). Significant headroom would allow for larger deviations.

Financial risk profile: The outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to its financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.

Financial sponsor: An entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.

Profitability ratio: Commonly measured using return on capital and EBITDA margins but can be measured using sector-specific ratios. Generally calculated based on a five-year average, consisting of two years of historical data, and our projections for the current year and the next two financial years.

Shareholder remuneration policies: Management's stated shareholder reward plans (such as a buyback or dividend amount, or targeted payout ratios).

Stand-alone credit profile (SACP): Standard & Poor's opinion of an issue's or issuer's creditworthiness, in the absence of extraordinary intervention or support from its parent, affiliate, or related government or from a third-party entity such as an insurer.

Transfer and convertibility assessment: Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

Unconsolidated equity affiliates: Companies in which an issuer has an investment, but which are not consolidated in an issuer's financial statements. Therefore, the earnings and cash flows of the investees are not included in our primary metrics unless dividends are received from the investees.

Upstream/midstream/downstream: Referring to exploration and production, transport and storage, and refining and distributing, respectively, of natural resources and commodities (such as metals, oil, gas, etc.).

Volatility of profitability/SER: We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' trend line. We combine it with the profitability ratio to determine the final profitability assessment. We only calculate

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SER when companies have at least seven years of historical annual data, to ensure that the results are meaningful.

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Working-capital-intensive companies: Generally a company with large levels of working capital in relation to its sales in order to meet seasonal swings in working capital. Examples of working-capital-intensive sectors include retail, auto manufacturing, and capital goods.

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

(Watch the related CreditMatters TV segment titled, "Standard & Poor's Launches Its New Corporate Ratings Criteria," dated Nov. 19, 2013.)

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Witness: Linda C. Bridwell

27. Reference the Kentucky American Water application and state if the "2015" data shown in Exhibit 37K is actual data for 2015 or if it includes some estimated data. If the latter, update the exhibit to reflect actual data for 2015.

Response:

The "2015" data shown in Exhibit 37K is actual data for 2015.

Witness: Linda C. Bridwell/Donald J. Petry

28. Reference the Kentucky American Water application generally. Identify all rate base, expense, and/or revenue categories that have an allocation to sewer operations. For each such allocation, identify the amount and percentage allocated to sewer operations in the Base Period and the Test Period, as well as the basis for the allocation factor utilized.

Response:

Costs in rate base, expenses and revenues that were directly charged to sewer operations were excluded from the case. Labor, taxes and benefits were allocated by employee to water and sewer. The allocation was based on charges for the 12 months ending October 2013, 2014 and 2015. Please see the Work paper 3, pages 421-422, which was provided in response to Item 3 of the Commission Staff's first request for information. This work paper is where the charges were averaged to provide a "Water %" for each job code in a cost center, based on the average percentage of water charges over the three year period.

The Excel file for this work paper was provided to all parties on CD also in response to the same request referenced above.

Excel Location:

O&M\[Labor and Labor Related Exhibit.xlsx]Water %

Witness: Linda C. Bridwell

29. Reference the Kentucky American Water application generally. Has the Company filed any information regarding the linkage period, i.e., the period between the end of the Base Period ending April 30, 2016 and the beginning of the Test Period beginning September 1, 2016? If so, identify where in the filing such information can be found.

Response:

Please see the Company's response to Item 3 of the Commission Staff's First Request for Information, Workpaper 1 – Rate Base, Workpaper 2 – Revenues, Workpaper 4 – Depreciation and Amortization and Workpaper 7 – Capitalization.

Witness: Linda C. Bridwell

30. Reference the Kentucky American Water application. Provide the 2016 Annual Business Plan and 2017 Strategic Business Plan used to develop the Base Period and Test Period in this case. If this information has been provided previously, provide the applicable cite.

Response:

The 2016 Annual Business Plan and the 2017 Strategic Business Plan are a consolidation of the forecasted Operating Income Statement, Balance Sheet, Cash Flow Statement and Strategic Capital Expenditure Plans. The 2016 and 2017 Capital Plans are provided in Exhibit 11 of the Application. 2016 and 2017 Operating Income Statements are provided in Exhibit 17 of the Application. The 2016 and 2017 Balance Sheets are provided in Exhibit 18. The 2016 and 2017 Cash Flow Statements are provided in Exhibit 19 of the Application. The 2016 and 2017 Water Sales are provided in Exhibit 25 of the Application.

Witness: Linda C. Bridwell

31. Reference the Kentucky American Water application and update Exhibit 37C, page 2 to reflect actual costs, by category, for each year from 2011-2015.

Response:

Please see attached.

Kentucky American Water Company Case No. 2015-00418 Jurisdictional Operating Income Summary for the Years 2011-2015

	Major						
Line	Acct.	Description	2011	2012	2013	2014	2015
No.	Group	Description	2011	2012	2013	2014	2015
1		Operating Revenues					
2	400	Water Revenues	\$79,806,593	\$83,011,016	\$81,509,294	\$86,369,150	\$88,532,168
3	400	Other Revenues	3,208,887	2,678,580	1,833,036	2,057,413	2,271,754
4	420	AFUDC	0	0	0	0	0
5	Total	Total Revenues (Sum Lines 2-3)	\$83,015,480	\$85,689,596	\$83,342,330	\$88,426,563	\$90,803,923
6							
7	401	Operating Expenses					
8		O&M:					
9		Purchased Water	\$239,796	\$339,748	\$217,301	\$142,812	\$223,057
10		Fuel & Power	3,716,910	3,891,484	3,647,971	3,752,546	3,936,453
11		Chemicals	1,900,698	1,806,850	1,736,335	1,635,189	1,590,100
12		Waste Disposal	301,751	340,068	382,880	278,242	240,586
13		Salaries and Wages	7,718,953	7,231,416	6,509,113	6,813,292	7,142,104
14		Pension	923,432	1,021,182	810,479	241,039	586,309
15		Group Insurance	2,094,581	2,002,574	1,698,750	1,402,590	1,628,409
16		Other Benefits	410,207	376,837	321,713	363,669	416,408
17		Support Services	7,751,264	9,114,911	9,163,738	8,775,862	8,326,485
18		Contract Services	1,073,120	878,391	800,109	723,112	1,071,877
19		Building Maintenance & Services	599,081	536,593	453,543	633,985	601,979
20		Telecommunications	245,597	297,145	276,207	264,191	228,370
21		Postage, Printing, & Stationary	29,630	25,531	23,598	19,451	30,484
22		Office Supplies & Services	156,496	173,508	187,291	162,348	242,612
23		Advertising & Marketing	8,389	16,393	6,434	4,798	14,270
24		Employee Related Expense	272,362	224,253	88,816	137,146	338,694
25		Miscellaneous Expense	906,107	1,202,433	1,188,480	896,046	1,418,945
26		Rents	32,033	52,423	36,360	32,130	18,110
27		Transportation	477,597	511,569	570,051	495,430	442,206
28		Uncollectible Accounts	614,166	596,705	1,092,261	1,042,040	905,631
29		Other Customer Accounting	1,134,335	1,048,536	1,048,063	1,051,052	1,100,045
30		Regulatory Expense	214,599	213,119	260,448	249,916	289,304
31 32		Insurance Other Than Group	609,869	595,965	675,836	736,231	934,769
33	Total	Maintenance Supplies & Services Total O&M Expenses (Sum of Lines 9-32):	1,607,980 \$33,038,953	1,569,254 \$34,066,890	1,581,503 \$32,777,280	1,959,670 \$31,812,785	1,980,784 \$33,707,989
34	iotai	Total Odivi Expenses (Juni of Lines 3-32).	233,036,333	\$34,000,830	J32,777,280	331,812,783	\$33,707,989
35		Other Expenses					
36	403	Depreciation - Net of CIAC Amort	\$10 889 627	\$11,586,288	\$13 088 692	\$13 591 697	\$13 354 360
37	406	Amortization of UPAA	12,804	8,561	8,561	8,561	8,561
38	407	Amortization Expense	195,603	198,262	214,529	225,673	229,784
39		State Income Tax	155,005	130,202			
40	409	Current State Income Tax	400,770	1,826,947	581,290	867,876	1,114,821
41	410	Deferred State Income Tax	1,049,967	(422,568)		644,940	767,184
42		<u>Federal Tax</u>		, , ,	·	·	•
43	409	Current Federal Income Tax	21,003,266	9,812,980	197,027	3,776,789	8,573,873
44	410	Deferred Federal Income Tax	(12,799,106)	(1,438,619)	7,239,945	4,903,237	294,477
45	412	Investment Tax Credits	(84,797)	(84,797)	(84,797)	(84,797)	(84,797)
46	408	General taxes	5,102,210	4,913,919	5,052,856	5,753,035	6,562,434
48		Total Other Expense (Sum of Lines 36 -41)	\$25,770,344	\$26,400,973	\$26,793,558	\$29,687,010	
49							
50		Total Expenses (Line 33 + Lines 42):	\$58,809,297	\$60,467,863	\$59,570,839	\$61,499,795	\$64,528,687
51							
52		Utility Operating Income (Line 5 - Line 44):	\$24,206,183	\$25,221,733	\$23,771,491	\$26,926,768	\$26,275,236

Witness: Linda C. Bridwell

- **32.** Reference the Kentucky American Water application generally. For each American Water jurisdiction, state if
 - a. if there is an infrastructure replacement program currently in place that provides for recovery between base rate cases,
 - b. if any such recovery is based on projected plant additions (with a subsequent trueup) or is limited to actual plant additions over some period, and
 - c. if the jurisdiction uses a future Test Period based on the first twelve months during which rates will be effective or some other Test Period.

Response:

a.

State	Infrastructure	Projected or Actual
	Replacement Program	
California	No	
Hawaii	No	
Illinois	Yes	Projected or Actual
Indiana	Yes	Actual
Iowa	No	
Kentucky	No	
Maryland	No	
Michigan	No	
Missouri	Yes	Actual
New Jersey	Yes	Actual
New York	Yes	Actual
Pennsylvania	Yes	Actual
Tennessee	Yes	Projected
Virginia	No	
West Virginia	Yes	TBD

- b. See the response to part a.
- c. Illinois the forecasted period is the first twelve months the rates are effective.
 Tennessee the forecasted period is the first twelve months the rates are effective.
 New York the forecasted period is for the first twelve months the rates are effective.

Witness: Linda C. Bridwell

33. Reference the Kentucky American Water application and provide a copy of the December 2014 Report by AUS Consultants referenced on page 8 of Ms. Bridwell's testimony at lines 21-22.

Response:

Please see attached. The attachment contains confidential information and is subject to a petition for confidential treatment.

ATTACHMENT TO KAW_R_AGDR1_NUM033_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Linda C. Bridwell

34. Reference the Kentucky American Water application. Has AUS updated the report referenced on page 8, lines 21-22 of Ms. Bridwell's testimony? If so, provide any and all updates to this report.

Response:

AUS Utility reports are produced monthly; however, Kentucky American Water does not have a subscription. Kentucky American Water only has a limited number of AUS Utility reports which have been provided as a courtesy. The updated reports to which we have access are April 2015 and January 2016, which are attached. The attachment contains confidential information and is subject to a petition for confidential treatment.

ATTACHMENT TO KAW_R_AGDR1_NUM034_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Linda C. Bridwell

35. Reference the Kentucky American Water application generally. Is the Company proposing to charge interest on over/under recoveries if its proposed Qualified Infrastructure Program surcharge is approved? If so, what interest rate does the Company propose to utilize?

Response:

Yes, Kentucky American Water is proposing to charge interest on over/under recoveries of its proposed Qualified Infrastructure Program surcharge. Kentucky American Water has not proposed a specific interest rate as part of the proceeding. There are many ways of equitably calculating a short-term interest rate in tenor with the QIP including commercial paper rates or LIBOR rates and applying it to the balance.

Witness: Linda C. Bridwell

36. Reference the Kentucky American Water application. Regarding Exhibit 37I, page 5, does the "2015" data shown on this exhibit include actual 2015 data for a full year, or does it contain some estimates? If the latter, update this exhibit to reflect a full year of actual 2015 data.

Response:

The "2015" data shown on Exhibit 37I, page 5, includes actual 2015 data for a full year.

Witness: Linda C. Bridwell

37. Reference the Kentucky American Water application regarding Exhibit 37I, page 5, and provide the same information for each year from 2006-2010.

Response:

Please see attached.

KENTUCKY AMERICAN WATER COMPANY Case No. 2015-00418 REVENUE STATISTICS - TOTAL COMPANY

Type of Filing: __X__ Original _____ Updated _____ Revised

Line						
No.	Description	2006	2007	2008	2009	2010
1						
2	Sales by Customer Class:	6 440 520	6 667 054	C 4C0 F00	F 066 F04	6 225 245
3	Residential	6,440,529		6,469,580		
4	Commercial	4,225,322				
5	Industrial	748,978	•	620,520	•	•
6	Other Public Authorities	1,419,745				
7	Other Water Utilities Miscellaneous	388,879	•	524,301	•	•
8 9	iviiscellaneous	1,342	3,806	19,102	20,871	19,366
9 10	Total	13,224,795	12 025 607	12 //0 7/0	12,193,179	12 000 036
11	Total	13,224,733	13,933,097	13,443,740	12,193,179	12,330,330
12						
13	Number of Customers:					
14	12-Month Average:					
15	Residential	103,858	105,572	106,687	107,343	108,169
16	Commercial	8,487	8,623	8,715	8,771	8,767
17	Industrial	23	21	21	22	23
18	Other Public Authorities	485	487	500	511	529
19	Other Water Utilities	10	13	11	12	12
20	Miscellaneous	30	33	0	0	0
21	Wilderhamedas	30	33	· ·	· ·	Ü
22	Total	112,893	114,748	115,934	116,659	117,499
23						
24						
25	End of Period:					
26	Residential	104,780	106,068	106,913	107,500	108,389
27	Commercial	8,586	8,585	8,741	8,760	8,766
28	Industrial	23	21	22	22	22
29	Other Public Authorities	486	488	504	519	524
30	Other Water Utilities	11	13	12	12	12
31	Miscellaneous	35	31	0	0	0
32						
33	Total	113,921	115,206	116,192	116,813	117,713
34			<u> </u>		•	
35						
36						
37	Average Sales per Customer:					
38	Residential	62	63	61	56	58
39	Commercial	498	500	478	434	466
40	Industrial	32,802	36,571	29,201	23,499	24,851
41	Other Public Authorities	2,926	3,227	3,311	2,783	3,042
42	Other Water Utilities	37,332	49,047	46,605	38,919	40,503
43	Miscellaneous	46	117	229,230	N/A	232,395
44						
45						
46						
47	Note: Sales are stated in 1000 Gallons					
48						
49						
50						

Witness: Dr. Edward Spitznagel

38. Reference the Kentucky American Water application generally. Is it correct that Dr. Spitznagel's model used a 30-year period to determine the relationships between water usage and various variables? If so, state why a 30-year period was selected.

Response:

No, that is not correct. Dr. Spitznagel's model used a 10-year period (120 months), beginning in May of 2005 and ending in April of 2015 to determine the relationships between water usage and various variables. This model is made up of twelve individual models, one model for each month, in order to allow for different effects of drought and temperature across the seasons. The estimated model coefficients are in Rows 6 through 17, Columns B through E of the spreadsheet in Appendix D.

A 30-year period was used to compute average drought and temperature values, to be inserted into the models to estimate water usage in gallons per customer day. This is consistent with the standard period used by National Oceanic and Atmospheric Administration (NOAA) for reporting U.S. Climate Normals. Dr. Spitznagel computed averages of drought (PMDI) and temperature (CDD) for the thirty years beginning in May of 1985 and ending in April of 2015. These averages are in Rows 6 through 17, Columns F and G of the spreadsheet in Appendix D.

Witness: Linda C. Bridwell

39. Reference the Kentucky American Water application generally. Identify all other American Water jurisdictions that use a 30-year period to determine the relationship between water usage and various variables for purposes of establishing utility rates.

Response:

Neither Kentucky American nor any other American Water jurisdiction uses a 30-year period to determine the relationship between water usage and various independent variables for purposes of establishing utility rates. As discussed in Dr. Spitznagel's testimony and in the responses to AG 1-38 and AG 1-40, ten years of water usage data is utilized in Dr. Spitznagel's model. 30 years of weather data is used to establish "normal" weather variables.

Witness: Dr. Edward Spitznagel

- 40. Reference the Kentucky American Water application. Provide the forecasted water sales (in volumes) that would result if Dr. Spitznagel had used the following periods to determine the relationship between water usage and various variables, and provide all calculations and supporting workpapers with your response:
 - a. 5 years,
 - b. 10 years,
 - c. 15 years,
 - d. 20 years, and
 - e. 25 years.

Response:

As explained above, Dr. Spitznagel did use ten years of data to determine the relationships between water usage and various (weather and time) variables. A 10-year period yields the most reliable results. The request that this be done for other periods of water usage (5, 15, 20 and 25 years) would require significant new original work by Dr. Spitznagel at a significant cost and is beyond the scope of his engagement. His calculations for ten years of data are displayed in Appendices B, C, and D to his Direct Testimony should the Attorney General desire to utilize those calculations in forming any opinions or preparing any models the Attorney General may have on water usage.

Witness: Linda C. Bridwell

41. Reference the Kentucky American Water application generally. What percentage of the Company's water sales are weather sensitive?

Response:

Although Kentucky American realizes swings in water demand in extreme weather conditions, Kentucky American has not attempted to approximate the percentage of water sales that are weather sensitive.

Witness: Linda C. Bridwell

42. Reference the Kentucky American Water application generally. For each category of miscellaneous revenue, provide the actual revenue received in each of the past five years, as well as the miscellaneous revenues projected for the Base Period and the Test Period.

Response:

Please see the attached.

Kentucky American Water Company Case No. 2015-00418 AG DR 1-42 Miscellaneous Revenues Since 2011 (\$)

	2011	2012	2013	2014	2015	Base Year	Test Year
Other revenue - late payment charge	-	48,878	668,876	750,140	943,713	952,621	852,640
Other Revenue - Rent	94,129	95,456	96,776	57,118	80,911	75,358	69,684
Other Revenue - Rent Interco	268,260	323,412	120,082	120,082	61,218	50,904	65,400
Other Revenue - NSF Check Charge	32,700	26,556	28,152	29,508	27,720	30,740	32,142
Other Revenue - Collection for Others	1,608,612	1,115,265	4,970	-	308		
Other Revenue - Application/Initiation Fee	615,062	637,079	738,583	777,616	751,666	754,380	743,543
Other Revenue - Usage Data	-	15,938	52,634	49,296	50,598	51,945	52,634
Other Revenue - Reconnection Fee	590,124	403,364	125,496	272,308	346,853	331,964	299,605
Other Revenue - Frozen Meter	-	-	-	96	-		
Other Revenue - Misc Service	-	12,184	1,976	2,903	12,860	37,776	59,000
Total	3,208,887	2,678,132	1,837,544	2,059,067	2,275,846	2,285,688	2,174,648

Witness: Brent E. O'Neill/Linda C. Bridwell

- **43.** Reference the Kentucky American Water application generally. Does the Company have any contracts related to antenna leases? If so, for each such contract, provide:
 - a. the actual revenues received by contract, in each of the past five years,
 - b. the Base Period and Test Period claims included in the filing, and
 - c. a description of any contractual increases in 2016 or 2017.

Response:

Yes it does.

- a. Please refer to the attachment.
- b. the Base Period and Test Period amount included in the filing reflected in Exhibit 37, Schedule M-1 included in the initial application are:

Base Period: \$ 75,358 Test Period: \$69,684

These amounts assume only T-Mobile and Cingular leases in the test period.

c. There were no contractual increases included in 2016 or 2017 forecasts.

Kentucky American Water Company Case No. 2015-00418 AG DR 1-43 Revenues from Antenna Leases - Since 2011

	2011	2012	2013	2014	2015
Rent - Antenna Leases Only	92.989	94.316	94,801	83.218	82.259

Revenues Received by Contract

T-Mobile	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2011	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	31,987
2012	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	31,987
2013	2,666	2,666	2,666	2,666	2,666	2,666	2,666	2,666	3,023	2,844	2,844	2,844	32,882
2014	2,844	2,844	2,844	2,844	2,844	2,844	2,844	2,844	2,844	2,844	3,629	2,844	34,919
2015	3,144	2,994	2,994	2,994	2,994	2,994	2,994	2,994	2,994	2,994	2,994	2,994	36,084

Cingular Wireless	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2011	2,547	2,547	2,547	2,547	3,754	3,599	2,849	2,849	2,849	2,849	2,849	2,849	34,633
2012	2,849	2,849	2,849	2,849	3,599	2,849	2,849	2,849	2,849	2,849	2,849	2,849	34,935
2013	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	34,185
2014	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	2,849	4,349	3,599	36,435
2015	3,599	3,599	3,599	3,599	3,599	3,599	3,599	3,599	3,599	3,599	3,599	3,599	43,185

Sprint/Nextel	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2011	2,000	2,000	4,369	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	26,369
2012	2,000	2,000	2,500	2,000	2,794	2,300	2,300	2,300	2,300	2,300	2,300	2,300	27,394
2013	2,434	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	27,734
2014	2,300	2,300	2,300			(134)							6,766
2015													-

AT&T	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov De	c Total
2011												-
2012												=
2013												-
2014									5,099			5,099
2015										142	2,84	2,991

Witness: Linda C. Bridwell

44. Reference the Kentucky American Water application generally. Provide, for each of the past five years, the total amount paid to Towers Watson by American Water and its subsidiaries and affiliates. For each year, provide the total amount incurred as well as the amount, if any, allocated to Kentucky operations.

Response:

Please see attached.

Kentucky American Water Company Response to AG 1-44

Co	2011	2012	2013	2014	2015
Total Payments to Willis Towers Watson	\$585,614	\$1,223,400	\$1,160,567	\$881,738	\$966,613
Allocated to KY from AWWSC	\$17,342	\$37,782	\$27,185	\$22,022	\$20,835

Witness: Linda C. Bridwell

45. Reference the Kentucky American Water application generally. Provide, for each of the past five years, the total amount paid to Towers Watson directly by Kentucky American (not allocated from other entities) for work done on Kentucky American's behalf.

Response:

Please refer to the response to Item 44 of this same request.

Witness: Robert V. Mustich

46. Reference the Kentucky American Water application generally. Did Towers Watson include in its study any analysis regarding the extent to which incentive compensation costs paid by the companies in its study are included in regulated utility rates and recovered from ratepayers? If so, provide the results of that analysis.

Response:

No, Willis Towers Watson did not.

Witness: Christine Karlsson

47. Reference the Kentucky American Water application generally. Identify all criteria used to award Long Term Performance Plan ("LTPP") incentive payments a) in each of the past three years, b) for the Base Period, and c) for the Test Period.

Response:

Eligibility is based on salary level and the date of hire. Employees in salary level 50 and above on or before the date of grant, which is typically mid-February each year, may be eligible to receive an Equity Award.

Total grant amount is determined by multiplying annual base salary by the LTPP percentage tied to the participant's salary level.

Witness: Kevin N. Rogers

- **48.** Reference the Kentucky American Water application generally. Identify all criteria used to award Annual Performance Plan ("APP") incentive payments:
 - a. in each of the past three years,
 - b. projected for the Base Period, and
 - c. projected for the Test Period.

Response:

a. As of this filing, no awards have been issued from the American Water APP plan. The first APP award will be issued in early 2017 for the CY2016 performance period.

Regarding the criteria for AIP awards; an employee's award amount is dependent largely upon the performance of the individual and the performance of the company. Other significant award factors are related to the employee's classification within the company.

Employees eligible for AIP awards in 2015, 2014 and 2013 are classified in American Water's job leveling criteria as salaried employees level L12 and above. Level L12's are considered to be early career or early education individual contributors.

Awards are granted in the early part of the calendar year following the performance review period. During the calendar years in question a 5 point performance rating scale was used. 1 would denote the lowest rating possible and 5 being the highest rating possible.

After an employee's performance was assessed by the employee's manager, the manager calibrates the performance of each individual within their organization and grants anywhere between 0-200% of the employee's target award amount. Again, the 0-200% is based largely upon the performance rating issued by the manager.

In CYs 2016, 2015 and 2014 the AIP was the short term incentive plan that was in place. AIP guidelines are set at a corporate level. In some instances, employees may be eligible for local incentive and/or bonus/recognition programs.

Please find 2014 and 2013 AIP brochures attached. The 2015 AIP brochure was attached to the response to Item 18 of the Commission Staff's First Request for Information.

- b. Please refer to the response in part a. above and to Item 24 of the Commission Staff's second request for information.
- c. Please refer to the response to Item 24 of the Commission Staff's second request for information.



2013 Annual Incentive Plan

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THE 2013 AMERICAN WATER ANNUAL INCENTIVE PLAN

Your Performance — **Your Award**

At American Water, your performance counts. We rely on our employees' knowledge and skills to help the company achieve its business objectives.

- The American Water 2013 Annual Incentive Plan (AIP) is designed to give eligible exempt employees an annual opportunity to earn a cash award that recognizes and rewards their contributions to the company's success. This means that company and *individual performance* are both taken into account to determine cash awards under the plan. We continue to make adjustments to the AIP design to reinforce the link between company and individual performance and award payouts.
- We are continuing the funding approach that was used in 2012, which directly ties the amount of available cash for AIP payouts to company performance against specific metrics. AIP funding for all eligible, exempt employees will depend on the company's achieving its financial, Business Transformation and operational goals.
- Your individual performance continues to play a large role in determining the amount of your payout. Employees who exceed their performance targets could receive higher payouts. Conversely, employees who underperform and do not meet their performance targets could receive lower payouts or no payout at all. In short, your performance directly impacts the amount of your award.

The 2013 AIP is designed to challenge and motivate you to perform at your highest level, and promote the creation of value to the customer and shareholder. Read this brochure to learn about how the 2013 plan works and what it means for you.

The 2013 AIP

Elements of the Program

- AIP award pool funding is based on overall corporate performance against specific financial, Business Transformation and operational performance (represented by the Corporate Multiplier), then allocated across organizational groups/functional areas. Allocation is subject to senior management's discretion and recognizes organizational group/functional area results.
 - AIP funding for all eligible exempt employees depends on the company achieving its financial, nonfinancial goals which are Business
 Transformation and operational performance.
 - A pre-determined financial threshold for company performance must be met in order for funding and any award to be provided under the AIP.
- Individual award payouts will be based on individual performance against specific goals represented by the Individual Performance Factor and paid from available organizational group/functional area funding.

- For 2013, the Individual Performance Factor range is
 0%-200%. Individual payouts will be capped at 200% of AIP target award.
- Award opportunity (Target Award) is expressed as a percentage of base salary. (See Attachment B).
 - Actual payout may be lower or higher than target depending on company and *individual* performance against specific goals.
- Individual performance is assessed by your manager and measured against your predetermined performance goals.
- Your AIP will be distributed as a cash award in March.
 - You must be actively employed with American Water on the date awards are paid to receive your 2013 AIP payout. You (or your beneficiary) may be eligible for a prorata award if you are disabled, retire, die, involuntarily terminate (not "for cause") or a divestiture occurred after June 30, 2013. Involuntary termination for cause would not be eligible.

Eligibility

- You are eligible for an AIP award opportunity if you are a regular, full-time exempt employee of American Water.
 - Regular, full-time exempt employees who join American Water on or before September 30, 2013 are also eligible to participate in the AIP on a prorated basis.
 - Employees transferred from nonexempt to exempt status on or after
 September 30, 2013 are not eligible in the current plan year.

■ If you are promoted or transferred during the plan year to a position with a *higher* AIP target level, or if you are reclassified/transferred to a position with a *lower* AIP target level, your award payout will be based on your new salary and target level as of December 14, 2013, except ML4s and above who will be prorated at each salary and target level. All AIP target awards will be paid based on salaries as of December 14, 2013.

- You must be an active employee with American Water on the date the payout is made in order to receive the award. You (or your beneficiary) may be eligible for a prorata award if you are disabled, retire, die, involuntarily terminate (not "for cause") or a divestiture occurred after June 30, 2013. (Retirement under this plan is age 55 and 10 total years of employment service.)
- You are **not** eligible for an AIP award if:
 - you transfer from exempt status to nonexempt status during the current plan
 year or your job was reclassified to nonexempt status,
 - your performance rating is "Unacceptable" or "Too Soon to Rate,"
 - you have not complied with the company's annual Code of Ethics certification by the established deadline,
 - your employment was involuntarily terminated for cause.

Why Is the Plan Based on Individual Performance?

Since the value (as reflected in our share price and our return to shareholders) and success of our business depend on the achievement of annual company and individual performance goals, American Water recognizes the need to differentiate and reward the performance of employees who enable us to reach these goals. The 2013 AIP is designed to ensure that award payouts are directly tied to measurable contributions — both company and individual — to American Water's success.

DETERMINING AIP AWARDS

AIP award payouts depend on individual performance; they also depend on overall corporate performance and organizational group/functional area results (which determine award pool funding).

AIP awards will be determined according to the following three-step process:

Step 1:	Establish initial award pool based on overall corporate performance.
Step 2:	Allocate overall corporate funding to organizational groups/functional areas, and adjust specific organizational group/functional area funding to reflect results.
Step 3:	Determine AIP award based on individual performance; awards are paid from available organizational group/functional area funding.

Step 1: Establish initial award pool based on overall corporate performance

Each year, American Water establishes funding for the AIP award pool. In 2013, the funding will be directly tied to company performance and represented by the **Corporate Multiplier**. The Corporate Multiplier can range from 0% to 150% depending on how well the company performed against the financial, Business Transformation and operational goals described below. Note that there is a predetermined **threshold** for company performance:

- 2013 Diluted Earnings Per Share (EPS) must be at least 94% of target for any financial funding and award to be provided under the AIP.
- 2013 Diluted Earnings Per Share (EPS) must be at least 90% of target for funding of any award to be provided under the AIP for Business Transformation and Operational Performance Factors.

Based on financial (weighted 55%), nonfinancial (weighted 45%) Business Transformation(weighted 25%) and operational (weighted 20%) goals **Forecasted Corporate Funding** X Corporate Multiplier \$XX,XXX Sum of Total [X.XX%] **AIP Funding** (0%-150%) \$XX.XXX Financial Performance (55% Weight) Diluted Earnings Per Share (55%) Nonfinancial Performance (45% Weight) **Business Transformation Performance (25%)** Operational Performance (20% Weight) Safety Customer Environmental Customer Satisfaction Compliance Service Quality Survey (5%) (5%) Survey (5%) Notices of Violation (NOVs) (5%)

Financial Metric (Weighted 55%) *

■ *Diluted Earnings Per Share* is a widely tracked measure of financial performance/profitability, and is calculated as follows:

Net Income to Common Stockholders

÷

Average Outstanding Shares (including dilutive securities such as stock options)

=

Diluted Earnings per Share

- Nonfinancial Metric (Weighted 45%)
 - Business Transformation (Weighted 25%)
 - Enterprise Asset Management/Customer Information System successful go live (Judgment of Management with Discretion of the Board of Directors.)
 - Operational Performance (Weighted 20%)*
 - Environmental Compliance Notices of Violation (NOVs) (5%)
 - Safety Performance (5%)
 - Customer Satisfaction Survey (5%)
 - Customer Service Quality Survey (5%)

Please note that AIP funding for all employees will depend on how well the company achieves its financial, nonfinancial goals which are Business Transformation and operational performance. A predetermined financial threshold for company performance must be met in order for funding and any

^{* 2013} Diluted Earnings Per Share (EPS) must be at least 94% of target for any financial funding and award to be provided under the AIP.

^{*}These outcomes are based on a combination of surveys, end-of-year results, data and other annual reports (For more details on these performance measures, see Attachment A at the back of this brochure).

award to be provided under the AIP. For 2013, the threshold is 90% of EPS target in order to fund any award to be provided under the AIP for Business Transformation and operational performance factors.

The financial, Business Transformation and operational metrics are added together to determine the Corporate Multiplier. So, even if certain metrics are not achieved, the funding may be reduced, but not eliminated altogether. However, if the company's financial performance does not meet the threshold, the Corporate Multiplier will be reduced to zero, which would eliminate any award payout. The Corporate Multiplier (and thus funding for payouts) may be adjusted to take into account nonrecurring items such as impairment charges, dissolutions or acquisitions of businesses or costs associated with one-time events.

Step 2: Allocate overall corporate funding to organizational groups/ functional areas, and adjust specific organizational group/functional area funding to reflect results

Once the overall corporate funding is determined as described under Step 1, senior management will allocate the corporate funding to American Water's organizational groups and functional areas. The funding for each organizational group/functional area may be increased or decreased, at senior management's discretion, to reflect specific organizational group/functional area results.

Step 3: Determine individual AIP award based on (a) individual performance, and (b) available organizational group/functional area funding; awards are paid from available organizational group/functional area award pool

Your **AIP target award** (i.e., your award opportunity) is based on your job with the company and is expressed as a percentage of your base salary. Your actual award payout may be higher or lower than target depending on whether *individual* and company performance goals have been met, and your organizational group's/functional area's results. Contact your manager for information on your individual AIP Target Award.

Your individual performance factor is based on (a) your performance against specific targets, and (b) the amount of organizational group/functional area funding available

\$XX,XXX Individual \$XX,XXX Award paid from **Individual AIP** Performance Individual available X Target **Factor** Award organizational (% of Base [x.xx%] group/functional Salary) (0%-200%) area award pool

The sum of individual awards for a specific organizational group/functional area must not exceed the funding allocated to that organizational group/functional area

The *Individual Performance Factor* represents how well you achieve your annual individual performance goals. Your *Individual Performance Factor (IPF)* can range from 0% to 200%, depending on your performance for the plan year and the amount of organizational group/functional area funding available. This performance factor will then be multiplied by your Target Award to determine your 2013 AIP award payout. Individual payouts will be capped at 200% of AIP target award. Individual AIP awards are then paid from the available organizational group/functional area award funding, which may impact the original IPF determination. The sum of all individual awards within a given organizational group/functional area must not exceed its allocated pool of dollars.

WHAT THE 2013 AIP MEANS FOR YOU

Performance Ratings

Most people are motivated to do their best; therefore *the better you perform, the greater your potential award will be under the plan*. It is your responsibility to maximize your award opportunity by achieving or exceeding your goals.

Each year, you and your manager identify four to six high priority and challenging performance targets, which represent where you can directly impact the company's success. These performance targets and their weightings should be specific, measurable and aligned with the company's performance targets. During your year-end performance review, you and your manager will discuss how well you performed against the established targets, and rate your performance using one of the following performance ratings:

2013 Performance Rating Scale		
Rating	Description	
Exceptional	Contributions are widely recognized as extraordinary. Results far exceed all defined expectations, producing important and substantial impact on the Company, Division, Operating Company, Line of Business or Function.	
Highly Effective	Contributions are widely recognized as distinguished. Results exceed all or most expectations, producing a tangible and material impact on the Company, Division, Operating Company, Line of Business or Function.	
Commendable	Contributions are widely recognized as meaningful. Results meet, and in some cases exceed expectations, producing a positive and desirable impact on the Company, Division, Operating Company, Line of Business or Function.	
Needs Improvement	Contributions are widely recognized as limited. Results generally meet but in some cases fall slightly short of expectations, producing inconsistent and marginal impact on the Company, Division, Operating Company, Line of Business or Function.	
Unacceptable	Contributions are widely recognized as unsatisfactory. Results fall considerably short of expectations, producing negligible or no impact on the Company, Division, Operating Company, Line of Business or Function.	
Too Soon to Rate	Contributions cannot be measured at this time because more time is needed to see a result.	

Later, during the AIP process, your manager will use your rating to determine your Individual Performance Factor. Depending on how you performed during the year, you could potentially earn a higher payout — or you could earn a lower payout or no payout at all. In other words, the AIP design gives you more power to impact the size of your award. It also means that you are accountable for meeting your performance goals.

Award Funding Determination

Below are four scenarios that demonstrate how AIP funding may be calculated:

AIP Funding Assumptions

Total AIP Funding * \$20,000,000
Total AIP Funding for Organizational Group* \$2,000,000

^{*} The total is the sum of the target awards for the eligible employees.

	Performance			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4
■ Company	Above Target	Target	Threshold	Below Threshold
— Financial	1.39	0.94	0.25	0.00
Performance Factor — Business Transformation	1.10	0.85	0.50	0.00
Performance Factor — Operational Performance Factor	0.90	1.16	0.50	0.00

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
STEP 1: Establish corporate	funding based on overa	Il corporate performar	nce	
Total of AIP Targets (A)	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000
Financial Performance Factor (i) (55% weight)	1.39 × 0.55 = 0.76	0.94 × 0.55 = 0.52	0.25 × 0.55 = 0.14	0.00 × 0.55 = 0.00
Business Transformation Performance Factor (ii) (25% Weight)	1.10 × 0.25 = 0.27	0.85 × 0.25 = 0.21	0.50 × 0.25 = 0.12	0.00 × 0.25 = 0.00
Operational Performance Factor (iii) (20% weight)	0.90 × 0.20 = 0.18	1.16 × 0.20 = 0.23	0.50 × 0.20 = 0.10	0.00 × 0.20 = 0.00
i + ii + iii = Corporate Multiplier (B)	1.21	.96	0.36	0.00
A × B = Corporate Funding	\$20,000,000 ×1.21 = \$24,200,000	\$20,000,000 ×.96 = \$19,200,000	\$20,000,000 × 0.36 = \$7,200,000	\$20,000,000 × 0.00 = \$0

STEP 2: Allocate overall corp group/functional area funding		izational groups/function	onal areas; adjust spec	cific organizational
Organizational Group Pool (C) (Allocated from corporate funding)	\$2,420,000	\$1,920,000	\$720,000	\$0
Organizational Group Adjustment (D)	1.00 (Target)	.80 (Below Target)	1.20 (Above Target)	1.00 (Target)
C × D = Organizational Group Pool (adjusted based on results)	\$2,420,000 ×1.00 = \$2,420,000	\$1,920,000 × 0.80 = \$1,536,000	\$720,000×1.20 = \$864,000	\$0 × 1.00 = \$0

Both company and individual performance can significantly impact your final payout. Also, remember that the sum of individual awards for a specific organizational group/functional area must equal the funding allocated to that organizational group/functional area.

Please discuss the AIP with your manager to ensure you clearly understand how the formula works and how your performance impacts your potential award payout.

Receiving Your AIP Award

Awards will be paid in cash no later than March 15, 2014. If you are eligible for an award payout, please keep in mind that:

- You must be actively employed with the company on the date of payout.
- The payout will be based on your annual base salary as of December 14, 2013 and subject to all federal, state and local income tax withholdings.
- The American Water Board of Directors or its Designee has the right to adjust the award determination(s) and/or award payouts(s) at its discretion.

Remember, it's your performance — and your award: The contributions you make to American Water's success throughout the year ultimately impact the amount of your payout. Be sure to carefully review this brochure; then speak with your manager about the AIP and about what you can do to improve your performance and share the financial rewards of American Water's success.

FREQUENTLY ASKED QUESTIONS

Question	Answer
How does the plan reward performance?	The AIP allows us to differentiate and reward the performance of employees who contribute to the achievement of the company's goals. The 2013 AIP directly ties award payouts to measurable contributions (company, organizational group/functional area and individual) to American Water's success.
Who is eligible for the AIP?	All regular, full-time exempt employees are eligible to participate. If you join American Water on or before September 30, 2013, you are also eligible to participate in the plan on a prorated basis.
What do I have to do to receive an AIP award?	Any payout will depend largely on your performance, as well as on company, organizational group/functional area performance (including financial, nonfinancial- Business Transformation and operational), which determines funding. If your performance is rated "Needs Improvement" or higher, you may receive an award payout — but only if threshold company performance metrics have been met. If your performance rating is "Unacceptable" or "Too Soon to Rate," you will not receive a payout. To maximize your award opportunity, it's important to meet with your manager to establish meaningful performance goals, and then work hard throughout the year to achieve those goals.
How is my AIP target award opportunity determined? How can I find out what it is?	Your AIP target award opportunity is based on your job and is expressed as a percentage of your base salary. Please see your manager to learn more about your target award opportunity for 2013.
How will my AIP award payout be calculated?	The size of the pool which funds your award is determined based on overall corporate performance and adjusted to reflect specific organizational group/functional area results. AIP funding for all eligible employees will depend on the company and/or organizational group/functional area achieving its nonfinancial - operational and Business Transformation goals as well as financial goals. Once individual awards are calculated, they are paid from the organizational group/functional area funding.
What is the minimum and maximum that could be paid under the plan (as a percent of target)?	AIP award payouts can range from zero, to a maximum of an Individual Performance Factor of 200%. Payouts are capped at 200% of AIP target award.

Question	Answer
Will I receive an award payout if I meet my individual performance goals but the company does not achieve minimum (threshold) performance?	No. A pre-determined financial threshold for company performance must be met in order for funding and any award to be provided under the AIP.
What happens if I leave American Water before I receive my award payout?	To receive the award payout, you must be actively employed with American Water on the date the payment is to be made. You (or your beneficiary) may be eligible for a prorata award if you are disabled, retire, die, involuntarily terminate (not "for cause") or a divestiture occurred after June 30, 2013. (Retirement under this plan is age 55 and 10 total years of employment service.) Employees involuntarily terminated for cause would not be eligible.
What happens if I change job positions or I receive a merit increase within American Water during the plan year?	Your award payout will be based on your base salary and target level percentage as of December 14, 2013.

This brochure is the 2013 American Water Annual Incentive Plan. The American Water Board of Directors or its Designee, whose decisions will be final and binding, will determine interpretations of the Plan. The company reserves the right to amend, modify, or discontinue the Plan during the plan year or at any time in the future. Participation in the Plan does not convey any commitment to ongoing employment.

2013 AIP FINANCIAL PAYOUT CURVE

DILUTED EARNINGS PER SHARE (EPS) (55%)

% Target Achieved	% Payout
103.0%	150.0%
102.4%	140.0%
101.8%	130.0%
101.2%	120.0%
100.6%	110.0%
100%	100.0%
98.8%	85%
97.6%	70%
96.4%	55%
95.2%	40%
94.0%	25%
<94.0%	0%

NONFINANCIAL PERFORMANCE (45%)

BUSINESS TRANSFORMATION PERFORMANCE 2013 AIP MEASURE

Enterprise Asset Management/Customer Information System successful go live (judgment of management with discretion of the Board of Directors.)

2013 AIP OPERATIONAL MEASURES

Environmental Compliance (5%)

For determining environmental compliance, American Water will count Notices of Violation (NOV) for which the company is responsible as described in the Environmental Non-Compliance Reporting Practice. For 2013 American Water's NOV target is 15%.

NOVs	Award
9	150.0%
11	137.5%
13	125.0%
14	112.5%
15	100.0%
16	87.5%
17	75.0%
18	62.5%
19	50.0%
>19	0%

Safety Performance (5%)

Safety performance will be determined using the total OSHA Recordable Incident Rate (ORIR) which measures all injuries and illnesses requiring treatment beyond first aid for every 200,000 hours worked. For 2013 the goal has been set at 3.10 which is 40% below the Bureau of Labor Statistics (BLS) Water Utility Average ORIR of 5.20 and will be evaluated against the graduated award scale below and discretion of management.

ORIR	Award
2.90	150.0%
2.95	137.5%
3.00	125.0%
3.05	112.5%
3.10	100.0%
3.20	87.5%
3.30	75.0%
3.40	62.5%
3.50	50.0%
>3.50	0%

2013 AIP OPERATIONAL MEASURES

Service Quality (5%)

This metric is measured by the Service Quality Survey (SQS) which is conducted throughout the year for customers requesting service resulting in completion of a service order by a Field Service Representative (FSR). The score is based on the survey question: "Overall, how satisfied were you with the outcome of your service contact?" taking the top two response categories of a 5 point response scale (5. Extremely Satisfied, 4. Very Satisfied, 3. Somewhat Satisfied, 2. Somewhat Dissatisfied, 1. Very Dissatisfied). The American Water goal for 2013 is 85% and the graduated award scale is provided below.

SQS %	Award
90	150%
89	140%
88	130%
87	120%
86	110%
85	100%
84	90%
83	80%
82	70%
81	60%
80	50%
< 80	0%

Customer Satisfaction (5%)

This metric measures overall customer satisfaction through a random customer survey containing the following question, "Overall, how satisfied have you been with (Company Name) in general during the past twelve months", which has a five-point response scale (Extremely Satisfied, Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied, Very Dissatisfied), response percentages in the top three categories are indicative of overall customer satisfaction levels and a 90% target has been set.



Annual Incentive Plan

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THE 2014 ANNUAL INCENTIVE PLAN

Your Performance —Your Award

At American Water, your performance counts. We rely on our employees' knowledge and skills to help the company achieve its business objectives.

- The American Water 2014 Annual Incentive Plan (AIP) is designed to give eligible exempt employees an annual opportunity to earn a cash award that recognizes and rewards their contributions to the company's success. This means that company and individual performance are both taken into account to determine cash awards under the plan. We continue to make adjustments to the AIP design to reinforce the link between company and individual performance and award payouts.
- The AIP program for 2014 is similar to last year, and directly ties the amount of available cash for AIP payouts to company performance against specific metrics. For 2014, the performance metrics have been adjusted, replacing measures around Business Transformation. We have increased targets for safety, service quality and customer satisfaction. Doing so continues to drive value for our customers and focuses our efforts to ensure that the work we do is always safe.
- Your individual performance continues to play a large role in determining the amount of your payout. Employees who exceed their performance targets could receive higher payouts. Conversely, employees who underperform and do not meet their performance targets could receive lower payouts or no payout at all. In short, your performance directly impacts the amount of your award. The 2014 AIP is designed to challenge and motivate you to perform at your highest level, and promote the creation of value to the customer and shareholder. Read this brochure to learn about how the 2014 plan works and what it means for you.

ELEMENTS OF THE PROGRAM

- AIP award pool funding is based on overall corporate performance against specific financial and non-financial
 performance (represented by the Corporate Multiplier), then allocated across organizational groups/functional
 areas. Allocation is subject to senior management's discretion and recognizes organizational group/functional area
 results.
 - AIP funding for all eligible exempt employees depends on the company achieving its financial and nonfinancial performance.
 - A pre-determined financial threshold for company performance must be met in order for funding and any award to be provided under the AIP.
- Individual award payouts will be based on individual performance against specific goals represented by the Individual Performance Factor and paid from available organizational group/functional area funding.
- For 2014, the Individual Performance Factor range is 0%–200%. Individual payouts will be capped at 200% of AIP target award.
- Award opportunity (Target Award) is expressed as a percentage of base salary. (See Attachment B.)
 - Actual payout may be lower or higher than target depending on company and individual performance against specific goals.
- Individual performance is assessed by your manager and measured against your predetermined performance goals.
- Your AIP will be distributed as a cash award in March.
 - You must be actively employed with American Water on the date awards are paid to receive your 2014 AIP payout. You (or your beneficiary) may be eligible for a prorata award if you are disabled, retire, die, involuntarily terminate (not "for cause") or a divestiture occurred on or after July 1, 2014. In the event of an involuntary termination for cause, you would not be eligible to receive an award.

Eligibility

- You are eligible for an AIP award opportunity if you are a regular, full-time exempt employee of American Water.
 - Regular, full-time exempt employees who join American Water on or before September 30, 2014 are also eligible to participate in the AIP on a prorated basis.
 - Employees transferred from nonexempt to exempt status on or after September 30, 2014 are not eligible in the current plan year.
- If you are promoted or transferred during the plan year to a position with a higher AIP target level, or if you are reclassified/transferred to a position with a lower AIP target level, your award payout will be based on your new salary and target level as of December 12, 2014, except ML4s and above who will be prorated at each salary and target level. All AIP target awards will be paid based on salaries as of December 12, 2014.
- You must be an active employee with American Water on the date the payout is made in order to receive the award. You (or your beneficiary) may be eligible for a prorata award if you are disabled, retire, die, involuntarily terminate (not "for cause") or a divestiture occurred on or after July 1, 2014. (Retirement under this plan is age 55 and 10 total years of employment service.)
- You are not eligible for an AIP award if:
 - you transfer from exempt status to nonexempt status during the current plan year or your job was reclassified to nonexempt status,
 - your performance rating is "Unacceptable" or "Too Soon to Rate,"
 - you have not complied with the company's annual Code of Ethics certification by the established deadline, or
 - your employment was involuntarily terminated for cause.

Why Is the Plan Based on Individual Performance?

Since the value (as reflected in our share price and our return to shareholders) and success of our business depend on the achievement of annual company and individual performance goals, American Water recognizes the need to differentiate and reward the performance of employees who enable us to reach these goals. The 2014 AIP is designed to ensure that award payouts are directly tied to measurable contributions — both company and individual — to American Water's success.

DETERMINING AIP AWARDS

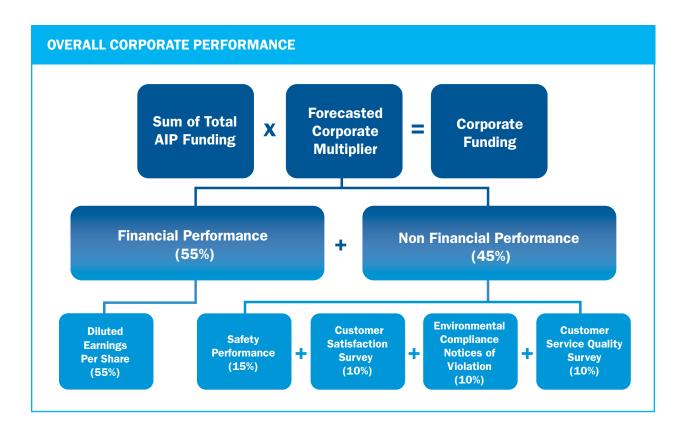
AIP award payouts depend on individual performance; they also depend on overall corporate performance and organizational group/functional area results (which determine award pool funding).

AIP awards will be determined according to the following three-step process:

- **Step 1:** Establish initial award pool based on overall corporate performance.
- Step 2: Allocate overall corporate funding to organizational groups/functional areas, and adjust specific organizational group/functional area funding to reflect results.
- Step 3: Determine AIP award based on individual performance; awards are paid from available organizational group/ functional area funding.

Step 1: Establish initial award pool based on overall corporate performance

Each year, American Water establishes funding for the AIP award pool. In 2014, the funding will be directly tied to company performance and represented by the Corporate Multiplier. The Corporate Multiplier can range from 0% to 150% depending on how well the company performed against the financial and operational goals described on the following page. Note that there is a predetermined threshold for company performance.



Step 1 (continued)

- 2014 Diluted Earnings Per Share (EPS) must be at least 94% of target for any financial funding and award to be provided under the AIP.
- 2014 Diluted Earnings Per Share (EPS) must be at least 90% of target for funding of any award to be provided under the AIP Non Financial Performance Factors.
- Financial Metric (Weighted 55%)*
 - Diluted Earnings Per Share is a widely tracked measure of financial performance/profitability, and is calculated as follows:

Net Income to Common Stockholders

Average
Outstanding Shares
(including dilutive securities such as stock options)

Diluted Earnings per Share

- * 2014 Diluted Earnings Per Share (EPS) must be at least 94% of target for any financial funding and award to be provided under the AIP.
- Non Financial Metric (Weighted 45%)**
 - Environmental Compliance Notices of Violation (NOVs) (10%)
 - Safety Performance (15%)
 - Customer Satisfaction Survey (10%)
 - Customer Service Quality Survey (10%)

Please note that AIP funding for all employees will depend on how well the company achieves its financial and non financial goals. A predetermined financial threshold for company performance must be met in order for funding and any award to be provided under the AIP. For 2014, the threshold is 90% of EPS target in order to fund any award to be provided under the AIP for non financial performance factors.

The financial and non financial metrics are added together to determine the Corporate Multiplier. So, even if certain metrics are not achieved, the funding may be reduced, but not eliminated altogether. However, if the company's financial performance does not meet the threshold, the Corporate Multiplier will be reduced to zero, which would eliminate any award payout. The Corporate Multiplier (and thus funding for payouts) may be adjusted to take into account nonrecurring items such as impairment charges, dissolutions or acquisitions of businesses or costs associated with one-time events.

^{**} These outcomes are based on a combination of surveys, end-of-year results, data and other annual reports (For more details on these performance measures, see Attachment A at the back of this brochure).

Step 2: Allocate overall corporate funding, and adjust specific area funding to reflect results

Once the overall corporate funding is determined as described under Step 1, senior management will allocate the corporate funding to American Water's organizational groups and functional areas. The funding for each organizational group/functional area may be increased or decreased, at senior management's discretion, to reflect specific organizational group/functional area results.

Step 3: Determine individual AIP award

Your AIP target award (i.e., your award opportunity) is based on your job with the company and is expressed as a percentage of your base salary. Your actual award payout may be higher or lower than target depending on whether individual and company performance goals have been met, and your organizational group's/functional area's results. Contact your manager for information on your individual AIP target award.

The Individual Performance Factor represents how well you achieve your annual individual performance goals. Your Individual Performance Factor (IPF) can range from 0% to 200%, depending on your performance for the plan year and the amount of organizational group/functional area funding available. This performance factor will then be multiplied by your Target Award to determine your 2014 AIP award payout. Individual payouts will be capped at 200% of AIP target award. Individual AIP awards are then paid from the available organizational group/functional area award funding, which may impact the original IPF determination. The sum of all individual awards within a given organizational group/functional area must not exceed its allocated pool of dollars.

INDIVIDUAL PERFORMANCE FACTOR (IPF) Your individual performance factor is based on (a) your performance against specific targets, and (b) the amount of organizational group/functional area funding available \$XX,XXX Individual **Available SXX.XXX Organizational Individual AIP Performance Individual Group/Functional** Target (% of Factor (X.XX%) Award* Area Award Pool **Base Salary)** (0%-200%)

*The sum of individual awards for a specific organizational group/functional area must not exceed the funding allocated to that organizational group/functional area.

WHAT THE 2014 AIP MEANS FOR YOU

Performance Ratings

Most people are motivated to do their best; therefore the better you perform, the greater your potential award will be under the plan. It is your responsibility to maximize your award opportunity by achieving or exceeding your goals.

Each year, you and your manager identify four to six high priority and challenging performance targets, which represent where you can directly impact the company's success. These performance targets and their weightings should be specific, measurable and aligned with the company's performance targets. During your year end performance review, you and your manager will discuss how well you performed against the established targets, and rate your performance using one of the following performance ratings:

2014 PERFORMANCE RATING SCALE		
RATING	DESCRIPTION	
EXCEPTIONAL	Contributions are widely recognized as extraordinary. Results far exceed all defined expectations, producing important and substantial impact on the Company, Division, Operating Company, Line of Business or Function.	
HIGHLY EFFECTIVE	Contributions are widely recognized as distinguished. Results exceed all or most expectations, producing a tangible and material impact on the Company, Division, Operating Company, Line of Business or Function.	
COMMENDABLE	Contributions are widely recognized as meaningful. Results meet, and in some cases exceed expectations, producing a positive and desirable impact on the Company, Division, Operating Company, Line of Business or Function.	
NEEDS IMPROVEMENT	Contributions are widely recognized as limited. Results generally meet but in some cases fall slightly short of expectations, producing inconsistent and marginal impact on the Company, Division, Operating Company, Line of Business or Function.	
UNACCEPTABLE	Contributions are widely recognized as unsatisfactory. Results fall considerably short of expectations, producing negligible or no impact on the Company, Division, Operating Company, Line of Business or Function.	
TOO SOON TO RATE	Contributions cannot be measured at this time because more time is needed to see a result.	

Later, during the AIP process, your manager will use your rating to determine your Individual Performance Factor. Depending on how you performed during the year, you could potentially earn a higher payout — or you could earn a lower payout or no payout at all. In other words, the AIP design gives you more power to impact the size of your award. It also means that you are accountable for meeting your performance goals.

Award Funding Determination

Below are four scenarios that demonstrate how AIP funding may be calculated:

AIP FUNDING EXAMPLE

TOTAL AIP FUNDING* \$ 20,000,000 TOTAL AIP FUNDING FOR ORGANIZATIONAL GROUP* \$ 2,000,000

 $\ensuremath{^{\star}}$ The total is the sum of the target awards for the eligible employees.

	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	
Financial Performance Factor	1.39	0.94	0.25	0.00	
Non Financial Performance Factor	0.90	1.00	0.50	0.00	
STEP 1: Establish corporate	funding based on ove	rall corporate perform	ance		
Total of AIP Targets (A)	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	
Financial Performance Factor (i) (55% weight)	1.39 × 0.55 = 0.76	0.94 × 0.55 = 0.52	0.25 × 0.55 = 0.14	0.00 × 0.55 = 0.00	
Non Financial Performance Factor (ii) (45% weight)	0.90 × 0.45 = 0.41	1.00 × 0.45 = 0.45	0.50 × 0.45 = 0.23	0.00 × 0.45 = 0.00	
i + ii = Corporate Multiplier (B)	1.17	0.97	0.37	0.00	
A × B = Corporate Funding	\$20,000,000 × 1.17 = \$23,400,000	0.97 = 0.37 =		\$20,000,000 × 0.00 = \$0	
STEP 2: Allocate overall corp group/functional area fundi		nizational groups/func	rtional areas; adjust sp	oecific organizational	
Organizational Group Pool (C) (Allocated from corporate funding)	\$2,340,000	\$1,940,000	\$740,000	\$0	
Organizational Group Adjustment (D)	1.00 (Target)	.80 (Below Target)	1.20 (Above Target)	1.00 (Target)	
C × D = Organizational Group Pool (adjusted based on results)	\$2,340,000 × 1.00 = \$2,340,000	1.00 \$1,940,000 × \$740,000 × 1.20 = \$1,552,000 \$888,000		\$0 × 1.00 = \$0	

Both company and individual performance can significantly impact your final payout. Also, remember that the sum of individual awards for a specific organizational group/functional area must equal the funding allocated to that organizational group/functional area.

Please discuss the AIP with your manager to ensure you clearly understand how the formula works and how your performance impacts your potential award payout.

Receiving Your AIP Award

Awards will be paid in cash no later than March 14, 2015. If you are eligible for an award payout, please keep in mind that:

- You must be actively employed with the company on the date of payout.
- The payout will be based on your annual base salary as of December 12, 2014 and subject to all federal, state and local income tax withholdings.
- The American Water Board of Directors or its Designee has the right to adjust the award determination(s) and/or award payouts(s) at its discretion.

Remember, it's your performance — and your award: The contributions you make to American Water's success throughout the year ultimately impact the amount of your payout. Be sure to carefully review this brochure; then speak with your manager about the AIP and about what you can do to improve your performance and share the financial rewards of American Water's success.

FREQUENTLY ASKED QUESTIONS

How does the plan reward performance?

The AIP allows us to differentiate and reward the performance of employees who contribute to the achievement of the company's goals. The 2014 AIP directly ties award payouts to measurable contributions (company, organizational group/functional area and individual) to American Water's success.

Who is eligible for the AIP?

All regular, full-time exempt employees are eligible to participate. If you join American Water on or before September 30, 2014, you are also eligible to participate in the plan on a prorated basis.

What do I have to do to receive an AIP award?

Any payout will depend largely on your performance, as well as on company, organizational group/functional area performance (including both financial and non financial), which determines funding.

If your performance is rated "Needs Improvement" or higher, you may receive an award payout — but only if threshold company performance metrics have been met. If your performance rating is "Unacceptable" or "Too Soon to Rate," you will not receive a payout. To maximize your award opportunity, it's important to meet with your manager to establish meaningful performance goals, and then work hard throughout the year to achieve those goals.

How is my AIP target award opportunity determined? How can I find out what it is?

Your AIP target award opportunity is based on your job and is expressed as a percentage of your base salary. Please see your manager to learn more about your target award opportunity for 2014.

How will my AIP award payout be calculated?

The size of the pool which funds your award is determined based on overall corporate performance and adjusted to reflect specific organizational group/functional area results. AIP funding for all eligible employees will depend on the company and/or organizational group/functional area achieving its non financial operational goals as well as financial goals. Once individual awards are calculated, they are paid from the organizational group/functional area funding.

What is the minimum and maximum that could be paid under the plan (as a percent of target)?

AIP award payouts can range from zero, to a maximum of an Individual Performance Factor of 200%. Payouts are capped at 200% of AIP target award.

Will I receive an award payout if I meet my individual performance goals but the company does not achieve minimum (threshold) performance?

No. A pre-determined financial threshold for company performance must be met in order for funding and any award to be provided under the AIP.

What happens if I leave American Water before I receive my award payout?

To receive the award payout, you must be actively employed with American Water on the date the payment is to be made. You (or your beneficiary) may be eligible for a prorata award if you are disabled, retire, die, involuntarily terminate (not "for cause") or a divestiture occurred on or after July 1, 2014. (Retirement under this plan is age 55 and 10 total years of employment service.) Employees involuntarily terminated for cause would not be eligible.

What happens if I change job positions or I receive a merit increase within American Water during the plan year?

In either scenario, your award payout will be based on your base salary and target level percentage as of December 12, 2014.

2014 AIP FINANCIAL PAYOUT CURVE

Diluted Earnings Per Share (55%)

% TARGET	ACHIEVED % PAYOUT
103.0%	150.0%
102.4%	140.0%
101.8%	130.0%
101.2%	120.0%
100.6%	110.0%
100.0%	100.0%
98.8%	85.0%
97.6%	70.0%
96.4%	55.0%
95.2%	40.0%
94.0%	25.0%
<94.0%	0.0%

2014 AIP OPERATIONAL MEASURES NON FINANCIAL PERFORMANCE (45%)

Environmental Compliance (10%)

For determining environmental compliance, American Water will count Notices of Violation (NOVs) for which the company is responsible as described in the Environmental Non-Compliance Reporting Practice. For 2014, American Water's NOV target is 13.

NOVs	AWARD
7	150.0%
9	137.5%
11	125.0%
12	112.5%
13	100.0%
14	87.5%
15	75.0%
16	62.5%
17	50.0%
>17	0.0%

Safety Performance (15%)

Safety performance will be determined using the OSHA Recordable Incident Rate (ORIR), which measures injuries and illnesses requiring treatment beyond first aid per 200,000 hours worked. For 2014, the goal has been set at a rate less than 2.75 with the Regulated Operations at a rate less than 2.86 and the Market Based goal at a rate of less than 2.05. These goals will be evaluated against the graduated award scale below and discretion of management.

ORIR	AWARD
2.55	150.0%
2.60	137.5%
2.65	125.0%
2.75	112.5%
< 2.75	100.0%
2.85	87.5%
2.95	75.0%
3.05	62.5%
3.15	50.0%
>3.15	0.0%

Service Quality (10%)

This metric is measured by the Service Quality Survey (SQS) which is conducted throughout the year for customers requesting service resulting in completion of a service order by a Field Service Representative (FSR). The score is based on the survey question "Overall, how satisfied were you with the outcome of your service contact?" which has a five-point response scale (Extremely Satisfied, Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied, Very Dissatisfied). The American Water target for 2014 is 85% extremely or very satisfied customers, and the graduated award scale is provided below.

SQS %	AWARD
90	150%
89	140%
88	130%
87	120%
86	110%
85	100%
84	90%
83	80%
82	70%
81	60%
80	50%
< 80	0%

Customer Satisfaction (10%)

This metric measures overall customer satisfaction through a random customer survey containing the question "Overall, how satisfied have you been with (Company Name) in general during the past twelve months?", which has a five-point response scale (Extremely Satisfied, Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied, Very Dissatisfied). Response percentages in the top three categories are indicative of overall customer satisfaction levels and a 90% target has been set for 2014.

CSS%	AWARD
95	150%
94	140%
93	130%
92	120%
91	110%
90	100%
89	90%
88	80%
87	70%
86	60%
85	50%
<85	0%

2014 ANNUAL INCENTIVE PLAN TARGETS

Exempt Positions

GRADE	AIP%
ML4	30%
L5-L6	20%
L7	15%
L8-L9	10%
L10-L12	5%



1025 Laurel Oak Road Voorhees, NJ 08043

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Donald J. Petry

49. Reference the Kentucky American Water application generally. Itemize all incentive compensation costs allocated from American Water and/or other affiliates that are included in the Company's claim. Provide this information separately for the Base Period and the Test Period.

Response:

The performance compensation costs allocated from American Water Works Service Company (AWWSC) included in the Company's filing are reflected in the table below. The account 50171000 reflects the amounts for the Annual Performance Plan, however the general ledger account name displays the Annual Incentive Plan name.

GL Account GL Account Name		Base Year	Forecasted Test Year
50171000 Annual Incentive Plan		\$417,328	\$537,596
50171600	Compensation Exp - Options	50,427	60,362
50171800	Compensation Exp - RSU's	147,019	183,090
Total		\$614,774	\$781,049

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Linda C. Bridwell

50. Reference the Kentucky American Water application generally. Provide the date(s) when the Company first offered incentive compensation and explain why Kentucky American Water did not previously request recovery in rates.

Response:

KAW implemented an incentive compensation program after reviewing the recommendation of Schumaker & Company in its comprehensive management and operations audit of KAW in 1991 that the company consider a bonus program for senior level management and Service Company executives.

The first rate case not resolved by settlement following KAW's implementation of an incentive compensation program was Case No. 95-554. KAW proposed to include incentive compensation in rates. In that case, the Office of the Attorney General ("AG") recommended that the costs associated with incentive compensation not be recovered in rates. The Commission denied the AG'S proposed adjustment because the incentive program adopted by KAW "not only reviews financial goals beneficial to the stockholders, but also includes service and operations goals beneficial to ratepayers... [KAW] has thus met its burden by showing that the cost of its incentive bonus plan is appropriate for rate-making purposes."

In KAW's next rate, Case No. 97-034, KAW again requested that incentive compensation expenses be included in rates and the AG recommended that the costs be shared between ratepayers and stockholders. The Commission denied the AG's adjustment for the same reasons as in Case No. 95-554.²

KAW's next rate case, Case No. 2000-120, also included incentive compensation expenses. The AG proposed the same adjustment as in Case No. 97-034. The Commission again denied the adjustment, but noted it was reconsidering its position on the issue.³

In Case No. 2004-00103, the AG again proposed a cost-sharing adjustment in response to KAW including incentive compensation expenses in rates. The Commission eliminated

¹ In the Matter of: Application of Kentucky-American Water Company to Increase Its Rates (Case No. 95-554) September 11, 1996 Order.

² In the Matter of: Application of Kentucky-American Water Company to Increase Its Rates (Case No. 97-034) September 30, 1997 Order.

³ In the Matter of: Application of Kentucky-American Water Company to Increase Its Rates (Case No. 2000-120) November 27, 2000 Order.

all of the incentive compensation costs. The Commission's order stated that KAW did not demonstrate that the incentive plans benefited ratepayers.⁴

The next KAW rate case not resolved by settlement was Case No. 2010-00036. KAW again proposed to include incentive compensation in rates and produced a study that was intended to quantity the benefits that inure to customers as a result of incentive compensation. The AG recommended that KAW's proposed incentive compensation expense not be included in rates. The Commission continued its position from Case No. 2004-00103.⁵

In KAW's last rate case, Case No. 2012-00520, KAW did not propose to include incentive compensation expense in rates. As explained in the direct testimony of then-President Cheryl Norton, incentive compensation adds value to KAW customers, but KAW recognized that the Commission had not allowed rate recovery of that legitimate expense in recent cases based on the lack of an acceptable study on the topic. At the time, KAW had not completed a study.

KAW has proposed to recover its total compensation expenses in this case, which includes short-term and long-term variable compensation. KAW has included a study performed by Willis Towers Watson finding that KAW's total compensation is reasonable, competitive and benefits employees, customers and shareholders. As such, it is a legitimate expense that should be included in rates.

⁴ In the Matter of: Adjustment of the Rates of Kentucky-American Water Company (Case No. 2004-00103) February 28, 2005 Order.

⁵ In the Matter of: Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year (Case No. 2010-00036) December 14, 2010 Order.

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Christine Karlsson

51. Reference the Kentucky American Water application generally. Describe any changes to employee or office incentive programs over the past five years or that are projected for the future.

Response:

For 2016 (and the future)

- Full-time non-union, non-exempt American Water employees will be added to the Annual Performance Plan (APP) at 5% of their annual base salary.
- Reduced the number of measures from 10 to 6 to simplify the design and align the number of measures and performance to our peers.

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Donald J. Petry

52. Reference the Kentucky American Water application generally. Identify and quantify all officer compensation by component, including incentive awards and bonuses, paid in each of the past three years and indicate the portion of each component that is included in the Company's proposed revenue requirement. Also identify, by title, the officers whose compensation is included in this response. Include both Kentucky American Water officers as well as officers of affiliates whose costs are allocated to Kentucky American Water in your response.

Response:

Please see attached. Officer compensation, including allocated compensation from American Water Works Service Company employees, is provided for Kentucky American, American Water Works Service Company and American Water Capital Corporation officers. The attachment contains confidential information and is subject to a petition for confidential protection.

Kentucky American Water Company Officer Compensation

Year	Officer	Title	Co	Salary	Bonus	AiP	Stock Div	Total
2013			KY	\$177,938	\$0	\$70,571	\$1,835	\$250,344
2013			AWWSC	5,831	0	2,020	68	7,918
2013			AWWSC	26,212	0	7,174	0	33,385
2013			KY	155,594	0	53,232	1,827	210,652
2013			AWWSC	11,669	0	3,063	0	14,733
2013			AWWSC	5,139	0	1,530	0	6,669
2013			AWWSC	4,837	0	1,538	53	6,428
2013			AWWSC	90,394	0	17,892	0	108,287
2013			AWWSC	6,792	0	1,652	0	8,443
2013			AWWSC	0	0	0	0	0
2013 Total				\$484,405	\$0	\$158,672	\$3,783	\$646,859
2014			KY	182,486	0	32,620	5,110	220,216
2014			AWWSC	30,379	0	7,174	0	37,552
2014			KY	159,973	0	39,112	1,472	200,557
2014			AWWSC	9,937	0	3,063	0	13,000
2014			AWWSC	3,866	0	647	0	4,514
2014			AWWSC	6,838	704	139	6	7,687
2014			AWWSC	3,129	0	609	0	3,738
2014			AWWSC	58,308	0	17,892	0	76,201
2014			AWWSC	7,557	0	1,652	0	9,209
2014			AWWSC	0	0	0	0	0
2014 Total				\$462,474	\$704	\$102,909	\$6,588	\$572,674
2015			AWWSC	38,322	0	15,401	2,051	55,775
2015			AWWSC	34,783	0	7,174	0	41,956
2015			AWWSC	4,585	0	647	0	5,232
2015			AWWSC	7,330	0	139	6	7,476
2015			AWWSC	3,394	0	609	0	4,004
2015			AWWSC	56,207	0	17,892	0	74,099
2015			KY	16,118	0	0	0	16,118
2015			AWWSC	8,095	0	1,652	0	9,747
2015			AWWSC	0	0	0	0	0
2015 Total				\$168,835	\$0	\$43,515	\$2,057	\$214,407

American Water Works Service Company Officer Compensation

			Allocated	Allocated	Allocated	Alloc Stock	
Year	Officer	Title	Salary	Bonus	AIP	Div	Total
2013			\$5,453	\$0	\$2,292	\$284	\$8,028
2013			2,452	0	1,557	192	4,202
2013			10,974	0	6,967	1,015	18,957
2013			6,468	0	2,459	209	9,136
2013			7,537	0	2,912	269	10,718
2013			6,089	0	1,543	0	7,632
2013			25,694	0	15,401	2,051	43,146
2013			7,640	0	4,027	177	11,845
2013			0	0	0	0	0
2013			5,831	0	2,020	68	7,918
2013			19,843	0	17,564	3,194	40,601
2013			1,735	0	0	0	1,735
2013			5,139	0	1,530	0	6,669
2013			4,837	0	1,538	53	6,428
2013			5,466	0	3,488	445	9,399
2013			6,270	0	1,668	75	8,013
2013			8,752	0	4,459	533	13,745
2013			9,006	0	3,784	89	12,878
2013			13,822	0	9,691	1,557	25,070
2013			6,792	0	1,652	0	8,443
2013			8,736	0	4,422	0	13,158
2013			8,056	0	2,273	0	10,328
2013 Total			\$176,590	\$0	\$91,247	\$10,210	\$278,048
2014			11,609	0	6,000	904	18,513
2014			5,833	0	1,761	175	7,769
2014			7,975	0	3,075	221	11,270
2014			6,448	0	1,118	1	7,567
2014			27,381	0	13,127	1,894	42,401
2014			372	0	121	3	496
2014			8,166	0	3,074	152	11,393
2014			0	0	0	0	0
2014			21,070	0	16,395	2,878	40,343
2014			1,850	0	0	0	1,850
2014			3,866	0	796	0	4,662
2014			7,776	0	4,023	546	12,345
2014			6,838	704	1,154	60	8,756
2014			6,640	0	1,198	62	7,900
2014			9,342	343	3,636	485	13,805

American Water Works Service Company Officer Compensation

			Allocated	Allocated	Allocated	Alloc Stock	
Year	Officer	Title	Salary	Bonus	AIP	Div	Total
2014			3,129	0	460	0	3,589
2014			8,986	0	3,511	74	12,572
2014			7,820	343	2,162	211	10,536
2014			14,533	0	8,303	1,526	24,361
2014			7,557	0	1,337	68	8,963
2014			7,119	0	2,540	366	10,025
2014			8,686	8,118	0	0	16,804
2014 Total			\$182,998	\$9,507	\$73,790	\$9,625	\$275,920
2015			38,322	0	17,857	2,445	58,625
2015			0	0	0	0	0
2015			11,328	880	2,902	190	15,300
2015			8,409	0	3,429	384	12,221
2015			492	0	231	32	755
2015			21,807	0	15,909	2,663	40,379
2015			1,962	0	0	0	1,962
2015			4,585	0	1,118	0	5,703
2015			10,331	0	5,008	682	16,021
2015			7,330	0	2,226	56	9,612
2015			8,481	0	1,684	384	10,549
2015			7,298	264	1,332	58	8,951
2015			8,004	0	2,846	185	11,035
2015			9,612	0	3,952	447	14,011
2015			3,394	0	529	0	3,923
2015			8,222	0	3,409	194	11,826
2015			8,095	0	1,796	63	9,954
2015			13,570	0	6,563	16	20,149
2015			13,883	0	10,056	52	23,991
2015			10,627	0	0	0	10,627
2015			4,428	2,641	0	0	7,069
2015			3,047	880	0	0	3,927
2015 Total			\$203,229	\$4,665	\$80,843	\$7,852	\$296,589

American Water Capital Corporation Officer Compensation

			Allocated	Allocated	Allocated	Alloc	
Year	Officer	Title	Salary	Bonus	AIP	Stock Div	Total
2013			\$0	\$0	\$0	\$0	\$0
2013			6,468	0	2,459	209	9,136
2013			2,978	0	395	0	3,373
2013			0	0	0	0	0
2013			5,139	0	1,530	0	6,669
2013			8,752	0	4,459	533	13,745
2013			8,736	0	4,422	0	13,158
2013			\$32,073	\$0	\$13,265	\$743	\$46,080
2014			5,833	0	1,761	175	7,769
2014			0	0	0	0	0
2014			2,872	0	871	42	3,785
2014			6,640	0	1,198	62	7,900
2014			9,342	343	3,636	485	13,805
2014			7,119	0	2,540	366	10,025
2014			\$31,806	\$343	\$10,006	\$1,129	\$43,284
2015			0	0	0	0	0
2015			7,298	264	1,332	58	8,951
2015			8,004	0	2,846	185	11,035
2015			9,612	0	3,952	447	14,011
2015			13,883	0	10,056	52	23,991
2015			4,428	2,641	0	0	7,069
2015			\$43,225	\$2,905	\$18,185	\$742	\$65,057

Witness: Linda C. Bridwell

- **53.** Reference the Kentucky American Water application generally. Identify all compensation, bonuses, and benefit costs included in the Company's claim relating to:
 - a. the Kentucky American Water Board of Directors, and
 - b. Board of Directors' costs allocated from American Water and/or other subsidiaries.

Response:

- a. Kentucky American Water Board of Directors' fees included in the Company's claim were \$72,000.
- b. The Director's fees allocated from American Water Service Company (AWWSC) and include in the Company's claim for the pro forma support service costs of the rate case were \$18,252.

Witness: Kevin N. Rogers

54. Reference the Kentucky American Water application. Provide the budgeted and actual number of employee positions for each month from January 1, 2013 through the latest month available.

Response:

Please see attached.

Kentucky Amerian Water Company Response to AG DR 1-54

2013	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Actual	127	127	126	127	128	128	127	127	127	128	127	126
Budget	139	139	139	139	139	139	139	139	139	139	139	139
2014	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Actual	125	126	126	126	126	121	120	120	121	123	126	126
Budget	139	139	139	139	139	139	139	139	139	139	139	139
2015	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Actual	127	127	127	127	127	127	127	128	133	132	133	134
Budget	138	138	138	138	138	138	138	138	138	138	138	138
2016	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Actual	133	132						·			·	
Budget	138	138										

Witness: Donald J. Petry

55. Reference the Kentucky American Water application generally. Itemize the amounts included in the Base Period and Test Period for positions that were vacant at the end of the Base Period.

Response:

Please see the Company's response to Item 21 of the Commission Staff's First Request for Information. The Company did not budget any vacant positions at the end of the Base Period.

Witness: Donald J. Petry

56. Reference the Kentucky American Water application generally. Provide the actual overtime hours in each of the past three years, as well as the hours assumed in the Base Period and Test Period in the filing.

Response:

Please see below.

Year	Overtime Hours
2013	23,524.25
2014	26,089.00
2015	27,164.50
Base Period	24,816.35
Forecast Year	16,947.44

Witness: Donald J. Petry

57. Reference the Kentucky American Water application generally. Provide the basis for the 4% increase assumed for non-OPEB insurance costs, as discussed on page 8 of Mr. Petry's testimony.

Response:

American Water worked with Willis Towers Watson to project future group insurance costs. According to Willis Towers Watson, the national healthcare trend for Energy and Utilities was approximately 5% for 2015 and is projecting to increase by 6% in 2016. However, with some benefit changes that helped reduce projected costs, the Company planned a 4% increase for the group insurance budget.

Witness: Donald J. Petry

58. Reference the Kentucky American Water application generally. Identify all benefits that vary depending upon the date of hire of the employee, and describe how the various benefits vary depending on hire date.

Response:

Benefit plans for 401(k), Defined Contribution Plan, Defined Benefit Plan and Post-Retirement Benefits Other Than Pensions (PBOP) vary depending on hire date.

Original 401(k) – non-union employees hired before 1/1/06 and union employees hired before 1/1/01 participate in the original 401(k) plan. The Company matches 50% of the first 5% of the employee's contribution (or 2.5% of base pay).

Enhanced 401(k) – non-union employees hired after 1/1/06 and union employees hired before 1/1/01 participate in the enhanced 401(k) plan. The Company matches 100% of the first 3% of the employee's contribution and 50% of the next 2% (or 4% of base pay, overtime and APP).

Defined Contribution Plan - non-union employees hired after 1/1/06 and union employees hired before 1/1/01 participate in DCP. Employees receive 5.25% of their base pay which is put into an investment account.

Defined Benefit Plan - non-union employees hired before 1/1/06 and union employees hired before 1/1/01 participate in DBP. This pension plan promises a specified monthly benefit on retirement that is predetermined by a formula based on the employee's earnings history, service years and age.

Post-Retirement Benefits Other Than Pensions (PBOP) - non-union employees hired before 1/1/06 and union employees hired before 1/1/01 participate in PBOP. Employees will receive medical heath care benefits after retirement.

Witness: Kevin N. Rogers/Donald J. Petry

59. Reference the Kentucky American Water application generally. Provide a job description for each new position added since the Company's last water base rate case.

Response:

- The following positions have been added to Kentucky American Water, Lexington:
 - o Automation & Controls Tech II
 - o Manager of Business Performance
 - o Mgr. Health & Safety Programs
 - o Specialist Business Services
 - o Waste Water Operator
 - o Water Quality and Environmental Technician III
- Job descriptions attached.

		JOB DESCRIPTION			
Job Title:	Job Title:	Automation & Controls Technician II	Job ID : 31002354		
	Grade:	L09	FLSA: Non-Exempt		
	EEO:	03 Technicians			
Job Family:			3		
Approved:	14	Job Content Reviewed: 🗸	Date: 10/30/2014		
Primary Role:	integration, process co systems re treatment a educating of	e for performing and/or assisting in the d configuration, diagnosis, security, and control & monitoring equipment in automati- lated to water treatment and distribution and collection. Additional responsibilities company employees on process control sector Company process control standards a	ommissioning of on & process control and wastewater include, systems, ensuring		
	design revistant up of process contesting. Assuming a programs of a programs of a programs and systems. Dial with guidan improvements	sist in construction projects. Participate in the ew, information gathering, inspection, and projects that include electrical, instrument of the equipment or systems. Assist in factorists or perform with guidance minor change the extreme and functional operation of all interesting and functional operation of all interesting and resolve automation & processing. Keep current with hardware and softents.	d commissioning or tation and story witness ges in software als, graphic displays, astrumentation s control system issues, tware updates and		
	Perform and or direct diagnostic procedures on installed mechanical, electrical or instrumentation and process control equipment or systems following American Waters Best Operating Practices (BOP).				
Key Accountabilities:					
2:	operation of in the technic knowledge Per Re	vise and assist local maintenance person r diagnosis of automation & process contical training of company personnel to enland skills. If orm advanced instrumentation validation view existing control logic with the Control and assist in control logic changes	trol systems. Assist hance technical n.		

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JOB DESCRIPTION

Job Title: Automation & Controls Technician II Job ID: 31002354

	[
	Demonstrate ability to assess options and likely consequences when making decisions or solving problems.
Experience:	 Minimum two (3) years of experience in the installation, maintenance, troubleshooting, and repair of automation & process control equipment & systems (SCADA). Experience with data communications systems, protocols, wired and
	wireless network systems, and radio telemetry.
Certifications & Licenses:	
	Total Supervised: Exempt 0 Non-exempt 0
Saana	Direct Budget 0 Indirect Budget 0
Scope:	Direct Revenue 0
-	
	Indirect Revenue 0
Work Environment:	Operating Facilities – Multi District State Coverage Area. Requires "on-call" out of hours support during evenings, nights, holidays and weekends.
Travel Requirements:	Travel, including overnight, as required
Key Interfaces/ Relationships:	Level I & III Senior Technician and Controls Engineer as well as production, operations, engineering and maintenance personnel.
Other:	Blank

		JOB DESCRIPTION	
Job Title:	Job Title:	Mgr Business Performance	Job ID: 30200120
	Grade:	L08	FLSA: Exempt
	EEO:	01 1st/Mid Level Officials & Mgrs	
Job Family:			
100			ALCOHOL: N
Approved:	/2010	Job Content Reviewed:	✓ Date: 03/27/2006
Primary Role:		le for all facets of the regions busines	
Key Accountabilities:	processes interface be local operal Supervises Monitors pithe Custom Collections Monitors pithe Shared customer of locations (the Business Coff changes preview, intimpacting the Customer of Changes preview, intimpacting the Changes preview, intimpacting	overwents in customer service through that increase the efficiency and effect etween the Customer Service and Shiting centers. (10%) If day-to-day management of Sales Marocesses within the region to ensure the Satisfaction Center (CSC) for all Carrotions. (10%) Tocesses within the region to ensure a Service Center (SSC). This includes ash/payment related processes interesto tracking performance, timeliness of workflow information received from the Change Project Managers to ensure of being made thorough the organization of the Service Delivery Staff. (10%) Ideveloping and monitoring reports new the Service Delivery Related Hands and Service Delivery Area. The Meter Reading Equipment, (40%)	etiveness of the nared Business Service and aximization activity. (10%) appropriate handling by Call Center, Billing and appropriate handling by so but not limited to all actions with payment for process, etc.) (10%) the Corporate and Region communication and compliance on. Responsible for vitechnology/processes cessary to track RD Closing, Resource Center dling. Service Delivery elivery Performance Related volumes, etc.)
Education:		Degree in Business/Accounting or Conformance Management related field	
Skills:			

CONTRACTOR STATE	JOB DESCRIPTION	
Job Title:	Job Title: Mgr Health and Safety Programs	Job ID : 31001225
	Grade: L07	FLSA: Exempt
	EEO: 01 1st/Mid Level Officials & Mgrs	
Job Family:	OPS-RISKMGMT	
Approved:	Job Content Reviewed: 🗸	Date: 12/31/2013
Primary Role:	Direct and coordinate technical ORM duties as well awide Health and Safety Programs, Systems Develop Programs, Job Safety Analysis, and Computerize Sa Systems, which will be implemented by way of compositions, which was a coordance with established company strategy, goal activities also assure compliance with Federal Occup Safety (OSHA) regulations, State OSHA regulations, Environmental Protection Agency (EPA) programs, Environmental Protection Agency (EPA) programs, Environmental Protection Agency (EPA) programs, Environmental area. Make decisions that are guided through policies, procedures and business plan. Directly performs health, safety, emergency respons continuity and some environmental (e.g. Risk Managy Jersey Toxic Prevention Catastrophe Act (NJ TCPA) technical direction for state based safety staff, implemented in the programs of the programs, behavior based to the programs of the programs of the programs and activities, safety practices and procedures, accided with root cause analysis and corrective actions, selection implementation of computer based data bases and programs and activities, safety practices and procedures, accided the programs and properting systems and associated metrics performance and prepares periodic reports as required AW. Supports the Claims Center of Expertise by program incident analysis for workers' compensation issu will direct technical duties of state staff and work clos ORM staff to execute consistent AW programs. Interior of management in order to assure that programs are accordance with company policy, practices, goals an position will support Service Company Operations, Nasafety programs.	ement, Near Miss afety Enterprise pany-wide Ops and NJAW. Gram and supporting frequency in s and targets. Program pational Health and frederal and State Department of gulations when they of employees within a by and interpreted e, business frement Plan (RMP), New full duties that includes mentation and fig technical content fixed safety programs fent investigations for and frograms, database for Develops and fixed programs. Maintains for safety

Job ID: 31001225

JOB DESCRIPTION

Job Title: Mgr Health and Safety Programs

Education:	A bachelor's level degree from an accredited college or university in a safety health related field study or an equivalent combination of undergraduate education Ten (10) + years experience in a utility, construction or industrial setting that provides the knowledge and exposure to the fundamental theories, principles and concepts of the field. Certifications & Licenses: Required: At least one relevant/related nationally recognized professional certification Highly desirable: Safety related certifications, e.g., CIH, CSP, are preferred.
Skills:	
Knowledge:	Required Knowledge: *Knowledge of and familiarity with health and safety program management and OSHA regulatory requirements with increased opportunities to apply expertise across disciplines or organizational areas. *Generates trust and recognition as a coach and people leader. Desirable Knowledge: *Water Industry Knowledge *Emergency response and incident management Required Skills: *Ability to read and interpret documents such as safety rules and regulations, operating and maintenance instructions and procedure manuals. Ability to write reports and correspondence and communicate information through verbally. *Ability to solve practical problems and respond to employee and public complaints effectively. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form. Must be able to define problems, collect data, establish facts and draw valid conclusions. *Ability to technically manage staff of professionals *Ability to work independently with limited supervision *Ability to work well in a cooperative team environment, participate routinely in multi-disciplinary projects and activities *Ability to recognize and deal appropriately with confidential and sensitive information. Desirable Skills: *Particular areas or experience desired: knowledge of OSHA, Federal, State and Local regulations as applicable for a utility or construction environment.
Experience:	At least seven (7) years experience with at least three (3) years experience managing people. Demonstrated experience in development, management and delivery of health and safety programs

		JOB DESCRIPTION				
Job Title:	Job Title:	Specialist Business Svcs	Job ID: 30200226			
	Grade:	L10	FLSA: Exempt			
	EEO:	02 Professionals				
Job Family:						
Approved:	2010	Job Content Reviewed	l: 🕡 Date: 03/27/2006			
Primary Role:	assigned c	le for business services support in a ustomer/client base, including relati ommunications and documentation	onship building, trouble			
	Create and	manage an issues list and coordin	ate resolution. (10%)			
	Analyze bu	Analyze business issues and needs and document requirements. (10%)				
	Provide or facilitate training of customers/clients/users and/or internal staffs or departments. (10%)					
	Monitor service level agreements to insure organization is meeting deliverables. (10%)					
	Collaborate with customers/clients/user community to insure satisfactory performance. (10%)					
Key Accountabilities:	conference	Facilitate periodic reviews, client surveys and evaluations, conferences, site visits, conference calls, and/or business communications to transition clients or maintain service and satisfaction levels. (10%)				
	Prepare, m	onitor, update and distribute appropation.	oriate business			
	Maintain av practices.	vareness/issues list of current busir	ness, processes, and			
	Identify pot corrective a	ential performance or service probleaction.	ems and recommend			
	Develop bu	siness presentations, as needed.				
	Handle spe	cial projects and responsibilities as	assigned.			
##	Other dutie	s as assigned. (40%)				
Education:		Degree in Accounting, Finance, Hu perations discipline.	man Resources or related			
Skills:						

	411111	JOB DESCRIPTION	
Job Title:	Job Title:	Wastewater Operator PA	Job ID : 30300244
	Grade:	L99	FLSA: Non-Exempt
	EEO:	06 Craft workers (skilled)	
Job Family:			
Approved: Date: 01/01/20	10	Job Content Reviewe	ed: 🔽 Date: 09/07/2011
Primary Role:	Lead Opera or wastewa support a S requirement treatment a government Operator a	one or as a member of a team, an ator or Supervisor, provides for the ater facilities in an assigned area(so Supervisor or other Operators in courts to supply quality water treatmend collection, as established by that I regulatory agencies. Provides and, as necessary, to less senior Osigned as members of the team.	e safe operation of water s) in such a manner as to omplying with the nt, distributing wastewater ne company and s guidance and training to
Key Accountabilities:	specialized including processes; Maintains r special reputation, repairs, as Performs recontrol the processes, instructed by the processes. Trains othe including m required. F	and performs routine duties and can equipment and apparatus in a playing and preparation and biological wastewater treatment control equipment and monitoring ecords of operations, completes a corts, as assigned. (%) I mechanical equipment for proper adjustments, seal packing, minor necessary. (%) Plated field and laboratory tests negliated field and laboratory was the Lead Operator/Supervisor. In assists in repairs to water distriction and assists in the operation and an aintenance, repairs, laboratory was the property as the control of the property as the property as the control of the property as the property of the property as the property of t	ant/treatment facility on, and feeding; physical, nt and/or water treatment g equipment. (%) and submits routine and r operation. Performs normal maintenance, and minor ecessary to monitor and atments to equipment, ults may indicate and as (%) ribution systems and (%) care of facilities ork, and safety, as Norker and Lead
Education:	High School	ol graduate or equivalent.	
Skills:			

PER LIBERTY	JOB DESCRIPTION				
Job Title:	Job Title: WQ/Env Tech III (N) Job ID: 30300116				
	Grade: L12 FLSA: Non-Exempt				
	EEO: 05 Office and clerical				
Job Family:	×				
Approved: ☑ Date : 01/01/20	Job Content Reviewed: Date: 01/28/2011				
Primary Pala	Responsible for collecting samples from the treatment plant or distribution system, performing routine water quality analyses, sample custody, data entry and recordkeeping.				
Primary Role:	Interpret water quality results and suggest chemical dosage changes to treatment process.				
	Review and respond to water quality complaints and inquiries.				
	Collect and analyze process control and regulatory samples using quantitative and qualitative methods. Maintain bacteriological laboratory and perform bacteriological analysis in the absence of the lab analyst. (50%) Review laboratory test results to ensure that the laboratory data meets				
	QA/QC protocol and regulatory requirements. Initiate chemical dosage changes when necessary. (10%)				
Key Accountabilities:	Review, troubleshoot and maintain all laboratory equipment and continuous monitors. (10%)				
	Assist in the training and development of Water Quality Tech I and II. (10%)				
	Work with internal and external customers to build good relationships and solve laboratory issues. (10%)				
	Evaluate and monitor supplies and other laboratory costs to assist in maintaining the lab budget. (10%)				
Education:	Associate's degree in a Science-related field.				
Skills:					
M	Knowledge of basic chemistry and laboratory techniques and QA/QC programs.				
Knowledge:	Knowledge of regulatory requirements.				
	Working knowledge of Word, Excel, Access, Lotus Notes.				

Witness: Donald J. Petry

60. Reference the Kentucky American Water application generally. Provide the total amount of severance expenses incurred in each of the past three years, and identify any severance costs included in the Base Period and/or Test Period in this case.

Response:

Please see below.

				Base	Forecast
	2013	2014	2015	Period	Year
Kentucky American	\$0	\$18,538	\$127,647	\$32,927	\$0
Allocated from AWWSC	28,914	184,017	51,223	14,107	15,648
Total Severance Expense	\$28,914	\$202,555	\$178,870	\$47,034	\$15,648

Witness: Donald J. Petry

61. Reference the Kentucky American Water application generally. Provide the total relocation expenses in each of the last three years and as projected for the Base Period and Test Period.

Response:

Please see total relocation expenses below.

Year	Amount
2013	\$0
2014	0
2015	153,595
Base Year	269
Forecast Year	259

Witness: Donald J. Petry

- **62.** Reference the Kentucky American Water application generally. For each of the past five years, provide the following:
 - a. the actual pension cost booked by the Company, and
 - b. the amount of any contributions to the pension fund.

Response:

Please see below.

		2011	2012	2013	2014	2015
a.	Actual Pension Costs	\$923,432	\$1,021,518	\$819,279	\$246,193	\$599,719
b.	Contributions to Pension Fund	3,166,926	1,914,380	1,149,280	619,340	495,600

Witness: Donald J. Petry

- **63.** Reference the Kentucky American Water application generally. For each of the last five years provide the following:
 - a. the actual post-retirement benefit cost booked by the Company,
 - b. the amount of any contributions to a post-retirement benefit fund, and
 - c. the amount actually paid out in OPEB benefits.

Response:

Please see below.

		2011	2012	2013	2014	2015	
a.	Actual Post-Retirement Benefit Costs	\$923,432	\$1,021,518	\$819,279	\$246,193	\$599,719	
b.	Contributions to Fund	803,999	845,040	786,845	379,095	721.564	

Please see below for claims paid for OPEB benefits. The claims paid are for American Water in total. They are not provided by subsidiary. The 2015 claims will be provided once the Company receives the 2016 actuarial report from Willis Towers Watson.

		2010	2011	2012	2013	2014
c.	Claims Paid - American Water	\$23,989,615	\$23,802,962	\$24,890,651	\$25,237,236	\$26,381,880

Witness: Donald J. Petry

- **64.** Reference the Kentucky American Water application generally. Fully describe any non-qualified retirement benefits whose costs are included in the Company's claim, and include both costs that are directly incurred by Kentucky American Water as well as costs allocated to the Company:
 - a. identify the Base Period and Test Period costs included in the Company's filing,
 - b. state how the Company's claims were determined, and
 - c. identify the individuals eligible for such benefits.

Response:

- a. There are no non-qualified retirement benefit costs for Kentucky American Water employees. Some American Water Works Service Company (AWWSC) employees participate in a non-qualified deferred compensation plan. The costs allocated to Kentucky American for the Base Period were \$2,264 and \$2,398 for the Forecast Year.
- b. The Company used the Base Period amount and adjusted for merit increases to determine the Forecast Year.

Employees in the ML1-ML4 pay grades are eligible for the non-qualified deferred compensation plan. Please see attached for a list of AWWSC participants. The attachment contains confidential information and is subject to a petition for confidential treatment.

Kentucky American Water Company Response to AG 1-64 Non-Qualified Deferred Compensation Plan Participants

Employee	Pay
# Job Title	Grade
	ML4
	ML3B
	ML4
	ML3
	ML2
	ML4
	ML4
	ML3
	ML4
	ML4
	ML4
	ML3B
	ML3B
	ML3B
	ML3B
	ML4
	ML3
	ML4
	ML2
	ML4
	ML4
	ML3B
	ML4
	ML4
	ML3
	ML2
	ML4

Witness: **Kevin N. Rogers**

- **65.** Reference the Kentucky American Water application generally. Identify all entities from whom Kentucky American Water purchases water. For each such entity provide:
 - the volume of water purchased in each of the last five years, a.
 - b. the volume of water anticipated to be purchased in the Base Period and the Test Period,
 - identify any required minimum annual purchases, and c.
 - d. the current purchased water rate.

Response:

a., c-d.

Information for DR Response - DR #65 A, C & D							
	Carroll	Gallatin					
	County	County	Georgetown	Paris	WMU		
2011	21,092,444	10,185,000	13,794,000		25,243,500		
2012	21,058,484	13,823,000	27,464,000		22,503,750		
2013	18,630,014	13,982,000	24,918,000		21,173,175		
2014	11,369,000	20,441,982	2,379,000	11,549,600	25,195,575		
2015	11,491,000	19,117,900	0	39,759,200	20,685,000		
Min. Annual Purchases	None	None	None	None	None		
Current Purchase			KAW SFR Rate +\$.70 =		First 100cf \$4.27 minimum bill Next 400cf \$3.17 per 100cf Next 1,500cf \$2.96 per 100cf Next 15,000cf \$2.82 per 100cf Next 333,000cf \$2.14 per 100cf Over 350,000cf \$1.51 per 100cf		
Rate	\$2.26/1000g	\$1.46/1000g	\$4.91/1000g	\$2.25/1000g	Plus \$0.19 per		

		100cf - KRA Fee

b. Please see attached for base and forecast year volume purchased.

		Base Year -	Base Year - usage		Forecast Year - \$	Forecast Year - usage
City of Paris	May-15	5,252	23,341	Sep-16	4,167	26,884
	Jun-15	6,223	27,656	Oct-16	4,167	26,884
	Jul-15	8,017	35,632	Nov-16	4,167	26,884
	Aug-15	9,506	42,250	Dec-16	4,167	26,884
	Sep-15	17,841	79,292	Jan-17	4,167	26,884
	Oct-15	10,933	42,570	Feb-17	4,167	26,884
	Nov-15	7,500	33,333	Mar-17	4,167	26,884
	Dec-15	7,500	33,333	Apr-17	4,167	26,884
	Jan-16	4,167	26,884	May-17	4,167	26,884
	Feb-16	4,167	26,884	Jun-17	4,167	26,884
	Mar-16	4,167	26,884	Jul-17	4,167	26,884
	Apr-16	4,167	26,884	Aug-17	4,167	26,884
	-	89,439	424,943		50,004	322,606
	-					
Winchester	May-15	5,162	2,104	Sep-16	8,570	3,538
	Jun-15	4,863	1,947	Oct-16	9,673	4,170
	Jul-15	5,175	2,079	Nov-16	5,286	2,156
	Aug-15	6,289	2,575	Dec-16	6,435	2,636
	Sep-15	5,799	2,298	Jan-17	6,218	2,680
	Oct-15	5,919	2,384	Feb-17	6,781	2,928
	Nov-15	6,100	2,167	Mar-17	7,631	3,136
	Dec-15	6,100	2,167	Apr-17	5,991	2,451
	Jan-16	6,301	2,716	May-17	4,678	1,903
	Feb-16	6,872	2,967	Jun-17	6,792	2,786
	Mar-16	7,733	3,178	Jul-17	6,714	2,753
	Apr-16	6,071	2,484	Aug-17	7,229	2,968
	· -	72,384	29,066	_	81,999	34,105

Carroll County	May-15	3,564	1,577,200	Sep-16	3,342	1,636,900
	Jun-15	3,656	1,617,800	Oct-16	4,278	1,893,100
	Jul-15	4,403	1,948,300	Nov-16	3,294	1,457,800
	Aug-15	3,684	1,629,900	Dec-16	4,433	1,961,600
	Sep-15	3,949	1,747,500	Jan-17	3,036	1,343,528
	Oct-15	3,545	1,568,400	Feb-17	3,693	1,634,239
	Nov-15	3,082	1,363,717	Mar-17	3,823	1,692,066
	Dec-15	3,082	1,363,717	Apr-17	4,152	1,670,554
	Jan-16	3,076	1,361,500	May-17	3,735	1,820,054
	Feb-16	3,742	1,656,100	Jun-17	4,289	1,898,110
	Mar-16	3,875	1,714,700	Jul-17	3,604	1,595,064
	Apr-16	4,208	1,692,900	Aug-17	3,871	1,557,368
		43,866	19,241,734		45,551	20,160,382

		Base Year -	Base Year -		Forecast	Forecast Year
		\$	usage		Year - \$	- usage
Gallatin County	May-15	1,269	845,900	Sep-16	-	-
	Jun-15	1,152	768,100	Oct-16	-	-
	Jul-15	1,037	691,100	Nov-16	-	-
	Aug-15	1,425	949,700	Dec-16	-	-
	Sep-15	1,297	864,500	Jan-17	-	-
	Oct-15	2,918	1,944,900	Feb-17	2,966	2,031,525
	Nov-15	1,300	890,411	Mar-17	2,048	1,402,638
	Dec-15	1,300	890,411	Apr-17	2,257	1,546,020
	Jan-16	-	-	May-17	1,522	1,042,653
	Feb-16	3,006	2,058,700	Jun-17	880	602,836
	Mar-16	2,075	1,421,400	Jul-17	_	_
	Apr-16	2,287	1,566,700	Aug-17	-	_
	· -	19,065	12,891,822	J	9,673	6,625,671
Georgetown	May-15	9	-	Sep-16	18	-
	Jun-15	28	-	Oct-16	19	-
	Jul-15	9	-	Nov-16	-	-
	Aug-15	19	-	Dec-16	37	-
	Sep-15	19	-	Jan-17	32,714	5,679,527
	Oct-15	19	-	Feb-17	6,319	1,162,944
	Nov-15	18	-	Mar-17	3,676	686,319
	Dec-15	18	-	Apr-17	176	29,604
	Jan-16	33,152	5,755,500	May-17	11	-
	Feb-16	6,404	1,178,500	Jun-17	19	-
	Mar-16	3,725	695,500	Jul-17	9	_
	Apr-16	179	30,000	Aug-17		-
	-	43,598	7,659,500	- 0	43,027	7,558,395
	=	.,	, ,			, ,
Accrual/Reversal	May-15	(2,061)		Sep-16		
	Jun-15	(99)		Oct-16		
	Jul-15	5,130		Nov-16		
	Aug-15	(1,619)		Dec-16		
	Sep-15	1,502		Jan-17		
	Oct-15	270		Feb-17		
Total	May-15	13,195	2,448,545	Sep-16	16,098	1,667,322
	Jun-15	15,823	2,415,503	Oct-16	18,137	1,924,154
	Jul-15	23,771	2,677,111	Nov-16	12,747	1,486,840
	Aug-15	19,303	2,624,425	Dec-16	•	1,991,120
	Sep-15	30,407	2,693,590	Jan-17	46,135	7,052,620
	Oct-15	23,603	3,558,254	Feb-17	•	4,858,520
	Nov-15	18,000	2,289,628	Mar-17		3,811,043
	Dec-15	18,000	2,289,628	Apr-17	16,744	3,275,512
	Jan-16	46,696	7,146,600	May-17	•	2,891,493
	Feb-16	24,191	4,923,151	Jun-17		2,530,616
	Mar-16	21,575	3,861,662	Jul-17	•	1,624,701
	Apr-16	16,912	3,318,968	Aug-17		1,587,220
		271,476	40,247,065	,,,,,,	230,254	34,701,160
	-	211,410	+0,247,003		230,234	34,701,100

Witness: Kevin N. Rogers

66. Reference the Kentucky American Water application generally. Provide a copy of all purchased water contracts for which costs are included in the Company's claim.

Response:

Please see the attached for all of the existing purchased water contracts.

WATER PURCHASE AGREEMENT

This Contract, made and entered into this 14th day of September, 2000, by and between the Carroll County Water District #1, a special district formed pursuant to KRS Chapter 74, acting by and through its duly authorized officer and Chairman of its Board of Commissioners, Dennis Crawford, party of the first part, Seller, and the Tri-Village Water District, a special district formed pursuant to KRS Chapter 74, acting by and through its duly authorized officer and Chairman of its Board of Commissioners, Charles F. Noel, party of the second part, Buyer.

WITNESSETH:

Whereas, the parties hereto are each special districts formed under KRS chapter 74 for the purposes of constructing and operating water supply distribution systems serving water users within their respective areas of jurisdiction, and

Whereas, Buyer requires additional supplies of potable treated water in order to adequately fulfill its obligations to its users in the Wheatley area and has requested that same be supplied to it by Sellers, and

Whereas, Seller owns and operates a water supply distribution system capable of serving its present customers and the estimated number of Buyer's users to be served by the gallonage purposed to be sold to buyer hereunder, and

Whereas, Seller deems it in the best interests of itself and its users that it profitably dispose of its excess capacity as herein proposed, and

Whereas, both parties hereto have approved the sale and purchase of water in accordance with the terms and conditions contained herein by Resolutions duly adopted by their respective commissioners.

Now Therefore, for and in consideration of the foregoing premises and the mutual agreements and undertakings hereinafter set forth, the parties promise and agree as follows:

- 1. Seller agrees to furnish and supply to Buyer, at the point of delivery hereinafter specified, during the term of this agreement or any renewal or extension thereof, potable treated water meeting applicable state and federal purity and quality standards in such quantity as may be required by the Purchaser.
- 2. Said water in the amount of \$\int_{000} \text{5000 gallons}\$ per day will be furnished at a reasonably constant pressure calculated at 30 or greater PSI from a master meter installed in a 6" water main located on Highway 227 between the water tank and

Wheatley. If a greater pressure than the normally available at the point of delivery is required by the Purchaser, the cost of providing such greater pressure shall be borne by the Purchaser. Emergency failures of pressure of supply due to main supply line breaks, power failure, flood, fire and use of water to fight fire, earthquake or other catastrophe shall excuse the Seller from this provision for such reasonable period of time as may be necessary to restore service.

- 3. Seller agrees to furnish, install, operate, and maintain at its own expense at point of delivery, the necessary metering equipment, including a meter house or pit, and required devices of standard type of properly measuring the quantity of water delivered to the Purchaser and to calibrate such metering equipment whenever requested by the Purchaser but no more frequently than once every twelve (12) months. A meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate. The previous readings of any meter disclosed by test to be inaccurate shall be corrected for the 3 months previous to such test in accordance with the percentage of inaccuracy found by such tests. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless Seller and Purchaser shall agree upon a different amount. The metering equipment shall normally be read on the 20th day of the month. An appropriate official of the Purchaser at all reasonable times shall have access to the meter for the purpose of verifying its readings.
- 4. Seller agrees to furnish the Purchaser not later than the 5th day of each month, with an itemized statement of the amount of water furnished the purchaser during the preceding month.
- 5. Purchaser agrees to pay the Seller, not later than the 20th day of each month, for water delivered in accordance with the following schedule of rates:
 - \$1.66 per thousand gallons
 - 6. It is further mutually agreed between the Seller and the Purchaser as follows:
 - A. (Term of Contract) That this contract shall extend for a term of <u>20</u> years from the date of initial delivery of any water as shown by the first bill submitted by the Seller to the Purchaser and, thereafter shall be extended or renewed for successive one year terms, unless terminated by either party, upon one year's written notice delivered, except where the Seller is unable to comply with its obligations under Sections 1 and 2 or any breach of representations in this contract in which case Purchaser may terminate this contract upon 30 days' written notice.

- B. (Delivery of Water) That 30 days prior to the estimated date of initial delivery of water, the Purchaser will notify the Seller in writing the date for initial delivery of water.
- C. Purchaser shall have the right, at all reasonable times, to conduct such testing of Seller's water quality at such locations in Seller's system as is reasonable.
- D. (Failure to Deliver) That the Seller will, at all times, operate and maintain its system in an efficient manner and will take such action as may be necessary to furnish the Purchaser with the quality and quantities of water required by the Purchaser. Temporary or partial failure to deliver water shall be remedied with all possible dispatch. In the event of an extended shortage of water, or the supply of water available to the Seller is otherwise diminished over an extended period of time, the supply of water to Purchaser's consumers shall be reduced or diminished in the same ratio or proportion as the supply to Seller's consumers is reduced or diminished.
- E. (Modification of Contract) That the provisions of this contract pertaining to the schedule of rates to be paid by the Purchaser for water delivered are subject to modification at any time upon mutual agreement of the parties provided that Purchaser shall be provided with 120 days' notice prior to any modification of rates.

In the event that compliance with action by regulatory or governmental authority causes Seller to increase its rate to its customers in order to meet resulting increased costs, the rates charged to Purchaser shall be subject to increase based upon approval by the Public Service Commission.

Provisions of this contract may be modified or altered by mutual written agreement.

F. (Regulatory Agencies) That this contract is subject to such rules, regulations, or laws as may be applicable to similar agreements in this State, including the Kentucky Public Service Commission, and the Seller and Purchaser will collaborate in obtaining such permits, certificates, or the like, as may be required to comply therewith.

The parties' respective rights and duties hereunder are contingent upon all necessary approvals from the Kentucky Public Service Commission, or its successor agency.

CARROLL COUNTY WATER DISTRICT

RESOLUTION

A Resolution related to contracting for the Sale of Water to Tri-Village Water District, approving same and authorizing the Chairman of the Board of Commissioners to execute and deliver a contract evidencing same.

Be it resolved by the Commissioners of the Carroll County Water district, as follows:

That Dennis Crawford, Chairman, of the Board of Commissioners and is hereby authorized, empowered and directed to execute and deliver, on behalf of the district, thereby binding the District to, a contract for the sale of water to the Tri-village Water district at the rate of \$1.66 per thousand gallons, to a point of delivery at metering station near Wheatley, Kentucky, for a term of 20 years with automatic one-year extensions terminable by either party upon one year's prior notice, and containing other customary and prudent terms and provisions, which contract is hereby approved.

Adopted this 14 day of SEPT., 2000.

Chairman, Board of Commissioners of

Carroll County Water District #1

ATTEST

Carroll County Water District #1

TRI-VILLAGE WATER DISTRICT

RESOLUTION

A Resolution related to contracting for the Sale of Water to Tri-Village Water District, approving same and authorizing the Chairman of the Board of Commissioners to execute and deliver a contract evidencing same.

Be it resolved by the Commissioners of the Tri-Village Water District, as follows:

That Charles Noel, Chairman of the Board of Commissioners and is hereby authorized, empowered and directed to execute and deliver, on behalf of the District, thereby binding the District to, a contract for the sale of water to the Tri-Village Water District at the rate of (INSERT RATE)per thousand gallons, to a point of delivery at (INSERT LOCATION), Kentucky, for a term of 20 years with automatic one-year extensions terminable by either party upon one year's prior notice, and containing other customary and prudent terms and provisions, which contract is hereby approved.

Adopted	this	 _day of	 · ~	, 2000),

Chairman, Board of Commissioners of

Tri-Village Water District

A True Copy: ATTEST

Secretary, Tri-Village Water District

TRI-VILLAGE WATER DISTRICT

RESOLUTION

A resolution related to contracting for the sale of water to Tri-Village Water District, approving same and authorizing the Chairman of the Board of Commissioners to execute and deliver a contract evidencing the same.

Be it resolved by the Commissioners of the Tri-Village Water District, as follows:

That Charles Noel, Chairman of the Board of Commissioners is hereby authorized, empowered and directed to execute and deliver, on behalf of the District thereby binding the District to, a contract for the sale of water to the Tri-Village Water District at the rate of \$1.66 per 1000 gallons, to a point of delivery at Wheatley, Kentucky, Highway 227, for a term of 20 years with automatic one-year extensions terminable by either party upon one year's prior notice, and containing other customary and prudent terms and provisions, which contract is hereby approved.

Adopted this 13th day of September 2000

Chairman, Board of Commissioners of

Tri-Village Water District

A True Copy: ATTEST

Secretary, Tri-Village Water District

WATER PURCHASE AGREEMENT

This Contract, made and entered into this <u>ID</u> day of <u>CCtobes</u>, 2000, by and between the Gallatin County Water District, a special district formed pursuant to KRS Chapter 74, acting by and through its duly authorized officer and Chairman of its Board of Commissioners, Denny French, party of the first part, Seller, and the Tri-Village Water District, a special district formed pursuant to KRS Chapter 74, acting by and through its duly authorized officer and Chairman of its Board of Commissioners, Charles F. Noel, party of the second part, Buyer.

WITNESSETH:

Whereas, the parties hereto are each special districts formed under KRS Chapter 74 for the purposes of constructing and operating water supply distribution systems serving water users within their respective areas of jurisdiction, and

Whereas, Buyer requires additional supplies of potable treated water in order to adequately fulfill its obligations to its users in the City of Glencoe and has requested that same be supplied to it by Sellers, and

Whereas, Seller owns and operates a water supply distribution system capable of serving its present customers and the estimated number of Buyer's users to be served by the gallonage proposed to be sold to Buyer hereunder (currently being 266), and

Whereas, Seller deems it in the best interests of itself and its users that it profitably dispose of its excess capacity as herein proposed, and

Whereas, both parties hereto have approved the sale and purchase of water in accordance with the terms and conditions contained herein by Resolutions duly adopted by their respective commissioners.

PUBLIC SERVICE COMMISSION

Now Therefore, for and in consideration of the foregoing premises and the FECTIVE mutual agreements and undertakings hereinafter set forth, the parties promise and agrees as follows:

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- 1. Seller agrees to furnish and supply to Buyer, at the point of delight NAT TO 807 KAR 5:011, hereinafter specified, during the term of this agreement or any renewal or extension 9 (1) thereof, potable treated water meeting applicable state and federal purity and quality standards in such quantity as may be required by the Purchaser not to exceed to THE COMMISSION million gallons per month.
- 2. Said water will be furnished at a reasonably constant pressure calculated at 30 or greater PSI from a 6 inch main supply at a point located at west side of U.S. Hwy. 127, just south of Clarence Sullivan property at city limits of Glencoe, Kentucky. If a greater pressure than that normally available at the point of delivery is required by the

Purchaser, the cost of providing such greater pressure shall be borne by the Purchaser. Emergency failures of pressure or supply due to main supply line breaks, power failure, flood, fire and use of water to fight fire, earthquake or other catastrophe shall excuse the Seller from this provision for such reasonable period of time as may be necessary to restore service.

- 3. Seller agrees to furnish, install, operate, and maintain at its own expense at point of delivery, the necessary metering equipment, including a meter house or pit, and required devices of standard type for properly measuring the quantity of water delivered to the Purchaser and to calibrate such metering equipment whenever requested by the Purchaser but no more frequently than once every twelve (12) months. A meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate. The previous readings of any meter disclosed by test to be inaccurate shall be corrected for the 3 months previous to such test in accordance with the percentage of inaccuracy found by such tests. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless Seller and Purchaser shall agree upon a different amount. The metering equipment shall be read on First Working day of Month. An appropriate official of the Purchaser at all reasonable times shall have access to the meter for the purpose of verifying its readings.
- 4. Seller agrees to furnish the Purchaser not later than the fifteenth day of each month, with an itemized statement of the amount of water furnished the Purchaser during the preceding month.

 PUBLIC SERVICE COMMISSION
- 5. Purchaser agrees to pay the Seller, not later than the tenth day of each OF KENTUCKY month, for water delivered in accordance with the following schedule of rates:

One Dollar and forty cents (\$1.40) per thousand gallons, unless and until JAN 0.1 2001 modified by mutual agreement of the parties or by order of the Public Service Commission or any successor agency thereof.

- 6. Purchaser agrees to pay as an agreed cost, a connection fee to connective the commission Seller's system with the system of the Purchaser in a sum equal to one-half (1/2) the cost of installation and acquisition of the metering equipment, not to exceed the sum of \$2,000.00.
 - 7. It is further mutually agreed between the Seller and the Purchaser as follows:
 - A. (Term of Contract) That this contract shall extend for a term of 20 years from the date of initial delivery of any water as shown by the first bill submitted by the Seller to the Purchaser and, thereafter shall be extended or renewed for successive one year terms, unless terminated by either party upon written notice delivered not less than 120 days next preceding the expiration of the term of the contract or any extension or renewal thereof. Upon breach of this

contract by failure to perform, misrepresentation or other cause, the non-breaching party may terminate this contract upon thirty (30) days prior written notice to the breaching party, unless the breaching party wholly cures its breach within that 30 day notice period.

- B. (Delivery of Water) That 30 days prior to the estimated date of initial delivery of water, the Purchaser will notify the Seller in writing the date for the initial delivery of water.
- C. Purchaser shall have the right, at all reasonable times, to conduct testing of Seller's water quality at the master meter.
- D. (Failure to Deliver) That the Seller will, at all times, operate and maintain its system in an efficient manner and will take such action as may be necessary to furnish the Purchaser with quantities and quality of water required by the Purchaser. Temporary or Partial failure to deliver water shall be remedied with all possible dispatch. In the event of an extended shortage of water, or the supply of water available to the Seller is otherwise diminished over an extended period of time, the supply of water to Purchaser's consumers shall be reduced or diminished in the same ratio or proportion as the supply to Seller's consumers is reduced or diminished.
- E. (Modification of Contract) That the provisions of this contract pertaining to the schedule of rates to be paid by the Purchaser for water delivered are subject to modification at any time upon mutual agreement of the parties, or upon application to and approval of the Public Service Commission, or any agency successor thereto. No rate increase shall become effective prior to the date 180 days subsequent to the date Seller gives notice to Purchaser of its intent to raise the rate charged to Purchaser.

In the event that compliance with action by regulatory authority causes Seller to increase its rate to its customers in order to meet resulting increased costs, the rates charged to Purchaser shall be subject to increase in the same percentage as that borne by Seller's other users, the Seller's rate structure being based solely upon quantity of use. In the event that rate classifications are subsequently developed by Seller, Purchaser shall be given the wholesale rate Commission or its equivalent.

Provisions of this contract may be modified or altered by mutual JAN 0.1 2001 agreement.

F. (Regulatory Agencies) That this contract is subject to such rules, SECTION 9 (1) regulations, or laws as may be applicable to similar agreements in this State of the commission and the Seller and Purchaser will collaborate in obtaining such permits, certificates, or the like, as may be required to comply therewith.

The parties' respective rights and duties hereunder are contingent upon all necessary approvals from the Kentucky Public Service Commission, or its successor agency.

- G. (Successor to the Purchaser) That in the event of any occurrence rendering the Purchaser incapable of performing under this contract, any successor of the Purchaser, whether the result of legal process, assignment, or otherwise, shall succeed to the rights and duties of the Purchaser hereunder.
- H. This Contract shall be binding on the successors and assigns of the parties hereto.
- I. Seller represents that it is not subject to, any local, state or federal regulatory notices, actions, or other enforcement pertaining to Seller's potable water system.
- J. Seller represents that it has the sufficient treatment, pumping, storage, and all other system capacity to serve Purchaser in accordance with the terms of this contract. Provided, however, the parties know and understand that seller does not have capacity to, and will not, provide sufficient water quantity for fire protection purposes.

In witness whereof, the parties have hereunto affixed their signatures.

SELLER

Gallatin County Water

Denny French, Chairman

BUYER

Tri-Village Water District

Charles F. Noel, Chairman

PUBLIC SERVICE COMMISSION OF KENTUCKY EFFECTIVE

JAN 01 2001

PURSUANT TO 807 KAR 5:011, SECTION 9 (1) BY Stephano Bur

SECRETARY OF THE COMMISSION

COMMONWEALTH OF KENTUCKY)
COUNTY OF <u>Salatin</u>)

Signed and acknowledged before me by Denny French and Charles F. Noel on

this the 10 M day of October, 2000.

My commission expires: 8-4-2001

Notary Public, State at Large, Ky

PUBLIC SERVICE COMMISSION OF KENTUCKY EFFECTIVE

JAN 01 2001

PURSUANT TO 807 KAR 5:011, SECTION 9 (1) BY: Stephan Ball SECRETARY OF THE COMMISSION

WATER PURCHASE AGREEMENT

THIS AGREEMENT is made and entered into this the 29th day of July, 2014, by and between KENTUCKY-AMERICAN WATER COMPANY, a Kentucky corporation with offices at 2300 Richmond Road, Lexington, Kentucky 40502 ("KAW") and the CITY OF PARIS, 525 High Street, Paris, Kentucky 40361 ("Paris").

WIT NESSETH:

WHEREAS, KAW desires to purchase a supply of potable water from Paris in order to adequately fulfill KAW's obligations to: KAW's customers in the City of Millersburg; the Harrison County Water Association; and the Nicholas County Water District, and has requested Paris to provide that supply of potable water;

WHEREAS Paris owns and operates a water supply treatment, transmission and distribution system capable of meeting the potable water requirements of its own customers, the estimated number of KAW's customers in the City of Millersburg, and KAW's obligations to the Harrison County Water Association and the Nicholas County Water District; and

WHEREAS Paris desires to sell KAW potable water per the terms of this Agreement for use by KAW as described above.

NOW, THEREFORE, the parties hereto do hereby agree as follows:

1. From and after the 10th day of August 2014, KAW shall have the right to purchase from Paris, and Paris shall be obligated to sell to KAW, an amount of potable water not to exceed a daily average of 200,000 gallons per calendar more that to prest reaser the following KAW customers: (a) water customers in the City of letters by the County Water Association; and (c) Nicholas County Water District. Par Tariff Branch Aledges

9/5/2014

KAW_R_AGDR1_NUM066_032416 Page 14 of 35

that it is capable of supplying KAW with an amount of potable water necessary to meet those requirements. Paris shall furnish potable water to KAW at the point of delivery hereinafter specified which shall meet all applicable state, federal and/or other regulatory standards.

- 2. Delivery of the water purchased by KAW and sold by Paris shall be delivered at a point along Millersburg Road (U.S. 68) approximately 845 feet south of the intersection of Millersburg Road and Old U.S. Highway 68, which is approximately 1.31 miles south of the City of Millersburg at a reasonably constant pressure under normal operating conditions. Paris shall not be responsible for the quality of water purchased by KAW past this point of actual delivery.
- 3. KAW agrees to install at its own expense at the point of delivery all necessary metering equipment and related required devices for the City to properly measure the quantity of water delivered to KAW. As of the date identified in Paragraph 1 above, ownership in the metering equipment shall be transferred to Paris at no cost to Paris and Paris shall operate and maintain at its own expense the metering equipment. A meter registering not more than two percent above or below the actual flow shall be deemed to be accurate. KAW shall have access to meter for monitoring volumes of water purchased. KAW agrees to construct at its own expense approximately 780 feet of 6-inch diameter line to connect Paris' existing distribution system to the distribution system serving customers in the City of Millersburg.
- 4. KAW shall pay for the quantity of water purchased by it and sold by Paris at the initial rate of \$2.25 per 1,000 gallons under the first 18 months of this Agreement and thereafter as may change from time to time and as set forth by Paris city ordinance and accepted by the Public Service Commission. Paris shall read the meter on or about the 20 KENTUCKACh month Public Service COMMISSION

and provide an invoice to KAW on or about the 1st day of the following rectific

following FEEFIR. PEROUENI pay

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PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

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for the quantity of water purchased no later than the 15th day of the month. Payment may be made by check or by the transfer of electronic funds

- KAW agrees to continue with the ongoing leak detection services and surveys project for the entire water transmission and distribution system of Paris until that project is complete at no cost to Paris. Paris shall be responsible for costs in repairing municipal facilities associated with line loss.
- In the event any type of water curtailment practice, procedure, regulation or law is 6. utilized by Paris or is imposed upon Paris, KAW agrees to abide by all recommendations of Paris and to use reasonable efforts to restrict use by customers in the City of Millersburg in a fashion similar to that which is utilized by Paris or imposed on Paris. Paris may only reduce the amount of water available for purchase by KAW in the same ratio or proportion as such is reduced to other Paris customers.
- 7. Paris shall operate and maintain its water supply system in accordance with all applicable laws, rules and regulations and will take such action as necessary to furnish KAW with the quantity of water set forth in this Agreement. Temporary or partial failures to deliver water shall be remedied with all possible dispatch.
- 8. In the event all or any part of the waterworks plant and facilities of Paris which are used in meeting its obligations under this Agreement are acquired by a municipal corporation or any other entity, then and in that event Paris shall be relieved of all of its obligations hereunder and, in such event, this Agreement shall be binding upon the municipality or any other entity making such acquisition.
- This Agreement shall terminate when: (1) the connection of the con 9. portion of KAW's distribution system and the southwest portion of Paris' distribution system is

KAW_R_AGDR1_NUM066_032416 Page 16 of 35

complete and operating sufficiently such that the requirements of KAW's customers in the City of Millersburg can be met by using that connection in conjunction with the connection described in Paragraph 3 above; and (2) a binding contract between KAW and Paris has been executed and all necessary approvals have been obtained, regulatory or otherwise, the contract having the dual purposes of: (a) providing an emergency interconnection between KAW's distribution system and Paris' distribution system so that KAW can sell water to Paris in the event of a Paris emergency; and (b) KAW's use of Paris' transmission and distribution system so that potable water can be provided to KAW's customers in the City of Millersburg without the need for KAW to purchase water from Paris.

- 10. The Parties agree to file jointly a copy of this executed contract with the Public Service Commission of Kentucky.
- 11. This agreement constitutes the entire agreement of the parties and all prior conversations and writings are merged herein.
- 12. This Agreement shall be construed according to the laws of the Commonwealth of Kentucky.

KENTUCKYPUBLIC SERVICE COMMISSION

JEFF R. DEROUEN EXECUTIVE DIRECTOR

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9/5/2014

This Agreement has been executed by the parties hereto, by their appropriate authorized representatives, on this the 4th day of August, 2014.

CITY OF PARIS, KENTUCKY

Mayor, City of Paris

KENTUCKY-AMERICAN WATER COMPANY

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KENTUCKYPUBLIC SERVICE COMMISSION

JEFF R. DEROUEN EXECUTIVE DIRECTOR

9/5/2014

WINCHESTER MUNICIPAL UTILITIES COMMISSION and KENTUCKY AMERICAN WATER COMPANY

WATER PURCHASE AGREEMENT

THIS WATER PURCHASE AGREEMENT (herein after referred to as
"Agreement"), made and entered into this day of, 2001, by
and between the WINCHESTER MUNICIPAL UTILITIES COMMISSION (hereinafter
referred to as "WMU"), and KENTUCKY AMERICAN WATER COMPANY (hereinafter
referred to as "KAWC");

WITNESSETH:

WHEREAS, WMU has in operation a water treatment, transmission and distribution system supplying water to customers both within and without the corporate limits of the City of Winchester, and

WHEREAS, by contract dated October 13, 1981 the Boonesboro Water Association heretofore agreed to purchase water from WMU for the purpose of supplying its customers in southeastern and western Clark County, and

WHEREAS, by purchase of the assets of the Boonesboro Water Association in 1997, the obligations of Boonesboro Water Association in the contract between WMU and Boonesboro Water Association were assumed by KAWC, and

WHEREAS, KAWC has continued to purchase water from WMU since the acquisition of the assets of Boonesboro Water Association for the purpose of supplying all of its Clark County Customers, and

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OF KENTUCKY

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WHEREAS, KAWC has advised WMU of its desire to continue purchasing water from WMU as a cost-effective means of serving only a portion of its Clark County customers, and

WHEREAS, WMU desires to sell KAWC potable water per the terms of this new Agreement;

NOW, THEREFORE, in consideration of the premises and the covenants and agreements hereinbelow contained, the parties agree and bind themselves as follows:

- 1. Termination of Prior Agreement. The Water Purchase Agreement heretofore entered into by and between the parties and dated October 13, 1981, will terminate according to its terms on October 13, 2001.
- 2. WMU to be Exclusive Supplier. KAWC herewith agrees to purchase all of its water requirements for the area defined by this Agreement from WMU during the term of this Agreement, subject to the maximum provided for in Paragraph 6 below, and WMU shall be KAWC's exclusive supplier for the area defined by this Agreement.
- 3. KAWC Territory. KAWC has and shall retain the right to provide water service to all of those areas of southeastern Clark County as marked on the map attached hereto as Exhibit "A" and identified as "KAWC Service Territory", and the description attached hereto as Exhibit "B". Should there be any discrepancy between the map and the engineer's description, the engineer's description (Exhibit "B") shall control. With respect to this defined Service Territory, KAWC agrees that it will not extend or expand its service beyond this defined Service Territory using water purchased from WMU under this Agreement.

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COMMISSION

OF KENTUCKY

- 4. Effective Date and Term of Agreement. This Agreement shall become effective October 13, 2001 and shall remain in force and effect for a period of twenty (20) years thereafter; provided, however, that KAWC shall have the right to renew and extend this Agreement for an additional period of twenty (20) years if it so desires, upon written notice to WMU at least two (2) years prior the expiration of the first twenty-year term.
- 5. Quantity of Water to be Supplied. WMU hereby agrees to sell and deliver to KAWC up to 60,000 gallons per day as a peak day capacity allocation.
- 6. Request for Additional Capacity. WMU and KAWC hereby acknowledge and agree that the quantity of water allocated in Paragraph 6 of this Agreement was determined by KAWC and agreed upon by WMU. Both parties agree that in the future should KAWC require an additional quantity of water to serve growth, a request will be made in writing to WMU and that WMU will consider the request through the normal business routine as WMU would consider for approval a request for capacity from any customer. Increases in the quantity of water to be supplied to KAWC, upon approval by WMU in the normal course of business, will be noted in the meeting minutes of the WMU Commission and will be appended to this Agreement.
- 7. Compensation. KAWC shall compensate WMU for water furnished under this Agreement at the then current cost of service volumetric rate as approved by the Winchester Municipal Utilities Commission and as ordained by the City of Winchester Board of Commissioners, the current schedule of rates being attached to this Agreement as Exhibit "C". The rate shall reflect the cost of providing service and takelle Branch

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OF KENTUCKY

be subject to increase or decrease by the city of Winchester in its reasonable discretion from time to time and subject to the jurisdiction of the Kentucky Public Service Commission if applicable under Kentucky law.

KAWC agrees that should the peak day capacity allocated in Paragraph 6 of this Agreement be exceeded on any singular day, KAWC will pay WMU a surcharge of 25% of the rate then in effect for the entire quantity above the peak day capacity allocation payable with the regular monthly bill.

8. Metering. Water delivered to KAWC by WMU shall be measured by two master meters to be placed at a location agreed upon between the parties. The meters shall be owned and maintained by WMU. The meters shall be examined and tested at \$\int_{0\text{UY}}(4)\$ least once every five (5) years. KAWC shall have the right to test the meters upon seven (7) days written notice to WMU. A replacement meter(s) shall be provided by \$\int \text{WMU}\$ during all testing. In the event a test shows that the meter(s) is not accurate, it shall be repaired or replaced by WMU so as to render it accurate within a range of 98.5% to 101.5%, and an adjustment shall be made to the charges based upon test results and upon the average monthly charges during the preceding three (3) month period.

For billing purposes related to surcharges, the master meter will be read each day by WMU. WMU will notify KAWC within one business day each time that the peak day capacity allocation has been exceeded. Billing will be based on a monthly frequency and shall include any surcharges for exceeding peak day capacity incurred during the billing period.

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- 9. Terms and Conditions of Service. Subject to the provisions of this
 Agreement, KAWC hereby agrees and binds itself to abide by all ordinances, rules and
 regulations of the city of Winchester and WMU as may be applicable to other WMU
 customers; to pay all charges and delinquent penalties, if any; to be subject to
 termination for nonpayment of charges; and otherwise to receive the water service in
 the same manner and under the same terms and conditions as other customers of
 WMU.
- supply and deliver the quantity of water to KAWC as herein set forth, and WMU expressly limits and restricts the providing of such service with the understanding that WMU shall only be required to use reasonable attention, care and diligence in the operation and maintenance of its system to prevent and avoid any unnecessary interruptions and fluctuations in the supply of water. WMU does not represent or guarantee that interruptions or fluctuations will not happen or occur, and due to conditions which may be brought about or emergencies which may be caused by breaks, leaks, defects, repairs, extensions, enlargements, or demands upon the system, or by fire, floods, strikes, acts of God, or other unforeseen causes. There may be times and occasions when the quantity or supply of water may be diminished or interrupted, and there shall be no obligation or requirement upon WMU to deliver or provide the water to be supplied at any specific pressure or flow other than the laws and regulations of the Division of Water. KAWC hereby agrees to hold WMU harmless from



any and all liability incurred as a result of WMU's furnishing, or its reasonable failure to furnish, any particular quantity or pressure of water under the Agreement.

- 11. Water Shortages. It is agreed, that in cases of shortage of supply, all customers and users of both WMU and KAWC shall share the shortage proportionately and WMU will not discriminate against KAWC under such circumstances. In such cases of shortage, KAWC agrees to the terms and conditions of the WMU Emergency Water Conservation Program in addition to any other curtailment or restriction that KAWC may desire to implement.
- 12. Restriction Against Resale of Water by KAWC. KAWC shall not resell any water provided it under this Agreement outside the limits of the territory as described on Exhibits A and B attached.
- 13. Parties Bound. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns. This Agreement shall not be assigned by either party without the written consent of the other party, which consent shall not be unreasonably withheld; provided, however, in all events, each and every provision of this Agreement shall be binding upon a successor-in-interest who shall be exclusively responsible for the performance of the terms of this Agreement to be performed by either party hereunder.



Attest: Marianno Wa

IN TESTIMONY WHEREOF, this Agreement has been executed by the appropriately authorized representatives of the parties, to take effect on the day and year first above written.

Winchester Municipal Utilities Commission

Mobile

Dexter Noble Chairman

Kentucky American Water Company

Nick Rowe Vice President Attest:

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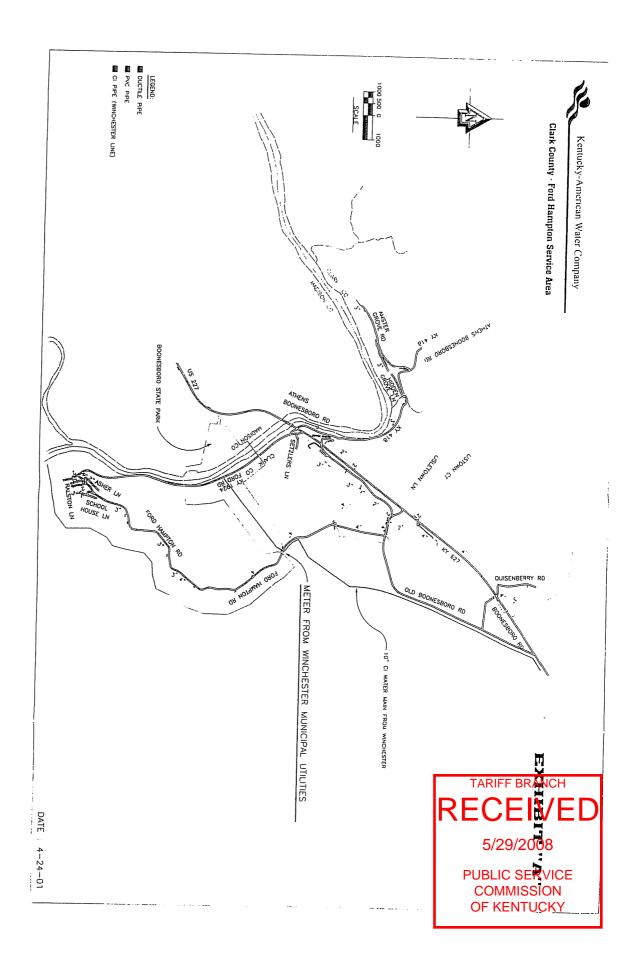


EXHIBIT B

The Kentucky American Water Company Service Territory, defined by drawing in Exhibit A, is defined in words as:

Beginning at a point on Amster Grove Road, 0.63 miles west of the intersection of KY 418, including properties fronting on Amster Grove Road and Hidden Grove Lane; and

Along KY 418 in a southwesterly direction from a point 0.24 miles northwest of the intersection of Amster Grove Road and KY 418 including properties fronting KY 418 to the intersection of KY 627; and

Along KY 627 in a northeasterly direction from the intersection of KY 1924 to the intersection of Quisenberry Lane, a distance of 2.01 miles, including properties fronting this reach of KY 627, and including properties fronting Coffee Springs Lane, Lisletown Lane, Lisletown Court, and Lisletown Trail, and including properties fronting Quisenberry Lane northwest of KY 627; And including properties fronting the northwest side of KY 627 a distance of 0.16 miles northeast from the intersection of Quisenberry Lane and KY 627. Excluded from this territory are 464 (Ballard) and 607 (Quisenberry) Quisenberry Lane and properties fronting Quisenberry Lane southeast of KY 627, including the Brenda Faye Harris and James Hunter Davis properties; and

Along Old Boonesboro Road, from the intersection of KY 627, this intersection being 0.19 miles north of the Kentucky River Bridge, to the intersection of the Ford Hampton Road, including all properties fronting this reach of Old Boonesboro Road; Included in this reach will be properties up to and including 7569 and 7522 Old Boonesboro Road and properties fronting the reach of Old Boonesboro Road from the intersection of KY 627 to the intersection of the Ford Hampton Road, said intersection being 0.99 miles from the Kentucky River Bridge; Excluded from this territory are 7466 and 7453 Old Boonesboro Road and all properties east and northeast of 7466 and 7453 Old Boonesboro Road.

Along the Ford Hampton Road, from the intersection of the Old Boonesboro Road to KY 1924, all properties fronting the Ford Hampton Road excluding the 520 Ford Hampton Rd (Horsemen), 1163 Ford Hampton Rd (Nickels), 7805 Old Boonesboro Rd (Shearer), 1297 Ford Hampton Rd (Fields), and 405 Nick Lane (Moore) properties; and

All properties fronting Asher Lane, School House Lane, and Ralston Lane; and

All properties fronting KY 1924 from the intersection of the Ford Hampton Read to the intersection of KY 627 excluding those properties fronting KY 1924 between and including 1501 Ford Road (KY1924, Davis Boat Dock and

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Restaurant) to 700 Ford Road (KY 1924, Bananas Restaurant), a distance of 0.72 miles.

All existing customers of either Kentucky American Water Company or Winchester Municipal Utilities or customers created as the result of any subdivision of the properties as defined in this agreement will remain customers of that utility unless transfer is by mutual agreement of both Kentucky American Water Company and Winchester Municipal Utilities.



5/29/2008

Attachment C: Schedule of Rates

Rate Expressed in Dollars per 100 Cubic Foot Usage

11010	Litpi obodu iii zone		:
Current	Effective	Effective	Effective
Rates	June 1, 2001	June 1, 2002	June 1, 2003
\$4.06	\$4.27	\$4.32	\$4.37
\$3.01	\$3.17	\$3.21	\$3.24
\$2.82	\$2.96	\$3.00	\$3.03
\$2.68	\$2.82	\$2.86	\$2.88
\$2.04	\$2.14	\$2.16	\$2.19
\$1.44	\$1.51	\$1.53	\$1.54
	Current Rates \$4.06 \$3.01 \$2.82 \$2.68 \$2.04	Current Effective Rates June 1, 2001 \$4.06 \$4.27 \$3.01 \$3.17 \$2.82 \$2.96 \$2.68 \$2.82 \$2.04 \$2.14	Rates June 1, 2001 June 1, 2002 \$4.06 \$4.27 \$4.32 \$3.01 \$3.17 \$3.21 \$2.82 \$2.96 \$3.00 \$2.68 \$2.82 \$2.86 \$2.04 \$2.14 \$2.16

Notes:

Rates shown are as approved by the WMU and City Commissions, December 1999. Rates are subject to increase or decrease in the reasonable discretion of the City of Winchester from time to time and subject to the jurisdiction of the Kentucky Public Service Commission if applicable under Kentucky law.





WINCHESTER MUNICIPAL UTILITIES COMMISSION and KENTUCKY AMERICAN WATER COMPANY

AMENDMENT TO WATER PURCHASE AGREEMENT

This Amendment to Water Purchase Agreement made and April 1003 entered into this 17 day of October, 2002, by and between WINCHESTER MUNICIPAL UTILITIES COMMISSION (hereinafter referred to as "WMU") and KENTUCKY AMERICAN WATER COMPANY (hereinafter referred to as "KAWC"),

WITNESSETH

WHEREAS, the parties have heretofore entered into a Water Purchase Agreement dated June 1, 2001 (hereinafter "Agreement"), and

WHEREAS, paragraph 5 of the Agreement specifies the quantity of water to be supplied and paragraph 12 of the Agreement specifies restriction against resale of water, and

WHEREAS, the parties are desirous of amending paragraphs 5 and 12,

NOW THEREFORE, the parties agree to amend the Agreement as follows:

- 1. Paragraph 5 of the Agreement is amended to provide as follows:
- agrees to sell and deliver to KAWC up to 60,000 gallons per day as a peak day capacity allocation. In addition, due to the extension of service to East Clark County Warter OF KENTUCKY SEVEN CONTROL OF KENTUCKY SEVEN TO THE SEVEN THE SEVEN

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

EXECUTIVE DIRECTOR

capacity allocation is increased to 62,100 gallons per day.

2. Paragraph 12 of the Agreement is amended to provide
as follows:

KAWC shall not resell any water provided it under this Agreement outside the limits of the territory as described on Exhibits A and B attached; notwithstanding this restriction, KAWC may resell water to East Clark County Water District from the connection near the old power station at Ford, Kentucky, for provision of water to seven residential customers. Terms and conditions of such sale shall be at a rate negotiated by KAWC and East Clark County Water District. Payment of tap or other administrative fees, charges or tariffs shall be as approved by the Public Service Commission.

3. In all other respects, the Agreement shall remain in full force and effect as previously adopted.

2

WINCHESTER MUNICIPAL UTILITIES COMMISSION

Dexter Noble, Chairman

ATTEST:

KENTUCKY AMERICAN WATER COMPANY

Nick Rowe Vice President

WINCHESTER MUNICIPAL UTILITIES COMMISSION APPROVED 4-17-03

ATTEST:

PUBLIC SERVICE COMMISSION OF KENTUCKY EFFECTIVE

AUG 3 0 2003

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

EXECUTIVE DIRECTOR

WINCHESTER MUNICIPAL UTILITIES COMMISSION and KENTUCKY-AMERICAN WATER COMPANY

SECOND AMENDMENT TO WATER PURCHASE AGREEMENT

WITNESSETH

WHEREAS, the parties have heretofore entered into a Water Purchase Agreement dated June 1, 2001 for the provision of water services by WMU to KAWC (hereinafter "Water Purchase Agreement"), and

WHEREAS, the parties agreed to amend the Water Purchase Agreement by an Amendment to Water Purchase Agreement dated April 17, 2003 (hereinafter "Amended Agreement"), and

WHEREAS, Exhibit "A" and Exhibit "B" collectively define the KWAC Service

Territory for purposes of the Amended Agreement, and

WHEREAS paragraph 4 of the Amended Agreement specifies the effective date and term of the Agreement, and

WHEREAS, the parties are desirous of amending Exhibit "A" to the Amended

Agreement to allow WMU to serve properties fronting Lisletown Lane, Lisletown Court, and

Lisletown Trail, which properties have heretofore been part of the KAWC Service Territory Feranch

purposes of the Water Purchase Agreement and the Amended Agreement, and

RECEIVE

11/7/2013

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WHEREAS, the parties further desire to amend the Water Purchase Agreement and the Amended Agreement to provide different terms of termination,

NOW THEREFORE, the parties agree to amend the Water Purchase Agreement and the Amended Agreement as follows:

- 1. Exhibit "A" to the Amended Agreement is modified solely to reflect that the KAWC Service Territory shall not include those properties fronting Lisletown Lane, Lisletown Court, and Lisletown Trail, in Clark County, Kentucky and the WMU Service Territory shall include such properties. Exhibit "A" to the Amended agreement is amended so as to exclude those properties shown on Exhibit "A-1" hereto which exhibit identifies properties fronting on Lisletown Lane, Lisletown Court, and Lisletown Trail which hereafter may be served by WMU. Except as so modified all other territories shown on Exhibit's A and B of the Water Purchase Agreement and Amended Agreement shall remain in full force and effect and shall be served by WMU and KAWC in accord with the terms and provisions of said agreements and this agreement.
- 2. The effective date, term and termination rights of the Water Purchase Agreement and as set forth in paragraph 4 of the Amended Agreement is amended to provide as follows:
- Agreement shall become effective October 13, 2001 and shall remain in force and effect for a period of twenty (20) years thereafter; provided, however, that KAWC shall have the right to renew and extend this Agreement for an additional period of twenty (20) years if it so desires, upon written notice to WMU at least two (2) years prior to the expiration of the first twenty-year term. Notwithstanding the foregoing and any other term of the Water Purchase Agreement, KAWC shall have the right to terminate the agreement upon Record Company.

11/7/2013

written notice to WMU and WMU shall have the right to terminate the agreement upon four (4) years written notice to KAWC.

 In all other respects, the Amended Agreement shall remain in full force and effect as previously adopted.

WINCHESTER MUNICIPAL

UTILITIES COMMISSION

Mike Anderson, Chairman

ATTEST:

KENTUCKY-AMERICAN WATER COMPANY

By Keah Cartier

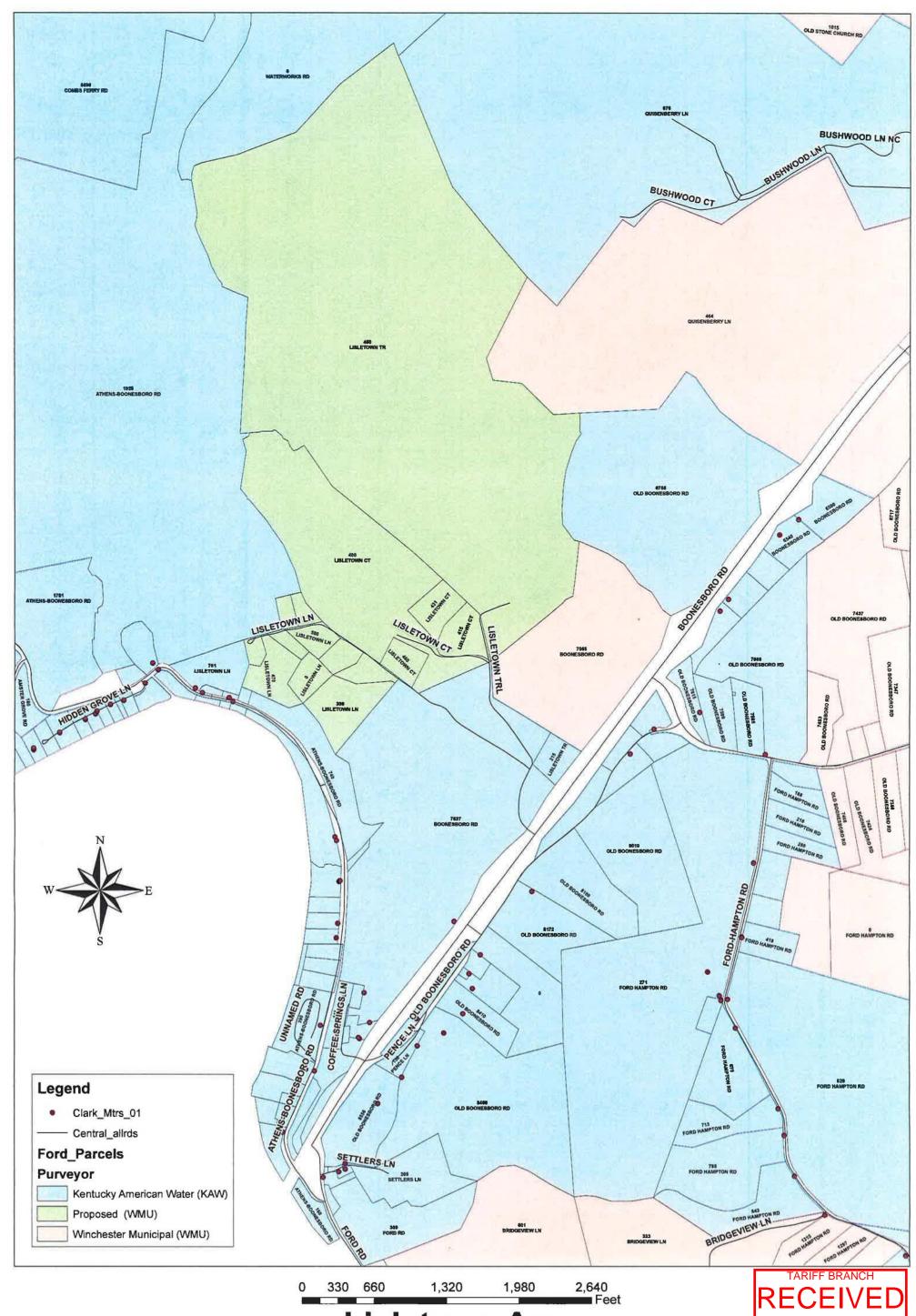
ATTEST:

WINCHESTER MUNICIPAL UTILITY IS COMMISSION

APPROVED 10-17-13

TARIFF BRANCH
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11/7/2013



Lisletown Area
FORD-HAMPTON AREA
EXHIBIT A-1

11/7/2013

PUBLIC SERVICE
COMMISSION

OF KENTUCKY

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Kevin N. Rogers

67. Reference the Kentucky American Water application generally. Provide the percentage of non-revenue water in each of the past ten years, and as projected for the Base Period and the Test Period.

Response:

	2006	2007	2008	2009	2010
Non Revenue Water - %	12.7%	14.0%	14.4%	12.5%	12.7%

	2011	2012	2013	2014	2015
Non Revenue Water - %	13.8%	13.4%	14.6%	15.8%	15.0%

	Base Year	Test Year
Non Revenue Water - %	15.4%	15.9%

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Kevin N. Rogers

68. Reference the Kentucky American Water application generally. What is the Company's target for non-revenue water?

Response:

The water industry in general, as well as the American Water Works Association, holds a general aspirational goal of 15% for non-revenue water. Kentucky American has adopted this 15% as its actual goal.

KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Linda C. Bridwell

69. Reference the Kentucky American Water application generally. Regarding page 15, lines 6-13 of Ms. Bridwell's testimony, provide the underlying assumptions and calculations showing how the fuel and power adjustments were calculated. Include all supporting calculations in excel (if available). If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The fuel and power expense adjustments were calculated by determining the variance between the base year and the forecast year. The base year is comprised of 6 months of actual expense (May 2015 to October 2015) and 6 months of estimated expense from November 2015 to April 2016. The 2016 forecast calculation is attached. The 2016 forecast was calculated by starting with 2014 power bills and adding on additional expense for rate increases. The forecasted expense was then divided by 2014 system delivery to arrive at a cost per thousand gallons delivered. This cost per thousand gallons delivered is then multiplied by the 2016 forecasted system delivery to arrive at a 2016 forecasted power expense.

The forecast year is September 2016 to August 2017. The expense for 2017 was calculated by adding additional expense for 2016 & 2017 rate increases to the 2014 expense. The normalized expense is then divided by the 2014 system delivery to arrive at a cost per thousand gallons delivered. This cost per thousand gallons delivered is then multiplied by 2017 forecasted system delivery. The 2017 forecast calculation is attached.

The power adjustment is the variance between the base year and forecast year, mainly comprised of the variance in system delivery and also additional rate increases for Owen Electric Cooperative and KU. Please see workpaper 3-3 to see the amounts on a monthly basis.

Profit Center E12	E12_Kentucky Americ	an	-										
	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Current 2015 Budge	et \$278,49	\$273,066	\$277,119	\$281,732	\$331,888	\$378,725	\$374,498	\$377,918	\$356,536	\$318,171	\$277,378	\$281,459	\$3,806,989
2016 Power budge	et \$240,57	\$282,915	\$316,853	\$294,683	\$305,605	\$419,442	\$424,837	\$416,288	\$382,156	\$307,142	\$298,184	\$271,426	\$3,960,101
2016 System Deliver	ry 1,006,375	985,554	1,082,791	1,019,581	1,167,326	1,245,397	1,371,683	1,287,288	1,152,026	1,153,542	993,202	1,051,359	13,516,124
2014 Normalized Power With Global Adjustments per TGA	AL 0.232	0.283	0.293	0.286	0.260	0.335	0.308	0.322	0.329	0.267	0.299	0.261	0.291
2014 Normalized Power With Global Adjustment				\$307,203	\$315,312	\$428,262	\$436,992	\$427,053	\$401,949		\$303,190	\$260,918	\$4,080,658
TOTAL GLOBAL ADJUSTMEN			\$39,387	\$32,904	\$24,994	\$58,010	\$51,181	\$50,185			\$40,381	\$30,165	\$454,108
3.5% OWEN ELECTRIC COOPERA			\$12	\$9	\$4	-\$2	\$2	\$1			\$1	\$4	\$40
15.5% KU	\$16,92	\$27,930	\$37,034	\$31,118	\$24,330	\$55,247	\$48,369	\$47,486			\$38,976	\$28,379	\$429,693
3.5% OWEN ELECTRIC COOPERA	TI \$1,69	\$2,399	\$2,342	\$1,777	\$660	\$2,764	\$2,810	\$2,698	\$2,249	\$1,799	\$1,404	\$1,781	\$24,374
2.0% CLARK ENERGY	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014 BY VENDO	. , , , , , , , , , , , , , , , , , , ,		,	\$274,299	\$290,318	\$370,253	\$385,811	\$376,868			\$262,808	\$230,754	\$3,626,550
OWEN ELECTRIC COOPERA				\$267	\$117	-\$52	\$65	\$32			\$43	\$117	\$1,149
KU	\$109,17	,,		\$200,762	\$156,968	\$356,431	\$312,056	\$306,364	\$295,523		\$251,461	\$183,092	\$2,772,212
OWEN ELECTRIC COOPERA				\$50,761	\$18,857	\$78,985	\$80,282	\$77,074			\$40,100	\$50,893	\$696,414
CLARK ENERGY	. \$1			\$0	. \$0	. \$0	\$0	\$0			. \$0	. \$0	\$0
OTHER	\$101,64	\$21,915	-\$30,039	\$22,508	\$114,375	-\$65,112	-\$6,592	-\$6,603	-\$6,005	\$42,824	-\$28,796	-\$3,348	\$156,776
2014 Normalized Power Cost per 1000 Gallor	\$0.21	\$0.255	\$0.256	\$0.256	\$0.240	\$0.290	\$0.272	\$0.284	\$0.289	\$0.240	\$0.259	\$0.231	\$0.259
2014 <u>NET</u> System Deliver	y 1,197,066	1,062,925	1,077,177	1,073,543	1,210,616	1,277,143	1,417,979	1,326,707	1,223,124	1,145,862	1,014,640	999,459	14,026,241
Total Adjusted 2014 Power Expense for: E12_Kentucky American	\$259,17	\$270,678	\$276,139	\$274,299	\$290,318	\$370,253	\$385,811	\$376,868	\$353,890	\$275,556	\$262,808	\$230,754	\$3,626,550

Part			- F. C								
Companies Part Pa			Profit Ce	nter E1202				Marah	Amell Br	1a l.	
Part							-		•	•	
2014 Normalized Fower With Closell Adjustments per TOAL 0.27542752 0.2885 0.3505 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.3285 0.3015 0.09340 0.											
2014 Normalized Power With Global Adjustments; per Tot. 0.2734/8952 0.2885 0.3052 0.3015 0.0940 0.2815											
Part					2016 System Delivery	192,003	188,031	206,583	194,523	222,/11	237,005
Part											
Substitution Subs					•						
15.58 KU 15.58 KU 15.68 KU					OTAL GLOBAL ADJUSTMENT						
Signature Sign	GL	OBAL ASSUMPTIONS							-		
Part						•	-			-	
								. ,			
OWEN ELECTRIC COOPERATIVE INC S0 S0 S0 S0 S0 S0 S0 S				2.0% CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
No.					2014 BY VENDOR						
OWEN PRICTICE COOPERATIVE See									-	-	
CLARK KINRINGY OTHER S12,431 -\$12,431 -\$12,431 -\$12,431 -\$12,431 -\$12,431 -\$6,544 59,219 52,187 51,150						•	-				
Coltable											
				OTHER		\$12,431	-\$12,431	-\$6,544	\$9,219	\$2,187	-\$1,750
Sistance				2014 Normalized Pov	ver Cost per 1000 Gallons	\$0.266	\$0.277	\$0.294	\$0.293	\$0.091	\$0.317
S1510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC S0 S0 S0 S0 S0 S0 S0 S				2	2014 <u>NET</u> System Delivery	228,383	202,791	205,510	204,817	230,969	243,661
NUMERICAN Section Se			Total Adjusted 2014 Power Expense	e for: E120252_CEN-Pool III WTP		\$60,758	\$56,112	\$60,378	\$59,980	\$21,044	\$77,235
Second S	51510000 TOTAL PRODUCT	ON ELECTRIC EXPENS	SES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
CLARK ENERGY S0 S0 S0 S0 S0 S0 S0 S				KU		\$0	\$0	\$0	\$0	\$0	\$0
OTHER S12000 10TAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER OTHER OTHER OTHER S12,431 - \$12,431 - \$6,544 - \$9,219 - \$2,187 - \$1,750 - \$50				OWEN ELECTRIC COOPERATIVE		\$48,326	\$68,543	\$66,923	\$50,761	\$18,857	\$78,985
S152000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0				CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
Historical Cost Normalization: -example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE -\$17,000 -\$107,000 \$69,000 \$23,000 -\$35,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$1,000 \$69,000 \$23,000 \$23,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000 \$40,000 -\$20,000 \$40,000				OTHER		\$12,431	-\$12,431	-\$6,544	\$9,219	\$2,187	-\$1,750
PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE Station 2 Station 3 Statio	51520000 TOTAL PRODUCT	ON GAS EXPENSES W	/ITH ADJUSTMENTS	OTHER		\$0	\$0	\$0	\$0	\$0	\$0
2014 ACTUAL EXPENSE	Historical Cost Normalization:										
Cost Center Account Account Description Service FACILITY Vendor 1 2 3 4 5 6 120252 51510000 1.PRODUCTION POWER Electricity KYAWAC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.I. PRODUCTION POWER N/A OTHER Discr. Power Accrual 0 77,758 163,112 (8,622) 36,980 56,044 37,235	-example 51510000 1.PRODUCTION PO	OWER Electricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE		-\$17,000	-\$107,000	\$69,000	\$23,000	-\$35,000	\$40,000
Cost Center Account Account Description Service FACILITY Vendor 1 2 3 4 5 6 120252 51510000 1.PRODUCTION POWER Electricity KYAWAC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.I. PRODUCTION POWER N/A OTHER Discr. Power Accrual 0 77,758 163,112 (8,622) 36,980 56,044 37,235											
Cost Center Account Account Description Service FACILITY Vendor 1 2 3 4 5 6 120252 51510000 1.PRODUCTION POWER Electricity KYAWAC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.I. PRODUCTION POWER N/A OTHER Discr. Power Accrual 0 77,758 163,112 (8,622) 36,980 56,044 37,235											
Cost Center Account Account Description Service FACILITY Vendor 1 2 3 4 5 6 120252 51510000 1.PRODUCTION POWER Electricity KYAWAC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.I. PRODUCTION POWER N/A OTHER Discr. Power Accrual 0 77,758 163,112 (8,622) 36,980 56,044 37,235											
Cost Center Account Account Description Service FACILITY Vendor 1 2 3 4 5 6 120252 51510000 1.PRODUCTION POWER Electricity KYAWAC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.I. PRODUCTION POWER N/A OTHER Discr. Power Accrual 0 77,758 163,112 (8,622) 36,980 56,044 37,235											
Cost Center Account Account Description Service FACILITY Vendor 1 2 3 4 5 6 120252 51510000 1.PRODUCTION POWER Electricity KYAWAC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.I. PRODUCTION POWER N/A OTHER Discr. Power Accrual 0 77,758 163,112 (8,622) 36,980 56,044 37,235											
120252 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE 65,326 175,543 (2,077) 27,761 53,857 38,985 120252 51510000 1.PRODUCTION POWER N/A OTHER 0 - <t< th=""><th>2014 ACTUAL EXPENSE</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	2014 ACTUAL EXPENSE										
120252 51510000 1.PRODUCTION POWER N/A OTHER 120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T 1.PRODUCTION POWER N/A OTHER 0 77,758 163,112 (8,622) 36,980 56,044 37,235	•										
120252 51510000 1.PRODUCTION POWER N/A OTHER Discr. Power Accrual 12,431 (12,431) (6,544) 9,219 2,187 (1,750) 120252 51510000 T.1.PRODUCTION POWER N/A OTHER 0 77,758 163,112 (8,622) 36,980 56,044 37,235				2 OWEN ELECTRIC COOPERATIVE			175,543	(2,077)	27,761	53,857	38,985
120252 51510000 T 1.PRODUCTION POWER N/A OTHER 0 77,758 163,112 (8,622) 36,980 56,044 37,235					0			-			
				Discr. Power Accrual							
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77,758

163,112

(8,622)

36,980

56,044

37,235

120252 Total 51510000 Tr 1.PRODUCTION POWER N/A

OTHER

	Profit Center E1202						
		uly A	August S	September C	October N	lovember D	ecember
	Current 2015 Budget	\$84,348	\$84,348	\$59,015	\$60,451	\$59,015	\$60,451
	2016 Power budget	\$81,026	\$78,295	\$58,219	\$47,058	\$43,957	\$53,994
	2016 System Delivery	261,699	245,598	219,792	220,081	189,490	200,586
	2044 Name lived Device Mith Clabel Adjustment on TCAI	0.2006	0.2400	0.2640	0.2420	0.2220	0.2502
	2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments	0.3096 \$83,761	0.3188 \$80,692	0.2649 \$61,812	0.2138 \$46,744	0.2320 \$44,905	0.2692 \$51,328
	TOTAL GLOBAL ADJUSTMENT	\$2,810	\$2,698	\$2,249	\$1,799	\$ 1,404	\$1,781
GLOBAL ASSUMPTIONS	3.5% OWEN ELECTRIC COOPERATIVE INC	\$2,810 \$0	\$2,038 \$0	\$2,249 \$0	\$1,799 \$0	\$1,404 \$0	\$1,781 \$0
GLOBAL ASSOVIF HONS	15.5% KU	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	3.5% OWEN ELECTRIC COOPERATIVE	\$2,810	\$2,698	\$2,249	\$1,799	\$1,404	\$1,781
	2.0% CLARK ENERGY	\$2,810	\$2,098 \$0	\$2,249	\$1,755	\$1,404	\$1,781
	2.0% CLARK EIVERGT	ŞU	ŞU	ŞU	ŞU	ŞU	ŞU
	2014 BY VENDOR	\$80,951	\$77,995	\$59,563	\$44,945	\$43,502	\$49,547
	OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	\$0
	KU	\$0	\$0	\$0	\$0	\$0	\$0
	OWEN ELECTRIC COOPERATIVE	\$80,282	\$77,074	\$64,264	\$51,405	\$40,100	\$50,893
	CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0
	OTHER	\$669	\$920	-\$4,701	-\$6,460	\$3,402	-\$1,347
			4			4	
	2014 Normalized Power Cost per 1000 Gallons	\$0.299	\$0.308	\$0.255	\$0.206	\$0.225	\$0.260
	2014 <u>NET</u> System Delivery	270,530	253,117	233,355	218,614	193,579	190,683
Total Adjusted 2014 Power	r Expense for: E120252 CEN-Pool III WTP	\$80,951	\$77,995	\$59,563	\$44,945	\$43,502	\$49,547
51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	\$0
	KU	\$0	\$0	\$0	\$0	\$0	\$0
	OWEN ELECTRIC COOPERATIVE	\$80,282	\$77,074	\$64,264	\$51,405	\$40,100	\$50,893
	CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0
	OTHER	\$669	\$920	-\$4,701	-\$6,460	\$3,402	-\$1,347
51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER	\$0	\$0	\$0	\$0	\$0	\$0
	 			**			
Historical Cost Normalization:							
-example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STAT	TION 2 OWEN ELECTRIC COOPERATIVE	\$8,000	\$10,000	-\$5,000		-\$5,000	-\$10,000
	<u>_</u>						
2014 ACTUAL EXPENSE							

Cost Center	Account	Account Description	Service	FACILITY	Vendor	7	8	9	10	11	12	
120252	51510000	1.PRODUCTION POWE	R Electricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE		72,282	67,074	69,264	51,405	45,100	60,893
120252	51510000	1.PRODUCTION POWE	R N/A	OTHER		0	-	-	-	-	-	(789)
120252	51510000	1.PRODUCTION POWE	R N/A	OTHER	Discr. Power Accrual		669	920	(4,701)	(6,460)	3,402	(558)
120252	51510000 T	1.PRODUCTION POWE	R N/A	OTHER		0	72,951	67,995	64,563	44,945	48,502	59,547
120252 Total	51510000 T	1.PRODUCTION POWE	R N/A	OTHER		0	72,951	67,995	64,563	44,945	48,502	59,547

			Profit Cente	er <u>E1202</u>				
						TOTAL		
					Current 2015 Budget	\$786,438		
					2016 Power budget	\$689,943		
					2016 System Delivery	2,578,702		0.190786056
				2014 Normalized Power With Globa		0.2677		
				2014 Normalized Power W	-	\$716,383		
		0.004.450.440			GLOBAL ADJUSTMENT	\$24,374		
		GLOBAL ASSUMPT		% OWEN ELECTRIC COOPERATIVE INC % KU		\$0 \$0		
				% OWEN ELECTRIC COOPERATIVE		\$0 \$24,374		
				% CLARK ENERGY		\$24,374 \$0		
			2.0	70 CEARK ENERGY		Ş0		
					2014 BY VENDOR	\$692,009		
				OWEN ELECTRIC COOPERATIVE INC		\$0		
				KU		\$0		
				OWEN ELECTRIC COOPERATIVE		\$696,414		
				CLARK ENERGY		\$0		
				OTHER		-\$4,405		
				2014 Normalized Power C	Cost per 1000 Gallons	\$0.259		
				2014	NET System Delivery	2,676,009		
			Total Adjusted 2014 Power Expense fo			\$692,009		
	51510000	TOTAL PRODUCTION ELECTRIC EX	PENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC KU		\$0 \$0		
				OWEN ELECTRIC COOPERATIVE		\$0		
				CLARK ENERGY		\$696,414 \$0		
				OTHER		-\$4,405		
	51520000	TOTAL PRODUCTION GAS EXPENS	SES WITH ADJUSTMENTS	OTHER		\$0		
					-			
listorical Cost			WALL CONTROL OF THE CONTROL OF	OWEN ELECTRIC COORERATIVE		\$0		and a second black his in Manach. Commented to
-example	51510000	1.PRODUCTION POWER Electric	ity KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE		_	rebruary number inflated high by appa	rent accrual that hit in March. Corrected. Ir
						\$0 \$0		
						\$0 \$0		
						\$0		
						\$0		
						\$0		
						\$0		
					_	\$0		
2014 AC	TUAL EX	PENSE						
		Account Description Service		Vendor		Grand Total		
20252		1.PRODUCTION POWER Electric		OWEN ELECTRIC COOPERATIVE	_	725,414		
20252		1.PRODUCTION POWER N/A	OTHER OTHER	Diago Davisa Assessal	0	(789)		
20252 20252		1.PRODUCTION POWER N/A 1.PRODUCTION POWER N/A	OTHER	Discr. Power Accrual	0	(3,616)		
		1.1 PRODUCTION POWER N/A	OTHER		0	721,009 721,009		

Profit Center E1202

Current 2015 Budget 2016 Power budget 2016 System Delivery

980083.1373

2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments

TOTAL GLOBAL ADJUSTMENT

2014 NET System Delivery

GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC

15.5% KU

3.5% OWEN ELECTRIC COOPERATIVE

2.0% CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC KU OWEN ELECTRIC COOPERATIVE CLARK ENERGY

OTHER

2014 Normalized Power Cost per 1000 Gallons

Total Adjusted 2014 Power Expense for: E120252_CEN-Pool III WTP									
51510000	TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC							
		KU							
		OWEN ELECTRIC COOPERATIVE							
		CLARK ENERGY							
		OTHER							
51520000	TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER							

Historical Cost Normalization:

-example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE

nproving projections for summer higher demand months.

2014 ACTUAL EXPENSE

Cost Center	Account	Account Description	Service	FACILITY	Vendor	
120252	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE	
120252	51510000	1.PRODUCTION POWER	R N/A	OTHER		0
120252	51510000	1.PRODUCTION POWER	R N/A	OTHER	Discr. Power Accrual	
120252	51510000	T-1.PRODUCTION POWER	R N/A	OTHER		0
120252 Total	51510000	T-1.PRODUCTION POWER	R N/A	OTHER		0

				Profit Center	E1202		E120251 CEN-	Pichmond Poar	l C+			
				Front Center	E1202					pril IV	ay Ju	ne
						Current 2015 Budget		\$34,453	\$40,314	\$41,957	\$37,429	\$36,927
						2016 Power budget		\$37,018	\$47,324	\$40,821	\$40,399	\$42,819
						2016 System Delivery		288,617	317,092	298,581	341,848	364,710
						2010 System Denvery	234,714	200,017	317,032	230,361	341,646	304,710
					2014 Normalized Power With 0	Global Adjustments per TGAL	0.093637746	0.1283	0.1492	0.1367	0.1182	0.1174
					2014 Normalized Pov	wer With Global Adjustments	\$32,825	\$39,924	\$47,078	\$42,981	\$41,897	\$43,910
					Т	OTAL GLOBAL ADJUSTMENT	\$4,405	\$5,358	\$6,318	\$5,662	\$5,622	\$5,893
		GLOBAL ASS	SUMPTIONS		6 OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
				15.5%			\$4,405	\$5,358	\$6,318	\$5,662	\$5,622	\$5,893
				3.5%	6 OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
				2.0%	6 CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
						2014 BY VENDOR	,	\$34,566	\$40,760	\$37,319	\$36,274	\$38,018
					OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
					KU		\$28,420	\$34,566	\$40,760	\$36,528	\$36,274	\$38,018
					OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
					CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
					OTHER		\$0	\$0	\$0	\$791	\$0	\$0
					2014 Normalized Pov	wer Cost per 1000 Gallons	\$0.081	\$0.111	\$0.129	\$0.119	\$0.102	\$0.102
						2014 <u>NET</u> System Delivery		311,272	315,446	314,382	354,523	374,005
-				Total Adjusted 2014 Power Expense for	: E120251 CEN-Richmond Road St		\$28,420	\$34,566	\$40,760	\$37,319	\$36,274	\$38,018
	51510000	TOTAL PRODUCTION ELECT	TRIC FXPFN		OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
	31310000			323 11111/12/30111121113	KU		\$28,420	\$34,566	\$40,760	\$36,528	\$36,274	\$38,018
					OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
					CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
					OTHER		\$0	\$0	\$0	\$0	\$0	\$0
	51520000	TOTAL PRODUCTION GAS E	EXPENSES \	WITH ADJUSTMENTS	OTHER		\$0	\$0	\$0	\$791	\$0	\$0
								**		****		
Historical Cost				10/41/4 14 66 66 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16					42.000	44.000		44.000
-example		1.PRODUCTION POWER	Electricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU				-\$3,000	-\$1,000		\$4,000
	51510000			KYAWC-RICHMOND ROAD STATION TR	KU		\$5,000		-\$6,000	-\$2,000	\$7,000	-\$4,000
	51510000	4 PROPULATION POWER A		OTHER	KU							
		1.PRODUCTION POWER N		OTHER								
	51520000	2.PRODUCTION FUEL N	N/A	OTHER		0		(8,008)	8,361			
2014 AC	TUAL EX	PENSE										
Cost Center	Account	Account Description S	Service	FACILITY	Vendor		1 :	2 3	4	. 5	6	
120251	51510000	1.PRODUCTION POWER E	Electricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU		8,482	8,742	12,997	10,435	8,172	3,756
120251		1.PRODUCTION POWER E		KYAWC-RICHMOND ROAD STATION TR	KU		14,938	25,825	36,763	29,093	21,103	34,261
120251	51510000	1.PRODUCTION POWER N	N/A	OTHER		0		-	-	-	-	
120251	51510000 T	1.PRODUCTION POWER N	N/A	OTHER		0		34,566	49,760	39,528	29,274	38,018
120251			N/A	OTHER		0	-,	(395)	42	791	-,	
120251			N/A	OTHER	PTP5 Accruals - KY	ŭ	-	8,403	(8,403)	-	-	-
120251			N/A	OTHER		0	-	8,008	(8,361)	791	-	-

23,420

42,574

41,399

40,319

29,274

38,018

OTHER

120251 Total 51520000 T 2.PRODUCTION FUEL N/A

				Profit Center	F1202							
							-	-	September			December
						Current 2015 Budget 2016 Power budget	\$37,429 \$44,536	\$37,429 \$43,565	\$36,927 \$39,518		\$41,957 \$41,048	\$42,69 \$31,25
						-			337,367	337,811	290,856	307,887
						2016 System Delivery	401,693	376,978	337,367	337,811	290,856	307,887
					2014 Normalized Power With	Global Adjustments per TGAL	0.1109	0.1156	0.1171	0.1295	0.1411	0.1015
						wer With Global Adjustments	\$46,039	\$44,898	\$41,957	\$43,441	\$41,933	\$29,71
					1	OTAL GLOBAL ADJUSTMENT	\$6,178	\$6,025	\$5,631	\$5,830	\$5,627	\$6,50
		GLOBAL A	SSUMPTION	S 3.59	% OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$
				15.59	% KU		\$6,178	\$6,025	\$5,631	\$5,830	\$5,627	\$6,50
				3.59	% OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$
				2.09	% CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$
						2014 BY VENDOR	\$39,861	\$38,873	\$36,326	\$37,611	\$36,306	\$23,20
					OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
					KU		\$39,861	\$38,873	\$36,326	\$37,611	\$36,306	\$41,95
					OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$
					CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$
					OTHER		\$0	\$0	\$0	\$0	\$0	-\$18,75
					2014 Normalized Po	wer Cost per 1000 Gallons	\$0.096	\$0.100	\$0.101	\$0.112	\$0.122	\$0.07
						2014 <u>NET</u> System Delivery	415,248	388,520	358,186	335,560	297,132	292,68
				Total Adjusted 2014 Power Expense for			\$39,861	\$38,873	\$36,326		\$36,306	\$23,20
	51510000	TOTAL PRODUCTION ELE	CTRIC EXPEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0		\$0	\$
					KU		\$39,861	\$38,873	\$36,326		\$36,306	\$41,95
					OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	-	\$0	\$
					CLARK ENERGY		\$0	\$0	-	-	\$0	\$
					OTHER		\$0	\$0		-	\$0	-\$18,75
	51520000	TOTAL PRODUCTION GAS	S EXPENSES	WITH ADJUSTMENTS	OTHER		\$0	\$0	\$0	\$0	\$0	\$
listorical Cost -example		on: 1.PRODUCTION POWER	Flectricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU		-\$1,000	\$1,000				
campic	51510000	III KODOCHON I OWEK	Licetificity	KYAWC-RICHMOND ROAD STATION TR	KU		-\$3,000	\$10,000	-\$5,000			
	51510000			KITAWO KIONIMOND KOND CITATION TK	KU		-55,000	\$10,000	-\$5,000			
		1.PRODUCTION POWER	N/A	OTHER	NO.							
		2.PRODUCTION FUEL		OTHER		0						
014 AC	TUAL EX	(PENSE										
		Account Description	Service	FACILITY	Vendor				9			12
20251	51510000	1.PRODUCTION POWER		KYAWC-JACOBSON RESERVOIR/INTAK	KU		10,008	7,870	9,211	9,088	9,368	13,775
20251	51510000		,	KYAWC-RICHMOND ROAD STATION TR	KU		33,853	20,003	32,115	28,523	26,938	28,181
20251	51510000	1.PRODUCTION POWER		OTHER		0	-	-	-	-	-	(18,750
20251		T ₁ 1.PRODUCTION POWER		OTHER		0	43,861	27,873	41,326	37,611	36,306	23,20
0251	E1E20000	2 DRODUCTION FUEL	NI/A	OTHER								

PTP5 Accruals - KY

0

0

43,861

27,873

41,326

37,611

36,306

23,207

120251

120251

120251

51520000 2.PRODUCTION FUEL N/A

51520000 2.PRODUCTION FUEL N/A

51520000 T 2.PRODUCTION FUEL N/A

120251 Total 51520000 Tr 2.PRODUCTION FUEL N/A

OTHER

OTHER

OTHER

OTHER

				Tronc cente		-	TOTAL	
						Current 2015 Budget		
						2016 Power budget	\$479,629	
						2016 System Delivery		ı
						2010 System Delivery	3,330,133	
					2014 Normalized Barres Mil	b Clahal Adjustments no TCAL	0.1200	
						h Global Adjustments per TGAL		
					2014 Normalized i	Power With Global Adjustments		
		CLODALA	SSUMPTIONS	3.51	% OWEN ELECTRIC COOPERATIVE INC	TOTAL GLOBAL ADJUSTMENT	\$69,053 \$0	
		GLOBAL A	SSUIVIPTION:		% KU		\$69,053	
							\$09,033	
					% OWEN ELECTRIC COOPERATIVE % CLARK ENERGY		\$0 \$0	
				2.0	CLAIM ENERGI		ŞU	
						2014 BY VENDOR	\$427,541	
					OWEN ELECTRIC COOPERATIVE INC		\$0	
					KU		\$445,501	
					OWEN ELECTRIC COOPERATIVE		\$0	
					CLARK ENERGY		\$0	
					OTHER		-\$17,959	
					2014 Normalized F	ower Cost per 1000 Gallons		
						2014 <u>NET</u> System Delivery	4,107,516	
				Tatal Adicated 2014 Bassas Foresan for	m F4202F4 CFN Bishmand Band Ch		Ć427.544	6425 400
	51510000	TOTAL PRODUCTION ELEC	CTDIC EVDEN	Total Adjusted 2014 Power Expense fo	OWEN ELECTRIC COOPERATIVE INC		\$427,541 \$0	\$425,188
	21210000	TOTAL PRODUCTION ELEC	CIRIC EAPEN	SES WITH ADJUSTIVIENTS	KU		\$0 \$445,501	
					OWEN ELECTRIC COOPERATIVE		\$0	
					CLARK ENERGY		\$0	
					OTHER		-\$18,750	
	51520000	TOTAL PRODUCTION GAS	EXPENSES \	WITH ADJUSTMENTS	OTHER		\$791	
Historical Cos							\$0	
-example		1.PRODUCTION POWER	Electricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU			Leveling out costs for the year
	51510000			KYAWC-RICHMOND ROAD STATION TR				Leveling out costs for the year
	51510000 51510000	1.PRODUCTION POWER	N/A	OTHER	KU		\$0	Lavalian automoto familia van
		1.PRODUCTION POWER 2.PRODUCTION FUEL		OTHER		0	\$0 \$353	Leveling out costs for the year
	31320000	2.1 NODUCTION FUEL	14/74	OTTLE		U	\$353	
							\$0 \$0	
							\$0 \$0	
							\$0	
2014 AC	TIIAI EV	/DENICE					, JO	
			Convice	FACILITY	Vendor		Grand Total	
120251		Account Description 1.PRODUCTION POWER	Service	KYAWC-JACOBSON RESERVOIR/INTAK			111,905	
120251		1.PRODUCTION POWER		KYAWC-RICHMOND ROAD STATION TR			331,596	
120251		1.PRODUCTION POWER		OTHER		0		
120251		T. 1.PRODUCTION POWER		OTHER		0		
120201	54500000	a propulation full		OTHER			727,731	

PTP5 Accruals - KY

E1202

0

0

0

438

438

425,188

Profit Center

120251

120251

120251

51520000 2.PRODUCTION FUEL N/A

51520000 2.PRODUCTION FUEL N/A

51520000 T 2.PRODUCTION FUEL N/A

120251 Total 51520000 T 2.PRODUCTION FUEL N/A

OTHER

OTHER

OTHER

	Pi	ofit Center	E1202	2	E120250_CEN-	Kentucky River	r St			
					January	February	March A	April M	∕lay J	une
				Current 2015 Budget		\$141,935	\$124,645	\$136,964	\$189,797	\$200,368
				2016 Power budget		\$139,221	\$145,128	\$137,119	\$200,467	\$225,259
				2016 System Delivery	519,664	508,912	559,122	526,483	602,773	643,087
			2014 Normalized Power Wit	h Global Adjustments per TGAL	0.223889121	0.2736	0.2596	0.2604	0.3326	0.3503
				Power With Global Adjustments		\$150,150	\$144,375	\$144,375	\$207,900	\$231,000
				TOTAL GLOBAL ADJUSTMENT	\$18,392	\$20,150	\$19,375	\$19,375	\$27,900	\$31,000
	GLOBAL ASSUMPTIONS	3.5% OWEN	ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
		15.5% KU			\$18,392	\$20,150	\$19,375	\$19,375	\$27,900	\$31,000
		3.5% OWEN	ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
		2.0% CLARK	ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
				2014 BY VENDOR		\$130,000	\$125,000	\$125,000	\$180,000	\$200,000
			ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
		KU			\$118,657	\$130,000	\$125,000	\$125,000	\$180,000	\$200,000
			ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
		CLARK	ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
		OTHER			\$1,343	\$0	\$0	\$0	\$0	\$0
			2014 Normalized P	ower Cost per 1000 Gallons		\$0.237	\$0.225	\$0.225	\$0.288	\$0.303
				2014 <u>NET</u> System Delivery	618,127	548,861	556,220	554,343	625,124	659,476
	Total Adjusted 2014 Power B				\$120,000	\$130,000	\$125,000	\$125,000	\$180,000	\$200,000
	51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS		ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
		KU			\$118,657	\$130,000	\$125,000	\$125,000	\$180,000	\$200,000
			ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
			ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
		OTHER			\$0	\$0	\$0	\$0	\$0	\$0
	51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER	<u>l</u>		\$1,343	\$0	\$0	\$0	\$0	\$0
	Normalization:				474 500	Å422.200	4450 700	6400.554	4446.066	4207.200
-example	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATIC				-\$71,593	-\$130,390	-\$158,730	-\$122,564	-\$116,266	-\$297,299
	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATIC	NT KU			\$120,000	\$130,000	\$125,000	\$125,000	\$180,000	\$200,000
2014 AC	TUAL EXPENSE									
Cost Center	Account Account Description Service FACILITY	Vendo			1	2 :	3 4	1 5		
120250	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STA				70,250	130,390	158,730	122,564	116,266	297,299
120250	51510000 T-1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STA			0		130,390	158,730	122,564	116,266	297,299
120250	51520000 2.PRODUCTION FUEL N/A OTHER			0		-	-	-	-	-
120250	54520000 T 2 PRODUCTION FUEL N/A OTHER			0	1,343					

1,343

71,593

130,390

158,730

122,564

116,266

297,299

120250

51520000 T-2.PRODUCTION FUEL N/A

120250 Total 51520000 T 2.PRODUCTION FUEL N/A

OTHER

			_					
	Prof	it Center E1202	:					
				-	•			December
		Current 2015 Budget		\$206,416	\$206,798	\$175,172	\$132,610	\$134,10
		2016 Power budget		\$229,741	\$223,013	\$162,785	\$146,979	\$127,57
		2016 System Delivery	708,297	664,718	594,873	595,656	512,861	542,89
		2014 Normalized Power With Global Adjustments per TGAL	0.3313	0.3456	0.3749	0.2733	0.2866	0.235
		2014 Normalized Power With Global Adjustments	\$242,550	\$236,775	\$236,775	\$161,700	\$150,150	\$121,2
		TOTAL GLOBAL ADJUSTMENT	\$32,550	\$31,775	\$31,775	\$21,700	\$20,150	\$16,2
	GLOBAL ASSUMPTIONS	3.5% OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	
		15.5% KU	\$32,550	\$31,775	\$31,775	\$21,700	\$20,150	\$16,2
		3.5% OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
		2.0% CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
		2014 BY VENDOR	,	\$205,000	\$205,000	\$140,000	\$130,000	\$105,0
		OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	
		KU	\$210,000	\$205,000	\$205,000	\$140,000	\$130,000	\$105,0
		OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
		CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
		OTHER	\$0	\$0	\$0	\$0	\$0	
		2014 Normalized Power Cost per 1000 Gallons		\$0.299	\$0.325	\$0.237	\$0.248	\$0.2
		2014 <u>NET</u> System Delivery	732,199	685,069	631,582	591,687	523,928	516,08
		ense for: E120250_CEN-Kentucky River St	\$210,000	\$205,000	\$205,000	\$140,000	\$130,000	\$105,0
	51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	
		KU	\$210,000	\$205,000	\$205,000	\$140,000	\$130,000	\$105,0
		OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
		CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
		OTHER	\$0	\$0	\$0	\$0	\$0	
	51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER	\$0	\$0	\$0	\$0	\$0	
	st Normalization:	- ***	¢220.426	¢205.427	6444.722	Ć422.000	Ć162.020	Ć104.0
-example	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION		-\$220,126	-\$206,437	-\$144,733	-\$132,990	-\$162,939	-\$104,8
	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION	т ки	\$210,000	\$205,000	\$205,000	\$140,000	\$130,000	\$105,0
014 AC	CTUAL EXPENSE							
ost Center	Account Account Description Service FACILITY	Vendor	7	8	9 1	10 1	11 1	12
20250	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATI		220,126	206,437	144,733	132,990	162,939	104,8
20250	51510000 T-1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATI	ON T 0	220,126	206,437	144,733	132,990	162,939	104,8

0

220,126

206,437

144,733

132,990

162,939

104,849

120250

120250

51520000 2.PRODUCTION FUEL N/A

51520000 T 2.PRODUCTION FUEL N/A

120250 Total 51520000 Tr 2.PRODUCTION FUEL N/A

OTHER

OTHER

Current 2015 Budget \$1,919,915 \$2,088,267 \$2,088,					Profit Center	E120				
2014 Normalized Power With Global Adjustments per TGAL 2014 NORMAL ADJUSTMENT 2014 NORMAL ADJUSTMENT 2004 NORMAL ADJUSTMENT 2014 NORMAL A								TOTAL		
2014 Normalized Power With Global Adjustments per TGAL 2014 NORMAL ADJUSTMENT 2014 NORMAL ADJUSTMENT 2004 NORMAL ADJUSTMENT 2014 NORMAL A							Current 2015 Budget	\$1,991,941		
2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments S2,165,417 S2,										
2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments S2,165,417 S2,										
## STATE OF TOTAL PRODUCTION FOLE EXPENSES WITH ADJUSTMENTS ## STATE OF TOTAL PRODUCTION FOWEr Electric Expenses with Adjustments of the Electric Cooperative inc care property incorporative incorpo								5,010,000		
## STATE OF TOTAL PRODUCTION FOLE EXPENSES WITH ADJUSTMENTS ## STATE OF TOTAL PRODUCTION FOWEr Electric Expenses with Adjustments of the Electric Cooperative inc care property incorporative incorpo										
TOTAL GLOBAL ADJUSTMENT GLOBAL ASSUMPTIONS GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC 3.5% OWEN ELECTRIC COOPERATIVE 3.5% OWEN ELECTRIC COOPE										
GLOBAL ASSUMPTIONS S 3.5% OWEN ELECTRIC COOPERATIVE INC 5290.417 3.5% KJU 5290.417 3.5% WEN ELECTRIC COOPERATIVE S 50 2.0% CLARK ENERGY \$0 2.014 BY VENDOR \$1,875,000 OWEN ELECTRIC COOPERATIVE INC \$0 KU \$1,877,657 OWEN ELECTRIC COOPERATIVE INC \$0 KU \$1,877,657 OWEN ELECTRIC COOPERATIVE INC \$0 KU \$1,877,657 OWEN ELECTRIC COOPERATIVE INC \$0 CLARK ENERGY \$0 OWEN ELECTRIC COOPERATIVE INC \$0 CLARK ENERGY \$0 OTHER \$0 51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC \$0 CLARK ENERGY \$0 OTHER \$0 OWEN ELECTRIC COOPERATIVE INC \$1,877,607 OWEN ELECTRIC COOPERATIVE INC \$0 OWEN ELECTRIC COOPERATIVE INC \$						2014 Normalized I	•			
15.5% KU \$290,417							TOTAL GLOBAL ADJUSTMENT			
Substitution Subs			GLOBAL ASSUI	MPTIONS						
2.0% CLARK ENERGY 2014 BY VENDOR \$1,875,000 OWEN ELECTRIC COOPERATIVE INC KU OWEN ELECTRIC COOPERATIVE FOR CLARK ENERGY OWEN ELECTRIC COOPERATIVE S1,875,000 OWEN ELECTRIC COOPERATIVE INC S1,875,000 OWEN ELECTRIC COOPERATIVE INC S1,875,000 OWEN ELECTRIC COOPERATIVE INC S1,875,677 OWEN ELECTRIC COOPERATIVE INC S1,875,677 OWEN ELECTRIC COOPERATIVE INC S1,875,677 OWEN ELECTRIC COOPERATIVE KU OWEN ELECTRIC COOPERATIVE S1,875,000 OWEN ELECTRIC COOPERATIVE S1,875,677 OWEN ELECTRIC COOPERATIVE S1,875,6										
Signature Sign										
OWEN ELECTRIC COOPERATIVE INC KU \$1,873,657 OWEN DELECTRIC COOPERATIVE S \$0 OWEN ELECTRIC COOPERATIVE \$0 OWEN ELECTRIC SOLUTION \$0 OWEN ELECTRIC SOLUTION \$0 OWEN ELECTRIC SOLUTION \$0 OWEN ELECTRIC SOLUTION \$0					2.09	6 CLARK ENERGY		\$0		
OWEN ELECTRIC COOPERATIVE INC KU \$1,873,657 OWEN DELECTRIC COOPERATIVE S \$0 OWEN ELECTRIC COOPERATIVE \$0 OWEN ELECTRIC SOLUTION \$0 OWEN ELECTRIC SOLUTION \$0 OWEN ELECTRIC SOLUTION \$0 OWEN ELECTRIC SOLUTION \$0							2014 BY VENDOR	\$1.875.000		
KU S1,873,657 OWEN ELECTRIC COOPERATIVE S0 CLARK ENERGY S0 OTHER S1,343 2014 Normalized Power Cost per 1000 Gallons 21,343 2014 Normalized Power Cost per 1000 Gallons 2014 Normalized Power						OWEN ELECTRIC COOPERATIVE INC				
OWEN ELECTRIC COOPERATIVE \$0 CLARK ENERGY \$0 CTHER \$1,343 2014 Normalized Power Cost per 1000 Gallons \$0.259 7,242,704 2014 Normalized Power Cost per 1000 Gallons 2014 NET System Delivery 7,242,704 2014 Normalized Power Cost per 1000 Gallons 2014 NET System Delivery 7,242,704 2016 NET System Delivery 7,242,704 2017 NET System Delivery 7,242,704 2018 NET System Delivery 7,242,704 2										
CLARK ENERGY 50 OTHER \$1,343 2014 Normalized Power Cost per 1000 Gallons 20,259 2014 NET System Delivery 7,242,704 Total Adjusted 2014 Power Expense for: E120250_CEN-Kentucky River St 20,875,000 5151000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC \$1,873,657 UNIVER STATION T COUNTY OTHER \$1,343 Historical Cost Normalization: -example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU CLARK ENERGY 50 UNIVERS STATION T KU S0 UNIVERS STATION T KU S0 UNIVERS STATION T KU S1,875,000 University S1,843 S1,843 S0 UNIVERS STATION T KU S1,875,000 University S1,868,916 University S1,868,916 University S1,843 S1,875,000 University S1,868,916 University S1,843 S0 UNIVERSITY S1,868,916 University S1,8						OWEN ELECTRIC COOPERATIVE				
OTHER 2014 Normalized Power Cost per 1000 Gallons 2014 NetT System Delivery 7,242,704 Total Adjusted 2014 Power Expense for: £120250_CEN-Kentucky River St 2014 NetT System Delivery 7,242,704 Total PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS 80 81,873,657 80 81,873,657 80 81,873,657 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 81,873,657 80 80 80 80 80 80 80 80 80 80 80 80 80										
2014 Normalized Power Cost per 1000 Gallons 20.259 2014 NET System Delivery 7,242,704 Total Adjusted 2014 Power Expense for: E120250_CEN-Kentucky River St \$1,875,000 \$1,868,916 \$66,00						OTHER				
2014 NET System Delivery 7,242,704 Total Adjusted 2014 Power Expense for: £120250_CEN-Kentucky River St \$1,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$61,875,000 \$1,868,916 \$1,868,91										
Total Adjusted 2014 Power Expense for: £120250_CEN-Kentucky River St S151000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC KU S1,873,657 OWEN ELECTRIC COOPERATIVE \$0 CLARK ENERGY OTHER \$0 OTHER \$1,343 Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU S1,875,000 S1,875,00						2014 Normalized F	ower Cost per 1000 Gallons	\$0.259		
S151000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC KU \$1,873,657 OWEN ELECTRIC COOPERATIVE \$0 CLARK ENERGY \$0 OTHER \$0 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER OTHER S1,343 Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU S0 Leveling costs across the year and accounting for higher usage in the Summer S1,875,000 Leveling costs across the year and accounting for higher usage in the Summer S0 S							2014 NET System Delivery	7,242,704		
S151000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC KU \$1,873,657 OWEN ELECTRIC COOPERATIVE \$0 CLARK ENERGY \$0 OTHER \$0 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER OTHER S1,343 Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU S0 Leveling costs across the year and accounting for higher usage in the Summer S1,875,000 Leveling costs across the year and accounting for higher usage in the Summer S0 S										
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OWEN ELECTRIC COOPERATIVE CLARK ENERGY OTHER 5152000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER 5152000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51,875,000 Leveling costs across the year and accounting for higher usage in the Summer S1,875,000 Leveling costs across the year and accounting for higher usage in the Summer S0		51510000	TOTAL PRODUCTION ELECTRI	C EXPENSES WITH ADJUSTM	ENTS					
CLARK ENERGY OTHER \$0 OTHER \$0 OTHER \$1,343 Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU \$1,875,000 Leveling costs across the year and accounting for higher usage in the Summer State of S										
OTHER \$0 5152000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER OTHER \$0 \$1,343 Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51,875,000 Leveling costs across the year and accounting for higher usage in the Summer State of										
Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51,868,916 Leveling costs across the year and accounting for higher usage in the Summer State Sta										
Historical Cost Normalization: -example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 516100 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51700 1.PRODUCTION POWE										
-example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51,875,000 Leveling costs across the year and accounting for higher usage in the Summer S0 50 50 50		51520000	TOTAL PRODUCTION GAS EX	PENSES WITH ADJUSTMENTS		OTHER		\$1,343		
-example 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 5151000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 51,875,000 Leveling costs across the year and accounting for higher usage in the Summer S0 50 50 50	Historical Cost N	Normalizatio	ın.					ćn		
51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU \$1,875,000 Leveling costs across the year and accounting for higher usage in the Summer so				ctricity KVAWC-KENTLICKY	DIVED STATION T	KII			Leveling costs across the year and acro	ounting for higher usage in the Summer mor
\$0 \$0	•			•						
\$0		31310000	1.FRODUCTION FOWER LIE	curicity KTAVVC-KENTOCKT	MIVENSIATION	RO			Leveling costs across the year and acc	Junting for higher usage in the Summer mor
								7.0		
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50								7.0		
50										
50										
2014 ACTUAL EXPENSE	2014 ACT	IIAI EV	DENCE				•	ŞŪ		
				ruico EACILITY		Vandor		Grand Total		
Cost Center Account Description Service FACILITY Vendor Grand Total			·		(V DIVED STATION T					
1202E0 51510000 1 PRODUCTION DOWED Electricity. KVAWC KENTLICKY DIVED STATION T. KUL. 1967 F73						NU	^			
120250 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU 1,867,573					AT MIVEN STATION I		0			
120250 51510000 Ti 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T 0 1,867,573	120200	01020000					U			
\cdot	120250	51520000 T	2 PRODUCTION FUEL N/4	OTHER			n	1 3/12		

Profit Center E1202

Current 2015 Budget 2016 Power budget 2016 System Delivery

2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments

TOTAL GLOBAL ADJUSTMENT

GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC

15.5% KU

3.5% OWEN ELECTRIC COOPERATIVE

2.0% CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC

KU

OWEN ELECTRIC COOPERATIVE

CLARK ENERGY OTHER

> 2014 Normalized Power Cost per 1000 Gallons 2014 <u>NET</u> System Delivery

				Total Adjusted 2014 Power Expense	e for: E120250_CEN-Kentucky River St	
	51510000	TOTAL PRODUCTION ELE	ECTRIC EXPEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE IN	c
					KU	
					OWEN ELECTRIC COOPERATIVE	
					CLARK ENERGY	
					OTHER	
	51520000	TOTAL PRODUCTION GA	S EXPENSES \	WITH ADJUSTMENTS	OTHER	
Historical Cost	t Normalizatio	on:				
-example	51510000	1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T	KU	iths.
	51510000	1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T	KU	iths.

2014 ACTUAL EXPENSE

Cost Center	Account	Account Description	Service	FACILITY	Vendor
120250	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-KENTUCKY RIVER STATION T	KU
120250	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-KENTUCKY RIVER STATION T	
120250	51520000	2.PRODUCTION FUEL	N/A	OTHER	
120250	51520000	2.PRODUCTION FUEL	N/A	OTHER	
120250 Total	51520000	2.PRODUCTION FUEL	N/A	OTHER	1

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				Profit Center	E1202	E120201_CEN-	Production	•				
						January	February	March	April	May	June .	July
					Current 2015 Budget	\$41,708	\$40,534	\$51,708	\$43,796	\$44,211	\$59,133	\$49,726
					2016 Power budget	\$44,126	\$52,424	\$61,353	\$58,090	\$43,811	\$73,352	\$64,642
					2016 System Delivery	1	1	1	1	1	1	1
				2014 Normal	ized Power With Global Adjustments per TGAL	44,125.86	52,423.66	61,352.74	58,090.18	43,811.36	73,352.00	64,642.05
					14 Normalized Power With Global Adjustments	\$44,126	\$52,424	\$61,353	\$58,090	\$43,811	\$73,352	\$64,642
					TOTAL GLOBAL ADJUSTMENT	-\$5,874	\$2,423	\$11,352	\$6,091	-\$9,188	\$18,352	\$9,642
		GLOBAL	ASSUMPTION:	S 3.5 %	6 OWEN ELECTRIC COOPERATIVE INC	\$1	\$1	\$12	\$9	\$4	-\$2	\$2
				15.5%	6 KU	-\$5,875	\$2,423	\$11,341	\$6,081	-\$9,192	\$18,354	\$9,640
				3.5%	6 OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				2.0%	6 CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					2014 BY VENDOR	\$50,000	\$50,000	\$50,000	\$52,000	\$53,000	\$55,000	\$55,000
					OWEN ELECTRIC COOPERATIVE INC	\$29	\$24	\$329	\$267	\$117	-\$52	\$65
					KU	-\$37,904	\$15,630	\$73,167	\$39,234	-\$59,306	\$118,414	\$62,195
					OWEN ELECTRIC COOPERATIVE CLARK ENERGY	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
					OTHER	\$87,874	\$0 \$34,346	-\$23,495	\$12,498	\$112,188	-\$63,362	-\$7,260
					OTHER	307,074	<i>\$</i> 34,340	-323,493	\$12,456	\$112,100	-303,302	-37,200
				2014	Normalized Power Cost per 1000 Gallons	\$49,999.890	\$50,000.220	\$50,000.370	\$51,999.560	\$52,999.650	\$54,999.690	\$54,999.580
					2014 <u>NET</u> System Delivery	1	1	1	1	1	1	1
				Total Adjusted 2014 Power Expense for	: E120201_CEN-Production	\$50,000	\$50,000	\$50,000	\$52,000	\$53,000	\$55,000	\$55,000
	51510000	TOTAL PRODUCTION EL	ECTRIC EXPEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	\$29	\$24	\$329	\$267	\$117	-\$52	\$65
					KU	-\$37,904	\$15,630	\$73,167	\$39,234	-\$59,306	\$118,414	\$62,195
					OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					OTHER	\$87,874	\$34,346	-\$51,112	\$12,498	\$112,188	-\$63,362	-\$7,260
	51520000	TOTAL PRODUCTION GA	AS EXPENSES I	WITH ADJUSTMENTS	OTHER	\$0	\$0	\$27,617	\$0	\$0	\$0	\$0
Historical Cost	t Normalizatio	on:										
-example	51510000	1.PRODUCTION POWER	Electricity	All Boosters	KU	-\$125,396	-\$80,788	-\$29,809	-\$40,594	-\$143,920	\$40,085	-\$40,335
	51510000	1.PRODUCTION POWER	Electricity	All Boosters	ки	\$50,000	\$50,000	\$50,000	\$52,000	\$53,000	\$55,000	\$55,000
2014 AC	TIIAI EX	DENSE										
Cost Center		Account Description	Service	FACILITY	Vendor	1	2	3	4	5	6	7
120201	51510000	1.PRODUCTION POWE		KYAWC-BRIAR HILL BOOSTER	KU	2,739	2,414	2,581	590	1,714	3,217	3,264
120201	51510000	1.PRODUCTION POWE		KYAWC-BURTON PIKE SUMP PUMP	OWEN ELECTRIC COOPERATIVE INC	2,739	2,414	2,561	25	27	3,217	28
120201	51510000	1.PRODUCTION POWE		KYAWC-CLAYS MILL ROAD TANK & B	KU	6,943	6,559	7,353	7,837	4,169	4,616	6,622
120201	51510000	1.PRODUCTION POWE		KYAWC-COX ST TANKS & BOOSTER	KU	661	1,043	1,090	1,019	740	1,134	1,089
120201	51510000	1.PRODUCTION POWE		KYAWC-DELAPLAIN BOOSTER	KU	158	449	292	223	623	1,196	504
120201	51510000	1.PRODUCTION POWE		KYAWC-HALL TANK & BOOSTER	KU	588	554	473	583	558	613	569
120201	51510000	1.PRODUCTION POWE		KYAWC-HALL TANK & BOOSTER KYAWC-HUME ROAD TANK & BOOSTER	KU KU	3,559	4,564	4/3 4,181	3,588	4,062	2,845	4,170
120201	51510000	1.PRODUCTION POWE	-	KYAWC-HOME ROAD TANK & BOOSTER KYAWC-LEESTOWN BOOSTER STATION				4,181	3,588 44	4,062	2,845 45	•
120201	51510000	1.PRODUCTION POWE		KYAWC-LEESTOWN BOOSTER STATION KYAWC-MALLARD POINT WATER PUMP		36	30	306		90		33 37
120201	51510000	1.PRODUCTION POWE		KYAWC-MALLARD POINT WATER PUMP KYAWC-MERCER ROAD TANK & BOOST	OWEN ELECTRIC COOPERATIVE INC				242		(76)	37
	51510000	1.PRODUCTION POWE		KYAWC-MERCER ROAD TANK & BOOST KYAWC-MOUNT HOREB BOOSTER	KU	1,057	1,306	1,173	562	1,232	685	1,019
120201		1.PRODUCTION POWE		KYAWC-MOUNT HOREB BOOSTER KYAWC-NEWTOWN BOOSTER STATION	KU	58	63	1,020	348 623	(348)	91	129
120201	51510000					1,208	923	1,920		1,118	1,113	1,118
120201	51510000	1.PRODUCTION POWER	-	KYAWC-PARKERS MILL TANK & BOOS	KU	4,427	3,518	4,339	2,933	3,271	2,189	3,161
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-RUSSELL CAVE RD PUMP STA	KU	349	435	451	443	420	459	458
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-SADIEVILLE TANK	KU	165	164	150	143	130	129	123

14,398

22,796

26,843

4,131

25,072

120201

51510000 1.PRODUCTION POWER Electricity KYAWC-WOODLAKE BOOSTER

				Profit Center	E1202	E120201_CEN-Production							
						January	February	March	April	May	J	une Jul	у
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-YORK ST TANK & BOOSTER	KU	1,14	1,600		1,065	818	1,196	865	199
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Discr. Power Accrual		3 (3)		(14)	24	4	(11)	(0)
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EE - April 2014	-	-		-	-	3,625	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - July 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - June 2014	-	-		-	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - September 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP - December 2013	1,04	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP UGRLT - January 2014	-	1,048		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - February 2014	-	-		3,625	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - October 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY UGRLT EEDP - November 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	March 2014 KY EEDP	-	-		-	3,625	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Power Accrual Adjustment	80,44	26,920	(6	51,104)	2,468	102,178	(73,357)	(17,266)
120201	51510000	1.PRODUCTION POWER	R N/A	OTHER	Sales Tax EE - April 2014	-	-		-	-	6,381	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - August 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - December 2013	6,38			-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - February 2014	-	-		6,381	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - January 2014	-	6,381		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - July 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - March 2014	-	-		-	6,381	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - May 2014	-	-		-	-	-	6,381	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - November 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - October 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - September 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EEDP - June 2014	-	-		-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - August 2014	-	-		-	-	-	-	-
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - May 2014	-	-		-	-	-	3,625	-
120201	51510000 T	1.PRODUCTION POWER	N/A	OTHER		0 125,39	80,788		2,193	40,594	143,920	(40,085)	40,335
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER		0 -	-	2	29,027	-	-	-	-
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016000	-	-		(906)	-	-	-	-
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016018	-	-		(504)	-	-	-	-
120201	51520000 T	2.PRODUCTION FUEL	N/A	OTHER		0 -	-	2	7,617	-	-	-	-
120201 Total	51520000 T	2.PRODUCTION FUEL	N/A	OTHER		0 125,39	80,788	2	9,809	40,594	143,920	(40,085)	40,335

					Profit Center	E1202						
							•					TOTAL
						Current 2015 Budget	\$49,726	\$53,796	\$44,211	\$43,796	\$44,211	\$566,5
						2016 Power budget	\$64,687	\$61,405	\$53,568	\$66,201	\$58,605	\$702,20
						2016 System Delivery	1	1	1	1	1	1
					2014 Normaliz	zed Power With Global Adjustments per TGAL	64,687.31	61,404.52	53,567.74	66,201.03	58,605.38	58,521.9
					201	4 Normalized Power With Global Adjustments	\$64,687	\$61,405	\$53,568	\$66,201	\$58,605	\$702,2
						TOTAL GLOBAL ADJUSTMENT	\$9,687	\$8,404	\$568	\$13,201	\$5,605	\$70,2
		GLOBAL AS	SUMPTIONS	S		OWEN ELECTRIC COOPERATIVE INC	\$1	\$4	\$2	\$1	\$4	\$
					15.5%		\$9,686	\$8,401	\$565	\$13,199	\$5,601	\$70,2
						OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
					2.0%	CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
						2014 BY VENDOR	\$55,000	\$53,000	\$53,000	\$53,000	\$53,000	\$632,0
						OWEN ELECTRIC COOPERATIVE INC	\$32	\$107	\$70	\$43	\$117	\$1,1
						KU	\$62,491	\$54,197	\$3,646	\$85,155	\$36,135	\$453,0
						OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0 \$0	
						CLARK ENERGY OTHER	\$0 -\$7,523	\$0 \$1.304	\$0 \$49,284	\$0 -\$32,197	\$0 \$16,748	ć177 T
						OTHER	-\$7,523	-\$1,304	\$49,284	-\$32,197	\$16,748	\$177,7
					2014	Normalized Power Cost per 1000 Gallons						\$52,666.6
						2014 <u>NET</u> System Delivery	1	1	1	1	1	
					wer Expense for:	E120201_CEN-Production	\$55,000	\$53,000	\$53,000	\$53,000	\$53,000	\$632,0
	51510000	TOTAL PRODUCTION ELEC	TRIC EXPEN	ISES WITH ADJUSTMENTS		OWEN ELECTRIC COOPERATIVE INC	\$32	\$107	\$70	\$43	\$117	\$1,1
						KU	\$62,491	\$54,197	\$3,646	\$85,155	\$36,135	\$453,0
						OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
						CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
	F450000					OTHER	-\$7,523	-\$1,304	\$49,284	-\$32,197	\$16,748	\$150,1
	51520000	TOTAL PRODUCTION GAS	EXPENSES V	WITH ADJUSTMENTS		OTHER	\$0	\$0	\$0	\$0	\$0	\$27,6
listorical Cos	t Normalizati	on:										
-example	51510000	1.PRODUCTION POWER	Electricity	All Boosters		KU	-\$26,844	-\$44,080	-\$87,340	\$9,220	-\$61,785	-\$631,5
	51510000	1.PRODUCTION POWER	Electricity	All Boosters		ки	\$55,000	\$53,000	\$53,000	\$53,000	\$53,000	\$632,0
	TUAL EX											
Cost Center			Service	FACILITY			<u> </u>					Grand Tota
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-BRIAR HILL BOOS	TER	KU	3,757	3,591	2,072	3,189	3,110	32,2

Cost Center	Account	Account Description	Service	FACILITY	Vendor	8	9	10	1	1 12		Grand Total
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-BRIAR HILL BOOSTER	KU		3,757	3,591	2,072	3,189	3,110	32,239
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-BURTON PIKE SUMP PUMP	OWEN ELECTRIC COOPERATIVE INC		0	50	27	22	31	310
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-CLAYS MILL ROAD TANK & B	KU		5,006	5,213	8,701	2,914	9,044	74,979
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-COX ST TANKS & BOOSTER	KU		932	391	1,464	1,097	1,681	12,340
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-DELAPLAIN BOOSTER	KU		(215)	929	211	276	402	5,048
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-HALL TANK & BOOSTER	KU		479	562	567	455	609	6,608
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-HUME ROAD TANK & BOOSTER	KU		3,350	2,396	3,993	3,455	5,242	45,406
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-LEESTOWN BOOSTER STATION	KU		46	42	45	40	55	503
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MALLARD POINT WATER PUMP	OWEN ELECTRIC COOPERATIVE INC		31	58	43	20	86	839
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MERCER ROAD TANK & BOOST	KU		760	766	(32)	(321)	240	8,446
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MOUNT HOREB BOOSTER	KU		91	116	95	96	79	1,839
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-NEWTOWN BOOSTER STATION	KU		(254)	1,368	202	327	2,492	12,157
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-PARKERS MILL TANK & BOOS	KU		2,131	2,334	3,048	2,682	3,490	37,522
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-RUSSELL CAVE RD PUMP STA	KU		415	416	446	391	844	5,526
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-SADIEVILLE TANK	KU		0	248	137	(13)	317	1,693
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-WOODLAKE BOOSTER	KU		16,820	26,069	16,129	9,015	16,931	198,964

				Profit Center	E1202	_					
						August	September	October	November	December	TOTAL
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-YORK ST TANK & BOOSTER	KU	1,019	835	908	(666)	384	9,369
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Discr. Power Accrual	0	(3)	(6)	4	(2)	(5)
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EE - April 2014	-	-	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - July 2014	3,625	-	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - June 2014	-	-	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - September 2014	-	-	3,625	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP - December 2013	-	-	-	-	-	1,048
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP UGRLT - January 2014	-	-	-	-	-	1,048
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - February 2014	-	-	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - October 2014	-	-	-	1,799	-	1,799
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY UGRLT EEDP - November 2014	-	-	-	-	1,799	1,799
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	March 2014 KY EEDP	-	-	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Power Accrual Adjustment	(17,529)	(11,307)	39,285	(37,167)	11,785	45,347
120201	51510000	1.PRODUCTION POWER	R N/A	OTHER	Sales Tax EE - April 2014	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - August 2014	-	6,381	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - December 2013	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - February 2014	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - January 2014	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - July 2014	6,381	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - March 2014	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - May 2014	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - November 2014	-	-	-	-	3,167	3,167
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - October 2014	-	-	-	3,167	-	3,167
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - September 2014	-	-	6,381	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EEDP - June 2014	-	-	-	-	-	6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - August 2014	-	3,625	-	-	-	3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - May 2014	-	-	-	-	-	3,625
120201	51510000 1	c 1.PRODUCTION POWER	N/A	OTHER		0 26,844	44,080	87,340	(9,220)	61,785	603,969
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER		0 -	-	-	-	-	29,027
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016000	-	-	-	-	-	(906)
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016018	-	-	-	-	-	(504)
120201	51520000 1	c 2.PRODUCTION FUEL	N/A	OTHER		0 -	-	-	-	-	27,617
120201 Total	51520000 1	c 2.PRODUCTION FUEL	N/A	OTHER		0 26,844	44,080	87,340	(9,220)	61,785	631,586

Profit Center

E1202

Current 2015 Budget 2016 Power budget 2016 System Delivery

2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments

TOTAL GLOBAL ADJUSTMENT

3.5% OWEN ELECTRIC COOPERATIVE INC

15.5% KU

3.5% OWEN ELECTRIC COOPERATIVE

2.0% CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC

OWEN ELECTRIC COOPERATIVE

CLARK ENERGY

OTHER

2014 Normalized Power Cost per 1000 Gallons

2014 NET System Delivery

				Total Adjusted 2014 Pol	ver Expense for	E120201_CEN-Production	
	51510000	TOTAL PRODUCTION ELE	CTRIC EXPEN	ISES WITH ADJUSTMENTS		OWEN ELECTRIC COOPERATIVE INC	
						KU	
						OWEN ELECTRIC COOPERATIVE	
						CLARK ENERGY	
						OTHER	
	51520000	TOTAL PRODUCTION GA	S EXPENSES V	WITH ADJUSTMENTS		OTHER	
Historical Cost	t Normalizatio	on:					
-example	51510000	1.PRODUCTION POWER	Electricity	All Boosters		KU	
	51510000	1.PRODUCTION POWER	Electricity	All Boosters		KU	

2014 ACTUAL EXPENSE

Cost Center	Account	Account Description	Service	FACILITY	Vendor
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-BRIAR HILL BOOSTER	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-BURTON PIKE SUMP PUMP	OWEN ELECTRIC COOPERATIVE INC
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-CLAYS MILL ROAD TANK & B	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-COX ST TANKS & BOOSTER	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-DELAPLAIN BOOSTER	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-HALL TANK & BOOSTER	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-HUME ROAD TANK & BOOSTER	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-LEESTOWN BOOSTER STATION	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-MALLARD POINT WATER PUMP	OWEN ELECTRIC COOPERATIVE INC
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-MERCER ROAD TANK & BOOST	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-MOUNT HOREB BOOSTER	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-NEWTOWN BOOSTER STATION	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-PARKERS MILL TANK & BOOS	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-RUSSELL CAVE RD PUMP STA	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-SADIEVILLE TANK	KU
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-WOODLAKE BOOSTER	KU

GLOBAL ASSUMPTIONS

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Profit Center	E1202
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120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-YORK ST TANK & BOOSTER	KU	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Discr. Power Accrual	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EE - April 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - July 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - June 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - September 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP - December 2013	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP UGRLT - January 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - February 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - October 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY UGRLT EEDP - November 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	March 2014 KY EEDP	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Power Accrual Adjustment	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - April 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - August 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - December 2013	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - February 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - January 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - July 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - March 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - May 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - November 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - October 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - September 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EEDP - June 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - August 2014	
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - May 2014	
120201	51510000 To	1.PRODUCTION POWER	N/A	OTHER		0
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER		0
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016000	
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016018	
120201	51520000 To	2.PRODUCTION FUEL	N/A	OTHER		0
120201 Total	51520000 To	2.PRODUCTION FUEL	N/A	OTHER		0

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						Comprehensive ID No_Project	Comprehensive ID No_Project	No_Project	No_Project	No_Project
						Plan_PreClose Working	Plan_PreClose Working	Plan_PreClose Working	Plan_PreClose Working	Plan_PreClose Working
						2016	2016	2016	2016	2016
						Total Movements		Total Movements	Total Movements	Total Movements
						TradingPartner Jan	TradingPartner Feb	TradingPartner Mar	TradingPartner	TradingPartner May
E12 I	E12 IC	E12	E12 IC Intercompany Elims	System delivery	E12 IC Intercompany Elims	Jaii	0	C	Apr 0	•
E1201	E120100			System delivery	E120100_KY CORP-BS/OH	0	0	C	0	0
E1201	E120103	E12	E120103_KY CORP-Customer_Service	System delivery	E120103_KY CORP-Customer_Service	0	0	C	0	0
E1201			-	System delivery	E120105_KY CORP-Admin & Gen	0	-	C	-	0
E1201	E120107		_	System delivery	E120107_KY CORP-Finance	0	-	C	-	-
E1201 E1201	E120112 E120113		_	System delivery	E120112_CORP-Rates & Revenue	0		C		
E1201				System delivery System delivery	E120113_KY CORP-Info_Systems E120114_KY CORP-Engineering		0	0		ŭ
E1201	E120115			System delivery	E120115_KY CORP-Legal	0	0	C) 0	-
E1201	E120117		- "	System delivery	E120117_KY CORP-Water Quality	0	0	C	0	0
E1201	E120118	E12	E120118_KY CORP-Human Res	System delivery	E120118_KY CORP-Human Res	0	0	C	0	0
E1201	E120119			System delivery	E120119_KY CORP-Risk Mgmt	0	0	C		•
E1201	E120120		_	System delivery	E120120_KY CORP-Bus Dev	0	0	C	-	
E1201 E1201	E120121 E120122		E120121_KY CORP-Com Relations E120122_KY CORP-Government_Rela	System delivery	E120121_KY CORP-Com Relations	0	ū	C		0
E1201	E120122			System delivery	E120122_KY CORP-Government_Relations E120125 KY CORP-Ext Affairs	0	ū	0	-	0
E1201	E1201BT		E1201BT KY CORP-Business Transfo		E1201BT KY CORP-Business Transformation	0	0	C	-	
E12_I	E12_Inp			System delivery	E12_Input_KY Input	0	0	C	0	0
E1202	E120200	E12	E120200_CEN-BS/OH	System delivery	E120200_CEN-BS/OH	0	0	C	0	0
E1202	E120201			System delivery	E120201_CEN-Production	0	0	C	-	0
E1202	E120203		_	System delivery	E120203_CEN-Cust Service	0		C		0
E1202 E1202	E120205 E120206			System delivery	E120205_CEN-Admin & Gen	1006381.093		1082796.8		1167331.71 0
E1202			_	System delivery System delivery	E120206_CEN-Field Services E120214 CEN-Engineering	0	-	0	-	
E1202	E120214			System delivery	E120216 CEN-Maint Services	0	-	C	-	-
E1202			_	System delivery	E120217_CEN-Water Quality	0	0	C	0	0
E1202	E120250	E12	E120250_CEN-Kentucky River St	System delivery	E120250_CEN-Kentucky River St	0	0	C	0	0
E1202	E120251		-	System delivery	E120251_CEN-Richmond Road St	0	-	C	-	-
E1202			-	System delivery	E120252_CEN-Pool III WTP	0	-	C	-	-
E1202	E120261		_	System delivery	E120261_MILL-Production	0	ū	0	-	-
E1202 E1230	E120266 E123000			System delivery System delivery	E120266_MILL-Field Services E123000 NRTH-BS/OH	0	ū	0		•
E1230	E123001			System delivery	E123001_NRTH-Production	0	-	C	-	
E1230	E123003			System delivery	E123003_NRTH-Cust Service	0	0	C		
E1230	E123005	E12	E123005_NRTH-Admin & Gen	System delivery	E123005_NRTH-Admin & Gen	0	0	C	0	0
E1230	E123006		-	System delivery	E123006_NRTH-Field Services	0	0	C	-	
E1230	E123014			System delivery	E123014_NRTH-Engineering	0	ū	0		•
E1230 E1231	E123017 E123100			System delivery System delivery	E123017_NRTH-Water Quality E123100 ELK-BS/OH	0	0	C		-
E1231	E123100		_	System delivery	E123103 ELK-Cust Service	0	ū	0		•
E1231	E123105		_	System delivery	E123105_ELK-Admin & Gen	0	0	C	0	
E1231				System delivery	E123106_ELK-Field Services	0	0	C	0	0
E1232	E123200	E12	E123200_OWN-BS/OH	System delivery	E123200_OWN-BS/OH	0	0	C	0	•
E1232	E123201		_	System delivery	E123201_OWN-Production	0	-	C		
E1232	E123203			System delivery	E123203_OWN-Cust Service	0	-	C		•
E1232 E1232	E123205 E123206			System delivery System delivery	E123205_OWN-Admin & Gen E123206_OWN-Field Services	0	-	0	-	-
E1232	E123200		-	System delivery	E123300 OWNWW-BS/OH	0	· ·	0		ŭ
E1233	E123301		_	System delivery	E123301_OWNWW-Treatment	0	-	C	-	
E1233	E123303			System delivery	E123303_OWNWW-Cust Service	0	0	C	0	0
E1233	E123305		_	System delivery	E123305_OWNWW-Admin & Gen	0	0	C	-	-
E1233	E123306		-	System delivery	E123306_OWNWW-Field Services	0	-	0	-	
E1250	E125000			System delivery	E125000_RWWW-BS/OH	0	ū	C		ŭ
E1250	E125001	E12	E125001_RWWW-Treatment	System delivery	E125001_RWWW-Treatment	U	0	C	0	0

				No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	No_Project Plan_PreClose Working 2016 Total Movements TradingPartner
E1250	E125003 E12 E125003 RWWW-Cust Service	System delivery	E125003 RWWW-Cust Service	Jan o	Feb	Mar	Apr	May
	-		=	0	0	0	0	0
E1250	E125005 E12 E125005_RWWW-Admin & Gen	System delivery	E125005_RWWW-Admin & Gen	U	U	Ü	U	U
E1250	E125006 E12 E125006_RWWW-Field Services	System delivery	E125006_RWWW-Field Services	0	0	0	0	0
E1250	E125014 E12 E125014_RWWW-Engineering	System delivery	E125014_RWWW-Engineering	0	0	0	0	0
E1250	E125017 E12 E125017_RWWW-Water Quality	System delivery	E125017_RWWW-Water Quality	0	0	0	0	0
E1260	E126000 E12 E126000 MILLWW-BS/OH	System delivery	E126000 MILLWW-BS/OH	0	0	0	0	0
E1260	E126001 E12 E126001 MILLWW-Treatment	System delivery	E126001 MILLWW-Treatment	0	0	0	0	0
E1260	E126003 E12 E126003 MILLWW-Cust Service	System delivery	E126003 MILLWW-Cust Service	0	0	0	0	0
E1260	E126005 E12 E126005 MILLWW-Admin & Gen	System delivery	E126005 MILLWW-Admin & Gen	0	0	0	0	0
E1260	E126006 E12 E126006 MILLWW-Field Services	System delivery	E126006 MILLWW-Field Services	0	0	0	0	0
E12G	E12G Ke E12 E12G Kentucky Growth	System delivery	E12G Kentucky Growth	0	0	0	0	0
E120_	E12 Ken E12 E12 Kentucky American	System delivery	E12 Kentucky American	1006381.093	985559.5073	1082796.8	1019587.335	1167331.71
E12	E12_Neii E12 E12_Neillucky American	system delivery	E12_Kentucky American	1000381.093	303559.5075	1082/90.8	1019367.333	110/331./1

					Comprehensive ID					
					No_Project	No_Project	No_Project	No_Project	No_Project	
					Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose	
					Working	Working	Working	Working	Working	
					2016	2016	2016	2016	2016	
					Total Movements					
					TradingPartner	TradingPartner	TradingPartner	TradingPartner	TradingPartner	
					Jun	Jul	Aug	Sep	Oct	
E12_I	E12_IC_	E12 E12_IC_Intercompany Elims	System delivery	E12_IC_Intercompany Elims	0	-			-	
E1201	E120100	E12 E120100_KY CORP-BS/OH	System delivery	E120100_KY CORP-BS/OH	0		C			
E1201	E120103	E12 E120103_KY CORP-Customer_Service		E120103_KY CORP-Customer_Service	0		(•	
E1201	E120105	E12 E120105_KY CORP-Admin & Gen	System delivery	E120105_KY CORP-Admin & Gen	0	-	(-	
E1201	E120107	E12 E120107_KY CORP-Finance	System delivery	E120107_KY CORP-Finance	0	-	(-	
E1201	E120112	E12 E120112_CORP-Rates & Revenue	System delivery	E120112_CORP-Rates & Revenue	0		(
E1201 E1201	E120113 E120114	E12 E120113_KY CORP-Info_Systems E12 E120114 KY CORP-Engineering	System delivery System delivery	E120113_KY CORP-Info_Systems E120114_KY CORP-Engineering	u O		(,	•	
E1201	E120114 E120115	E12 E120114_KY CORP-Engineering	System delivery	E120114_KY CORP-Engineering E120115 KY CORP-Legal	0		(•	
E1201	E120113	E12 E120113_K1 CORP-Legal E12 E120117 KY CORP-Water Quality	System delivery	E120117_KY CORP-Water Quality	0	-	(-	
E1201	E120117	E12 E120118 KY CORP-Human Res	System delivery	E120117_Kt CORP-Human Res	0	·		,		
E1201	E120118	E12 E120119_KY CORP-Risk Mgmt	System delivery	E120119_KY CORP-Risk Mgmt	0	-	(
E1201	E120113		System delivery	E120120 KY CORP-Bus Dev	0		(•	
E1201	E120121	E12 E120121 KY CORP-Com Relations	System delivery	E120121 KY CORP-Com Relations	0	-	(-	
E1201		E12 E120122 KY CORP-Government Rel		E120122 KY CORP-Government Relations	0	-	(-	
E1201	E120125	E12 E120125 KY CORP-Ext Affairs	System delivery	E120125 KY CORP-Ext Affairs	0	0) 0	0	
E1201	E1201BT	E12 E1201BT KY CORP-Business Transfo		E1201BT KY CORP-Business Transformation	0	0) 0	0	
E12 I	E12 Inp	E12 E12 Input KY Input	System delivery	E12 Input KY Input	0	0	C) 0	0	
E1202	E120200	E12 E120200_CEN-BS/OH	System delivery	E120200_CEN-BS/OH	0	0	C) 0	0	
E1202	E120201	E12 E120201 CEN-Production	System delivery	E120201_CEN-Production	0	0	() 0	0	
E1202	E120203	E12 E120203 CEN-Cust Service	System delivery	E120203 CEN-Cust Service	0	0	C) 0	0	
E1202	E120205	E12 E120205 CEN-Admin & Gen	System delivery	E120205 CEN-Admin & Gen	1245402.826	1371688.635	1287294.467	1152032.175	1153548.373	
E1202	E120206	E12 E120206_CEN-Field Services	System delivery	E120206_CEN-Field Services	0	0	C	0	0	
E1202	E120214	E12 E120214_CEN-Engineering	System delivery	E120214_CEN-Engineering	0	0	C) 0	0	
E1202	E120216	E12 E120216_CEN-Maint Services	System delivery	E120216_CEN-Maint Services	0	0	C) 0	0	
E1202	E120217	E12 E120217_CEN-Water Quality	System delivery	E120217_CEN-Water Quality	0	0	C	0	0	
E1202	E120250	E12 E120250_CEN-Kentucky River St	System delivery	E120250_CEN-Kentucky River St	0	0	C	0	0	
E1202	E120251	E12 E120251_CEN-Richmond Road St	System delivery	E120251_CEN-Richmond Road St	0	0	C	0	0	
E1202	E120252	E12 E120252_CEN-Pool III WTP	System delivery	E120252_CEN-Pool III WTP	0	0	C	0	0	
E1202	E120261	E12 E120261_MILL-Production	System delivery	E120261_MILL-Production	0		(-	
E1202	E120266		System delivery	E120266_MILL-Field Services	0		(,		
E1230	E123000	E12 E123000_NRTH-BS/OH	System delivery	E123000_NRTH-BS/OH	0	-	C		-	
E1230	E123001	E12 E123001_NRTH-Production	System delivery	E123001_NRTH-Production	0	-	C			
E1230	E123003	E12 E123003_NRTH-Cust Service	System delivery	E123003_NRTH-Cust Service	0		(-	
E1230	E123005	E12 E123005_NRTH-Admin & Gen	System delivery	E123005_NRTH-Admin & Gen	0		(•	
E1230	E123006	E12 E123006_NRTH-Field Services	System delivery	E123006_NRTH-Field Services	0	-	(-	
E1230	E123014	E12 E123014_NRTH-Engineering	System delivery	E123014_NRTH-Engineering	0	·	(
E1230 E1231	E123017 E123100	E12 E123017_NRTH-Water Quality	System delivery	E123017_NRTH-Water Quality	0	-	(-	
E1231		E12 E123100_ELK-BS/OH	System delivery	E123100_ELK-BS/OH	0	·	(
E1231	E123103 E123105	E12 E123103_ELK-Cust Service E12 E123105_ELK-Admin & Gen	System delivery System delivery	E123103_ELK-Cust Service E123105_ELK-Admin & Gen	0	-	(-	
E1231	E123105		System delivery	E123105_ELK-Admin & Gen	0	-	(-	
E1232	E123200	E12 E123200 OWN-BS/OH	System delivery	E123200 OWN-BS/OH	0	-	(-	
E1232	E123200	E12 E123200_OWN-Production	System delivery	E123201 OWN-Production	0	·	(
E1232	E123203	E12 E123203 OWN-Cust Service	System delivery	E123203 OWN-Cust Service	0		(
E1232	E123205	E12 E123205_OWN-Admin & Gen	System delivery	E123205_OWN-Admin & Gen	0	-	(-	
E1232	E123206	E12 E123206 OWN-Field Services	System delivery	E123206_OWN-Field Services	0	-	(-	
E1233	E123300	E12 E123300 OWNWW-BS/OH	System delivery	E123300 OWNWW-BS/OH	0		(,	•	
E1233	E123301	E12 E123301_OWNWW-Treatment	System delivery	E123301_OWNWW-Treatment	0	-	(-	
E1233	E123303	E12 E123303 OWNWW-Cust Service	System delivery	E123303_OWNWW-Cust Service	0	0				
E1233	E123305	E12 E123305_OWNWW-Admin & Gen	System delivery	E123305_OWNWW-Admin & Gen	0	0) 0	0	
E1233	E123306	E12 E123306_OWNWW-Field Services	System delivery	E123306_OWNWW-Field Services	0	0	C) 0	0	
E1250	E125000	E12 E125000_RWWW-BS/OH	System delivery	E125000_RWWW-BS/OH	0	0	C) 0	0	
E1250	E125001	E12 E125001_RWWW-Treatment	System delivery	E125001_RWWW-Treatment	0	0	C) 0	0	

				Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner
				Jun	Jul	Aug	Sep	Oct
E1250	E125003 E12 E125003_RWWW-Cust Service	System delivery	E125003_RWWW-Cust Service	0	0	0	C	0
E1250	E125005 E12 E125005_RWWW-Admin & Gen	System delivery	E125005_RWWW-Admin & Gen	0	0	0	C	0
E1250	E125006 E12 E125006_RWWW-Field Services	System delivery	E125006_RWWW-Field Services	0	0	0	C	0
E1250	E125014 E12 E125014_RWWW-Engineering	System delivery	E125014_RWWW-Engineering	0	0	0	C	0
E1250	E125017 E12 E125017_RWWW-Water Quality	System delivery	E125017_RWWW-Water Quality	0	0	0	C	0
E1260	E126000 E12 E126000_MILLWW-BS/OH	System delivery	E126000_MILLWW-BS/OH	0	0	0	C	0
E1260	E126001 E12 E126001_MILLWW-Treatment	System delivery	E126001_MILLWW-Treatment	0	0	0	C	0
E1260	E126003 E12 E126003_MILLWW-Cust Service	System delivery	E126003_MILLWW-Cust Service	0	0	0	C	0
E1260	E126005 E12 E126005 MILLWW-Admin & Gen	System delivery	E126005 MILLWW-Admin & Gen	0	0	0	C	0
E1260	E126006 E12 E126006_MILLWW-Field Services	System delivery	E126006_MILLWW-Field Services	0	0	0	C	0
E12G	E12G Ke E12 E12G Kentucky Growth	System delivery	E12G Kentucky Growth	0	0	0	C	0
E12	E12_Ken E12 E12_Kentucky American	System delivery	E12_Kentucky American	1245402.826	1371688.635	1287294.467	1152032.175	1153548.373

						Comprehensive ID No_Project Plan PreClose	Comprehensive ID No_Project Plan PreClose
						Working	Working
						2016	2016
						Total Movements TradingPartner	Total Movements TradingPartner
						Nov	Dec
E12_I	E12_IC_	E12	E12_IC_Intercompany Elims	System delivery	E12_IC_Intercompany Elims	0	
E1201	E120100	E12	E120100_KY CORP-BS/OH	System delivery	E120100_KY CORP-BS/OH	0	
E1201	E120103		E120103_KY CORP-Customer_Service		E120103_KY CORP-Customer_Service	0	
E1201	E120105		E120105_KY CORP-Admin & Gen	System delivery	E120105_KY CORP-Admin & Gen	0	
E1201 E1201	E120107 E120112		E120107_KY CORP-Finance E120112 CORP-Rates & Revenue	System delivery System delivery	E120107_KY CORP-Finance E120112_CORP-Rates & Revenue	0	
E1201			E120112_CORP-Nates & Revenue E120113_KY CORP-Info_Systems	System delivery	E120112_CORP-hates & Revenue E120113_KY CORP-Info_Systems	0	
E1201	E120114		E120114_KY CORP-Engineering	System delivery	E120114_KY CORP-Engineering	0	
E1201	E120115		E120115_KY CORP-Legal	System delivery	E120115_KY CORP-Legal	0	0
E1201	E120117	E12	E120117_KY CORP-Water Quality	System delivery	E120117_KY CORP-Water Quality	0	0
E1201	E120118		E120118_KY CORP-Human Res	System delivery	E120118_KY CORP-Human Res	0	
E1201	E120119		E120119_KY CORP-Risk Mgmt	System delivery	E120119_KY CORP-Risk Mgmt	0	
E1201 E1201	E120120 E120121		E120120_KY CORP-Bus Dev E120121 KY CORP-Com Relations	System delivery System delivery	E120120_KY CORP-Bus Dev E120121 KY CORP-Com Relations	0	
E1201			E120121_KY CORP-Com Relations E120122 KY CORP-Government Rela		E120121_KY CORP-Colli Relations E120122 KY CORP-Government Relations	0	
E1201			E120125_KY CORP-Ext Affairs	System delivery	E120125_KY CORP-Ext Affairs	0	
E1201	E1201BT		E1201BT_KY CORP-Business_Transfo		E1201BT_KY CORP-Business_Transformation	0	
E12_I	E12_Inp	E12	E12_Input_KY Input	System delivery	E12_Input_KY Input	0	0
E1202	E120200		E120200_CEN-BS/OH	System delivery	E120200_CEN-BS/OH	0	
E1202	E120201		E120201_CEN-Production	System delivery	E120201_CEN-Production	0	
E1202	E120203		E120203_CEN-Cust Service	System delivery	E120203_CEN-Cust Service	0	
E1202 E1202	E120205 E120206		E120205_CEN-Admin & Gen E120206 CEN-Field Services	System delivery System delivery	E120205_CEN-Admin & Gen E120206 CEN-Field Services	993207.8363 0	
E1202	E120214		E120214_CEN-Engineering	System delivery	E120214_CEN-Engineering	0	
E1202	E120216		E120216_CEN-Maint Services	System delivery	E120216_CEN-Maint Services	0	
E1202	E120217		E120217_CEN-Water Quality	System delivery	E120217_CEN-Water Quality	0	0
E1202	E120250		E120250_CEN-Kentucky River St	System delivery	E120250_CEN-Kentucky River St	0	
E1202	E120251		E120251_CEN-Richmond Road St	System delivery	E120251_CEN-Richmond Road St	0	
E1202	E120252		E120252_CEN-Pool III WTP	System delivery	E120252_CEN-Pool III WTP	0	
E1202 E1202	E120261 E120266		E120261_MILL-Production E120266_MILL-Field Services	System delivery System delivery	E120261_MILL-Production E120266 MILL-Field Services	0	
E1230	E120200		E123000_NRTH-BS/OH	System delivery	E123000_NRTH-BS/OH	0	
E1230	E123001		E123001_NRTH-Production	System delivery	E123001_NRTH-Production	0	
E1230	E123003		E123003_NRTH-Cust Service	System delivery	E123003_NRTH-Cust Service	0	0
E1230	E123005	E12	E123005_NRTH-Admin & Gen	System delivery	E123005_NRTH-Admin & Gen	0	
E1230			E123006_NRTH-Field Services	System delivery	E123006_NRTH-Field Services	0	
E1230	E123014		E123014_NRTH-Engineering	System delivery	E123014_NRTH-Engineering	0	
E1230 E1231	E123017 E123100		E123017_NRTH-Water Quality E123100 ELK-BS/OH	System delivery System delivery	E123017_NRTH-Water Quality E123100 ELK-BS/OH	0	
E1231	E123100		E123103_ELK-Cust Service	System delivery	E123103_ELK-Cust Service	0	
E1231	E123105		E123105 ELK-Admin & Gen	System delivery	E123105 ELK-Admin & Gen	0	
E1231	E123106	E12	E123106_ELK-Field Services	System delivery	E123106_ELK-Field Services	0	0
E1232	E123200		E123200_OWN-BS/OH	System delivery	E123200_OWN-BS/OH	0	
E1232			E123201_OWN-Production	System delivery	E123201_OWN-Production	0	
E1232	E123203		E123203_OWN-Cust Service	System delivery	E123203_OWN-Cust Service	0	
E1232 E1232	E123205 E123206		E123205_OWN-Admin & Gen E123206_OWN-Field Services	System delivery System delivery	E123205_OWN-Admin & Gen E123206 OWN-Field Services	0	
E1232	E123200		E123300_OWNWW-BS/OH	System delivery	E123300_OWNWW-BS/OH	0	
E1233	E123301		E123301_OWNWW-Treatment	System delivery	E123301_OWNWW-Treatment	0	
E1233	E123303	E12	E123303_OWNWW-Cust Service	System delivery	E123303_OWNWW-Cust Service	0	
E1233	E123305		E123305_OWNWW-Admin & Gen	System delivery	E123305_OWNWW-Admin & Gen	0	
E1233			E123306_OWNWW-Field Services	System delivery	E123306_OWNWW-Field Services	0	
E1250	E125000		E125000_RWWW-BS/OH	System delivery	E125000_RWWW-BS/OH	0	
E1250	E125001	⊏12	E125001_RWWW-Treatment	System delivery	E125001_RWWW-Treatment	U	U

						Comprehensive ID No_Project Plan_PreClose Working	Comprehensive ID No_Project Plan_PreClose Working
						2016	2016
						Total Movements	Total Movements
						TradingPartner	TradingPartner
						Nov	Dec
E1250	E125003	E12	E125003_RWWW-Cust Service	System delivery	E125003_RWWW-Cust Service	0	0
E1250	E125005	E12	E125005_RWWW-Admin & Gen	System delivery	E125005_RWWW-Admin & Gen	0	0
E1250	E125006	E12	E125006_RWWW-Field Services	System delivery	E125006_RWWW-Field Services	0	0
E1250	E125014	E12	E125014_RWWW-Engineering	System delivery	E125014_RWWW-Engineering	0	0
E1250	E125017	E12	E125017_RWWW-Water Quality	System delivery	E125017_RWWW-Water Quality	0	0
E1260	E126000	E12	E126000_MILLWW-BS/OH	System delivery	E126000_MILLWW-BS/OH	0	0
E1260	E126001	E12	E126001_MILLWW-Treatment	System delivery	E126001_MILLWW-Treatment	0	0
E1260	E126003	E12	E126003_MILLWW-Cust Service	System delivery	E126003_MILLWW-Cust Service	0	0
E1260	E126005	E12	E126005_MILLWW-Admin & Gen	System delivery	E126005_MILLWW-Admin & Gen	0	0
E1260	E126006	E12	E126006_MILLWW-Field Services	System delivery	E126006_MILLWW-Field Services	0	0
E12G_	E12G_Ke	E12	E12G_Kentucky Growth	System delivery	E12G_Kentucky Growth	0	0
E12	E12 Ken	E12	E12 Kentucky American	System delivery	E12 Kentucky American	993207.8363	1051365.084

	2016 change from 2014
GLOBAL ASSUMPTIONS	

	2010 Change Holli 2014
6	3.5%
	15.5%
	3.5%
	2.0%

OWEN ELECTRIC COOPERATIVE INC

OWEN ELECTRIC COOPERATIVE

CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC

OWEN ELECTRIC COOPERATIVE

CLARK ENERGY	
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$	-
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-
\$	-

Profit Center E12	E12_Kentucky America	n	_										
	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Current 2015 Budg	et \$278,499	\$273,066	\$277,119	\$281,732	\$331,888	\$378,725	\$374,498	\$377,918	\$356,536	\$318,171	\$277,378	\$281,459	\$3,806,989
2017 Power budg	et \$243,457	\$284,263	\$326,093	\$302,227	\$307,528	\$431,110	\$436,458	\$421,543	\$389,030	\$311,681	\$305,808	\$277,745	\$4,036,944
2017 System Delive	ry 999,730	958,832	1,077,978	1,016,880	1,150,680	1,235,229	1,366,710	1,260,776	1,135,317	1,138,538	983,922	1,041,977	13,366,569
2014 Normalized Power With Global Adjustments per TG/	AL 0.236	0.291	0.303	0.294	0.265	0.347	0.318	0.332	0.339	0.273	0.309	0.269	0.299
2014 Normalized Power With Global Adjustmen		\$309,371	\$325,897	\$315,753	\$321,371	\$443,107	\$450,322	\$440,088				\$268,853	
TOTAL GLOBAL ADJUSTMEN			\$49,758	\$41,454	\$31,054	\$72,854	\$64,511	\$63,220					
3.5% OWEN ELECTRIC COOPERA		\$1	\$12	\$9	\$4	-\$2	\$2	\$1				\$4	
19.0% KU	\$20,743	\$34,237	\$45,396	\$38,145	\$29,824	\$67,722	\$59,291	\$58,209	\$56,149	\$34,439	\$47,778	\$34,787	\$526,720
6.5% OWEN ELECTRIC COOPERA	ATI \$3,141	\$4,455	\$4,350	\$3,299	\$1,226	\$5,134	\$5,218	\$5,010	\$4,177	\$3,341	\$2,607	\$3,308	\$45,267
2.0% CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014 BY VENDO	,,			\$274,299	\$290,318	\$370,253	\$385,811	\$376,868					1 - 7 7
OWEN ELECTRIC COOPERA	ATI \$29	\$24	\$329	\$267	\$117	-\$52	\$65	\$32			\$43	\$117	\$1,149
KU	\$109,174	\$180,196	\$238,927	\$200,762	\$156,968	\$356,431	\$312,056	\$306,364			\$251,461	\$183,092	
OWEN ELECTRIC COOPERA			\$66,923	\$50,761	\$18,857	\$78,985	\$80,282	\$77,074					
CLARK ENERGY	\$0			\$0	\$0	\$0	\$0	\$0					
OTHER	\$101,648	\$21,915	-\$30,039	\$22,508	\$114,375	-\$65,112	-\$6,592	-\$6,603	-\$6,005	\$42,824	-\$28,796	-\$3,348	\$156,776
2014 Normalized Power Cost per 1000 Gallor	ns \$0.217	\$0.255	\$0.256	\$0.256	\$0.240	\$0.290	\$0.272	\$0.284	\$0.289	\$0.240	\$0.259	\$0.231	\$0.259
2014 <u>NET</u> System Deliver	ry 1,197,066	1,062,925	1,077,177	1,073,543	1,210,616	1,277,143	1,417,979	1,326,707	1,223,124	1,145,862	1,014,640	999,459	14,026,241
Total Adjusted 2014 Power Expense for: E12_Kentucky American	\$259,178	\$270,678	\$276,139	\$274,299	\$290,318	\$370,253	\$385,811	\$376,868	\$353,890	\$275,556	\$262,808	\$230,754	\$3,626,550

			Profit Cente	E1202	E1202E2 (EN-Pool III WTP	_			
			Profit Cent	E1202	January	February	= March	April N	∕lay Ju	une
				Current 2015 Bu	•	-		\$59,015	\$60,451	\$82,29
				2016 Power bu				\$59,940	\$21,167	\$79,66
				2016 System Deli				194,008	219,535	235,666
				2010 System Den	very 150,7	102,533	203,004	154,006	219,333	233,000
				2014 Normalized Power With Global Adjustments per 1	TGAL 0.2797875	89 0.2987	0.3150	0.3090	0.0964	0.338
				2014 Normalized Power With Global Adjustm	ents \$63,8	99 \$60,567	\$64,728	\$63,280	\$22,269	\$82,36
				TOTAL GLOBAL ADJUSTN	IENT \$3,1	41 \$4,455	\$4,350	\$3,299	\$1,226	\$5,1
		GLOBAL ASSUMPTIO	NS 3.5	6% OWEN ELECTRIC COOPERATIVE INC		\$0 \$0	\$0	\$0	\$0	:
			19.0)% KU		\$0 \$0	\$0	\$0	\$0	
			6.5	6% OWEN ELECTRIC COOPERATIVE	\$3,1	41 \$4,455	\$4,350	\$3,299	\$1,226	\$5,1
			2.0	0% CLARK ENERGY		\$0 \$0	\$0	\$0	\$0	Ş
				2014 BY VEN				\$59,980	\$21,044	\$77,23
				OWEN ELECTRIC COOPERATIVE INC		\$0 \$0		\$0	\$0	Ş
				KU		\$0 \$0	\$0	\$0	\$0	Ş
				OWEN ELECTRIC COOPERATIVE	\$48,3			\$50,761	\$18,857	\$78,98
				CLARK ENERGY		\$0 \$0	\$0	\$0	\$0	Ş
				OTHER	\$12,4	31 -\$12,431	-\$6,544	\$9,219	\$2,187	-\$1,75
				2014 Normalized Power Cost per 1000 Gal	lons \$0.2	66 \$0.277	\$0.294	\$0.293	\$0.091	\$0.3
				2014 <u>NET</u> System Deli	very 228,3	33 202,791	205,510	204,817	230,969	243,66
			Total Adjusted 2014 Power Expense fo	_	\$60,7			\$59,980	\$21,044	\$77,23
	51510000	TOTAL PRODUCTION ELECTRIC EXPI	ENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0 \$0		\$0	\$0	Ş
				KU		\$0 \$0		\$0	\$0	\$
				OWEN ELECTRIC COOPERATIVE	\$48,3			\$50,761	\$18,857	\$78,98
				CLARK ENERGY		\$0 \$0	-	\$0	\$0	,
				OTHER	\$12,4			\$9,219	\$2,187	-\$1,75
	51520000	TOTAL PRODUCTION GAS EXPENSE	S WITH ADJUSTMENTS	OTHER		\$0 \$0	\$0	\$0	\$0	
	t Normalizati		. WANTE WENT LICKY DIVIED CTATION 2	OMEN ELECTRIC COORERATIVE	647.6	00 6407.000	¢60,000	¢22.000	ć3F 000	Ć40.04
-example	51510000	1.PRODUCTION POWER Electricity	y KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE	-\$17,0	00 -\$107,000	\$69,000	\$23,000	-\$35,000	\$40,00
	TUAL EX									
		Account Description Service	FACILITY	Vendor	1	2	3			
20252				OWEN ELECTRIC COOPERATIVE	65,3			27,761	53,857	38,98
20252		1.PRODUCTION POWER N/A	OTHER		0 -		-	-	-	-
20252		1.PRODUCTION POWER N/A	OTHER	Discr. Power Accrual	12,4			9,219	2,187	(1,75
20252		T ₁ .PRODUCTION POWER N/A	OTHER		0 77,7			36,980	56,044	37,23
252 Total	E4E40000	T. 1 DDODLICTION DOWED N/A	OTHER		0 77.7	0 462.442	(0.633)	26.000	FC 044	

77,758

163,112

(8,622)

36,980

56,044

37,235

120252 Total 51510000 Tr 1.PRODUCTION POWER N/A

Profit	t Center E1202						
		uly	August	September	October N	November D	ecember
	Current 2015 Budget	\$84,348	\$84,348	\$59,015	\$60,451	\$59,015	\$60,451
	2016 Power budget	\$83,054	\$78,880	\$59,165	\$47,978	\$44,713	\$55,104
	2016 System Delivery	260,750	240,540	216,604	217,218	187,720	198,796
	2014 Normalized Power With Global Adjustments per TGAL	0.3185	0.3279	0.2731	0.2209	0.2382	0.2772
	2014 Normalized Power With Global Adjustments	\$86,169	\$83,005	\$63,740	\$48,286	\$46,108	\$52,855
	TOTAL GLOBAL ADJUSTMENT	\$5,218	\$5,010	\$4,177	\$3,341	\$2,607	\$3,308
GLOBAL ASSUMPTIONS	3.5% OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	\$0
	19.0% KU	\$0	\$0	\$0	\$0	\$0	\$0
	6.5% OWEN ELECTRIC COOPERATIVE	\$5,218	\$5,010	\$4,177	\$3,341	\$2,607	\$3,308
	2.0% CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0
	2014 BY VENDOR	\$80,951	\$77,995	\$59,563	\$44,945	\$43,502	\$49,547
	OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	\$0
	KU	\$0	\$0	\$0	\$0	\$0	\$0
	OWEN ELECTRIC COOPERATIVE	\$80,282	\$77,074	\$64,264	\$51,405	\$40,100	\$50,893
	CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0
	OTHER	\$669	\$920	-\$4,701	-\$6,460	\$3,402	-\$1,347
	2014 Normalized Power Cost per 1000 Gallons	\$0.299	\$0.308	\$0.255	\$0.206	\$0.225	\$0.260
	2014 Normalized Fower Cost per 1000 danons	270,530	253,117	233,355	218,614	193,579	190,683
	2014 NET System Delivery	270,330	233,117	233,333	210,014	193,379	130,003
	ense for: E120252_CEN-Pool III WTP	\$80,951	\$77,995	\$59,563	\$44,945	\$43,502	\$49,547
51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	\$0
	KU	\$0	\$0	\$0	\$0	\$0	\$0
	OWEN ELECTRIC COOPERATIVE	\$80,282	\$77,074	\$64,264	\$51,405	\$40,100	\$50,893
	CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	\$0
	OTHER	\$669	\$920	-\$4,701	-\$6,460	\$3,402	-\$1,347
51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER	\$0	\$0	\$0	\$0	\$0	\$0
Historical Cost Normalization: -example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION 2	2 OWEN ELECTRIC COOPERATIVE	\$8,000	\$10,000	-\$5,000		-\$5,000	-\$10,000
		70,000	+,	+-,		4-,	+==,===
204 A ACTUAL EVENICE	_						
2014 ACTUAL EXPENSE							

Cost Center	Account	Account Description	Service	FACILITY	Vendor	7	8	9	10	11	12	
120252	51510000	1.PRODUCTION POWE	R Electricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE		72,282	67,074	69,264	51,405	45,100	60,893
120252	51510000	1.PRODUCTION POWE	R N/A	OTHER		0	-	-	-	-	-	(789)
120252	51510000	1.PRODUCTION POWE	R N/A	OTHER	Discr. Power Accrual		669	920	(4,701)	(6,460)	3,402	(558)
120252	51510000 T	1.PRODUCTION POWE	R N/A	OTHER		0	72,951	67,995	64,563	44,945	48,502	59,547
120252 Total	51510000 T	1.PRODUCTION POWE	R N/A	OTHER		0	72,951	67,995	64,563	44,945	48,502	59,547

				Profit Cent	er E1202	!			
						1	OTAL		
						Current 2015 Budget	\$786,438		
						2016 Power budget	\$702,445		
						2016 System Delivery	2,550,169	•	0.190786056
						,	_,		
					2014 Normalized Power Wit	h Global Adjustments per TGAL	0.2755		
						Power With Global Adjustments	\$737,276		
						TOTAL GLOBAL ADJUSTMENT	\$45,267		
		GLOBAL	ASSUMPTIONS	S 3.!	5% OWEN ELECTRIC COOPERATIVE INC		\$0		
					0% KU		\$0		
					5% OWEN ELECTRIC COOPERATIVE		\$45,267		
					0% CLARK ENERGY		\$0		
							**		
						2014 BY VENDOR	\$692,009		
					OWEN ELECTRIC COOPERATIVE INC		\$0		
					KU		\$0		
					OWEN ELECTRIC COOPERATIVE		\$696,414		
					CLARK ENERGY		\$0		
					OTHER		-\$4,405		
					OTHER		Ş-,-03		
					2014 Normalized P	ower Cost per 1000 Gallons	\$0.259		
					2014 Normanzeu i	2014 NET System Delivery	2,676,009		
						2014 NET System Denvery	2,676,009		
				Total Adjusted 2014 Power Expense fo	or: F120252 CFN-Pool III WTP		\$692,009	\$721,009	
	51510000	TOTAL PRODUCTION FL	ECTRIC EVDEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0	Ų721,003	
	31310000	TOTAL PRODUCTION LL	LCTRIC EXPER	SES WITH ADJOSTIVE WIS	KU		\$0		
					OWEN ELECTRIC COOPERATIVE		\$696,414		
					CLARK ENERGY		\$0,414		
					OTHER		-\$4,405		
	51520000	TOTAL PRODUCTION GA	V EADENICES I	WITH ADJUSTMENTS	OTHER		-34,403 \$0		
	31320000	TOTAL PRODUCTION GA	H3 EXPENSES V	WITH ADJUSTIVIENTS	OTHER		30		
Historical Cost	Normalizatio	n·				To the second se	\$0		
		1.PRODUCTION POWER	Flectricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE			February number inflated high by anna	arent accrual that hit in March. Corrected. In
-example	31310000	1.FRODUCTION FOWER	Liectricity	KTAWC-KENTOCKT KIVEK STATION 2	OWEN ELECTRIC COOP ERATIVE		\$0	rebruary number innated night by appo	irent accidal that hit in March. Corrected. II
							\$0 \$0		
							\$0		
							\$0 \$0		
							\$0 ¢0		
							\$0 \$0		
							\$0 \$0		
							\$0 \$0		
						<u>.</u>	ŞU		
2014 ACT	TUAL EX	PENSE							
		Account Description	Service	FACILITY	Vendor	(Grand Total		
	51510000	1.PRODUCTION POWE	R Electricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE		725,414		
		1.PRODUCTION POWE		OTHER		0	(789)		
120252	51510000	1.PRODUCTION POWE	R N/A	OTHER	Discr. Power Accrual		(3,616)		
		1.PRODUCTION POWE		OTHER		0	721,009		
120252 Total	51510000 T	1.PRODUCTION POWE	R N/A	OTHER		0	721,009		

Profit Center E1202

Current 2015 Budget 2016 Power budget 2016 System Delivery

980083.1373

2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments

TOTAL GLOBAL ADJUSTMENT

GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC

19.0% KU

6.5% OWEN ELECTRIC COOPERATIVE

2.0% CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC KU OWEN ELECTRIC COOPERATIVE

CLARK ENERGY OTHER

> 2014 Normalized Power Cost per 1000 Gallons 2014 <u>NET</u> System Delivery

	Total Adjusted 2014 Power Ex	pense for: E120252_CEN-Pool III WTP
51510000	TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC
		KU
		OWEN ELECTRIC COOPERATIVE
		CLARK ENERGY
		OTHER
51520000	TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER

Historical Cost Normalization:

-example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION 2 OWEN ELECTRIC COOPERATIVE

nproving projections for summer higher demand months.

2014 ACTUAL EXPENSE

Cost Center	Account	Account Description	Service	FACILITY	Vendor	
120252	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-KENTUCKY RIVER STATION 2	OWEN ELECTRIC COOPERATIVE	
120252	51510000	1.PRODUCTION POWER	R N/A	OTHER		0
120252	51510000	1.PRODUCTION POWER	R N/A	OTHER	Discr. Power Accrual	
120252	51510000	T-1.PRODUCTION POWER	R N/A	OTHER		0
120252 Total	51510000	T-1.PRODUCTION POWER	R N/A	OTHER		0

				Profit Center	E1202		E120251_CEN-	Richmond Road	St			
							January	February N	1arch A	pril IV	lay Ju	ine
						Current 2015 Budget		\$34,453	\$40,314	\$41,957	\$37,429	\$36,927
						2016 Power budget	\$28,245	\$37,106	\$48,541	\$41,924	\$41,029	\$43,756
						2016 System Delivery	292,768	280,791	315,683	297,790	336,973	361,733
					2014 Normalized Power With G	obal Adjustments per TGAL	0.096475253	0.1321	0.1538	0.1408	0.1218	0.1210
						er With Global Adjustments		\$41,134	\$48,505	\$44,260	\$43,166	\$45,241
					то	TAL GLOBAL ADJUSTMENT	\$5,400	\$6,568	\$7,744	\$6,940	\$6,892	\$7,223
		GLOBAL ASSU	IMPTIONS	3.5%	6 OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
				19.0%	6 KU		\$5,400	\$6,568	\$7,744	\$6,940	\$6,892	\$7,223
				6.5%	6 OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
				2.09	6 CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
						2014 BY VENDOR		\$34,566	\$40,760	\$37,319	\$36,274	\$38,018
					OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
					KU		\$28,420	\$34,566	\$40,760	\$36,528	\$36,274	\$38,018
					OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
					CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
					OTHER		\$0	\$0	\$0	\$791	\$0	\$0
						er Cost per 1000 Gallons		\$0.111	\$0.129	\$0.119	\$0.102	\$0.102
					20	014 <u>NET</u> System Delivery	350,555	311,272	315,446	314,382	354,523	374,005
				Total Adjusted 2014 Power Expense for	_		\$28,420	\$34,566	\$40,760	\$37,319	\$36,274	\$38,018
	51510000	TOTAL PRODUCTION ELECTR	RIC EXPENS	SES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$0
					KU		\$28,420	\$34,566	\$40,760	\$36,528	\$36,274	\$38,018
					OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
					CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
	F4F00000				OTHER		\$0	\$0	\$0	\$0 4=04	\$0	\$0
	51520000	TOTAL PRODUCTION GAS EX	(PENSES W	/IIH ADJUSTMENTS	OTHER		\$0	\$0	\$0	\$791	\$0	\$0
Historical Cost -example		n: 1.PRODUCTION POWER Ele	ectricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU				-\$3,000	-\$1,000		\$4,000
	51510000		-	KYAWC-RICHMOND ROAD STATION TR	KU		\$5,000		-\$6,000	-\$2,000	\$7,000	-\$4,000
	51510000				KU		, . ,		, .,	. ,	. ,	, ,
		1.PRODUCTION POWER N/	Ά	OTHER								
		2.PRODUCTION FUEL N/		OTHER		C		(8,008)	8,361			
	0.020000	Z. Nobodiidii dee		OTTEN.				(8,000)	0,501			
2014 AC Cost Center			ervice	FACILITY	Vendor		1 :	2 3	4	5	6	
120251		1.PRODUCTION POWER Ele		KYAWC-JACOBSON RESERVOIR/INTAK	KU		8,482	8,742	12,997	10,435	8,172	3,756
120251		1.PRODUCTION POWER Ele	-	KYAWC-RICHMOND ROAD STATION TR	KU		14,938	25,825	36,763	29,093	21,103	34,261
120251		1.PRODUCTION POWER N/		OTHER		C		-	-	-	-	3.,201
120251		1.PRODUCTION POWER N/		OTHER		C		34,566	49,760	39,528	29,274	38,018
120251		2.PRODUCTION FUEL N/		OTHER		0	-,	(395)	49,700	791	-	-
120251		2.PRODUCTION FUEL N/		OTHER	PTP5 Accruals - KY	·	, - -	8,403	(8,403)	791		-
120251		2.PRODUCTION FUEL N/		OTHER	r ir 3 Acciudis - Ki	0	-) -	8,008	(8,361)	- 791		
		2.PRODUCTION FUEL N/		OTHER		ſ						
		Z.I NODOG HON FUEL IN/	_	OTTIEN		U	23,420	42,574	41,399	40,319	29,274	38,018

						_					
				Profit Center	E1202	- -	A	·			
					Current 2015 Budge	-	•	September O			ecember
					Current 2015 Budge 2016 Power budge		\$37,429 \$43,960	\$36,927 \$40,125	\$38,336 \$44,471	\$41,957 \$41,896	\$42,69 \$32,50
					2016 System Delivery		369,214	332,474	333,417	288,139	305,140
					2010 System Denver	400,230	309,214	332,474	333,417	200,133	303,140
					2014 Normalized Power With Global Adjustments per TGAI	0.1142	0.1191	0.1207	0.1334	0.1454	0.106
					2014 Normalized Power With Global Adjustments		\$46,259	\$43,229	\$44,757	\$43,204	\$31,1
					TOTAL GLOBAL ADJUSTMENT	\$7,574	\$7,386	\$6,902	\$7,146	\$6,898	\$7,9
		GLOBAL A	SSUMPTION	S 3.5 %	6 OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	
				19.0%	6 KU	\$7,574	\$7,386	\$6,902	\$7,146	\$6,898	\$7,9
				6.59	6 OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
				2.09	6 CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
					2014 BY VENDOR	\$39,861	\$38,873	\$36,326	\$37,611	\$36,306	\$23,20
					OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	:
					KU	\$39,861	\$38,873	\$36,326	\$37,611	\$36,306	\$41,9
					OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
					CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
					OTHER	\$0	\$0	\$0	\$0	\$0	-\$18,7
					2014 Normalized Power Cost per 1000 Gallons	\$0.096	\$0.100	\$0.101	\$0.112	\$0.122	\$0.0
					2014 <u>NET</u> System Delivery	415,248	388,520	358,186	335,560	297,132	292,68
				Total Adjusted 2014 Power Expense for	_	\$39,861	\$38,873	\$36,326	\$37,611	\$36,306	\$23,20
	51510000	TOTAL PRODUCTION ELE	CTRIC EXPEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	\$0	\$0	\$0	\$0	\$0	
					KU	\$39,861	\$38,873	\$36,326	\$37,611	\$36,306	\$41,9
					OWEN ELECTRIC COOPERATIVE	\$0	\$0	\$0	\$0	\$0	
					CLARK ENERGY	\$0	\$0	\$0	\$0	\$0	
	E4 E00000				OTHER	\$0	\$0	\$0	\$0	\$0	-\$18,7
	51520000	TOTAL PRODUCTION GAS	S EXPENSES	WITH ADJUSTMENTS	OTHER	\$0	\$0	\$0	\$0	\$0	
istorical Cost -example	t Normalizati 51510000	on: 1.PRODUCTION POWER	Electricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU	-\$1,000	\$1,000				
	51510000		,	KYAWC-RICHMOND ROAD STATION TR	KU	-\$3,000	\$10,000	-\$5,000			
	51510000				KU	70,000	7-0,000	40,000			
	51510000	1.PRODUCTION POWER	R N/A	OTHER							
	5152000	0 2.PRODUCTION FUEL		OTHER							
014 AC	TUAL EX	(PENSE									
		Account Description	Service	FACILITY	Vendor		8 9				
0251	51510000		,	KYAWC-JACOBSON RESERVOIR/INTAK	KU	10,008	7,870	9,211	9,088	9,368	13,77
0251		1.PRODUCTION POWER	,	KYAWC-RICHMOND ROAD STATION TR	KU	33,853	20,003	32,115	28,523	26,938	28,18
0251	51510000			OTHER	(-	-	-	-	(18,75
0251		T ₁ 1.PRODUCTION POWER		OTHER	(43,861	27,873	41,326	37,611	36,306	23,20
0251	E1E20000	2 DRODUCTION FUEL	NI/A	OTHER	,						

PTP5 Accruals - KY

0

0

43,861

27,873

41,326

37,611

36,306

23,207

120251

120251

120251

51520000 2.PRODUCTION FUEL N/A

51520000 2.PRODUCTION FUEL N/A

51520000 T 2.PRODUCTION FUEL N/A

120251 Total 51520000 Tr 2.PRODUCTION FUEL N/A

OTHER

OTHER

OTHER

				Tront cente	LILUL		-			
							TOTAL			
						Current 2015 Budget	\$462,055			
						2016 Power budget	\$489,279			
						2016 System Delivery	3,914,359			
					2014 Normalized Power With	n Global Adjustments per TGAL	0.1247			
						ower With Global Adjustments				
						TOTAL GLOBAL ADJUSTMENT				
		GLOBAL	ASSUMPTION	٠	% OWEN ELECTRIC COOPERATIVE INC	TOTAL GLODAL ADJOSTINEIT	\$0			
		GEODALE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		% KU		\$84,645			
					% OWEN ELECTRIC COOPERATIVE		\$0			
					% CLARK ENERGY		\$0			
						2014 BY VENDOR	\$427,541			
					OWEN ELECTRIC COOPERATIVE INC	2014 DI VENDOR	\$ 427,341 \$0			
					KU		\$445,501			
					OWEN ELECTRIC COOPERATIVE		\$443,301			
					CLARK ENERGY		\$0			
					OTHER		-\$17,959			
					2014 Normalized Po	ower Cost per 1000 Gallons	\$0.104			
						2014 <u>NET</u> System Delivery	4,107,516			
				Total Adjusted 2014 Power Expense fo	r: E120251 CEN-Richmond Road St		\$427,541			
	51510000	TOTAL PRODUCTION EL	ECTRIC EXPEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0			
					KU		\$445,501			
					OWEN ELECTRIC COOPERATIVE		\$0			
					CLARK ENERGY		\$0			
					OTHER		-\$18,750			
	51520000	TOTAL PRODUCTION GA	AS EXPENSES	WITH ADJUSTMENTS	OTHER		\$791			
listavisal Cast	t Normalizatio						ćo		1	
-example		1.PRODUCTION POWER	Electricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU		\$0 \$0	Leveling out costs for the year	l	
-example	51510000	1.FRODUCTION FOWER	Electricity	KYAWC-RICHMOND ROAD STATION TR	KU		\$2,000	Leveling out costs for the year	l	
	51510000			KTAWO-KICHWOND KOAD STATION TK	KU		\$2,000	Leveling out costs for the year	l	
		1.PRODUCTION POWE	R N/A	OTHER	KO		\$0	Leveling out costs for the year	1	
		2.PRODUCTION FUEL		OTHER		0		Levening out costs for the year	l	
	01020000	Z.I RODOOTIOITI OLL	14//	OTTER		0	\$0		l	
							\$0		l	
							\$0		1	
							\$0		1	
2014 AC	TUAL EX	PENSE								
		Account Description	Service	FACILITY	Vendor		Grand Total			
20251	51510000	1.PRODUCTION POWE	R Electricity	KYAWC-JACOBSON RESERVOIR/INTAK	KU		111,905			
20251	51510000	1.PRODUCTION POWE	R Electricity	KYAWC-RICHMOND ROAD STATION TR	KU		331,596			
20251	51510000	1.PRODUCTION POWE	R N/A	OTHER		0	(18,750)			
20251	51510000 T	1.PRODUCTION POWE	R N/A	OTHER		0				
20251	51520000	2.PRODUCTION FUEL	N/A	OTHER		0				
20251	51520000	2.PRODUCTION FUEL	N/A	OTHER	PTP5 Accruals - KY		-			
20251	51520000 T	2.PRODUCTION FUEL	N/A	OTHER		0	438			
120251 Total	E1E20000 T	2 DRODUCTION FUEL	NI/A	OTHER		0	425 400			

425,188

E1202

Profit Center

120251 Total 51520000 T 2.PRODUCTION FUEL N/A

		Profit Center	E1202		E120250_CEN-	Kentucky Rive	er St			
					January	February	March /	April I	May J	une
				Current 2015 Budget		\$141,935	\$124,645	\$136,964	\$189,797	\$200,36
				2016 Power budget		\$139,551	\$148,862	\$140,900	\$203,596	\$230,19
				2016 System Delivery	516,232	495,114	556,637	525,088	594,178	637,836
			2014 Normalized Power Witl	n Global Adjustments per TGAL	0.230607803	0.2819	0.2674	0.2683	0.3427	0.3609
			2014 Normalized P	ower With Global Adjustments	\$142,545	\$154,700	\$148,750	\$148,750	\$214,200	\$238,00
				TOTAL GLOBAL ADJUSTMENT		\$24,700	\$23,750	\$23,750	\$34,200	\$38,00
	GLOBAL ASSUMPTIONS		OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	
		19.0%			\$22,545	\$24,700	\$23,750	\$23,750	\$34,200	\$38,00
			OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	Ş
		2.0%	CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$
				2014 BY VENDOR		\$130,000	\$125,000	\$125,000	\$180,000	\$200,00
			OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$
			KU		\$118,657	\$130,000	\$125,000	\$125,000	\$180,000	\$200,00
			OWEN ELECTRIC COOPERATIVE		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	Ş
			CLARK ENERGY OTHER		•	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	;
			OTHER		\$1,343	ŞŪ	ŞU	3 0	ŞU	ş
			2014 Normalized P	ower Cost per 1000 Gallons	\$0.194	\$0.237	\$0.225	\$0.225	\$0.288	\$0.30
				2014 <u>NET</u> System Delivery	618,127	548,861	556,220	554,343	625,124	659,47
	Total Adjusted 2	014 Power Expense for:	E120250_CEN-Kentucky River St		\$120,000	\$130,000	\$125,000	\$125,000	\$180,000	\$200,00
	51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMEN	NTS	OWEN ELECTRIC COOPERATIVE INC		\$0	\$0	\$0	\$0	\$0	\$
			KU		\$118,657	\$130,000	\$125,000	\$125,000	\$180,000	\$200,00
			OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	Ş
			CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$
			OTHER		\$0	\$0	\$0	\$0	\$0	\$
	51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS		OTHER		\$1,343	\$0	\$0	\$0	\$0	\$
	Normalization:									
-example	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY R		KU		-\$71,593	-\$130,390	-\$158,730	-\$122,564	-\$116,266	-\$297,29
	51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY R	IVER STATION T	KU		\$120,000	\$130,000	\$125,000	\$125,000	\$180,000	\$200,00
	THAT EXPENSE									
2014 AC ost Center	FUAL EXPENSE Account Account Description Service FACILITY		Vendor		1	2	3 4	4 -	5 6	
20250	Account Account Description Service FACILITY 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY	/ RIVER STATION T	KU		70,250	130,390	158,730	122,564	116,266	297,299
20250	51510000 T.PRODUCTION POWER Electricity KYAWC-KENTUCKY		NO	0		130,390	158,730	122,564	116,266	297,299
0250	51520000 2.PRODUCTION FUEL N/A OTHER			0		130,390	138,730	122,304	110,200	251,25
20250	51520000 T.2 PRODUCTION FILE N/A OTHER			0	1,343	-	-	-	-	-

0

1,343

71,593

130,390

158,730

122,564

116,266

297,299

120250

51520000 T-2.PRODUCTION FUEL N/A

120250 Total 51520000 T 2.PRODUCTION FUEL N/A

OTHER

Profit Center E1202		
July August September	October November	December
Current 2015 Budget \$202,996 \$206,416 \$206,798	\$175,172 \$132,610	0 \$134,105
2016 Power budget \$240,866 \$231,828 \$226,438	\$165,536 \$150,018	8 \$130,266
2016 System Delivery 705,729 651,028 586,245	587,909 508,069	538,047
2014 Normalized Power With Global Adjustments per TGAL 0.3413 0.3561 0.3863	0.2816 0.2953	0.2421
2014 Normalized Power With Global Adjustments \$249,900 \$243,950 \$243,950	\$166,600 \$154,700	0 \$124,950
TOTAL GLOBAL ADJUSTMENT \$39,900 \$38,950 \$38,950	\$26,600 \$24,700	0 \$19,950
GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC \$0 \$0 \$0	\$0 \$0	0 \$0
19.0% KU \$39,900 \$38,950 \$38,950	\$26,600 \$24,700	
6.5% OWEN ELECTRIC COOPERATIVE \$0 \$0 \$0	\$0 \$0	
2.0% CLARK ENERGY \$0 \$0 \$0	\$0 \$0	0 \$0
2014 BY VENDOR \$210,000 \$205,000 \$205,000	\$140,000 \$130,000	0 \$105,000
OWEN ELECTRIC COOPERATIVE INC \$0 \$0 \$0	\$0 \$0	0 \$0
KU \$210,000 \$205,000 \$205,000	\$140,000 \$130,000	0 \$105,000
OWEN ELECTRIC COOPERATIVE \$0 \$0 \$0	\$0 \$0	0 \$0
CLARK ENERGY \$0 \$0 \$0	\$0 \$0	
OTHER \$0 \$0 \$0	\$0 \$0	0 \$0
2014 Normalized Power Cost per 1000 Gallons \$0.287 \$0.299 \$0.325	\$0.237 \$0.248	8 \$0.203
2014 NET System Delivery 732,199 685,069 631,582	591,687 523,928	•
Total Adjusted 2014 Power Expense for: £120250_CEN-Kentucky River St \$210,000 \$205,000 \$205,000	\$140,000 \$130,000	
51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC \$0 \$0 \$0 \$0	\$0 \$0	
KU \$210,000 \$205,000	\$140,000 \$130,000	
OWEN ELECTRIC COOPERATIVE \$0 \$0 \$0 CLARK ENERGY \$0 \$0 \$0	\$0 \$0 \$0 \$0	-
CLARK ENERGY \$0 \$0 \$0 OTHER \$0 \$0 \$0	\$0 \$1 \$0 \$1	-
51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	-
	70 71	
Historical Cost Normalization:		
-example 51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU -\$220,126 -\$206,437 -\$144,733	-\$132,990 -\$162,939	
51510000 1.PRODUCTION POWER Electricity KYAWC-KENTUCKY RIVER STATION T KU \$210,000 \$205,000 \$205,000	\$140,000 \$130,000	0 \$105,000
2014 ACTUAL EVDENCE		
2014 ACTUAL EXPENSE Cost Center	10 11	12

Cost Center	Account	Account Description	Service	FACILITY	Vendor	7	8	9	1	10	11 1	12
120250	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-KENTUCKY RIVER STATION T	KU		220,126	206,437	144,733	132,990	162,939	104,849
120250	51510000 T	1.PRODUCTION POWE	R Electricity	KYAWC-KENTUCKY RIVER STATION T		0	220,126	206,437	144,733	132,990	162,939	104,849
120250	51520000	2.PRODUCTION FUEL	N/A	OTHER		0	-	-	-	-	-	-
120250	51520000 T	2.PRODUCTION FUEL	N/A	OTHER		0	-	-	-	-	-	-
120250 Total	51520000 T	2.PRODUCTION FUEL	N/A	OTHER		0	220,126	206,437	144,733	132,990	162,939	104,849

				Profit Cente	er E120	2	•		
							TOTAL		
						Current 2015 Budget	\$1,991,941		
						2016 Power budget		-	
						2016 System Delivery	6,902,113	•	
						2020 0/010 20	0,502,115		
						th Global Adjustments per TGAL			
					2014 Normalized	Power With Global Adjustments			
						TOTAL GLOBAL ADJUSTMENT	\$355,995		
		GLOBAL AS	SSUMPTIONS		% OWEN ELECTRIC COOPERATIVE INC		\$0		
					% KU		\$355,995		
					% OWEN ELECTRIC COOPERATIVE		\$0		
				2.0	% CLARK ENERGY		\$0		
						2014 BY VENDOR	\$1,875,000		
					OWEN ELECTRIC COOPERATIVE INC		\$0		
					KU		\$1,873,657		
					OWEN ELECTRIC COOPERATIVE		\$0		
					CLARK ENERGY		\$0		
					OTHER		\$1,343		
					2044 November 4		40.050		
					2014 Normalized F	Power Cost per 1000 Gallons	\$0.259		
						2014 <u>NET</u> System Delivery	7,242,704		
				Total Adjusted 2014 Power Expense fo	r: E120250_CEN-Kentucky River St		\$1,875,000	\$1,868,916	
	51510000	TOTAL PRODUCTION ELEC	CTRIC EXPEN	SES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC		\$0		
					ки		\$1,873,657		
					OWEN ELECTRIC COOPERATIVE		\$0		
					CLARK ENERGY		\$0		
					OTHER		\$0		
	51520000	TOTAL PRODUCTION GAS	EXPENSES V	VITH ADJUSTMENTS	OTHER		\$1,343		
Historical Cost	t Normalizatio	· · ·				;	\$0		
-example		1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T	KU				ounting for higher usage in the Summer mor
-example		1.PRODUCTION POWER	-	KYAWC-KENTUCKY RIVER STATION T	KU				ounting for higher usage in the Summer mor
	31310000	1.FRODUCTION FOWER	Liectricity	KTAWC-KENTOCKT KIVEK STATION T	KO		\$1,875,000	Leveling costs across the year and acco	diffing for fligher usage in the summer mor
							\$0		
							\$0		
							\$0		
							\$0		
							\$0		
							\$0		
2014 AC	ΤΙΙΔΙ ΕΧ	PENSE				•			
			Service	FACILITY	Vendor		Grand Total		
120250		1.PRODUCTION POWER		KYAWC-KENTUCKY RIVER STATION T	KU		1,867,573		
120250		1.PRODUCTION POWER		KYAWC-KENTUCKY RIVER STATION T	-	0	1,867,573		
120250			N/A	OTHER		0	1,343		
120250			N/A	OTHER		0	1,343		
120250 Total			N/A	OTHER		0			

Profit Center E1202

> Current 2015 Budget 2016 Power budget 2016 System Delivery

2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments

TOTAL GLOBAL ADJUSTMENT

GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC

19.0% KU

6.5% OWEN ELECTRIC COOPERATIVE

2.0% CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC

OWEN ELECTRIC COOPERATIVE CLARK ENERGY

OTHER

2014 Normalized Power Cost per 1000 Gallons 2014 NET System Delivery

				Total Adjusted 2014 Power Expense	for: E120250_CEN-Kentucky River St	
	51510000	TOTAL PRODUCTION ELE	ECTRIC EXPEN	ISES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	
					KU	
					OWEN ELECTRIC COOPERATIVE	
					CLARK ENERGY	
					OTHER	
	51520000	TOTAL PRODUCTION GA	S EXPENSES	WITH ADJUSTMENTS	OTHER	
Historical Cos	st Normalizatio	on:				
-example	51510000	1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T	KU	iths.
	51510000	1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T	KU	ıths.

2014 ACTUAL EXPENSE

Cost Center	Account	Account Description	Service	FACILITY	Vendor	
120250	51510000	1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T	KU	
120250	51510000	1.PRODUCTION POWER	Electricity	KYAWC-KENTUCKY RIVER STATION T		0
120250	51520000	2.PRODUCTION FUEL	N/A	OTHER		0
120250	51520000	2.PRODUCTION FUEL	N/A	OTHER		0
120250 Total	51520000	2.PRODUCTION FUEL	N/A	OTHER		0

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									5 I II				
					Profit Center	E120	4	E120201_CEN					
								January	February		•	•	June
							Current 2015 Budget		\$40,534 \$52,971	\$51,708	\$43,796	\$44,211	\$59,1
							2016 Power budget			\$63,914	\$59,463	\$41,736	\$77,4
							2016 System Delivery	1	1	1	1	1	
					201		h Global Adjustments per TGAL			63,913.5803	59,463.3629	41,735.6530	77,496.47
						2014 Normalized I	Power With Global Adjustments	\$42,799	\$52,971	\$63,914	\$59,463	\$41,736	\$77,4
							TOTAL GLOBAL ADJUSTMENT	-\$7,201	\$2,970	\$13,913	\$7,464	-\$11,264	\$22,
		GLOBAL A	ASSUMPTION	IS	3.5% OWEN ELECT	RIC COOPERATIVE INC		\$1	\$1	\$12	\$9	\$4	
					19.0% KU			-\$7,202	\$2,970	\$13,902	\$7,454	-\$11,268	\$22,
					6.5% OWEN ELECT	RIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	
					2.0% CLARK ENER	GY		\$0	\$0	\$0	\$0	\$0	
							2014 BY VENDOR	,	\$50,000	\$50,000	\$52,000	\$53,000	\$55,0
						RIC COOPERATIVE INC		\$29	\$24	\$329	\$267	\$117	-:
					KU			-\$37,904	\$15,630	\$73,167	\$39,234	-\$59,306	\$118,
					OWEN ELECT	RIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	
					CLARK ENER	GY		\$0	\$0	\$0	\$0	\$0	
					OTHER			\$87,874	\$34,346	-\$23,495	\$12,498	\$112,188	-\$63,
						2014 Normalized F	ower Cost per 1000 Gallons		\$50,000.220	\$50,000.370	\$51,999.560	\$52,999.650	\$54,999.
							2014 <u>NET</u> System Delivery	1	1	1	1	1	
					ower Expense for: E120201_CE			\$50,000	\$50,000	\$50,000	\$52,000	\$53,000	\$55,
	51510000	TOTAL PRODUCTION ELE	CTRIC EXPEN	NSES WITH ADJUSTMENTS		TRIC COOPERATIVE INC		\$29	\$24		\$267	\$117	-
					KU			-\$37,904	\$15,630	\$73,167	\$39,234	-\$59,306	\$118,
					OWEN ELEC	TRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	
					CLARK ENER	RGY		\$0	\$0	\$0	\$0	\$0	
					OTHER			\$87,874	\$34,346	-\$51,112	\$12,498	\$112,188	-\$63,
	51520000	TOTAL PRODUCTION GA	S EXPENSES	WITH ADJUSTMENTS	OTHER			\$0	\$0	\$27,617	\$0	\$0	
torical Cost	: Normalizatio	on:											
-example	51510000	1.PRODUCTION POWER	Electricity	All Boosters	KU			-\$125,396	-\$80,788	-\$29,809	-\$40,594	-\$143,920	\$40
	51510000	1.PRODUCTION POWER	Electricity	All Boosters	KU			\$50,000	\$50,000	\$50,000	\$52,000	\$53,000	\$55,
014 AC	TUAL EX	PENSE											
		Account Description	Service	FACILITY	Vendor			1	2	3	4	5	6
Jac Center	Account	Account Description	OCI VICE	IAVILIII	vendor				_	J	-	,	v

Cost Center	Account	Account Description	Service	FACILITY	Vendor	1	2	3	4	5	6	
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-BRIAR HILL BOOSTER	KU		2,739	2,414	2,581	590	1,714	3,217
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-BURTON PIKE SUMP PUMP	OWEN ELECTRIC COOPERATIVE INC		29	24	23	25	27	24
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-CLAYS MILL ROAD TANK & B	KU		6,943	6,559	7,353	7,837	4,169	4,616
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-COX ST TANKS & BOOSTER	KU		661	1,043	1,090	1,019	740	1,134
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-DELAPLAIN BOOSTER	KU		158	449	292	223	623	1,196
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-HALL TANK & BOOSTER	KU		588	554	473	583	558	613
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-HUME ROAD TANK & BOOSTER	KU		3,559	4,564	4,181	3,588	4,062	2,845
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-LEESTOWN BOOSTER STATION	KU		36	30	46	44	42	45
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MALLARD POINT WATER PUMP	OWEN ELECTRIC COOPERATIVE INC		-	-	306	242	90	(76)
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MERCER ROAD TANK & BOOST	KU		1,057	1,306	1,173	562	1,232	685
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MOUNT HOREB BOOSTER	KU		58	63	1,020	348	(348)	91
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-NEWTOWN BOOSTER STATION	KU		1,208	923	1,920	623	1,118	1,113
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-PARKERS MILL TANK & BOOS	KU		4,427	3,518	4,339	2,933	3,271	2,189
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-RUSSELL CAVE RD PUMP STA	KU		349	435	451	443	420	459
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-SADIEVILLE TANK	KU		165	164	150	143	130	129
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-WOODLAKE BOOSTER	KU		14,398	22,796	26,843	8,073	12,688	4,131

			Profit Cente	r E1202	E1:	20201_CEN	N-Production	-			
					Jar	nuary	February	March	April	May J	une
120201	51510000 1.PRODUCTION F	OWER Electricity	KYAWC-YORK ST TANK & BOOSTER	KU		1,146	1,600	1,065	818	1,196	865
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Discr. Power Accrual		3	(3)	(14)	24	4	(11)
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Gross Receipts EE - April 2014		-	-	-	-	3,625	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Gross Receipts EEDP - July 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Gross Receipts EEDP - June 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Gross Receipts EEDP - September 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	KY EEDP - December 2013		1,048	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	KY EEDP UGRLT - January 2014		-	1,048	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	KY Gross Receipts EEDP - February 2014		-	-	3,625	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	KY Gross Receipts EEDP - October 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	KY UGRLT EEDP - November 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	March 2014 KY EEDP		-	-	-	3,625	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Power Accrual Adjustment		80,442	26,920	(61,104)	2,468	102,178	(73,357)
120201	51510000 1.PRODUCTION	POWER N/A	OTHER	Sales Tax EE - April 2014		-	-	-	-	6,381	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - August 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - December 2013		6,381	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - February 2014		-	-	6,381	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - January 2014		-	6,381	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - July 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - March 2014		-	-	-	6,381	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - May 2014		-	-	-	-	-	6,381
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - November 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - October 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EE - September 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	Sales Tax EEDP - June 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	UGRLT EEDP - August 2014		-	-	-	-	-	-
120201	51510000 1.PRODUCTION F	OWER N/A	OTHER	UGRLT EEDP - May 2014		-	-	-	-	-	3,625
120201	51510000 Tc 1.PRODUCTION I	OWER N/A	OTHER		0	125,396	80,788	2,193	40,594	143,920	(40,085)
120201	51520000 2.PRODUCTION F	UEL N/A	OTHER		0	-	-	29,027	-	-	-
120201	51520000 2.PRODUCTION F	UEL N/A	OTHER	5000016000		-	-	(906)	-	-	-
120201	51520000 2.PRODUCTION F	UEL N/A	OTHER	5000016018		-	-	(504)	-	-	-
120201	51520000 Tc 2.PRODUCTION I	-	OTHER		0	-	-	27,617	-	-	-
120201 Total	51520000 Tc 2.PRODUCTION I	UEL N/A	OTHER		0	125,396	80,788	29,809	40,594	143,920	(40,085)

Current 2015 Budget 2016 Power budget 2016 Power budget 2016 System Delivery 1 1 1 1 1 1 2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments 2016 System Delivery 2017 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
Current 2015 Budget 2016 Power budget 2016 Power budget 2016 Power budget 2016 System Delivery \$49,726 \$49,726 \$53,796 \$44,211 \$43,796 2016 System Delivery 1 1 1 1 1 1 2014 Normalized Power With Global Adjustments per TGAL 2014 Normalized Power With Global Adjustments 66,818.8683 66,874.5112 63,301.4166 53,695.3431 69,181.4606 59,81				July	August	September	October	November	December
2016 Power budget \$66,819 \$66,875 \$63,301 \$53,695 \$69,181				•	•	•			\$44,211
2014 Normalized Power With Global Adjustments per TGAL 66,818.8683 66,874.5112 63,301.4166 53,695.3431 69,181.4606 59,81 2014 Normalized Power With Global Adjustments \$66,819 \$66,875 \$63,301 \$53,695 \$69,181			-						\$59,870
2014 Normalized Power With Global Adjustments \$66,819 \$66,875 \$63,301 \$53,695 \$69,181		2	2016 System Delivery	1	1	1	1	1	1
2014 Normalized Power With Global Adjustments \$66,819 \$66,875 \$63,301 \$53,695 \$69,181									
		2014 Normalized Power With Global A	Adjustments per TGAL	66,818.8683	66,874.5112	63,301.4166	53,695.3431	69,181.4606	59,870.1139
		2014 Normalized Power Witl	h Global Adjustments	\$66,819	\$66,875	\$63,301	\$53,695	\$69,181	\$59,870
TOTAL GLOBAL ADJUSTMENT \$11,819 \$11,874 \$10,301 \$695 \$16,181		TOTAL G	LOBAL ADJUSTMENT	\$11,819	\$11,874	\$10,301	\$695	\$16,181	\$6,870
GLOBAL ASSUMPTIONS 3.5% OWEN ELECTRIC COOPERATIVE INC \$2 \$1 \$4 \$2 \$1	GLOBAL ASSUMPTIONS	3.5% OWEN ELECTRIC COOPERATIVE INC		\$2	\$1	\$4	\$2	\$1	\$4
19.0% KU \$11,873 \$10,297 \$693 \$16,179		19.0% KU		\$11,817	\$11,873	\$10,297	\$693	\$16,179	\$6,866
6.5% OWEN ELECTRIC COOPERATIVE \$0 \$0 \$0 \$0 \$0		6.5% OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
2.0% CLARK ENERGY \$0 \$0 \$0 \$0		2.0% CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
2014 BY VENDOR \$55,000 \$53,000 \$53,000 \$53,000			2014 BY VENDOR	\$55,000	\$55,000	\$53,000	\$53,000	\$53,000	\$53,000
OWEN ELECTRIC COOPERATIVE INC \$65 \$32 \$107 \$70 \$43		OWEN ELECTRIC COOPERATIVE INC		\$65	\$32	\$107	\$70	\$43	\$117
KU \$62,195 \$62,491 \$54,197 \$3,646 \$85,155		KU		\$62,195	\$62,491	\$54,197	\$3,646	\$85,155	\$36,135
OWEN ELECTRIC COOPERATIVE \$0 \$0 \$0 \$0 \$0		OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
CLARK ENERGY \$0 \$0 \$0 \$0 \$0		CLARK ENERGY							\$0
OTHER -\$7,260 -\$7,523 -\$1,304 \$49,284 -\$32,197		OTHER		-\$7,260	-\$7,523	-\$1,304	\$49,284	-\$32,197	\$16,748
2014 Normalized Power Cost per 1000 Gallons \$54,999.580 \$55,000.040 \$53,000.230 \$53,000.190 \$53,000.470 \$53,000.500 \$55,000.040 \$53,000.04		2014 Normalized Power Co	st per 1000 Gallons	\$54,999,580	\$55,000,040	\$53,000,230	\$53,000,190	\$53,000,470	\$53,000.340
2014 NET System Delivery 1 1 1 1 1 1 1			•						1
			<u>=-</u> 0,010						
Total Adjusted 2014 Power Expense for: £120201_CEN-Production \$55,000 \$55,000 \$53,000 \$53,000 \$53,000 \$53,000	Total Adjusted 2014 P	wer Expense for: E120201_CEN-Production		\$55,000	\$55,000	\$53,000	\$53,000	\$53,000	\$53,000
51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS OWEN ELECTRIC COOPERATIVE INC \$65 \$32 \$107 \$70 \$43	51510000 TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS				\$32	\$107	\$70	\$43	\$117
KU \$62,195 \$62,491 \$54,197 \$3,646 \$85,155		KU		\$62,195	\$62,491	\$54,197	\$3,646	\$85,155	\$36,135
OWEN ELECTRIC COOPERATIVE \$0 \$0 \$0 \$0 \$0		OWEN ELECTRIC COOPERATIVE		\$0	\$0	\$0	\$0	\$0	\$0
CLARK ENERGY \$0 \$0 \$0 \$0 \$0		CLARK ENERGY		\$0	\$0	\$0	\$0	\$0	\$0
OTHER -\$7,260 -\$7,523 -\$1,304 \$49,284 -\$32,197		OTHER		-\$7,260	-\$7,523	-\$1,304	\$49,284	-\$32,197	\$16,748
51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS OTHER \$0 \$0 \$0 \$0 \$0	51520000 TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER		\$0	\$0	\$0	\$0	\$0	\$0
Historical Cost Normalization: -example 51510000 1.PRODUCTION POWER Electricity All Boosters KU -\$40,335 -\$26,844 -\$44,080 -\$87,340 \$9,220 -\$40,335 -\$26,844 -\$44,080 -\$87,340 \$9,220 -\$40,335 -\$26,844 -\$44,080 -\$87,340 \$9,220 -\$40,335 -\$40,335 -\$40,335 -\$40,335 -\$40,335 -\$40,335 -\$40,335 -\$40,080 -\$87,340 \$9,220 -\$40,080 -\$87,080 -\$		KU		-\$40,335	-\$26,844	-\$44,080	-\$87,340	\$9,220	-\$61,785
	·								
51510000 1.PRODUCTION POWER Electricity All Boosters KU \$55,000 \$53,000 \$53,000 \$53,000	51510000 1.PRODUCTION POWER Electricity All Boosters	KU		\$55,000	\$55,000	\$53,000	\$53,000	\$53,000	\$53,000
2044 A CTITAL EVERNICE	O4.4.A CTUAL EVDENCE								
2014 ACTUAL EXPENSE Control Acquiret Acquiret Acquiret Acquiret Acquiret EACH ITY Acquiret A				_					

Cost Center	Account	Account Description	Service	FACILITY	Vendor	7	8	9	10	11	12	
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-BRIAR HILL BOOSTER	KU		3,264	3,757	3,591	2,072	3,189	3,110
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-BURTON PIKE SUMP PUMP	OWEN ELECTRIC COOPERATIVE INC		28	0	50	27	22	31
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-CLAYS MILL ROAD TANK & B	KU		6,622	5,006	5,213	8,701	2,914	9,044
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-COX ST TANKS & BOOSTER	KU		1,089	932	391	1,464	1,097	1,681
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-DELAPLAIN BOOSTER	KU		504	(215)	929	211	276	402
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-HALL TANK & BOOSTER	KU		569	479	562	567	455	609
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-HUME ROAD TANK & BOOSTER	KU		4,170	3,350	2,396	3,993	3,455	5,242
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-LEESTOWN BOOSTER STATION	KU		33	46	42	45	40	55
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-MALLARD POINT WATER PUMP	OWEN ELECTRIC COOPERATIVE INC		37	31	58	43	20	86
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-MERCER ROAD TANK & BOOST	KU		1,019	760	766	(32)	(321)	240
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-MOUNT HOREB BOOSTER	KU		129	91	116	95	96	79
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-NEWTOWN BOOSTER STATION	KU		1,118	(254)	1,368	202	327	2,492
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-PARKERS MILL TANK & BOOS	KU		3,161	2,131	2,334	3,048	2,682	3,490
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-RUSSELL CAVE RD PUMP STA	KU		458	415	416	446	391	844
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-SADIEVILLE TANK	KU		123	0	248	137	(13)	317
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-WOODLAKE BOOSTER	KU		25,072	16,820	26,069	16,129	9,015	16,931

				Profit Cer	eter E1202							
						July	,	lugust :	September	October	November [December
120201	51510000 1.PRODU	JCTION POWER	Electricity	KYAWC-YORK ST TANK & BOOSTER	KU		199	1,019	835	908	(666)	384
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Discr. Power Accrual		(0)	0	(3)	(6)	4	(2)
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Gross Receipts EE - April 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Gross Receipts EEDP - July 2014		-	3,625	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Gross Receipts EEDP - June 2014		3,625	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Gross Receipts EEDP - September 2014		-	-	-	3,625	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	KY EEDP - December 2013		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	KY EEDP UGRLT - January 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - February 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - October 2014		-	-	-	-	1,799	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	KY UGRLT EEDP - November 2014		-	-	-	-	-	1,799
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	March 2014 KY EEDP		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Power Accrual Adjustment		(17,266)	(17,529)	(11,307)	39,285	(37,167)	11,785
120201	51510000 1.PRODI	UCTION POWER	R N/A	OTHER	Sales Tax EE - April 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - August 2014		-	-	6,381	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - December 2013		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - February 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - January 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - July 2014		-	6,381	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - March 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - May 2014		-	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - November 2014		-	-	-	-	-	3,167
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - October 2014		-	-	-	-	3,167	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EE - September 2014		-	-	-	6,381	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	Sales Tax EEDP - June 2014		6,381	-	-	-	-	-
120201	51510000 1.PRODU	JCTION POWER	N/A	OTHER	UGRLT EEDP - August 2014		-	-	3,625	-	-	-
120201		JCTION POWER	N/A	OTHER	UGRLT EEDP - May 2014		-	-	-	-	-	-
120201	51510000 Tc 1.PRODU	JCTION POWER	N/A	OTHER		0	40,335	26,844	44,080	87,340	(9,220)	61,785
120201		ICTION FUEL	N/A	OTHER		0	-	-	-	-	-	-
120201	51520000 2.PRODU	ICTION FUEL	N/A	OTHER	5000016000		-	-	-	-	-	-
120201		ICTION FUEL	N/A	OTHER	5000016018		-	-	-	-	-	-
120201	51520000 Tc 2.PRODU	JCTION FUEL	N/A	OTHER		0	-	-	-	-	-	-
120201 Total	51520000 Tc 2.PRODU	JCTION FUEL	N/A	OTHER		0	40,335	26,844	44,080	87,340	(9,220)	61,785

	Profit Center	E1202	_
			TOTAL
		Current 2015 Bud	get \$566,556
		2016 Power bud	get \$718,121
		2016 System Deliv	ery 12
		2014 Normalized Power With Global Adjustments per TO	AL 59,843.3924
		2014 Normalized Power With Global Adjustme	nts \$718,121
		TOTAL GLOBAL ADJUSTME	NT \$86,120
GLOBAL ASSUMPTIONS	3.5%	OWEN ELECTRIC COOPERATIVE INC	\$40
	19.0%	KU	\$86,080
	6.5%	OWEN ELECTRIC COOPERATIVE	\$0
	2.0%	CLARK ENERGY	\$0
		2014 BY VEND	OR \$632,000
		OWEN ELECTRIC COOPERATIVE INC	\$1,149
		KU	\$453,054
		OWEN ELECTRIC COOPERATIVE	\$0
		CLARK ENERGY	\$0
		OTHER	\$177,797
		2014 Normalized Power Cost per 1000 Gallo	ns \$52,666.686
		2014 <u>NET</u> System Delive	ery 12

	Total Adjusted 2014 Power Ex	pense for: E120201_CEN-Production	\$632,000
51510000	TOTAL PRODUCTION ELECTRIC EXPENSES WITH ADJUSTMENTS	OWEN ELECTRIC COOPERATIVE INC	\$1,149
		KU	\$453,054
		OWEN ELECTRIC COOPERATIVE	\$0
		CLARK ENERGY	\$0
		OTHER	\$150,180
51520000	TOTAL PRODUCTION GAS EXPENSES WITH ADJUSTMENTS	OTHER	\$27,617

						-		
Historical Cost Normalization:						\$0		
-example	51510000	1.PRODUCTION POWER	Electricity	All Boosters	KU		-\$631,586	
							\$0	
	51510000	1.PRODUCTION POWER	Electricity	All Boosters	KU		\$632,000	
							\$0	
							\$0	
							\$0	
							\$0	
							\$0	
							do	

2014 ACTUAL EXPENSE

Cost Center	Account	Account Description	Service	FACILITY	Vendor	Grand Total		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-BRIAR HILL BOOSTER	KU	32,239		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-BURTON PIKE SUMP PUMP	OWEN ELECTRIC COOPERATIVE INC	310		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-CLAYS MILL ROAD TANK & B	KU	74,979		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-COX ST TANKS & BOOSTER	KU	12,340		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-DELAPLAIN BOOSTER	KU	5,048		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-HALL TANK & BOOSTER	KU	6,608		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-HUME ROAD TANK & BOOSTER	KU	45,406		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-LEESTOWN BOOSTER STATION	KU	503		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MALLARD POINT WATER PUMP	OWEN ELECTRIC COOPERATIVE INC	839		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MERCER ROAD TANK & BOOST	KU	8,446		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-MOUNT HOREB BOOSTER	KU	1,839		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-NEWTOWN BOOSTER STATION	KU	12,157		
120201	51510000	1.PRODUCTION POWER	R Electricity	KYAWC-PARKERS MILL TANK & BOOS	KU	37,522		
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-RUSSELL CAVE RD PUMP STA	KU	5,526		
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-SADIEVILLE TANK	KU	1,693		
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-WOODLAKE BOOSTER	KU	198,964		

				Profit Cente	r E1202		
						т	OTAL
120201	51510000	1.PRODUCTION POWER	Electricity	KYAWC-YORK ST TANK & BOOSTER	KU		9,369
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Discr. Power Accrual		(5)
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EE - April 2014		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - July 2014		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - June 2014		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Gross Receipts EEDP - September 2014		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP - December 2013		1,048
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY EEDP UGRLT - January 2014		1,048
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - February 2014		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY Gross Receipts EEDP - October 2014		1,799
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	KY UGRLT EEDP - November 2014		1,799
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	March 2014 KY EEDP		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Power Accrual Adjustment		45,347
120201	51510000	1.PRODUCTION POWER	R N/A	OTHER	Sales Tax EE - April 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - August 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - December 2013		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - February 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - January 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - July 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - March 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - May 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - November 2014		3,167
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - October 2014		3,167
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EE - September 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	Sales Tax EEDP - June 2014		6,381
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - August 2014		3,625
120201	51510000	1.PRODUCTION POWER	N/A	OTHER	UGRLT EEDP - May 2014		3,625
120201	51510000 T	tc 1.PRODUCTION POWER	N/A	OTHER		0	603,969
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER		0	29,027
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016000		(906)
120201	51520000	2.PRODUCTION FUEL	N/A	OTHER	5000016018		(504)
120201 51520000 Tc 2.PRODUCTION FUEL			N/A	OTHER		0	27,617
120201 Total	51520000 T	c 2.PRODUCTION FUEL	N/A	OTHER		0	631,586

							No_	Project	Comprehensive ID No_Project	No_Project	No_Project	No_Project	
								n_PreClose rking	Plan_PreClose Working	Plan_PreClose Working	Plan_PreClose Working	Plan_PreClose Working	
							201	_	2016	2016	2016	2016	
										Total Movements	Total Movements	Total Movements	
							Trac	dingPartner	TradingPartner	TradingPartner	TradingPartner	TradingPartner	
		=					Jan	_	Feb	Mar	Apr	May	
E12_I E1201	E12_IC_ E120100			System delivery System delivery	E12_IC_Interco	MPANY Elims KY CORP-BS/OH		0	0	C	-	0	
E1201	E120100		E120100_KY CORP-Customer Service			KY CORP-Customer Service		0		0		0	
E1201				System delivery		KY CORP-Admin & Gen		0	-	C	-	0	
E1201	E120107		_	System delivery		KY CORP-Finance		0	0	C	0	0	
E1201	E120112	E12	E120112_CORP-Rates & Revenue	System delivery	E120112	CORP-Rates & Revenue		0	0	C	0	0	
E1201	E120113			System delivery		_KY CORP-Info_Systems		0	· ·	C	•	0	
E1201				System delivery		_KY CORP-Engineering		0	0	C	•	0	
E1201	E120115			System delivery		_KY CORP-Legal		0	0	C	-	0	
E1201 E1201	E120117 E120118			System delivery System delivery		_KY CORP-Water Quality KY CORP-Human Res		0	ū	0	•	0	
E1201	E120118		-	System delivery		_KY CORP-Risk Mgmt		0	0	0		0	
E1201	E120120			System delivery		KY CORP-Bus Dev		0	0	C	0	0	
E1201	E120121	E12	E120121_KY CORP-Com Relations	System delivery	E120121	_KY CORP-Com Relations		0	0	C	0	0	
E1201	E120122	E12	E120122_KY CORP-Government_Rela	System delivery	E120122	_KY CORP-Government_Relations		0	0	C	0	0	
E1201	E120125			System delivery		_KY CORP-Ext Affairs		0	ū	C	-	0	
E1201	E1201BT		E1201BT_KY CORP-Business_Transfo			_KY CORP-Business_Transformatio	n	0	-	C		0	
E12_I	E12_Inp			System delivery		t_KY Input		0	0	C	•	0	
E1202 E1202	E120200 E120201			System delivery System delivery		_CEN-BS/OH _CEN-Production		0	0		-	0	
E1202	E120201			System delivery		CEN-Cust Service		0	ū	C	-	0	
E1202	E120205		_	System delivery	· · · · · · · · · · · · · · · · · · ·	CEN-Admin & Gen		999736.093					
E1202	E120206			System delivery		CEN-Field Services		0		C		0	
E1202	E120214	E12	E120214_CEN-Engineering	System delivery	E120214	_CEN-Engineering		0	0	C	0	0	
E1202	E120216		-	System delivery		_CEN-Maint Services		0		C		0	
E1202				System delivery		_CEN-Water Quality		0	ū	C	•	0	
E1202				System delivery		_CEN-Kentucky River St		0	-	0		0	
E1202 E1202	E120251 E120252		_	System delivery System delivery		_CEN-Richmond Road St CEN-Pool III WTP		0	-		-	0	
E1202	E120232			System delivery		MILL-Production		0	-	0	-	0	
E1202	E120266		_	System delivery		MILL-Field Services		0	0	C	-	0	
E1230	E123000		_	System delivery		_ NRTH-BS/OH		0	0	C	0	0	
E1230	E123001	E12	E123001_NRTH-Production	System delivery	E123001	_NRTH-Production		0	0	C	0	0	
E1230	E123003		-	System delivery		_NRTH-Cust Service		0	· ·	C	•	0	
E1230	E123005			System delivery		_NRTH-Admin & Gen		0	ū	C	-	0	
E1230 E1230	E123006 E123014		_	System delivery		NRTH-Field Services		0	0	C	-	0	
E1230	E123014			System delivery System delivery		_NRTH-Engineering NRTH-Water Quality		0	ū	C	•	0	
E1231	E123100			System delivery		00 ELK-BS/OH		0	0	C		0	
E1231	E123103		_	System delivery		03_ELK-Cust Service		0	0	C	0	0	
E1231	E123105	E12	E123105_ELK-Admin & Gen	System delivery	E1231	05_ELK-Admin & Gen		0	0	C	0	0	
E1231			_	System delivery		06_ELK-Field Services		0	-	C		0	
E1232	E123200			System delivery		00_OWN-BS/OH		0	ū	C		0	
E1232	E123201		_	System delivery		01_OWN-Production		0	-	C		0	
E1232 E1232	E123203 E123205		-	System delivery System delivery		03_OWN-Cust Service 05 OWN-Admin & Gen		0	-	C	•	0	
E1232	E123203			System delivery		06_OWN-Field Services		0	-	0	-	0	
E1232	E123300		-	System delivery		OWNWW-BS/OH		0	· ·	C	•	0	
E1233	E123301		_	System delivery		_OWNWW-Treatment		0	-	C	-	0	
E1233	E123303			System delivery		OWNWW-Cust Service		0	0	C	0	0	
E1233	E123305	E12	E123305_OWNWW-Admin & Gen	System delivery	E123305	OWNWW-Admin & Gen		0	0	C	0	0	
E1233	E123306		-	System delivery		OWNWW-Field Services		0	-	C	-	0	
E1250	E125000			System delivery		_RWWW-BS/OH		0	ū	0	•	0	
E1250	E125001	∟ 12	E125001_RWWW-Treatment	System delivery	E125001	_RWWW-Treatment		0	0	C	0	0	

						Comprehensive ID	Comprehensive ID	Comprehensive ID	Comprehensive ID	Comprehensive ID
						No_Project	No_Project	No_Project	No_Project	No_Project
						Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose
						Working	Working	Working	Working	Working
						2016	2016	2016	2016	2016
						Total Movements	Total Movements	Total Movements	Total Movements	Total Movements
						TradingPartner	TradingPartner	TradingPartner	TradingPartner	TradingPartner
						Jan	Feb	Mar	Apr	May
E1250	E125003	E12	E125003_RWWW-Cust Service	System delivery	E125003_RWWW-Cust Service) () () (0
E1250	E125005	E12	E125005_RWWW-Admin & Gen	System delivery	E125005_RWWW-Admin & Gen) () () (0
E1250	E125006	E12	E125006_RWWW-Field Services	System delivery	E125006_RWWW-Field Services) () () (0
E1250	E125014	E12	E125014_RWWW-Engineering	System delivery	E125014_RWWW-Engineering	1) () () (0
E1250	E125017	E12	E125017_RWWW-Water Quality	System delivery	E125017_RWWW-Water Quality	1) () () (0
E1260	E126000	E12	E126000_MILLWW-BS/OH	System delivery	E126000_MILLWW-BS/OH	1) () () (0
E1260	E126001	E12	E126001_MILLWW-Treatment	System delivery	E126001_MILLWW-Treatment	1) () () (0
E1260	E126003	E12	E126003_MILLWW-Cust Service	System delivery	E126003_MILLWW-Cust Service	1) () () (0
E1260	E126005	E12	E126005_MILLWW-Admin & Gen	System delivery	E126005_MILLWW-Admin & Gen	1) () () (0
E1260	E126006	E12	E126006_MILLWW-Field Services	System delivery	E126006_MILLWW-Field Services	1) () () (0
E12G_	E12G_Ke	E12	E12G_Kentucky Growth	System delivery	E12G_Kentucky Growth	1) () () (0
E12	E12 Ken	E12	E12 Kentucky American	System delivery	E12 Kentucky American	999736.09	958837.5073	1077983.8	1016886.335	1150685.71

					Comprehensive ID					
					No Project					
					Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose	
					Working	Working	Working	Working	Working	
					2016	2016	2016	2016	2016	
					Total Movements					
					TradingPartner	TradingPartner	TradingPartner	TradingPartner	TradingPartner	
					Jun	Jul	Aug	Sep	Oct	
E12_I	E12_IC_	E12 E12_IC_Intercompany Elims	System delivery	E12_IC_Intercompany Elims	0	-			-	
E1201	E120100	E12 E120100_KY CORP-BS/OH	System delivery	E120100_KY CORP-BS/OH	0		(
E1201	E120103	E12 E120103_KY CORP-Customer_Service		E120103_KY CORP-Customer_Service	0		(•	
E1201	E120105	E12 E120105_KY CORP-Admin & Gen	System delivery	E120105_KY CORP-Admin & Gen	0	-	(-	
E1201	E120107	E12 E120107_KY CORP-Finance	System delivery	E120107_KY CORP-Finance	0	-	(-	
E1201	E120112	E12 E120112_CORP-Rates & Revenue	System delivery	E120112_CORP-Rates & Revenue	0		(
E1201 E1201	E120113 E120114	E12 E120113_KY CORP-Info_Systems E12 E120114 KY CORP-Engineering	System delivery	E120113_KY CORP-Info_Systems	u O		(,	0	
E1201	E120114 E120115	E12 E120114_KY CORP-Engineering	System delivery	E120114_KY CORP-Engineering E120115 KY CORP-Legal	0		(· ·	
E1201	E120115 E120117	E12 E120115_KY CORP-Legal E12 E120117 KY CORP-Water Quality	System delivery System delivery	E120115_KY CORP-Legal E120117_KY CORP-Water Quality	0	-	(-	
E1201	E120117	E12 E120118 KY CORP-Human Res	System delivery	E120118 KY CORP-Human Res	0	·		,	· ·	
E1201	E120118	E12 E120119_KY CORP-Risk Mgmt	System delivery	E120119_KY CORP-Risk Mgmt	0	-	(
E1201	E120119		System delivery	E120120 KY CORP-Bus Dev	0		(· ·	
E1201	E120121	E12 E120121 KY CORP-Com Relations	System delivery	E120121 KY CORP-Com Relations	0	-	(-	
E1201		E12 E120122 KY CORP-Government Rel		E120122 KY CORP-Government Relations	0		(0	
E1201	E120125	E12 E120125 KY CORP-Ext Affairs	System delivery	E120125 KY CORP-Ext Affairs	0	0) 0	0	
E1201	E1201BT	E12 E1201BT KY CORP-Business Transfo		E1201BT KY CORP-Business Transformation	0	0) 0	0	
E12 I	E12 Inp	E12 E12 Input KY Input	System delivery	E12 Input KY Input	0					
E1202	E120200	E12 E120200_CEN-BS/OH	System delivery	E120200_CEN-BS/OH	0	0) 0	0	
E1202	E120201	E12 E120201 CEN-Production	System delivery	E120201_CEN-Production	0	0	C) 0	0	
E1202	E120203	E12 E120203 CEN-Cust Service	System delivery	E120203 CEN-Cust Service	0	0	C) 0	0	
E1202	E120205	E12 E120205 CEN-Admin & Gen	System delivery	E120205 CEN-Admin & Gen	1235234.826	1366715.635	1260782.467	1135323.175	1138544.373	
E1202	E120206	E12 E120206 CEN-Field Services	System delivery	E120206 CEN-Field Services	0		C		0	
E1202	E120214	E12 E120214_CEN-Engineering	System delivery	E120214_CEN-Engineering	0	0	0) 0	0	
E1202	E120216	E12 E120216_CEN-Maint Services	System delivery	E120216_CEN-Maint Services	0	0	0) 0	0	
E1202	E120217	E12 E120217_CEN-Water Quality	System delivery	E120217_CEN-Water Quality	0	0	() 0	0	
E1202	E120250	E12 E120250_CEN-Kentucky River St	System delivery	E120250_CEN-Kentucky River St	0	0	() 0	0	
E1202	E120251	E12 E120251_CEN-Richmond Road St	System delivery	E120251_CEN-Richmond Road St	0	0	C	0	0	
E1202	E120252	E12 E120252_CEN-Pool III WTP	System delivery	E120252_CEN-Pool III WTP	0	0	C	0	0	
E1202	E120261	E12 E120261_MILL-Production	System delivery	E120261_MILL-Production	0		C		-	
E1202	E120266		System delivery	E120266_MILL-Field Services	0		(,	· ·	
E1230	E123000	E12 E123000_NRTH-BS/OH	System delivery	E123000_NRTH-BS/OH	0	-	(-	
E1230	E123001	E12 E123001_NRTH-Production	System delivery	E123001_NRTH-Production	0	-	C			
E1230	E123003	E12 E123003_NRTH-Cust Service	System delivery	E123003_NRTH-Cust Service	0		C		-	
E1230	E123005	E12 E123005_NRTH-Admin & Gen	System delivery	E123005_NRTH-Admin & Gen	0		C		· ·	
E1230	E123006	E12 E123006_NRTH-Field Services	System delivery	E123006_NRTH-Field Services	0	-	(-	
E1230	E123014	E12 E123014_NRTH-Engineering	System delivery	E123014_NRTH-Engineering	0	·	(· ·	
E1230	E123017	E12 E123017_NRTH-Water Quality	System delivery	E123017_NRTH-Water Quality	0	-	(0	
E1231	E123100	E12 E123100_ELK-BS/OH	System delivery	E123100_ELK-BS/OH	0	·	(· ·	
E1231	E123103	E12 E123103_ELK-Cust Service	System delivery	E123103_ELK-Cust Service	0	-	(-	
E1231 E1231	E123105 E123106	E12 E123105_ELK-Admin & Gen E12 E123106 ELK-Field Services	System delivery System delivery	E123105_ELK-Admin & Gen E123106 ELK-Field Services	0	-	(-	
E1231	E123100	E12 E123100_ELK-Field Services E12 E123200 OWN-BS/OH	System delivery	E123200 OWN-BS/OH	0	-	(0	
E1232	E123200	E12 E123200_OWN-B3/OH E12 E123201 OWN-Production	System delivery	E123201 OWN-Production	0	·	(-	
E1232	E123201	E12 E123201_OWN-Friduction	System delivery	E123203 OWN-Cust Service	0		(
E1232	E123205	E12 E123205_OWN-Admin & Gen	System delivery	E123205_OWN-Admin & Gen	0	-	(-	
E1232	E123206	E12 E123206 OWN-Field Services	System delivery	E123206_OWN-Field Services	0	-	(-	
E1233	E123300	E12 E123200_OWNWW-BS/OH	System delivery	E123300 OWNWW-BS/OH	0		(,	•	
E1233	E123300	E12 E123300_OWNWW-Treatment	System delivery	E123301_OWNWW-Treatment	0	-	(-	
E1233	E123303	E12 E123303 OWNWW-Cust Service	System delivery	E123303_OWNWW-Cust Service	0	-	(0	
E1233	E123305	E12 E123305 OWNWW-Admin & Gen	System delivery	E123305 OWNWW-Admin & Gen	0	-	(-	
E1233	E123306	E12 E123306 OWNWW-Field Services	System delivery	E123306 OWNWW-Field Services	0	0) 0	0	
E1250	E125000	E12 E125000 RWWW-BS/OH	System delivery	E125000 RWWW-BS/OH	0		(
E1250	E125001		System delivery	E125001 RWWW-Treatment	0	0			0	
		= '		_						

						Comprehensive ID				
						No_Project	No_Project	No_Project	No_Project	No_Project
						Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose	Plan_PreClose
						Working	Working	Working	Working	Working
						2016	2016	2016	2016	2016
						Total Movements				
						TradingPartner	TradingPartner	TradingPartner	TradingPartner	TradingPartner
						Jun	Jul	Aug	Sep	Oct
E1250	E125003	E12	E125003_RWWW-Cust Service	System delivery	E125003_RWWW-Cust Service	0	0	0	(0
E1250	E125005	E12	E125005_RWWW-Admin & Gen	System delivery	E125005_RWWW-Admin & Gen	0	0	0	(0
E1250	E125006	E12	E125006_RWWW-Field Services	System delivery	E125006_RWWW-Field Services	0	0	0	(0
E1250	E125014	E12	E125014_RWWW-Engineering	System delivery	E125014_RWWW-Engineering	0	0	0	(0
E1250	E125017	E12	E125017_RWWW-Water Quality	System delivery	E125017_RWWW-Water Quality	0	0	0	(0
E1260	E126000	E12	E126000_MILLWW-BS/OH	System delivery	E126000_MILLWW-BS/OH	0	0	C		0
E1260	E126001	E12	E126001_MILLWW-Treatment	System delivery	E126001_MILLWW-Treatment	0	0	0	(0
E1260	E126003	E12	E126003_MILLWW-Cust Service	System delivery	E126003_MILLWW-Cust Service	0	0	0	(0
E1260	E126005	E12	E126005_MILLWW-Admin & Gen	System delivery	E126005_MILLWW-Admin & Gen	0	0	0		0
E1260	E126006	E12	E126006_MILLWW-Field Services	System delivery	E126006_MILLWW-Field Services	0	0	0	(0
E12G_	E12G_Ke	E12	E12G_Kentucky Growth	System delivery	E12G_Kentucky Growth	0	0	0		0
E12	E12 Ken	E12	E12 Kentucky American	System delivery	E12 Kentucky American	1235234.826	1366715.635	1260782.467	1135323.175	1138544.373

					No_I	prehensive ID Project _PreClose	Comprehensive ID No_Project Plan_PreClose
					Wor		Working
					2016	;	2016
						l Movements	Total Movements
						ingPartner	TradingPartner Dec
E12 I	E12 IC	F12	E12 IC Intercompany Elims	System delivery	Nov E12 IC Intercompany Elims	0	0
E1201	E120100		E120100 KY CORP-BS/OH	System delivery	E120100 KY CORP-BS/OH	0	
E1201	E120103		E120103_KY CORP-Customer_Service		E120103_KY CORP-Customer_Service	0	0
E1201	E120105	E12	E120105_KY CORP-Admin & Gen	System delivery	E120105_KY CORP-Admin & Gen	0	0
E1201	E120107		E120107_KY CORP-Finance	System delivery	E120107_KY CORP-Finance	0	0
E1201	E120112		E120112_CORP-Rates & Revenue	System delivery	E120112_CORP-Rates & Revenue	0	
E1201 E1201	E120113 E120114		E120113_KY CORP-Info_Systems E120114_KY CORP-Engineering	System delivery System delivery	E120113_KY CORP-Info_Systems E120114_KY CORP-Engineering	0	
E1201	E120114 E120115		E120114_KY CORP-Lingingering	System delivery	E120114_KY CORP-Legal	0	0
E1201			E120117 KY CORP-Water Quality	System delivery	E120117_KY CORP-Water Quality	0	
E1201	E120118		E120118_KY CORP-Human Res	System delivery	E120118_KY CORP-Human Res	0	0
E1201	E120119	E12	E120119_KY CORP-Risk Mgmt	System delivery	E120119_KY CORP-Risk Mgmt	0	0
E1201	E120120		E120120_KY CORP-Bus Dev	System delivery	E120120_KY CORP-Bus Dev	0	0
E1201	E120121		E120121_KY CORP-Com Relations	System delivery	E120121_KY CORP-Com Relations	0	
E1201 E1201	E120122 E120125		E120122_KY CORP-Government_Rela		E120122_KY CORP-Government_Relations	0	
E1201 E1201	E120125 E1201BT		E120125_KY CORP-Ext Affairs E1201BT KY CORP-Business Transfo	System delivery	E120125_KY CORP-Ext Affairs E1201BT KY CORP-Business Transformation	0	
E12 I	E12 Inp		E12 Input KY Input	System delivery	E12 Input KY Input	0	
E1202	E120200		E120200_CEN-BS/OH	System delivery	E120200_CEN-BS/OH	0	
E1202	E120201		E120201_CEN-Production	System delivery	E120201_CEN-Production	0	0
E1202	E120203	E12	E120203_CEN-Cust Service	System delivery	E120203_CEN-Cust Service	0	0
E1202	E120205		E120205_CEN-Admin & Gen	System delivery	E120205_CEN-Admin & Gen	983927.8363	
E1202	E120206		E120206_CEN-Field Services	System delivery	E120206_CEN-Field Services	0	
E1202 E1202	E120214 E120216		E120214_CEN-Engineering E120216 CEN-Maint Services	System delivery System delivery	E120214_CEN-Engineering E120216 CEN-Maint Services	0	0
E1202	E120216 E120217		E120216_CEN-Water Quality	System delivery	E120216_CEN-Water Quality	0	
E1202	E120250		E120250_CEN-Kentucky River St	System delivery	E120250_CEN-Kentucky River St	0	
E1202	E120251		E120251_CEN-Richmond Road St	System delivery	E120251_CEN-Richmond Road St	0	
E1202	E120252	E12	E120252_CEN-Pool III WTP	System delivery	E120252_CEN-Pool III WTP	0	0
E1202	E120261		E120261_MILL-Production	System delivery	E120261_MILL-Production	0	
E1202	E120266		E120266_MILL-Field Services	System delivery	E120266_MILL-Field Services	0	
E1230	E123000 E123001		E123000_NRTH-BS/OH	System delivery	E123000_NRTH-BS/OH	0	0
E1230 E1230	E123001		E123001_NRTH-Production E123003_NRTH-Cust Service	System delivery System delivery	E123001_NRTH-Production E123003 NRTH-Cust Service	0	
E1230	E123005		E123005_NRTH-Admin & Gen	System delivery	E123005_NRTH-Admin & Gen	0	
E1230	E123006		E123006_NRTH-Field Services	System delivery	E123006_NRTH-Field Services	0	
E1230	E123014	E12	E123014_NRTH-Engineering	System delivery	E123014_NRTH-Engineering	0	0
E1230	E123017		E123017_NRTH-Water Quality	System delivery	E123017_NRTH-Water Quality	0	
E1231	E123100		E123100_ELK-BS/OH	System delivery	E123100_ELK-BS/OH	0	
E1231	E123103 E123105		E123103_ELK-Cust Service E123105 ELK-Admin & Gen	System delivery	E123103_ELK-Cust Service E123105_ELK-Admin & Gen	0	
E1231 E1231			E123105_ELK-Admin & Gen	System delivery System delivery	E123105_ELK-Admini & Gen E123106_ELK-Field Services	0	
E1232	E123200		E123200 OWN-BS/OH	System delivery	E123200 OWN-BS/OH	0	
E1232	E123201		E123201_OWN-Production	System delivery	E123201_OWN-Production	0	0
E1232	E123203	E12	E123203_OWN-Cust Service	System delivery	E123203_OWN-Cust Service	0	0
E1232	E123205		E123205_OWN-Admin & Gen	System delivery	E123205_OWN-Admin & Gen	0	
E1232	E123206		E123206_OWN-Field Services	System delivery	E123206_OWN-Field Services	0	
E1233 E1233	E123300 E123301		E123300_OWNWW-BS/OH E123301_OWNWW-Treatment	System delivery	E123300_OWNWW-BS/OH	0	
E1233	E123301 E123303		E123301_OWNWW-Treatment E123303_OWNWW-Cust Service	System delivery System delivery	E123301_OWNWW-Treatment E123303 OWNWW-Cust Service	0	
E1233	E123305		E123305_OWNWW-Admin & Gen	System delivery	E123305 OWNWW-Admin & Gen	0	0
E1233	E123306		E123306_OWNWW-Field Services	System delivery	E123306_OWNWW-Field Services	0	
E1250			E125000_RWWW-BS/OH	System delivery	E125000_RWWW-BS/OH	0	0
E1250	E125001	E12	E125001_RWWW-Treatment	System delivery	E125001_RWWW-Treatment	0	0

						Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner	Comprehensive ID No_Project Plan_PreClose Working 2016 Total Movements TradingPartner
						Nov	Dec
E1250	E125003	E12	E125003_RWWW-Cust Service	System delivery	E125003_RWWW-Cust Service	0	0
E1250	E125005	E12	E125005_RWWW-Admin & Gen	System delivery	E125005_RWWW-Admin & Gen	0	0
E1250	E125006	E12	E125006_RWWW-Field Services	System delivery	E125006_RWWW-Field Services	0	0
E1250	E125014	E12	E125014_RWWW-Engineering	System delivery	E125014_RWWW-Engineering	0	0
E1250	E125017	E12	E125017_RWWW-Water Quality	System delivery	E125017_RWWW-Water Quality	0	0
E1260	E126000	E12	E126000_MILLWW-BS/OH	System delivery	E126000_MILLWW-BS/OH	0	0
E1260	E126001	E12	E126001_MILLWW-Treatment	System delivery	E126001_MILLWW-Treatment	0	0
E1260	E126003	E12	E126003_MILLWW-Cust Service	System delivery	E126003_MILLWW-Cust Service	0	0
E1260	E126005	E12	E126005_MILLWW-Admin & Gen	System delivery	E126005_MILLWW-Admin & Gen	0	0
E1260	E126006	E12	E126006_MILLWW-Field Services	System delivery	E126006_MILLWW-Field Services	0	0
E12G_	E12G_Ke	E12	E12G_Kentucky Growth	System delivery	E12G_Kentucky Growth	0	0
E12	E12_Ken	E12	E12_Kentucky American	System delivery	E12_Kentucky American	983927.8363	1041983.084

State	Cost Center CC	PC	1	2	3	4	5	6	7	8	9	10	11	12	Total	% of Profit Center % of	company
KY	120201 Total 1202XX	1202	2,257	1,963	1,780	1,532	1,966	2,426	2,459	2,872	3,994	6,019	5,506	4,219	36,993		0.3% Allocate across 3 plants
KY	120250 Total 120250	1202	631,689	516,998	512,287	546,037	728,237	661,893	785,287	670,721	554,649	508,046	575,096	539,433	7,230,373	51.64%	51.5%
KY	120251 Total 120251	1202	246,640	284,770	341,600	325,060	410,900	402,290	365,460	378,005	411,920	432,870	253,240	242,430	4,095,185	29.28%	29.2%
KY	120252 Total 120252	1202	299,952	255,420	218,099	198,012	67,100	208,329	262,305	272,654	250,261	196,899	178,241	210,727	2,617,999	19.08%	18.7%
KY	123001 Total 120252	1202	16,527	3,773	3,410	2,901	2,413	2,203	2,467	2,454	2,299	2,027	2,556	2,649	45,679		0.3% Plant decommisioned, picked up by 120252
KY Total			1,197,065	1,062,924	1,077,176	1,073,542	1,210,615	1,277,142	1,417,978	1,326,706	1,223,123	1,145,861	1,014,639	999,458	14,026,229		

	2016 change from 2014
GLOBAL ASSUMPTIONS	3.5%
	19.0%
	6.5%
	2.0%

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OWEN ELECTRIC COOPERATIVE

CLARK ENERGY

2014 BY VENDOR

OWEN ELECTRIC COOPERATIVE INC

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KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2015-00418 ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Linda C. Bridwell

70. Reference the Kentucky American Water application. Regarding page 15, line 18 to page 16, line 4 of Ms. Bridwell's testimony, provide the underlying assumptions and calculations showing how the chemical expense adjustments were calculated. Include all excel files (if available). If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The chemical expense adjustments were calculated by determining the variance between the base year and the forecast year. Base year is comprised of 6 months of actual expense (May 2015 – October 2015) and 6 months of forecasted expense from the 2016 forecast. Please see Attachment 1 to see the 2016 forecast calculation. The 2016 forecast was calculated by starting with in some cases 2014 chemical usages and dividing it by 2014 system delivery to come up with a chemical dosage per thousand gallons of water produced. In other cases a two year average chemical dosage was utilized. The difference in dosage calculation methodology is due to additions or removals of chemicals used in the treatment process. This dosage was then multiplied by the 2016 forecasted system delivery to arrive at a 2016 forecasted chemical usage in units. The next step is to determine the 2016 price per unit. This was arrived at by taking the 2015 actual price per unit and multiplying it by an inflation factor that was determined by a contact in the corporate supply chain. The 2016 price per unit was then multiplied the 2016 forecasted chemical usage in units to arrive at 2016 forecasted expense.

Please note that the 2015 chemical budget in Attachment 1 does not agree to the amount in the base year due to adjustments over the course of 2015 that were not recalculated in the final budget.

Forecast year is calculated by combining the 2016 forecast and 2017 forecast for the forecast period of September 2016 to August 2017. The 2017 forecast is calculated in the same manner as the 2016 forecast with the following exception: The 2017 cost per unit is the 2016 price per unit multiplied by an inflation factor that was determined by a contact in the corporate supply chain. No adjustments were made to the 2016 dosage per thousand gallons of water produced. The dosage was then multiplied by 2017 system delivery to arrive at a 2017 forecasted chemical usage in units. The 2017 forecasted chemical usage in units was then multiplied by the 2017 cost per unit to arrive at the 2017 forecasted chemical expense. Please see Attachment 2 for the 2017 forecast calculations.

The adjustment between base year and forecast year is composed of two variances. The first variance is the different cost per chemical from the base year to the forecast year.

The second variance is the different system delivery from the base year to the forecast year. Please see workpaper 3-4 to see the amounts on a monthly basis.

KENTUCKY AMERICAN WATER 2016 BUDGET COMPARISON TO 2015 BUDGET AND 2014 ACTUAL

	<u>Jan</u>	Feb	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov	Dec	Dec YTD
Draft State Base 2016 Chemical Budget	125,481.53	126,350.96	117,179.06	118,404.56	117,092.75	150,780.95	190,438.04	198,677.42	177,305.78	163,426.47	121,823.43	141,794.22	1,748,755.16
Final State Base 2015 Chemical Budget	115,583.04	97,947.30	108,901.94	122,195.08	128,572.59	143,087.64	173,793.88	170,869.59	133,758.85	107,689.61	118,704.49	112,585.84	1,533,689.85
Final State 2014 Actual Cost	140,301.15	155,136.48	105,783.91	104,494.76	145,676.98	133,509.10	136,300.62	189,178.95	166,990.73	174,220.28	96,985.83	107,021.71	1,655,600.50
2016 Budgeted System Delivery	1,006,381.09	985,559.51	1,082,796.80	1,019,587.34	1,167,331.71	1,245,402.83	1,371,688.64	1,287,294.47	1,152,032.17	1,153,548.37	993,207.84	1,051,365.08	13,516,195.84

Chemical	Part Number	SD Allocated to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>
	Number	to Flant									
2016 Central District System Delivery - Budget			1,006,381.09	985,559.51	1,082,796.80	1,019,587.34	1,167,331.71	1,245,402.83	1,371,688.64	1,287,294.47	1,152,032.17
2015 Central District System Delivery - Budget			980,083.14	942,411.52	986,157.34	996,661.68	1,163,018.41	1,301,837.00	1,334,898.07	1,355,315.08	1,250,294.84
2014 Central District System Delivery - Actual 2013 Central District System Delivery - Actual			1,180,538.14 1,019,730.29	1,059,151.14 925,074.43	1,073,765.71 1,017,064.57	1,070,641.00 1,005,991.71	1,208,202.86 1,109,121.29	1,274,938.14 1,157,294.00	1,415,510.57 1,183,522.43	1,324,252.43 1,245,984.57	1,220,824.00 1,247,286.57
2015 Central District System Delivery - Actual			1,019,730.29	925,074.43	1,017,004.57	1,005,991.71	1,109,121.29	1,157,294.00	1,165,522.45	1,245,984.57	1,247,280.57
Kentucky River Station (KRS) Plant: 2014 Monthly Chemical Usage in Units:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	45,040.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,629.00	4,676.00	4,800.00	19,610.00	9,000.00	7,399.00	7,548.00	6,888.00	5,323.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		27,759.00	23,631.00	22,458.00	28,257.00	42,165.00	39,899.00	51,517.00	44,368.00	35,960.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,BULK	1200647		24,608.00	22,586.00	22,428.00	35,028.00	35,550.00	29,503.00	41,940.00	26,157.00	23,170.00
CHM,PACL,DELPC2020, BULK	1200702		236,908.00	266,852.00	142,406.00	158,742.00	213,064.00	121,877.00	199,475.00	315,361.00	250,300.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		39,419.00	22,128.00	25,592.00	21,121.00	31,186.00	29,767.00	34,089.00	25,938.00	25,834.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		15,261.00	14,003.00	10,402.00	11,755.00	17,338.00	13,760.00	16,427.00	14,495.00	13,856.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928		4,700.00 0.00	4,350.00 0.00	2,500.00 0.00	3,200.00 0.00	1,400.00 0.00	1,850.00 0.00	1,950.00 0.00	1,650.00 0.00	2,300.00 0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,600.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200076		15,471.00	15,021.00	13,160.00	16,574.00	16,074.00	12,120.00	14,708.00	14,241.00	12,120.00
Allocated 2014 System Delivery		52%	612,109.03	549,169.87	556,747.52	555,127.36	626,453.18	661,055.43	733,942.23	686,624.88	632,997.24
2013 Monthly Chemical Usage in Units:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,631.00	5,862.00	6,173.00	5,048.00	5,308.00	5,879.00	6,506.00	7,021.00	6,162.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		31,744.00	26,584.00	29,200.00	28,904.00	30,522.00	37,322.00	41,285.00	41,555.00	40,988.00
CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK	1200612 1200647		102,828.00 27,564.00	31,334.00 24,868.00	0.00 29,150.00	0.00 29,298.00	0.00 26,382.00	0.00 29,429.00	0.00 26,436.00	0.00 31,555.00	157,568.00 24,686.00
CHM,PACL,DELPC2020, BULK	1200047		292,151.00	236,884.00	275,036.00	210,184.00	150,077.00	210,272.00	286,423.00	339,036.00	97,354.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		0.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		6,193.00	17,334.00	18,506.00	10,673.00	25,744.00	18,048.00	18,881.00	19,765.00	16,782.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		17,912.00	15,799.00	14,867.00	14,006.00	15,052.00	13,511.00	16,933.00	16,725.00	14,204.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,250.00	2,400.00	2,700.00	3,700.00	2,150.00	2,600.00	2,900.00	2,750.00	2,600.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		5,334.00	6,536.00	0.00	0.00	0.00	0.00	2,874.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		68,388.00	49,907.00	45,323.00	58,613.00	42,769.00	68,067.00	61,665.00	58,223.00	42,722.00
Allocated 2013 System Delivery		52%	528,730.15	479,651.09	527,347.98	521,606.70	575,079.39	600,056.94	613,656.38	646,043.00	646,718.09
2-Year Average Chemical Usage in Units:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,520.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,630.00	5,269.00	5,486.50	12,329.00	7,154.00	6,639.00	7,027.00	6,954.50	5,742.50
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		29,751.50	25,107.50	25,829.00	28,580.50	36,343.50	38,610.50	46,401.00	42,961.50	38,474.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		51,414.00	15,667.00	0.00	0.00	0.00	0.00	0.00	0.00	78,784.00
CHM,HFS ACID,23%,BULK	1200647		26,086.00	23,727.00	25,789.00	32,163.00	30,966.00	29,466.00	34,188.00	28,856.00	23,928.00
CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702 1201341		264,529.50 0.00	251,868.00 0.00	208,721.00 0.00	184,463.00 2,900.00	181,570.50 0.00	166,074.50 0.00	242,949.00 0.00	327,198.50 0.00	173,827.00 0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		3,096.50	8,667.00	9,253.00	5,336.50	12,872.00	9,024.00	9,440.50	9,882.50	8,391.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		19,709.50	11,064.00	12,796.00	10,560.50	15,593.00	14,883.50	17,044.50	12,969.00	12,917.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		16,586.50	14,901.00	12,634.50	12,880.50	16,195.00	13,635.50	16,680.00	15,610.00	14,030.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,975.00	3,375.00	2,600.00	3,450.00	1,775.00	2,225.00	2,425.00	2,200.00	2,450.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2,667.00	3,268.00	0.00	0.00	0.00	0.00	1,437.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	0.00	0.00	800.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		41,929.50	32,464.00	29,241.50	37,593.50	29,421.50	40,093.50	38,186.50	36,232.00	27,421.00

	Part	SD Allocated									
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>
2-Year Average Allocated System Delivery			570,419.59	514,410.48	542,047.75	538,367.03	600,766.28	630,556.18	673,799.31	666,333.94	639,857.67
Historical Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0338	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0099	0.0102	0.0101	0.0229	0.0119	0.0105	0.0104	0.0104	0.0090
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0522	0.0488	0.0477	0.0531	0.0605	0.0612	0.0689	0.0645	0.0601
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0901	0.0305	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1231
CHM,HFS ACID,23%,BULK	1200647		0.0457	0.0461	0.0476	0.0597	0.0515	0.0467	0.0507	0.0433	0.0374
CHM,PACL,DELPC2020, BULK	1200702		0.4637	0.4896	0.3851	0.3426	0.3022	0.2634	0.3606	0.4910	0.2717
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0054	0.0168	0.0171	0.0099	0.0214	0.0143	0.0140	0.0148	0.0131
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0346	0.0215	0.0236	0.0196	0.0260	0.0236	0.0253	0.0195	0.0202
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0291	0.0290	0.0233	0.0239	0.0270	0.0216	0.0248	0.0234	0.0219
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0070	0.0066	0.0048	0.0064 0.0000	0.0030	0.0035	0.0036 0.0021	0.0033	0.0038 0.0000
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0047	0.0064 0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,50GA CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876 1200956		0.0000 0.0735	0.0631	0.0000 0.0539	0.0000 0.0698	0.0000 0.0490	0.0000 0.0636	0.0000 0.0567	0.0012 0.0544	0.0429
CHM,30010M THIO30LFATE,LIQUID,30%,BOLK	1200930		0.0733	0.0031	0.0339	0.0038	0.0490	0.0030	0.0307	0.0344	0.0429
2016 BRIR Budgeted Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0656	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0092	0.0096	0.0099	0.0222	0.0114	0.0100	0.0096	0.0101	0.0091
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0486	0.0457	0.0464	0.0515	0.0580	0.0584	0.0632	0.0626	0.0608
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0840	0.0285	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1245
CHM,HFS ACID,23%,BULK	1200647		0.0426	0.0432	0.0463	0.0579	0.0494	0.0446	0.0466	0.0420	0.0378
CHM,PACL,DELPC2020, BULK	1200702		0.4322	0.4586	0.3749	0.3323	0.2898	0.2512	0.3310	0.4765	0.2746
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0644	0.0403	0.0460	0.0380	0.0498	0.0450	0.0464	0.0378	0.0408
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0271	0.0271	0.0227	0.0232	0.0259	0.0206	0.0227	0.0227	0.0222
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0065	0.0061	0.0047	0.0062	0.0028	0.0034	0.0033	0.0032	0.0039
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0023	0.0000
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Operations Adjustments to Budgeted Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222									(0.0656)	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557									(,	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597										
CHM,FERRIC,CHLORID,38%,BULK	1200612										
CHM,HFS ACID,23%,BULK	1200647										
CHM,PACL,DELPC2020, BULK	1200702										
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341										
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281										
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		(0.0644)	(0.0403)	(0.0460)	(0.0380)	(0.0498)	(0.0450)	(0.0464)	(0.0378)	(0.0408)
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761										
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900										
CHM,SODIUM HYDROXIDE,50%,BULK	1200928										
CHM,SODIUM PERMANGANATE,20%,50GA	1200876							0.0450	0.0464	0.0378	0.0408
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956										
Ortho/Poly 50/50	Not Created		0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549
New Chemical #2 New Chemical #3											
New Chemical#3											
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0092	0.0096	0.0099	0.0222	0.0114	0.0100	0.0096	0.0101	0.0091
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0486	0.0457	0.0464	0.0515	0.0580	0.0584	0.0632	0.0626	0.0608

	Part	SD Allocated									
Chemical	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	Jun	Jul	Aug	Sep
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0840	0.0285	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1245
CHM,HFS ACID,23%,BULK	1200647		0.0426	0.0432	0.0463	0.0579	0.0494	0.0446	0.0466	0.0420	0.0378
CHM,PACL,DELPC2020, BULK	1200702		0.4322	0.4586	0.3749	0.3323	0.2898	0.2512	0.3310	0.4765	0.2746
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0271	0.0271	0.0227	0.0232	0.0259	0.0206	0.0227	0.0227	0.0222
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0065	0.0061	0.0047	0.0062	0.0028	0.0034	0.0033	0.0032	0.0039
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000	0.0000	0.0000	0.0450	0.0464	0.0401	0.0408
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ortho/Poly 50/50			0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budgeted System Delivery		52%	521,808.60	511,012.60	561,430.14	528,656.03	605,261.49	645,741.37	711,220.56	667,462.18	597,328.68
			•			•	•				
2016 Budgeted Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK	1201222		4,799.44	4,902.90	5,532.65	11,741.09	6,911.99	6,485.20	6,809.46	6,760.41	5,418.92
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER	1200557		4,799.44 25,362.46	4,902.90 23,362.99	5,532.65 26,046.24	11,741.09 27,217.63	6,911.99 35,114.07	6,485.20 37,716.05	6,809.46 44,964.50	6,760.41 41,762.51	5,418.92 36,306.04
CHM,FERRIC,CHLORID,38%,BULK	1200397		43,829.23	14,578.43	0.00	0.00	0.00	0.00	0.00	0.00	74,344.63
CHM,HFS ACID,23%,BULK	1200612		22,237.70	22,078.41	26,005.90	30,629.30	29,918.48	28,783.39	33,129.59	28,050.67	22,579.69
CHM,PACL,DELPC2020, BULK	1200047		225,505.20	234,367.78	210,476.48	175,666.86	175,428.32	162,227.21	235,427.69	318,066.87	164,032.08
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOS,OKTHO,POLT,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200067		14,139.60	13,865.65	12,740.76	12,266.29	15,647.15	13,319.62	16,163.61	15,174.35	13,239.43
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		3,388.59	3,140.50	2,621.87	3,285.49	1,714.96	2,173.46	2,349.93	2,138.60	2,311.95
	1200900		0.00	•	0.00		0.00	0.00	2,349.93 0.00	0.00	0.00
CHM,SODIUM HYDROXIDE,50%,BULK				0.00		0.00					
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	29,077.42	33,033.66	26,769.45	24,378.29
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ortho/Poly 50/50			28,652.83	28,060.02	30,828.47	29,028.83	33,235.28	35,458.05	39,053.56	36,650.76	32,799.68
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Actual Price per Unit:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
CHM,HFS ACID,23%,BULK	1200647		0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265
CHM,PACL,DELPC2020, BULK	1200702		0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201311		0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200701		0.1545	0.1545	0.3280	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545
CHM,SODIUM HYDROXIDE,50%,BULK	1200900		0.1343	0.1343	0.1343	0.1343	0.1343	0.1398	0.1343	0.1398	0.1343
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398
CHM,SODIUM PEKMANGANATE,20%,SUGA CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
	1200336	_	0.2128	U.2128	U.Z1Z8	0.2128	0.2128	0.2128	U.Z1Z8	U.2128	U.2128
New Chemical #1											
New Chemical #2											
New Chemical #3											
2016 Price Increase (Decrease) per Supply Chain:		_									
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%

	Part	SD Allocated									
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	_	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #1											
New Chemical #2											
New Chemical #3											
2016 Budget Price per Unit:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1836	0.1836	0.1836	0.1836	0.1836	0.1836	0.1836	0.1836	0.1836
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200007		0.3280	0.3280	0.3480	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200701		0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592
CHM,SODIUM HYDROXIDE,50%,BULK	1200908		0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		1.0094	1.0094	1.0094	1.0094	1.0094	1.0094	1.0094	1.0094	1.0094
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200976		0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191
Ortho/Poly 50/50	1200930		0.3800	0.2191	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
nen enemaans			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budget Expense in Dollars:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		2,883.34	2,945.49	3,323.82	7,053.63	4,152.48	3,896.08	4,090.88	4,061.42	3,255.49
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		4,570.13	4,209.84	4,693.35	4,904.42	6,327.31	6,796.16	8,102.28	7,525.31	6,542.09
CHM,FERRIC,CHLORID,38%,BULK	1200612		4,382.92	1,457.84	0.00	0.00	0.00	0.00	0.00	0.00	7,434.46
CHM,HFS ACID,23%,BULK	1200647		5,087.34	5,050.89	5,949.39	7,007.09	6,844.47	6,584.80	7,579.08	6,417.17	5,165.57
CHM,PACL,DELPC2020, BULK	1200702		30,126.34	31,310.34	28,118.58	23,468.19	23,436.33	21,672.73	31,451.94	42,492.11	21,913.85
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,637.85	4,547.99	4,179.02	4,023.39	5,132.33	4,368.89	5,301.73	4,977.25	4,342.59
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		539.35	499.86	417.31	522.93	272.96	345.94	374.03	340.39	367.98
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	29,350.74	33,344.18	27,021.09	24,607.44
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ortho/Poly 50/50			10,888.08	10,662.81	11,714.82	11,030.95	12,629.41	13,474.06	14,840.35	13,927.29	12,463.88
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		Allocated								_	_
<u>Chemical</u>	<u>Number</u> to	<u>Plant</u>	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>
CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET			63,115.34	60,685.06	58,396.29	58,010.62	58,795.29	86,489.40	105,084.47	106,762.02	86,093.36
CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET		-	41,659.99	38,352.87	40,969.56	45,561.19	48,422.88	57,187.05	69,101.37	70,091.43	58,370.73
CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST			58,177.67	76,038.62	27,147.77	46,658.78	65,149.54	54,040.83	61,076.38	82,755.44	61,176.40
0			0.4240	0.4400	0.4040	0.4007	0.0074	0.4000	0.4470	0.4500	
Cost per 1000 gallons - 2016 Chemical Budget			0.1210	0.1188	0.1040	0.1097	0.0971	0.1339	0.1478	0.1600	0.1441
Cost per 1000 gallons - 2015 Chemical Budget			0.0820	0.0785	0.0801	0.0882	0.0803	0.0847	0.0998	0.0997	0.0900
Cost per 1000 gallons - 2014 Actual Cost			0.0950	0.1385	0.0488	0.0841	0.1040	0.0817	0.0832	0.1205	0.0966
2016 Drive Incorpor (Decrees) was County Chaire											
2016 Price Increase (Decrease) per Supply Chain:	1201222		2.00%	2.000/	2.009/	2.00%	2.000/	2.000/	2.000/	2.00%	2.000/
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%		2.00%	2.00%	2.00%		2.00%
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,HFS ACID,23%,BULK	1200647		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #1											
New Chemical #2											
New Chemical #3											
		-									

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	<u>Oct</u>	Nov	Dec	YTD
2016 Central District System Delivery - Budget			1,153,548.37	993,207.84	1,051,365.08	13,516,195.84
2015 Central District System Delivery - Budget			1,139,569.79	970,664.77	998,059.83	13,418,971.48
2014 Central District System Delivery - Actual			1,143,834.00	1,012,083.00	996,809.14	13,980,550.14
2013 Central District System Delivery - Actual			1,133,795.29	985,766.43	1,003,560.71	13,034,192.28
Kentucky River Station (KRS) Plant:						
2014 Monthly Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	45,040.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,480.00	5,504.00	5,802.00	87,659.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		32,165.00	30,359.00	24,442.00	402,980.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,BULK	1200647		22,458.00	24,835.00	23,195.00	331,458.00
CHM,PACL,DELPC2020, BULK	1200702		233,297.00	172,136.00	172,321.00	2,482,739.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		19,697.00	25,163.00	19,344.00	319,278.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		11,051.00	12,623.00	8,938.00	159,909.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		1,400.00	2,200.00	1,500.00	29,000.00
CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,50GA	1200928 1200876		0.00 0.00	0.00 0.00	0.00 0.00	0.00 1,600.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		24,112.00	26,525.00	21,474.00	201,600.00
CHIVI, SODIONI THIOSOLFATE, LIQUID, 30%, BOLK	1200950		24,112.00	20,323.00	21,474.00	201,600.00
Allocated 2014 System Delivery		52%	593,077.93	524,765.04	516,845.54	7,248,915.25
2013 Monthly Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		6,175.00	5,558.00	5,066.00	70,389.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		37,719.00	34,481.00	28,135.00	408,439.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		76,332.00	77,152.00	14,320.00	459,534.00
CHM,HFS ACID,23%,BULK	1200647		28,641.00	23,234.00	23,087.00	324,330.00
CHM,PACL,DELPC2020, BULK	1200702		134,620.00	269,830.00	251,297.00	2,753,164.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	5,800.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		17,989.00	4,936.00	0.00	174,851.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	14,852.00	21,550.00	36,402.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		17,524.00	14,337.00	16,465.00	187,335.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928		4,750.00 0.00	3,650.00 0.00	4,050.00 0.00	37,500.00 14,744.00
CHM,SODIUM HYDROXIDE,SU%,BULK CHM,SODIUM PERMANGANATE,20%,50GA	1200928		0.00	0.00	0.00	14,744.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		52,854.00	26,613.00	31,148.00	606,292.00
		520/	ŕ	ŕ	•	•
Allocated 2013 System Delivery		52%	587,872.86	511,119.89	520,346.23	6,758,228.70
2-Year Average Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	22,520.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,827.50	5,531.00	5,434.00	79,024.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		34,942.00	32,420.00	26,288.50	405,709.50
CHM,FERRIC,CHLORID,38%,BULK	1200612		38,166.00	38,576.00	7,160.00	229,767.00
CHM,HFS ACID,23%,BULK	1200647		25,549.50	24,034.50	23,141.00	327,894.00
CHM,PACL,DELPC2020, BULK	1200702		183,958.50	220,983.00	211,809.00	2,617,951.50
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	2,900.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		8,994.50	2,468.00	0.00	87,425.50
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667 1200761		9,848.50	20,007.50	20,447.00 12,701.50	177,840.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		14,287.50 3,075.00	13,480.00 2,925.00	2,775.00	173,622.00 33,250.00
CHM,SODIUM CHLORIDE,50% PORE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900		0.00	2,925.00	2,775.00	7,372.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		0.00	0.00	0.00	7,372.00 800.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		38,483.00	26,569.00	26,311.00	403,946.00
S, SSS. S SSSE FILL LOD JSS //JSSER	1200550		30,403.00	20,303.00	20,311.00	403,540.00

	Part	SD Allocated			
<u>Chemical</u>	<u>Number</u>	to Plant	<u>Oct</u>	Nov	<u>Dec</u>
ear Average Allocated System Delivery			590,475.39	517,942.46	518,595.89
torical Dosage per T-Gal Produced:					
M,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000
/I,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0099	0.0107	0.0105
CHLORINE,100%,2000LB CYLINDER	1200597		0.0592	0.0626	0.0507
I,FERRIC,CHLORID,38%,BULK	1200612		0.0646	0.0745	0.0138
1,HFS ACID,23%,BULK	1200647		0.0433	0.0464	0.0446
1,PACL,DELPC2020, BULK	1200702		0.3115	0.4267	0.4084
1,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000
,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0152	0.0048	0.0000
PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0167	0.0386	0.0394
POLYMER, CATIONC CEDRFLOC 524, BULK	1200761		0.0242	0.0260	0.0245
,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0052	0.0056	0.0054
I,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000
SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000
SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0652	0.0513	0.0507
BRIR Budgeted Dosage per T-Gal Produced:					
ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000
I,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0098	0.0105	0.0105
CHLORINE,100%,2000LB CYLINDER	1200597		0.0589	0.0618	0.0509
FERRIC,CHLORID,38%,BULK	1200612		0.0644	0.0735	0.0139
HFS ACID,23%,BULK	1200647		0.0431	0.0458	0.0448
ACL,DELPC2020, BULK	1200702		0.3102	0.4211	0.4098
HOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000
PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000
PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0332	0.0480	0.0374
POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0241	0.0257	0.0246
ODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0052	0.0056	0.0054
SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000
SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000
ODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000
Operations Adjustments to Budgeted Dosage per T-Gal Produced:					
ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222				
AMMONIA,ANHYDROUS,100%,BULK	1200557				
CHLORINE,100%,2000LB CYLINDER	1200597				
ERRIC,CHLORID,38%,BULK	1200612				
HFS ACID,23%,BULK	1200647				
ACL,DELPC2020, BULK	1200702				
HOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341				
PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281				
PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		(0.0332)	(0.0480)	(0.0374)
POLYMER,CATIONC CEDRFLOC 524,BULK	1200761				
SODIUM CHLORIDE,90% PURE,50LB 704	1200900				
SODIUM HYDROXIDE,50%,BULK	1200928				
SODIUM PERMANGANATE,20%,50GA	1200876		0.0332		
SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956				
Poly 50/50	Not Created		0.0549	0.0549	0.0549
Chemical #2					
Chemical #3					
inal Adjusted Budgeted Dosage per T-Gal Produced:					
I,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000
1,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0098	0.0105	0.0105
A,CHLORINE,100%,2000LB CYLINDER	1200597		0.0589	0.0618	0.0509

	Dort	SD Allocated			
Chemical	Part Number	SD Allocated to Plant	Oct	Nov	Dec
CHM,FERRIC,CHLORID,38%,BULK	1200612	<u> </u>	0.0644	0.0735	0.0139
HM,HFS ACID,23%,BULK	1200647		0.0431	0.0458	0.0448
HM,PACL,DELPC2020, BULK	1200702		0.3102	0.4211	0.4098
HM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000
HM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000
HM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000
HM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0241	0.0257	0.0246 0.0054
HM,SODIUM CHLORIDE,90% PURE,50LB 704 HM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928		0.0052 0.0000	0.0056 0.0000	0.0034
HM,SODIUM PERMANGANATE,20%,50GA	1200928		0.0332	0.0000	0.0000
HM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000
rtho/Poly 50/50			0.0549	0.0549	0.0549
ew Chemical #2			0.0000	0.0000	0.0000
w Chemical #3			0.0000	0.0000	0.0000
6 Budgeted System Delivery		52%	598,114.83	514,978.26	545,132.80
16 Budgeted Chemical Usage in Units:					
IM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00
HM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,876.99	5,427.85	5,731.41
IM,CHLORINE,100%,2000LB CYLINDER	1200597		35,238.76	31,815.37	27,727.28
HM,FERRIC,CHLORID,38%,BULK	1200612		38,490.14	37,856.56	7,551.87
IM,HFS ACID,23%,BULK	1200647		25,766.49	23,586.26	24,407.52
HM,PACL,DELPC2020, BULK	1200702		185,520.83	216,861.71	223,401.43
IM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00
M,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00
IM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00
IM,POLYMER,CATIONC CEDRFLOC 524,BULK IM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761 1200900		14,408.84 3,101.12	13,228.60 2,870.45	13,396.66 2,926.88
M,SODIUM HYDROXIDE,50%,BULK	1200900		0.00	0.00	0.00
M,SODIUM PERMANGANATE,20%,50GA	1200328		19,864.28	0.00	0.00
M,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00
tho/Poly 50/50	1200330		32,842.85	28,277.77	29,933.58
w Chemical #2			0.00	0.00	0.00
w Chemical #3			0.00	0.00	0.00
015 Actual Price per Unit:					
IM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1800	0.1800	0.1800
M,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.5833	0.5833	0.5833
M,CHLORINE,100%,2000LB CYLINDER	1200597		0.1749	0.1749	0.1749
M,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000
M,HFS ACID,23%,BULK	1200647		0.2265	0.2265	0.2265
M,PACL,DELPC2020, BULK	1200702		0.1297	0.1297	0.1297
M,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200
M,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4100	0.4100	0.4100
M,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400
M,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280
M,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1545	0.1545	0.1545
M,SODIUM HYDROXIDE,50%,BULK	1200928		0.1398	0.1398	0.1398
M,SODIUM PERMANGANATE,20%,50GA	1200876		0.9800	0.9800	0.9800
IM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2128	0.2128	0.2128
ew Chemical #1 ew Chemical #2					
ew Chemical #2					
		-			
016 Price Increase (Decrease) per Supply Chain: HM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%
,,	1201222		2.0070	2.0070	2.0070

	Part	SD Allocated				
Chemical	Number	to Plant	Oct	Nov	Dec	YTD
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%	1.00%	
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00%	0.00%	0.00%	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00%	0.00%	0.00%	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00%	0.00%	0.00%	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	
New Chemical #1						
New Chemical #2						
New Chemical #3						
2016 Budget Price per Unit:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1836	0.1836	0.1836	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6008	0.6008	0.6008	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288	0.2288	
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336	0.1336	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4100	0.4100	0.4100	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592	0.1592	0.1592	
CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,50GA	1200928 1200876		0.1426 1.0094	0.1426 1.0094	0.1426 1.0094	
, ,	1200876					
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK Ortho/Poly 50/50	1200956		0.2191 0.3800	0.2191 0.3800	0.2191 0.3800	
New Chemical #2			0.0000	0.0000	0.0000	
New Chemical #3			0.0000	0.0000	0.0000	
new chemical his			0.0000	0.0000	0.0000	
2016 Budget Expense in Dollars:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3,530.69	3,260.86	3,443.23	45,897.40
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		6,349.77	5,732.90	4,996.26	70,749.84
CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK	1200612 1200647		3,849.01 5,894.62	3,785.66 5,395.85	755.19 5,583.73	21,665.09 72,559.99
CHM,PACL,DELPC2020, BULK	1200647		24,784.63	28,971.62	29,845.29	337,591.94
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201702		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,726.16	4,339.04	4,394.16	54,970.41
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		493.59	456.87	465.86	5,097.06
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		20,051.01	0.00	0.00	134,374.46
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00
Ortho/Poly 50/50			12,480.28	10,745.55	11,374.76	146,232.24
New Chemical #2			0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	<u>Oct</u>	Nov	<u>Dec</u>	YTD
CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET			82,159.77	62,688.35	60,858.46	889,138.41
CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET			45,648.78	39,565.94	37,210.13	592,141.91
CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST			65,134.07	39,698.94	45,284.30	682,338.74
Cost per 1000 gallons - 2016 Chemical Budget			0.1374	0.1217	0.1116	0.1269
Cost per 1000 gallons - 2015 Chemical Budget			0.0773	0.0786	0.0719	0.0851
Cost per 1000 gallons - 2014 Actual Cost			0.1098	0.0757	0.0876	0.0941
2016 Price Increase (Decrease) per Supply Chain:		,				
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	
CHM,HFS ACID,23%,BULK	1200647		2.00%	2.00%	2.00%	
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00%	0.00%	0.00%	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3.00%	3.00%	3.00%	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		3.00%	3.00%	3.00%	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		2.00%	2.00%	2.00%	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	
New Chemical #1						
New Chemical #2						
New Chemical #3						

Chemical	Part <u>Number</u>	SD Allocated to Plant	<u>Notes</u>
2016 Central District System Delivery - Budget			Updated for 2016 Budgeted SD entered into hyperion as of May 29
2015 Central District System Delivery - Budget			Budgeted 2015 District Total System Delivery in T-gal
2014 Central District System Delivery - Actual 2013 Central District System Delivery - Actual			Actual 2014 District Total System Delivery in T-gal Actual 2013 District Total System Delivery in T-gal
2015 Central District System Delivery - Actual			Actual 2013 District Total System Delivery III 1-gai
Kentucky River Station (KRS) Plant:			
2014 Monthly Chemical Usage in Units:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		Actual 2014 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647 1200702		
CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Allocated 2014 System Delivery		52%	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2013 Monthly Chemical Usage in Units:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667 1200761		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		
CHM,SODIUM HYDROXIDE,50%,BULK	1200908		
CHM,SODIUM PERMANGANATE,20%,50GA	1200326		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Allocated 2013 System Delivery		52%	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2-Year Average Chemical Usage in Units:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2013/2014 average chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667 1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		
CHM,SODIUM HYDROXIDE,50%,BULK	1200900		
CHM,SODIUM PERMANGANATE,20%,50GA	1200328		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		

	Part	SD Allocated	
<u>Chemical</u>	Number	to Plant	<u>Notes</u>
2-Year Average Allocated System Delivery			2013/2014 average system delivery allocated to plant by month
Historical Dosage per T-Gal Produced:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2-year average chemical usage in units / 2-year average allocated system delivery
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
2016 BRIR Budgeted Dosage per T-Gal Produced:			Historical Dosage per T-Gal Produced above with following modifications:
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencie:
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencie:
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencie:
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencie:
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		Dosages made 0 as this chemical is charged to waste disposal expense.
2016 Operations Adjustments to Budgeted Dosage per T-Gal Produced:			Production Dept. Revisions to Budgeted Dosage in Rows 86-99 (Document explanation for adjustments):
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50	Not Created		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:			Final Budgeted Dosage per T-Gal after revisions input by Production Department
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		

Chemical CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK Ortho/Poly 50/50 New Chemical #2 New Chemical #3	Part Number 1200612 1200647 1200702 1201341 1201281 1200667 1200900 1200928 1200876 1200956	 	Notes If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budgeted System Delivery		52%	Current Placeholder - will be updated when revenue budget is completed
2016 Budgeted Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM PYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,50GA CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK Ortho/Poly 50/50	1201222 1200557 1200597 1200612 1200647 1200702 1201341 1201281 1200667 1200761 1200900 1200928 1200876 1200956		Final 2016 Budgeted Chemicals in Units (lbs./gal.) If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			if new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2015 Actual Price per Unit: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM PYDROXIDE,50%,BULK CHM,SODIUM PREMANGANATE,20%,50GA CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK New Chemical #1	1201222 1200557 1200597 1200612 1200647 1200702 1201341 1201281 1200667 1200761 1200900 1200928 1200876 1200956	,	Actual current year price per unit incurred by facility If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #2			f new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #3			f new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
2016 Price Increase (Decrease) per Supply Chain: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	2	2016 Price Increases per Guidance Provided by Supply Chain.

	Dout	CD Allocated	
Chemical	Part Number	SD Allocated to Plant	Notes
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	torium	NOCC .
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
New Chemical #1			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
2016 Budget Price per Unit:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budget Expense in Dollars:	4204222		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557 1200597		
CHM,CHLORINE,100%,2000LB CYLINDER			
CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK	1200612 1200647		
CHM,PACL,DELPC2020, BULK	1200647		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		
CHM,PHOS,ORTHO,POLT,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200701		
CHM,SODIUM HYDROXIDE,50%,BULK	1200900		
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		
Ortho/Poly 50/50	1200330		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
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Chemical CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET	Part <u>Number</u>	SD Allocated to Plant	Notes Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)
CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST			
Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost			
2016 Price Increase (Decrease) per Supply Chain: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DEIPC2020, BULK CHM,PACL,DEIPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,50GA	1201222 1200557 1200597 1200612 1200647 1200702 1201341 1201281 1200667 1200900 1200928 1200876		2016 Price Increases per Guidance Provided by Supply Chain.
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK New Chemical #1 New Chemical #2 New Chemical #3	1200956		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.

<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant
2016 Central District System Delivery - Budget		
2015 Central District System Delivery - Budget		
2014 Central District System Delivery - Actual		
2013 Central District System Delivery - Actual		
Kentucky River Station (KRS) Plant:		
2014 Monthly Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Allocated 2014 System Delivery		52%
2013 Monthly Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK	1200647 1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Allocated 2013 System Delivery		52%
2-Year Average Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	

Chemical	Part <u>Number</u>	SD Allocated to Plant
2-Year Average Allocated System Delivery		
Historical Dosage per T-Gal Produced:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702 1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417,101E	1201341	
CHM,PHOSPHATE,ORTH-DLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200007	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200908	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
, 4, , , , ,		
2016 BRIR Budgeted Dosage per T-Gal Produced:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	in dosages
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	in dosages
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	in dosages
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	in dosages
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	in dosages
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	in dosages
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
2016 Operations Adjustments to Budgeted Dosage per T-Gal Produced:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50 New Chemical #2	Not Created	
New Chemical #3		
nen enemea.		
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	

	Part	SD Alloca
<u>Chemical</u>	Number	to Plan
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281 1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50		
New Chemical #2		
New Chemical #3		
2016 Budgeted System Delivery		52%
2016 Budgeted Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341 1201281	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50		
New Chemical #2		
New Chemical #3		
2015 Actual Price per Unit:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
New Chemical #1		
New Chemical #2		
New Chemical #3		

2016 Price Increase (Decrease) per Supply Chain:

CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1201222

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	Dove
Chemical	Part Number
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
HM,FERRIC,CHLORID,38%,BULK	1200537
HM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
HM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
HM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200701
CHM,SODIUM HYDROXIDE,50%,BULK	1200908
CHM,SODIUM PERMANGANATE,20%,50GA	1200928
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
lew Chemical #1	1200550
ew Chemical #1	
ew Chemical #2	
EW Chemical #3	
016 Budget Price per Unit:	
HM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
CHM,AMMONIA,ANHYDROUS,100%,BULK	1201222
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200328
HM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
ortho/Poly 50/50	1200930
New Chemical #2	
ew Chemical #3	
016 Budget Expense in Dollars:	
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
HM,AMMONIA,ANHYDROUS,100%,BULK	1200557
HM,CHLORINE,100%,2000LB CYLINDER	1200597
HM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
HM,PACL,DELPC2020, BULK	1200702
HM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
HM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
HM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
HM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
HM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
HM,SODIUM HYDROXIDE,50%,BULK	1200900
HM,SODIUM PERMANGANATE,20%,50GA	1200928
HM,SODIUM PERMANGANATE,20%,50GA HM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876
ortho/Poly 50/50	1200930
ew Chemical #2	
lew Chemical #3	
NEW CHEHILOTHS	

Part SD Allocated Chemical Number to Plant

CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET

CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST

Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost

2016 Price Increase (Decrease) per Supply Chain:

2010 Thee merease (Decrease) per supply enam.	
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200876
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956

New Chemical #1 New Chemical #2 New Chemical #3 KAW_R_AGDR1_NUM070_032416 Page 23 of 122

	Part	SD Allocated										
<u>Chemical</u>	<u>Number</u>	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>
2016 Central District System Delivery - Budget			1,006,381.09	985,559.51	1,082,796.80	1,019,587.34	1,167,331.71	1,245,402.83	1,371,688.64	1,287,294.47	1,152,032.17	1,153,548.37
2015 Central District System Delivery - Budget			980,083.14	942,411.52	986,157.34	996,661.68	1,163,018.41	1,301,837.00	1,334,898.07	1,355,315.08	1,250,294.84	1,139,569.79
2014 Central District System Delivery - Actual			1,180,538.14	1,059,151.14	1,073,765.71	1,070,641.00	1,208,202.86	1,274,938.14	1,415,510.57	1,324,252.43	1,220,824.00	1,143,834.00
2013 Central District System Delivery - Actual			1,019,730.29	925,074.43	1,017,064.57	1,005,991.71	1,109,121.29	1,157,294.00	1,183,522.43	1,245,984.57	1,247,286.57	1,133,795.29
Richmond Road Station (RRS) Plant:												
2014 Monthly Chemical Usage in Units:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,137.00	1,836.00	2,434.00	15,397.00	2,819.00	2,752.00	2,336.00	5,604.00	3,019.00	3,619.00
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	1,200.00	750.00	0.00	200.00	750.00	750.00	200.00	200.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		14,088.00	18,186.00	19,546.00	21,339.00	21,440.00	21,722.00	23,063.00	25,515.00	26,556.00	22,717.00
CHM,HFS ACID,23%,BULK	1200647		9,537.00	10,529.00	8,882.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,MINI BULK	1200648		0.00	0.00	4,061.00	15,659.00	18,794.00	18,856.00	16,131.00	16,120.00	18,800.00	19,323.00
CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702 1201523		132,989.00 0.00	197,321.00 0.00	162,382.00 8,587.00	142,893.00 16,929.00	140,894.00	158,018.00 18,488.00	146,345.00 15,285.00	229,353.00 16,001.00	270,230.00 16,108.00	304,904.00 17,639.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		491.00	0.00	0.00	0.00	16,844.00 0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
·												
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		8,952.00	12,454.00	6,114.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		440.00	550.00	440.00	150.00	1,170.00	495.00	660.00	770.00	935.00	825.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,782.00	4,851.00	5,527.00	5,068.00	5,156.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	345.00	6,968.00	6,562.00	4,607.00	4,732.00	4,645.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		411.00	739.00	1,350.00	50.00	650.00	500.00	1,050.00	400.00	900.00	600.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	926.00	278.00	198.00	6.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		10,870.00	11,335.00	4,979.00	7,654.00	1,938.00	4,054.00	2,374.00	8,403.00	9,762.00	7,974.00
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		1,750.00	1,200.00	1,750.00	1,750.00	1,550.00	1,200.00	1,650.00	1,400.00	1,650.00	1,500.00
Allocated 2014 System Delivery	l	29%	346,724.05	311,072.69	315,364.99	314,447.26	354,849.18	374,449.33	415,735.45	388,932.94	358,556.01	335,944.05
2013 Monthly Chemical Usage in Units:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		2,208.00	895.00	1,600.00	223.00	1,968.00	3,681.00	2,961.00	6,123.00	2,850.00	2,236.00
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	900.00	380.00	2,000.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		10,076.00	8,901.00	10,636.00	14,401.00	18,882.00	23,283.00	37,202.00	28,997.00	29,001.00	21,394.00
CHM,HFS ACID,23%,BULK	1200647		5,910.00	3,955.00	4,921.00	7,541.00	12,139.00	13,788.00	15,796.00	14,352.00	16,541.00	12,166.00
CHM,HFS ACID,23%,MINI BULK	1200648		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PACL,DELPC2020, BULK	1200702		102,058.00	58,099.00	69,785.00	111,216.00	167,402.00	147,292.00	260,057.00	208,763.00	150,640.00	121,741.00
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	151.00	12,101.00	7,374.00	7,272.00	8,259.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		2,834.00	1,951.00	2,203.00	3,290.00	2,591.00	4,695.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		495.00	330.00	275.00	330.00	605.00	660.00	385.00	605.00	550.00	220.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		7,648.00	2,387.00	2,585.00	2,692.00	5,205.00	2,645.00	5,802.00	1,379.00	3,454.00	3,475.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		1,430.00	880.00	1,100.00	1,732.00	0.00	0.00	2,044.00	1,044.00	1,705.00	4,015.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		779.00	801.00	600.00	700.00	1,000.00	950.00	900.00	350.00	1,050.00	350.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		2,775.00	2,000.00	1,550.00	1,500.00	2,000.00	1,300.00	2,150.00	1,650.00	1,450.00	1,450.00
Allocated 2013 System Delivery	ı	29%	299,494.78	271,694.36	298,711.86	295,459.77	325,748.92	339,897.25	347,600.54	365,945.67	366,328.07	332,995.68
2-Year Average Chemical Usage in Units:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,672.50	1,365.50	2,017.00	7,810.00	2,393.50	3,216.50	2,648.50	5,863.50	2,934.50	2,927.50
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	450.00	190.00	1,000.00	0.00

	Part SD	Allocated									
Chemical		to Plant Jan	Feb	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.00	0.00	600.00	375.00	0.00	100.00	375.00	375.00	100.00	100.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	12,082.00	13,543.50	15,091.00	17,870.00	20,161.00	22,502.50	30,132.50	27,256.00	27,778.50	22,055.50
CHM,HFS ACID,23%,BULK	1200647	7,723.50	7,242.00	6,901.50	3,770.50	6,069.50	6,894.00	7,898.00	7,176.00	8,270.50	6,083.00
CHM,HFS ACID,23%,MINI BULK	1200648	0.00	0.00	2,030.50	7,829.50	9,397.00	9,428.00	8,065.50	8,060.00	9,400.00	9,661.50
CHM,PACL,DELPC2020, BULK	1200702	117,523.50	127,710.00	116,083.50	127,054.50	154,148.00	152,655.00	203,201.00	219,058.00	210,435.00	213,322.50
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.00	0.00	4,293.50	8,464.50	8,422.00	9,244.00	7,642.50	8,000.50	8,054.00	8,819.50
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	245.50	0.00	0.00	0.00	0.00	75.50	6,050.50	3,687.00	3,636.00	4,129.50
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	1,417.00	975.50	1,101.50	1,645.00	1,295.50	2,347.50	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	4,476.00	6,227.00	3,057.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	467.50	440.00	357.50	240.00	887.50	577.50	522.50	687.50	742.50	522.50
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	6,215.00	3,619.00	4,056.00	3,880.00	5,180.50	1,322.50	2,901.00	689.50	1,727.00	1,737.50
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.00	0.00	0.00	0.00	172.50	3,484.00	3,281.00	2,303.50	2,366.00	2,322.50
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	715.00	440.00	550.00	866.00	0.00	0.00	1,022.00	522.00	852.50	2,007.50
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	595.00	770.00	975.00	375.00	825.00	725.00	975.00	375.00	975.00	475.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.00	0.00	0.00	0.00	0.00	0.00	463.00	139.00	99.00	3.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	5,435.00	5,667.50	2,489.50	3,827.00	969.00	2,027.00	1,187.00	4,201.50	4,881.00	3,987.00
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	2,262.50	1,600.00	1,650.00	1,625.00	1,775.00	1,250.00	1,900.00	1,525.00	1,550.00	1,475.00
2-Year Average Allocated System Delivery		323,109.42	291,383.53	307,038.43	304,953.51	340,299.05	357,173.29	381,668.00	377,439.30	362,442.04	334,469.86
Historical Dosage per T-Gal Produced:	4000557	0.0052	0.0047	2 2255	0.0255	0.0070	0.0000	0.0050	0.0455	0.0004	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.0052	0.0047	0.0066	0.0256	0.0070	0.0090	0.0069	0.0155	0.0081	0.0088
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0005	0.0028	0.0000
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.0000	0.0000	0.0020	0.0012	0.0000	0.0003	0.0010	0.0010	0.0003	0.0003
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.0374	0.0465	0.0492	0.0586	0.0592	0.0630	0.0789	0.0722	0.0766	0.0659
CHM,HFS ACID,23%,BULK	1200647	0.0239	0.0249	0.0225	0.0124	0.0178	0.0193	0.0207	0.0190	0.0228	0.0182
CHM,HFS ACID,23%,MINI BULK	1200648	0.0000	0.0000	0.0066	0.0257	0.0276	0.0264	0.0211	0.0214	0.0259	0.0289
CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702 1201523	0.3637 0.0000	0.4383 0.0000	0.3781 0.0140	0.4166 0.0278	0.4530 0.0247	0.4274 0.0259	0.5324 0.0200	0.5804 0.0212	0.5806 0.0222	0.6378 0.0264
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323	0.0008	0.0000	0.0000	0.0000	0.0000	0.0002	0.0159	0.0098	0.0100	0.0123
CHM,PHOSPHATE,ORTHO,POLT,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281	0.0008	0.0033	0.0036	0.0054	0.0038	0.0066	0.0000	0.0000	0.0000	0.0000
CHM.PHOSPHATE,ORTH-PLY CARUS 8600.BULK	1200667	0.0139	0.0214	0.0100	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.0133	0.0015	0.0012	0.0008	0.0026	0.0016	0.0014	0.0018	0.0020	0.0016
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.0192	0.0124	0.0132	0.0127	0.0152	0.0017	0.0014	0.0018	0.0048	0.0052
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200701	0.0000	0.0000	0.0000	0.0000	0.0005	0.0098	0.0086	0.0018	0.0065	0.0069
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	0.0022	0.0015	0.0018	0.0028	0.0000	0.0000	0.0027	0.0014	0.0024	0.0060
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.0018	0.0026	0.0032	0.0012	0.0024	0.0020	0.0026	0.0014	0.0027	0.0014
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0004	0.0003	0.0000
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.0168	0.0195	0.0081	0.0125	0.0028	0.0057	0.0031	0.0111	0.0135	0.0119
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.0070	0.0055	0.0054	0.0053	0.0052	0.0035	0.0050	0.0040	0.0043	0.0044
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2016 BRIR Budgeted Dosage per T-Gal Produced:											
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.0048	0.0044	0.0064	0.0248	0.0067	0.0086	0.0064	0.0151	0.0082	0.0087
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.0000	0.0000	0.0019	0.0012	0.0000	0.0003	0.0009	0.0010	0.0003	0.0003
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.0348	0.0435	0.0479	0.0568	0.0568	0.0601	0.0725	0.0701	0.0775	0.0657
CHM,HFS ACID,23%,BULK	1200647	0.0223	0.0233	0.0219	0.0120	0.0171	0.0184	0.0190	0.0185	0.0231	0.0181
CHM,HFS ACID,23%,MINI BULK	1200648	0.0000	0.0000	0.0064	0.0249	0.0265	0.0252	0.0194	0.0207	0.0262	0.0288
CHM,PACL,DELPC2020, BULK	1200702	0.3390	0.4105	0.3681	0.4041	0.4344	0.4077	0.4888	0.5632	0.5869	0.6350
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0000	0.0000	0.0272	0.0538	0.0475	0.0494	0.0368	0.0411	0.0449	0.0525
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.0129	0.0200	0.0097	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.0138	0.0156	0.0175	0.0161	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000

	Dout CD Allocat	and.									
Chemical	Part SD Allocat Number to Plant		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.0000	0.0000	0.0000	0.0000	0.0010	0.0186	0.0158	0.0118	0.0132	0.0138
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.0017	0.0025	0.0031	0.0012	0.0023	0.0019	0.0023	0.0010	0.0027	0.0014
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0007	0.0006	0.0000
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.0314	0.0364	0.0158	0.0243	0.0055	0.0108	0.0057	0.0216	0.0272	0.0237
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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2016 Operations Adjustments to Budgeted Dosage per T	-Gal Produced:										
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557										
CHM,CARBON,PAC LIGNITE,900LB	1200585										
CHM,CARBON,PAC WOOD BASED,750LB	1200588										
CHM,CHLORINE,100%,2000LB CYLINDER	1200597										
CHM,HFS ACID,23%,BULK	1200647	(0.0223)	(0.0233)	(0.0219)	(0.0120)	(0.0171)	(0.0184)	(0.0190)	(0.0185)	(0.0231)	(0.0181)
CHM,HFS ACID,23%,MINI BULK	1200648	0.0223	0.0233	0.0219							
CHM,PACL,DELPC2020, BULK	1200702										
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0000	0.0000	(0.0272)	(0.0538)	(0.0475)	(0.0494)	(0.0368)	(0.0411)	(0.0449)	(0.0525)
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	(0.0014)									
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171										
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	(0.0129)	(0.0200)	(0.0097)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815										
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761										
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531										
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871										
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900										
CHM,SODIUM HYDROXIDE,50%,BULK	1200928										
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880										
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.05405	0.05405	0.05405	0.05405	0.05405	0.05405	0.05405	0.004.05	0.05405	0.05405
50/50 Polyphosphate	Not Obtained	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105
New Chemical #2 New Chemical #3											
New Chemical #3											
2016 Final Adjusted Budgeted Dosage per T-Gal Produce	d·										
CHM,AMMONIA,ANHYDROUS,100%,BULK	<u>u. </u>	0.0048	0.0044	0.0064	0.0248	0.0067	0.0086	0.0064	0.0151	0.0082	0.0087
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.0000	0.0000	0.0019	0.0012	0.0000	0.0003	0.0009	0.0010	0.0003	0.0003
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.0348	0.0435	0.0479	0.0568	0.0568	0.0601	0.0725	0.0701	0.0775	0.0657
CHM,HFS ACID,23%,BULK	1200647	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,HFS ACID,23%,MINI BULK	1200648	0.0223	0.0233	0.0283	0.0249	0.0265	0.0252	0.0194	0.0207	0.0262	0.0288
CHM,PACL,DELPC2020, BULK	1200702	0.3390	0.4105	0.3681	0.4041	0.4344	0.4077	0.4888	0.5632	0.5869	0.6350
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.0138	0.0156	0.0175	0.0161	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.0000	0.0000	0.0000	0.0000	0.0010	0.0186	0.0158	0.0118	0.0132	0.0138
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.0017	0.0025	0.0031	0.0012	0.0023	0.0019	0.0023	0.0010	0.0027	0.0014
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0007	0.0006	0.0000
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.0314	0.0364	0.0158	0.0243	0.0055	0.0108	0.0057	0.0216	0.0272	0.0237
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50/50 Polyphosphate		0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
New Chemical #2		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	Part	SD Allocated										
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct
2016 Budgeted System Delivery		29%	295,574.13	289,458.83	318,017.42	299,452.80	342,845.32	365,774.81	402,864.95	378,078.38	338,351.85	338,797.16
2016 Budgeted Chemical Usage in Units:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,425.77	1,270.62	2,033.96	7,437.58	2,312.53	3,141.99	2,566.51	5,699.86	2,769.14	2,952.36
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	605.05	357.12	0.00	97.68	363.39	364.53	94.37	100.85
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		10,299.62	12,602.47	15,217.93	17,017.87	19,478.99	21,981.21	29,199.65	26,495.32	26,213.22	22,242.81
CHM,HFS ACID,23%,BULK	1200647		0.00 6,584.10	0.00	0.00 9,007.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00 9,743.55
CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK	1200648 1200702		100,186.03	6,738.81 118,836.49	117,059.84	7,456.15 120,995.89	9,079.12 148,933.47	9,209.59 149,118.58	7,815.81 196,910.22	7,835.06 212,944.41	8,870.32 198,577.26	215,134.21
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201201		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,076.54	4,513.94	5,573.49	4,826.33	4,981.58	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	333.33	6,806.58	6,358.85	4,478.43	4,465.36	4,684.45
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		507.22	716.50	983.20	357.12	797.09	708.20	944.82	364.53	920.06	479.03
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	897.33	270.24	186.84	6.05
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		9,266.42	10,547.42	5,020.88	7,289.02	1,872.44	3,960.08	2,300.50	8,168.48	9,211.92	8,041.72
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			18,045.80	17,672.44	19,416.04	18,282.61	20,931.87	22,331.79	24,596.27	23,082.97	20,657.53	20,684.72
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Actual Price per Unit:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1749 0.2265	0.1749	0.1749	0.1749 0.2265	0.1749 0.2265	0.1749 0.2265	0.1749 0.2265	0.1749 0.2265	0.1749	0.1749 0.2265
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647 1200648		0.2650	0.2265 0.2650	0.2265 0.2650	0.2650	0.2650	0.2650	0.2650	0.2650	0.2265 0.2650	0.2650
CHM,PACL,DELPC2020, BULK	1200048		0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702		0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201201		0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	_	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890
New Chemical #1												
New Chemical #2												
New Chemical #3												
2016 Price Increase (Decrease) per Supply Chain:	42005	_	2.007/	2.005/	2.00-1	2.0054	2.0051	2.0054	2.0051	2.00-1	2.05-1	2.0051
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200585 1200588		3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%	3.00% 3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200588		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHIVI, CHEOMINE, 100/6, 2000LD CILINDEN	1200397		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

	Dort CD Allow										
Chemical	Part SD Alloca <u>Number</u> <u>to Pla</u> i		<u>Feb</u>	Mar	<u>Apr</u>	May	Jun	Jul	Aug	<u>Sep</u>	Oct
CHM,HFS ACID,23%,BULK	1200647	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
CHM,HFS ACID,23%,MINI BULK	1200648	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
CHM,PACL,DELPC2020, BULK	1200702	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM.POTASSIUM PERMANGANATE.100%.55LB	1200871	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #1											
New Chemical #2											
New Chemical #3											
2016 Budget Price per Unit:											
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373
CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.8002
	1200647	0.1802		0.2288	0.2288	0.2288	0.2288		0.2288	0.2288	0.1802
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647	0.2677	0.2288 0.2677	0.2677	0.2677	0.2677	0.2288	0.2288 0.2677	0.2677	0.2677	0.2288
CHM.PACL.DELPC2020. BULK	1200048	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823
CHM,POLYMER,CATIONC CEDRFLOC 408,30LB	1200761	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280
CHM,POLYMER,CATIONC CEDRILOC 524,BOLK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.1332	0.1392	0.1392	0.1426	0.1426	0.1392	0.1426	0.1426	0.1426	0.1426
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036
50/50 Polyphosphate	1200932	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374
New Chemical #2		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budget Expense in Dollars:	4200557	056.55	762.21	4 224 02	4 460 22	4 200 20	4 007 50	4 544 06	2 424 26	4.662.66	4 772 67
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	856.55	763.34	1,221.93	4,468.22	1,389.28	1,887.59	1,541.86	3,424.26	1,663.60	1,773.67
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.00	0.00	524.10	309.34	0.00	84.61	314.77	315.76	81.74	87.36
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	1,855.92	2,270.88	2,742.16	3,066.50	3,509.98	3,960.86	5,261.57	4,774.27	4,723.44	4,008.00
CHM,HFS ACID,23%,BULK	1200647	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,MINI BULK	1200648	1,762.24	1,803.65	2,410.76	1,995.64	2,430.03	2,464.95	2,091.90	2,097.06	2,374.15	2,607.87
CHM,PACL,DELPC2020, BULK	1200702	13,384.35	15,875.95	15,638.60	16,164.44	19,896.76	19,921.49	26,306.21	28,448.30	26,528.92	28,740.84
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Part	SD Allocated										
Chemical	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	<u>Oct</u>
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		1,337.12	1,480.59	1,828.13	1,583.06	1,633.98	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	168.63	3,443.46	3,216.96	2,265.64	2,259.03	2,369.87
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		80.73	114.04	156.50	56.84	126.87	112.72	150.39	58.02	146.45	76.25
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	127.93	38.53	26.64	0.86
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		8,614.39	9,805.26	4,667.58	6,776.13	1,740.69	3,681.43	2,138.63	7,593.71	8,563.73	7,475.87
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			7,892.46	7,729.17	8,491.75	7,996.03	9,154.71	9,766.97	10,757.36	10,095.50	9,034.72	9,046.61
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		_										
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2016 CHEM	IICAL BUDGET		35,783.76	39,842.89	37,681.51	42,416.20	40,050.93	45,324.10	51,907.59	59,111.06	55,402.41	56,187.20
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2015 CHEMI	CAL BUDGET		50,146.14	41,750.22	44,861.37	54,306.15	52,098.82	58,311.67	63,885.69	59,524.62	55,074.56	43,108.81
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2014 ACTUA	IL COST		37,752.52	48,641.45	53,520.29	42,766.09	67,443.63	45,653.52	41,137.30	71,431.86	64,576.38	85,749.95
Cost per 1000 gallons - 2016 Chemical Budget			0.1211	0.1376	0.1185	0.1416	0.1168	0.1239	0.1288	0.1563	0.1637	0.1658
Cost per 1000 gallons - 2015 Chemical Budget			0.1742	0.1508	0.1549	0.1855	0.1525	0.1525	0.1629	0.1495	0.1500	0.1288
Cost per 1000 gallons - 2014 Actual Cost			0.1089	0.1564	0.1697	0.1360	0.1901	0.1219	0.0990	0.1837	0.1801	0.2553

Note: Approximately \$55k of chemicals purchased form Aquatic Control, Inc. (Algimycin Application?) were paid on invoices and are not reflected in the above chemical usage amounts.

Chamical	Part SD Allocated	Nov	Doe	VTD	Notes
<u>Chemical</u>	<u>Number</u> <u>to Plant</u>	Nov	<u>Dec</u>	<u>YTD</u>	<u>Notes</u>
2016 Central District System Delivery - Budget		993,207.84	1,051,365.08	13,516,195.84	Updated for 2016 Budgeted SD entered into hyperion as of May 29
2015 Central District System Delivery - Budget		970,664.77	998,059.83	13,418,971.48	Budgeted 2015 District Total System Delivery in T-gal
2014 Central District System Delivery - Actual		1,012,083.00	996,809.14	13,980,550.14	Actual 2014 District Total System Delivery in T-gal
2013 Central District System Delivery - Actual	Į.	985,766.43	1,003,560.71	13,034,192.28	Actual 2013 District Total System Delivery in T-gal
Richmond Road Station (RRS) Plant: 2014 Monthly Chemical Usage in Units:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	1,766.00	3,141.00	45,860.00	Actual 2014 Chemicals used in units (lbs./gal) by month
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	0.00	0.00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	200.00	1,206.45	5,456.45	Left blank in template.
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	14,205.00	28,436.00	256,813.00	
CHM,HFS ACID,23%,BULK	1200647	0.00	0.00	28,948.00	
CHM,HFS ACID,23%,MINI BULK	1200648	12,912.00	24,664.00	165,320.00	
CHM,PACL,DELPC2020, BULK	1200702	124,736.00	241,526.00	2,251,591.00	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201523 1201281	11,500.00 0.00	21,922.00 0.00	159,303.00 491.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281	0.00	0.00	0.00	
		0.00	0.00		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200667 1200815	550.00	990.00	27,520.00 7,975.00	
CHM,POLYMER,CATIONC CEDRFLOC 406,30LB	1200813	0.00	0.00	25,384.00	
CHM,POLYMER,CATIONC CEDRFLOC 524,BOLK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	5,170.00	10,742.00	43,771.00	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201331	0.00	0.00	0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	950.00	1,300.00	8,900.00	
CHM,SODIUM HYDROXIDE,50%,BULK	1200900	0.00	0.00	1,408.00	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200328	7,688.00	15,057.00	92,088.00	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	1,550.00	2,850.00	19,800.00	
G.IIII,5003.0III 11110302[7112,5111,12074]35020	1200352	1,330.00	2,030.00	13,000.00	
Allocated 2014 System Delivery	29%	297,248.78	292,762.85	4,106,087.58	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2013 Monthly Chemical Usage in Units:					
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	1,998.00	8,571.00	35,314.00	Actual 2013 Chemicals used in units (lbs./gal) by month
	1200557 1200585	1,998.00 0.00	8,571.00 0.00	35,314.00 3,280.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK					Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	0.00	3,280.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK	1200585 1200588 1200597 1200647	0.00 0.00 13,064.00 7,671.00	0.00 4,800.00 13,322.00 7,843.00	3,280.00 4,800.00 229,159.00 122,623.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200585 1200588 1200597 1200647 1200648	0.00 0.00 13,064.00 7,671.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK	1200585 1200588 1200597 1200647 1200648 1200702	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,PHATE,ORTHO,POLY,CEDARCLEAR 417	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CRUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-D,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 0.00 605.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 0.00 110.00 3,638.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 0.00 110.00 3,638.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRELOC 408,50LB CHM,POLYMER,CATIONC CEDRELOC 524,BULK CHM,POLYMER,CATIONC CEDRELOC 524,BULK CHM,POLYMER,CATIONC CEDRELOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POLYMER,CATIONC CEDRFLOC 424,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871 1200900	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CHCRINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200585 1200588 1200588 1200647 1200648 1200702 1201523 12011281 1201171 1200667 1200815 1200761 1201531 1200871 1200871 1200900 1200928	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BIULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOCS24,MINIBULK CHM,POTASUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINIBULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871 1200900 1200928 1200928	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00 2,835.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00 0.00 2,835.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CHCRINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200585 1200588 1200588 1200647 1200648 1200702 1201523 12011281 1201171 1200667 1200815 1200761 1201531 1200871 1200871 1200900 1200928	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BIULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOCS24,MINIBULK CHM,POTASUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINIBULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871 1200900 1200928 1200928	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00 2,835.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00 0.00 2,835.00	Actual 2013 Chemicals used in units (lbs./gal) by month System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201123 1201171 1200667 1200815 1200761 1201531 1200871 1200900 1200928 1200880 1200952	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00 0.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00 2,835.00 1,750.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00 0.00 2,835.00 20,975.00	
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CHDRINE,100%,2000LB CYLINDER CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM THOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871 1200900 1200928 1200880 1200952	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00 0.00 1,400.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00 2,835.00 1,750.00 294,745.78	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00 0.00 2,835.00 20,975.00 3,828,142.27	
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units:	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871 1200900 1200928 1200880 1200952	0.00 0.00 13,064.00 7,671.00 0.00 116,956.00 0.00 6,454.00 0.00 605.00 3,524.00 0.00 550.00 800.00 0.00 1,400.00	0.00 4,800.00 13,322.00 7,843.00 0.00 113,945.00 0.00 6,807.00 0.00 110.00 3,638.00 0.00 1,980.64 850.00 0.00 2,835.00 1,750.00	3,280.00 4,800.00 229,159.00 122,623.00 0.00 1,627,954.00 0.00 48,418.00 17,564.00 0.00 5,170.00 44,434.00 0.00 16,480.64 9,130.00 0.00 2,835.00 20,975.00	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants

	Part	SD Allocated				
Chemical	<u>Number</u>	to Plant	Nov	<u>Dec</u>	YTD	<u>Notes</u>
CHM.CARBON.PAC WOOD BASED.750LB	1200588		100.00	3,003.23	5,128.23	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		13,634.50	20,879.00	242,986.00	
CHM,HFS ACID,23%,BULK	1200647		3,835.50	3,921.50	75,785.50	
CHM,HFS ACID,23%,MINI BULK	1200648		6,456.00	12,332.00	82,660.00	
CHM,PACL,DELPC2020, BULK	1200702		120,846.00	177,735.50	1,939,772.50	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		5,750.00	10,961.00	79,651.50	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3,227.00	3,403.50	24,454.50	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	8,782.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	13,760.00	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		577.50	550.00	6,572.50	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		1,762.00	1,819.00	34,909.00	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		2,585.00	5,371.00	21,885.50	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		275.00	990.32	8,240.32	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		875.00	1,075.00	9,015.00	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	704.00	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		3,844.00	8,946.00	47,461.50	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		1,475.00	2,300.00	20,387.50	
2-Year Average Allocated System Delivery			293,384.19	293,754.31	3,967,114.93	2013/2014 average system delivery allocated to plant by month
Historical Dosage per T-Gal Produced:						
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0064	0.0199		2-year average chemical usage in units / 2-year average allocated system delivery
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.0000	0.0000		2 year are age are mean asage in among 2 year are age and are age.
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.0003	0.0102		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0465	0.0711		
CHM,HFS ACID,23%,BULK	1200647		0.0131	0.0133		
CHM,HFS ACID,23%,MINI BULK	1200648		0.0220	0.0420		
CHM,PACL,DELPC2020, BULK	1200702		0.4119	0.6050		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.0196	0.0373		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0110	0.0116		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0000	0.0000		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.0020	0.0019		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0060	0.0062		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.0088	0.0183		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0009	0.0034		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0030	0.0037		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.0131	0.0305		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.0050	0.0078		
2016 BRIR Budgeted Dosage per T-Gal Produced:						Historical Dosage per T-Gal Produced above with following modifications:
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0063	0.0200		nistorical bosage per 1-dai Frouticeu above with following mountations.
CHM,CARBON,PAC LIGNITE,900LB	1200537		0.0000	0.0000		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.0003	0.0103		Osed 2014 dosages only as opposed to 2-year average, as it appears that system delivery him between plants was ma
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0459	0.0713		
CHM,HFS ACID,23%,BULK	1200557		0.0129	0.0134		
CHM,HFS ACID,23%,BOLK CHM,HFS ACID,23%,MINI BULK	1200648		0.0217	0.0421		
CHM,PACL,DELPC2020, BULK	1200702		0.4065	0.6071		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.0387	0.071	0.0488	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		0.0000	0.0000	0.0-00	Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201201		0.0000	0.0000		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.0000	0.0000		Made dosages zero, as chemical usage is charged to waste disposal expense
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0000	0.0000		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	Nov	Dec	YTD	<u>Notes</u>
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.0183	0.0183		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0029	0.0037		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.0257	0.0257		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was ma
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.0000	0.0000		Made dosages zero, as chemical usage is charged to waste disposal expense
2016 Operations Adjustments to Budgeted Dosage per T-Gal						Production Dept. Revisions to Budgeted Dosage in Rows 106-124 (Document explanation for adjustments):
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557					
CHM,CARBON,PAC LIGNITE,900LB	1200585					
CHM,CARBON,PAC WOOD BASED,750LB	1200588					
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		(0.0420)	(0.0424)		
CHM,HFS ACID,23%,BULK	1200647		(0.0129)	(0.0134)		
CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK	1200648 1200702					
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		(0.0387)	(0.0749)	(0.0488)	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		(0.0387)	(0.0749)	(0.0488)	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281					
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200007		0.0000	0.0000		
CHM.POLYMER.CATIONC CEDRFLOC 524.BULK	1200761					
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531					
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871					
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900					
CHM,SODIUM HYDROXIDE,50%,BULK	1200928					
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880					
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952					
50/50 Polyphosphate	Not Obtained		0.06105	0.06105		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2						If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3						If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Final Adjusted Budgeted Decage new T Cal Dyadused						Final Budgetad Decage new T. Cal often revisions input by Draduction Department
2016 Final Adjusted Budgeted Dosage per T-Gal Produced: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0063	0.0200		Final Budgeted Dosage per T-Gal after revisions input by Production Department
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.0003	0.0000		
CHM,CARBON,PAC LIGHTE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.0003	0.0103		
CHM.CHLORINE.100%.2000LB CYLINDER	1200588		0.0459	0.0713		
CHM,HFS ACID,23%,BULK	1200537		0.0000	0.0000		
CHM,HFS ACID,23%,MINI BULK	1200648		0.0217	0.0421		
CHM,PACL,DELPC2020, BULK	1200702		0.4065	0.6071		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.0000	0.0000		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0000	0.0000		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.0000	0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0000	0.0000		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.0183	0.0183		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0029	0.0037		
CHM,SODIUM HYDROXIDE,50%,BULK			0.0000	0.0000		
	1200928					
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200928 1200880		0.0257	0.0257		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB			0.0257 0.0000	0.0000		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB 50/50 Polyphosphate	1200880		0.0257 0.0000 0.0611	0.0000 0.0611		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200880		0.0257 0.0000	0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.

	Part	SD Allocated			
Chemical	Number	to Plant Nov	Dec	YTD	<u>Notes</u>
2016 Budgeted System Delivery		29% 291,705.14	308,785.93	3,969,706.72	Current Placeholder - will be updated when revenue budget is completed
2016 Budgeted Chemical Usage in Units:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	1,846.90	6,176.50	39,633.73	Final 2016 Budgeted Chemicals in Units (lbs./gal.)
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	0.00	0.00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	98.14	3,167.59	5,248.72	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	13,380.22	22,021.72	236,151.03	
CHM,HFS ACID,23%,BULK	1200647	0.00	0.00	0.00	
CHM,HFS ACID,23%,MINI BULK	1200648	6,335.60	13,006.94	101,682.17	
CHM,PACL,DELPC2020, BULK	1200702	118,592.24	187,463.07	1,884,751.72	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.00	0.00	0.00	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.00	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00 0.00	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200667 1200815	0.00	0.00 0.00	0.00 0.00	
	1200813	0.00	0.00		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761	5,351.60	5,664.96	23,971.89 38,143.54	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201331	0.00	0.00	0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971	858.68	1,133.84	8,770.30	
CHM,SODIUM HYDROXIDE,50%,BULK	1200900	0.00	0.00	1,360.47	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200328	7,501.30	7,940.54	81,120.74	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200880	0.00	0.00	0.00	
50/50 Polyphosphate	1200332	17,809.59	18,852.43	242,364.06	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2		0.00	0.00	0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3		0.00	0.00	0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #5		0.00	0.00	0.00	The west characteristic asea in 2013/2014 needs to be added, list chemical description and part number at left.
2015 Actual Price per Unit:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.5833	0.5833		Actual current year price per unit incurred by facility
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.9100	0.9100		
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.8410	0.8410		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.1749	0.1749		
CHM,HFS ACID,23%,BULK	1200647	0.2265	0.2265		
CHM,HFS ACID,23%,MINI BULK	1200648	0.2650	0.2650		
CHM,PACL,DELPC2020, BULK	1200702	0.1297	0.1297		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.3974	0.3974		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.4100	0.4100		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.6800	0.6800		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.3400	0.3400		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	2.4823	2.4823		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.3280	0.3280		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.5059	0.5059		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	2.3594	2.3594		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.1545	0.1545		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.1398	0.1398		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.9026	0.9026		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.4890	0.4890		
New Chemical #1					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Gro
New Chemical #2					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Gro
New Chemical #3					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Grc
2016 Price Increase (Decrease) per Supply Chain:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	3.00%	3.00%		2016 Price Increases per Guidance Provided by Supply Chain.
CHM,CARBON,PAC LIGNITE,900LB	1200585	3.00%	3.00%		2010 Finde indeases per duidance riovided by supply Chain.
CHM,CARBON,PAC LIGHTE,500LB	1200583	3.00%	3.00%		
CHM,CHLORINE,100%,2000LB CYLINDER	1200588	3.00%	3.00%		
S. M. J. S. M. E. J. M. J. D. O. J. D. C. L. M. D.	1200337	3.00%	3.00%		

	Part	SD Allocated				
Chemical	Number	to Plant	Nov	Dec	YTD	Notes
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%		
CHM,HFS ACID,23%,MINI BULK	1200648		1.00%	1.00%		
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00%	0.00%		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00%	0.00%		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00%	0.00%		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00%	0.00%		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00%	0.00%		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00%	0.00%		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00%	0.00%		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		3.00%	3.00%		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		3.00%	3.00%		
New Chemical #1						If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Grc
New Chemical #2						If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Grc
New Chemical #3						If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Grc
2016 Budget Price per Unit:						
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6008	0.6008		2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.9373	0.9373		
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.8662	0.8662		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802		
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288		
CHM,HFS ACID,23%,MINI BULK	1200648		0.2677	0.2677		
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.3974	0.3974		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4100	0.4100		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.6800	0.6800		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		2.4823	2.4823		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.5059	0.5059		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.3594	2.3594		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592	0.1592		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1426	0.1426		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.9296	0.9296		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.5036	0.5036		
50/50 Polyphosphate			0.4374	0.4374		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			0.0000	0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			0.0000	0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budget Expense in Dollars:						
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,109.55	3,710.61	23,810.45	2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	==== ======= one maniphed by E020 budgeted into per one
CHM,CARBON,PAC WOOD BASED,750LB	1200588		85.01	2,743.79	4,546.47	
CHM,CHLORINE,100%,2000LB CYLINDER	1200500		2,411.02	3,968.16	42,552.78	
CHM,HFS ACID,23%,BULK	1200537		0.00	0.00	0.00	
CHM,HFS ACID,23%,MINI BULK	1200648		1,695.73	3,481.31	27,215.28	
CHM,PACL,DELPC2020, BULK	1200702		15,843.32	25,044.12	251,793.30	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	0.00	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	
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	Part	SD Allocated			
Chemical	Number	to Plant	Nov	Dec	YTD
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00	0.00	7,862.88
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		2,707.38	2,865.91	19,296.90
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		136.68	180.47	1,395.96
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	193.96
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		6,973.47	7,381.80	75,412.70
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	0.00
50/50 Polyphosphate			7,789.15	8,245.25	105,999.69
New Chemical #2			0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2016 CHEMICAL	L BUDGET		38,751.31	57,621.43	560,080.38
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2015 CHEMICAL	BUDGET		59,136.56	55,030.34	637,234.95
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2014 ACTUAL CO	ST		37,391.11	44,871.58	640,935.68
Cost per 1000 gallons - 2016 Chemical Budget			0.1328	0.1866	0.1411
Cost per 1000 gallons - 2015 Chemical Budget			0.2074	0.1877	0.1617
Cost per 1000 gallons - 2014 Actual Cost			0.1258	0.1533	0.1561

Note: Approximately \$55k of chemicals purchased form Aquatic Control, Inc. (Algimycin App

If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.

Notes

Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reaso

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - RICHMOND ROAD STATION COST CENTER COST CENTER #120251 2016 CHEMICALS BUDGET

<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant
2016 Central District System Delivery - Budget		
2015 Central District System Delivery - Budget		
2014 Central District System Delivery - Actual		
2013 Central District System Delivery - Actual		
Richmond Road Station (RRS) Plant:		
2014 Monthly Chemical Usage in Units:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
Allocated 2014 System Delivery		29%
2013 Monthly Chemical Usage in Units:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
Allocated 2013 System Delivery		29%
2-Year Average Chemical Usage in Units:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM CARRON DAC LIGNITE 0001 B	1200557	

CHM,CARBON,PAC LIGNITE,900LB

1200585

	Part	SD Allocated
Chemical	Number	to Plant
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
2-Year Average Allocated System Delivery		
Historical Dosage per T-Gal Produced:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
2016 BRIR Budgeted Dosage per T-Gal Produced:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014

Chemical	Number
HM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531
IM,POTASSIUM PERMANGANATE,100%,55LB	1200871
HM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
HM,SODIUM HYDROXIDE,50%,BULK	1200928
HM,SODIUM PERMANGANATE,20%,MINI BULK	1200880
HM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952
116 Operations Adjustments to Budgeted Dosage per T-G	Gal Produced:
HM,AMMONIA,ANHYDROUS,100%,BULK	1200557
HM,CARBON,PAC LIGNITE,900LB	1200585
HM,CARBON,PAC WOOD BASED,750LB	1200588
HM,CHLORINE,100%,2000LB CYLINDER	1200597
HM,HFS ACID,23%,BULK	1200647
IM,HFS ACID,23%,MINI BULK	1200648
M,PACL,DELPC2020, BULK	1200702
HM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523
IM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
HM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171
HM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
IM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815
IM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
HM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531
HM,POTASSIUM PERMANGANATE,100%,55LB	1200871
HM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
HM,SODIUM HYDROXIDE,50%,BULK	1200928
IM,SODIUM PERMANGANATE,20%,MINI BULK	1200880
HM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952
/50 Polyphosphate	Not Obtained
w Chemical #2	
ew Chemical #3	

Part

SD Allocated

CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM.CARBON.PAC LIGNITE.900LB 1200585 CHM, CARBON, PAC WOOD BASED, 750LB 1200588 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM.HFS ACID.23%.BULK 1200647 CHM, HFS ACID, 23%, MINI BULK 1200648 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK 1201523 CHM, PHOSPHATE, ORTHO, POLY, CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 408,50LB 1200815 CHM, POLYMER, CATIONC CEDRFLOC 524, BULK 1200761 CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK 1201531 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM HYDROXIDE,50%,BULK 1200928 CHM, SODIUM PERMANGANATE, 20%, MINI BULK 1200880 CHM,SODIUM THIOSULFATE,DRY,100%,50LB 1200952 50/50 Polyphosphate

New Chemical #2
New Chemical #3

terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014 terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014

terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014 terially different in 2013, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014

CHM,CHLORINE,100%,2000LB CYLINDER

	Part	SD Allocated
Chemical	Number	to Plant
2016 Budgeted System Delivery		29%
2016 Budgeted Chemical Usage in Units:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2015 Actual Price per Unit:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB New Chemical #1	1200952	un usill inquit pring par unit
New Chemical #2		up will input price per unit up will input price per unit
New Chemical #3		up will input price per unit up will input price per unit
New Chemical #3		ap will impac price per unit
2016 Price Increase (Decrease) per Supply Chain:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	

1200597

Chemical	Part Number	SD Allocat
		to Flair
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
New Chemical #1		

2016 Budget Price per Unit:

New Chemical #2

New Chemical #3

CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CARBON,PAC LIGNITE,900LB 1200585 CHM, CARBON, PAC WOOD BASED, 750LB 1200588 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,HFS ACID,23%,MINI BULK 1200648 CHM,PACL,DELPC2020, BULK 1200702 1201523 CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM, PHOSPHATE, ORTHO, POLY, CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 1200667 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM, POLYMER, CATIONC CEDRFLOC 408, 50LB 1200815 CHM, POLYMER, CATIONC CEDRFLOC 524, BULK 1200761 1201531 CHM, POLYMER, CATIONC CEDRFLOC524, MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 1200900 CHM.SODIUM HYDROXIDE.50%.BULK 1200928 CHM, SODIUM PERMANGANATE, 20%, MINI BULK 1200880 CHM,SODIUM THIOSULFATE,DRY,100%,50LB 1200952 50/50 Polyphosphate

New Chemical #2
New Chemical #3

2016 Budget Expense in Dollars:

CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CARBON,PAC LIGNITE,900LB 1200585 CHM,CARBON,PAC WOOD BASED,750LB 1200588 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,HFS ACID,23%,MINI BULK 1200648 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK 1201523 CHM, PHOSPHATE, ORTHO, POLY, CEDARCLEAR 417 1201281 CHM, PHOSPHATE, ORTH-PLY CARUS 4100, BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667

up will input price increase. up will input price increase. up will input price increase.

	Part	SD Allocated
<u>Chemical</u>	Number	to Plant
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		

CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2016 CHEMICAL BUDGET

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CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2014 ACTUAL COST

Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost

Note: Approximately \$55k of chemicals purchased form Aquatic Control, Inc. (Algimycin App

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<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>
2016 Central District System Delivery - Budget			1,006,381.09	985,559.51	1,082,796.80	1,019,587.34 996,661.68		1,245,402.83	1,371,688.64		1,152,032.17	1,153,548.37	993,207.84 970,664.77	1,051,365.08 998,059.83
2015 Central District System Delivery - Budget 2014 Central District System Delivery - Actual			980,083.14 1,180,538.14	942,411.52 1,059,151.14	986,157.34 1,073,765.71	1,070,641.00		1,301,837.00	1,334,898.07 1,415,510.57	1,355,315.08	1,250,294.84 1,220,824.00	1,139,569.79	1,012,083.00	998,059.83
2013 Central District System Delivery - Actual			1,019,730.29	925,074.43				1,157,294.00		1,245,984.57	1,247,286.57		985,766.43	1,003,560.71
2013 Central District System Delivery - Actual			1,013,730.23	323,074.43	1,017,004.37	1,003,331.71	1,103,121.23	1,137,234.00	1,103,322.43	1,243,364.37	1,247,280.37	1,133,733.23	363,700.43	1,003,300.71
KRS II Plant:														
2014 Monthly Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		11,972.00	10,756.00	7,838.00	3,718.00	3,596.00	11,714.00	14,833.00	18,400.00	14,976.00	10,154.00	12,261.00	9,307.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		10,605.00	9,644.00	8,837.00	8,019.00	3,506.00	14,152.00	20,568.00	14,010.00	14,617.00	9,700.00	9,975.00	9,161.00
CHM,HFS ACID,23%,BULK	1200647		12,175.00	11,851.00	12,325.00	7,467.00	2,580.00	8,017.00	10,968.00	11,154.00	11,142.00	7,316.00	8,127.00	7,076.00
CHM,PACL,DELPC2020, BULK	1200702		136,593.00	127,074.00	81,349.00	68,587.00	39,778.00	65,530.00	100,644.00	110,791.00	131,965.00	77,581.00	57,212.00	56,463.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		2,965.00	2,661.00	3,107.00	54.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	58.00	6,315.00	5,889.00	7,824.00	8,275.00	8,335.00	6,251.00	6,018.00	6,065.00
CHM,POLYMER,FILTER AID	1201127		0.00	0.00	0.00	122.00	78.00	38.00	611.00	383.00	48.00	0.00	14.00	0.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		900.00	450.00	1,350.00	900.00	450.00	900.00	0.00	450.00	0.00	1,924.00	900.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		1,376.00	783.00	588.00	929.00	459.00	0.00	302.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	1,540.00	3,135.00	3,685.00	3,685.00	2,145.00	1,155.00	770.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		1,628.00	1,388.00	2,088.00	316.00	512.00	1,517.00	1,240.00	895.00	900.00	1,286.00	811.00	902.00
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,146.00	23,923.00	1,602.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		994.00	820.00	752.00	926.00	1,331.00	843.00	1,159.00	777.00	908.00	943.00	829.00	493.00
Allocated 2014 System Delivery		19%	221,705.06	198,908.58	201,653.20	201,066.38	226,900.50	239,433.38	265,832.89	248,694.61	229,270.75	214,812.03	190,069.19	187,200.76
2013 Monthly Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		9,432.00	6,359.00	5,483.00	5,638.00	10,327.00	11,615.00	15,880.00	14,886.00	16,632.00	13,856.00	10,078.00	12,116.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		8,748.00	5,742.00	6,348.00	8,203.00	10,430.00	9,909.00	18,709.00	17,139.00	16,795.00	15,635.00	12,631.00	12,539.00
CHM,HFS ACID,23%,BULK	1200647		6,427.00	5,347.00	5,827.00	6,256.00	6,748.00	5,600.00	8,810.00	9,239.00	10,117.00	9,515.00	7,708.00	9,393.00
CHM,PACL,DELPC2020, BULK	1200702		93,043.00	70,762.00	50,073.00	58,590.00	68,978.00	43,159.00	125,310.00	108,084.00	118,912.00	83,562.00	83,960.00	112,847.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		1,537.00	1,421.00	1,638.00	1,672.00	2,027.00	1,990.00	2,254.00	1,963.00	2,498.00	2,433.00	1,870.00	2,246.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,FILTER AID	1201127			27.00	7.00	6.00	11.00	55.00	187.00	93.00	83.00	9.00	115.00	4.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		2,250.00	950.00	477.00	2,154.00	965.00	897.00	900.00	1,016.00	837.00	1,254.00	450.00	900.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		770.00	523.00	557.00	575.00	1,566.00	1,113.00	2,215.00	2,394.00	3,110.00	1,928.00	1,444.00	1,474.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		750.00	633.00	199.00	773.00	1,727.00	1,384.00	1,873.00	1,317.00	1,518.00	1,518.00	1,510.00	1,598.00
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		899.00	715.00	843.00	1,047.00	1,025.00	779.00	593.00	1,026.00	548.00	831.00	840.00	764.00
Allocated 2013 System Delivery		19%	191,505.35	173,728.98	191,004.73	188,925.24	208,292.98	217,339.81	222,265.51	233,995.90	234,240.42	212,926.75	185,126.94	188,468.70
2-Year Average Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		10,702.00	8,557.50	6,660.50	4,678.00	6,961.50	11,664.50	15,356.50	16,643.00	15,804.00	12,005.00	11,169.50	10,711.50
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		9,676.50	7,693.00	7,592.50	8,111.00	6,968.00	12,030.50	19,638.50	15,574.50	15,706.00	12,667.50	11,303.00	10,850.00
CHM,HFS ACID,23%,BULK	1200647		9,301.00	8,599.00	9,076.00	6,861.50	4,664.00	6,808.50	9,889.00	10,196.50	10,629.50	8,415.50	7,917.50	8,234.50
CHM,PACL,DELPC2020, BULK	1200702		114,818.00	98,918.00	65,711.00	63,588.50	54,378.00	54,344.50	112,977.00	109,437.50	125,438.50	80,571.50	70,586.00	84,655.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		2,251.00	2,041.00	2,372.50	863.00	1,013.50	995.00	1,127.00	981.50	1,249.00	1,216.50	935.00	1,123.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	29.00	3,157.50	2,944.50	3,912.00	4,137.50	4,167.50	3,125.50	3,009.00	3,032.50
CHM,POLYMER,FILTER AID	1201127		0.00	13.50	3.50	64.00	44.50	46.50	399.00	238.00	65.50	4.50	64.50	2.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		1,575.00	700.00	913.50	1,527.00	707.50	898.50	450.00	733.00	418.50	1,589.00	675.00	450.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		1,073.00	653.00	572.50	752.00	1,012.50	556.50	1,258.50	1,197.00	1,555.00	964.00	722.00	737.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	770.00	1,567.50	1,842.50	1,842.50	1,072.50	577.50	385.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		1,189.00	1,010.50	1,143.50	544.50	1,119.50	1,450.50	1,556.50	1,106.00	1,209.00	1,402.00	1,160.50	1,250.00
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,573.00	11,961.50	801.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		946.50	767.50	797.50	986.50	1,178.00	811.00	876.00	901.50	728.00	887.00	834.50	628.50

	Part	SD Allocated												
Chemical	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
2-Year Average Allocated System Delivery			206,605.21	186,318.78	196,328.96	194,995.81	217,596.74	228,386.60	244,049.20	241,345.25	231,755.58	213,869.39	187,598.06	187,834.73
<u> </u>														
Historical Dosage per T-Gal Produced:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.0518	0.0459	0.0339	0.0240	0.0320	0.0511	0.0629	0.0690	0.0682	0.0561	0.0595	0.0570
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0468	0.0413	0.0387	0.0416	0.0320	0.0527	0.0805	0.0645	0.0678	0.0592	0.0603	0.0578
CHM,HFS ACID,23%,BULK	1200647		0.0450	0.0462	0.0462	0.0352	0.0214	0.0298	0.0405	0.0422	0.0459	0.0393	0.0422	0.0438
CHM,PACL,DELPC2020, BULK	1200702		0.5557	0.5309	0.3347	0.3261	0.2499	0.2379	0.4629	0.4534	0.5413	0.3767	0.3763	0.4507
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0109	0.0110	0.0121	0.0044	0.0047	0.0044	0.0046	0.0041	0.0054	0.0057	0.0050	0.0060
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0001	0.0145	0.0129	0.0160	0.0171	0.0180	0.0146	0.0160	0.0161
CHM,POLYMER,FILTER AID	1201127		0.0000	0.0001	0.0000	0.0003	0.0002	0.0002	0.0016	0.0010	0.0003	0.0000	0.0003	0.0000
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.0076	0.0038	0.0047	0.0078	0.0033	0.0039	0.0018	0.0030	0.0018	0.0074	0.0036	0.0024
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871		0.0052 0.0000	0.0035 0.0000	0.0029 0.0000	0.0039 0.0000	0.0047 0.0000	0.0024 0.0034	0.0052 0.0064	0.0050 0.0076	0.0067 0.0080	0.0045 0.0050	0.0038 0.0031	0.0039 0.0020
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		0.0058	0.0054	0.0058	0.0000	0.0051	0.0034	0.0064	0.0076	0.0052	0.0050	0.0051	0.0020
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		0.0000	0.0034	0.0000	0.0028	0.0001	0.0004	0.0004	0.0046	0.0516	0.0000	0.0002	0.0007
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916		0.0046	0.0000	0.0041	0.0051	0.0054	0.0036	0.0036	0.0037	0.0031	0.0037	0.0044	0.0033
CHWI,50510W THIOSOEI ATE,EIQOID,5070,BOEK	1200330		0.0040	0.0041	0.0041	0.0031	0.0034	0.0030	0.0030	0.0037	0.0031	0.0041	0.0044	0.0033
2016 BRIR Budgeted Dosage per T-Gal Produced:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.0540	0.0541	0.0389	0.0233	0.0307	0.0487	0.0578	0.0669	0.0689	0.0559	0.0588	0.0572
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0478	0.0485	0.0438	0.0403	0.0307	0.0502	0.0739	0.0626	0.0685	0.0590	0.0595	0.0580
CHM,HFS ACID,23%,BULK	1200647		0.0549	0.0596	0.0611	0.0341	0.0206	0.0284	0.0372	0.0410	0.0464	0.0392	0.0417	0.0440
CHM,PACL,DELPC2020, BULK	1200702		0.6161	0.6389	0.4034	0.3163	0.2397	0.2270	0.4250	0.4400	0.5471	0.3751	0.3714	0.4522
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0134	0.0134	0.0154	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0003	0.0278	0.0246	0.0294	0.0333	0.0364	0.0291	0.0317	0.0324
CHM,POLYMER,FILTER AID	1201127		0.0000	0.0000	0.0000	0.0006	0.0003	0.0002	0.0023	0.0015	0.0002	0.0000	0.0001	0.0000
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		0.0062	0.0039	0.0029	0.0037	0.0045	0.0023	0.0047	0.0048	0.0068	0.0045	0.0038	0.0039
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000	0.0000	0.0000	0.0000	0.0032	0.0059	0.0074	0.0080	0.0050	0.0030	0.0021
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0073	0.0070	0.0104	0.0027	0.0049	0.0061	0.0059	0.0044	0.0053	0.0065	0.0061	0.0067
CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916 1200956		0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000 0.0000	0.0000 0.0000	0.0127 0.0000	0.1043 0.0000	0.0075 0.0000	0.0000 0.0000	0.0000
CHM,30DIOW THIOSOLFATE,LIQUID,30%,BOLK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Operations Adjustments to Budgeted Dosage pe	er T-Gal Produce	ed:												
CHM,AMMONIA,AQUA,19%,BULK	1200566	_												
CHM,CHLORINE,100%,2000LB CYLINDER	1200597													
CHM,HFS ACID,23%,BULK	1200647													
CHM,PACL,DELPC2020, BULK	1200702													
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		(0.0134)	(0.0134)	(0.0154)	(0.0003)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	(0.0003)	(0.0278)	(0.0246)	(0.0294)	(0.0333)	(0.0364)	(0.0291)	(0.0317)	(0.0324)
CHM,POLYMER,FILTER AID	1201127													
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855													
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870													
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871					0.0037	0.0045							
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900													
CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916 1200956													
50/50 Polyphosphate	Not Obtaine	d	0.038226204	0.038226204	0.038226204	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823
New Chemical #2	Not Obtaine	u e	0.038220204	0.038220204	0.038220204	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823
New Chemical #3														
2016 Final Adjusted Budgeted Dosage per T-Gal Produ	uced:													
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.0540	0.0541	0.0389	0.0233	0.0307	0.0487	0.0578	0.0669	0.0689	0.0559	0.0588	0.0572
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0478	0.0485	0.0438	0.0403	0.0307	0.0502	0.0739	0.0626	0.0685	0.0590	0.0595	0.0580
CHM,HFS ACID,23%,BULK	1200647		0.0549	0.0596	0.0611	0.0341	0.0206	0.0284	0.0372	0.0410	0.0464	0.0392	0.0417	0.0440
CHM,PACL,DELPC2020, BULK	1200702		0.6161	0.6389	0.4034	0.3163	0.2397	0.2270	0.4250	0.4400	0.5471	0.3751	0.3714	0.4522

	Part	SD Allocated												
<u>Chemical</u>	Number	to Plant	lan_	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,FILTER AID	1201127		0.0000	0.0000	0.0000	0.0006	0.0003	0.0002	0.0023	0.0015	0.0002	0.0000	0.0001	0.0000
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		0.0062	0.0039	0.0029	0.0037	0.0045	0.0023	0.0047	0.0048	0.0068	0.0045	0.0038	0.0039
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000	0.0000	0.0037	0.0045	0.0032	0.0059	0.0074	0.0080	0.0050	0.0030	0.0021
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0073	0.0070	0.0104	0.0027	0.0049	0.0061	0.0059	0.0044	0.0053	0.0065	0.0061	0.0067
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0127	0.1043	0.0075	0.0000	0.0000
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50/50 Polyphosphate			0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budgeted System Delivery		19% 188	,998.37	185,088.08	203,349.24	191,478.50	219,224.90	233,886.65	257,603.13	241,753.90	216,351.64	216,636.38	186,524.43	197,446.36
2016 Budgeted Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566	10	,205.85	10,008.65	7,903.92	4,454.93	6,726.01	11,394.28	14,881.09	16,178.52	14,913.47	12,106.96	10,961.19	11,297.75
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		,040.51	8,973.92	8,911.33	7,724.23	6,732.29	11,751.80	19,030.52	15,139.84	14,820.99	12,775.08	11,092.20	11,443.83
CHM,HFS ACID,23%,BULK	1200647	10	,378.90	11,027.57	12,428.66	6,534.31	4,506.23	6,650.77	9,582.85	9,911.93	10,030.54	8,486.97	7,769.84	8,685.18
CHM,PACL,DELPC2020, BULK	1200702	116	,442.33	118,244.68	82,033.20	60,556.27	52,538.50	53,085.55	109,479.41	106,383.26	118,370.21	81,255.78	69,269.58	89,288.22
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,FILTER AID	1201127		0.00	0.00	0.00	116.18	75.36	37.12	592.08	372.31	45.30	0.00	13.74	0.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	1	,173.01	728.60	592.95	716.14	978.25	543.61	1,219.54	1,163.59	1,467.38	972.19	708.53	777.34
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	716.14	978.25	752.16	1,518.97	1,791.08	1,738.68	1,081.61	566.73	406.07
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	1	,387.83	1,291.56	2,105.56	518.54	1,081.63	1,416.90	1,508.31	1,075.13	1,140.87	1,413.91	1,138.86	1,318.41
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,058.20	22,574.97	1,615.61	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate		7	,224.69	7,075.21	7,773.27	7,319.50	8,380.14	8,940.60	9,847.19	9,241.33	8,270.30	8,281.19	7,130.12	7,547.62
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Actual Price per Unit:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749
CHM,HFS ACID,23%,BULK	1200647		0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265
CHM,PACL,DELPC2020, BULK	1200702		0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,FILTER AID	1201127		1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128
New Chemical #1														
New Chemical #2														
New Chemical #3														
2016 Price Increase (Decrease) per Supply Chain:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200500		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,HFS ACID,23%,BULK	1200557		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
5, II 5 7610,2570,00 ER	120004/		1.0070	1.0070	1.0070	1.0070	1.00%	1.0070	1.00/0	1.0070	1.00/0	1.00%	1.0070	1.0078

	Part	SD Allocated												
Chemical	Number	to Plant	<u>Jan</u>	Feb	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,FILTER AID	1201127		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #1														
New Chemical #2														
New Chemical #3														
2016 Budget Price per Unit:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,FILTER AID	1201127		1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191
50/50 Polyphosphate			0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budget Expense in Dollars:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		1,314.00	1,288.61	1,017.63	573.57	865.97	1,467.01	1,915.93	2,082.97	1,920.10	1,558.76	1,411.25	1,454.58
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		1,629.04	1,617.04	1,605.76	1,391.85	1,213.11	2,117.59	3,429.17	2,728.09	2,670.64	2,301.98	1,998.74	2,062.10
CHM,HFS ACID,23%,BULK	1200647		2,374.39	2,522.79	2,843.31	1,494.86	1,030.89	1,521.50	2,192.28	2,267.56	2,294.69	1,941.57	1,777.51	1,986.91
CHM,PACL,DELPC2020, BULK	1200702		15,556.11	15,796.89	10,959.22	8,090.01	7,018.88	7,091.96	14,625.90	14,212.27	15,813.66	10,855.36	9,254.07	11,928.45
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,FILTER AID	1201127		0.00	0.00	0.00	148.71	96.46	47.51	757.87	476.56	57.98	0.00	17.59	0.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		2,742.61	1,703.53	1,386.37	1,674.41	2,287.24	1,271.01	2,851.40	2,720.60	3,430.88	2,273.07	1,656.63	1,817.49
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	1,740.38	2,377.36	1,827.92	3,691.44	4,352.72	4,225.37	2,628.55	1,377.28	986.84
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		220.90	205.58	335.14	82.53	172.16	225.53	240.08	171.13	181.59	225.05	181.27	209.85
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	280.74	2,072.38	148.31	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			2,745.38	2,688.58	2,953.84	2,781.41	3,184.45	3,397.43	3,741.93	3,511.71	3,142.71	3,146.85	2,709.45	2,868.10
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BU	DGET		26,582.42	25,823.01	21,101.27	17,977.74	18,246.53	18,967.46	33,445.99	32,804.34	35,810.01	25,079.51	20,383.77	23,314.33
CENTRAL DISTRICT - KRSII PLANT 2015 CHEMICAL BUD	GET	Г	21,773.31	16,445.45	21,651.30	20,344.50	25,729.19	25,859.96	38,643.06	39,135.77	18,269.43	16,893.54	17,989.49	18,374.45
CENTRAL DISTRICT - KRSII PLANT 2013 CHEMICAL BOLL	,GL1	-	31,913.62	26,439.28	19,907.99	15,013.18	9,948.56	20,234.23	32,605.22	34,235.37	38,157.62	22,330.22	17,524.45	15,783.62
CENTRE DISTRICT KINSHIT EARLY ZOTA ACTUAL COST		L	31,313.02	20,733.20	15,507.55	13,013.10	3,340.30	20,237.23	32,003.22	37,233.37	30,137.02	-2,330.22	17,324.43	13,703.02

9	Part	SD Allocated		- 1										
Chemical	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	Jui	Aug	<u>Sep</u>	Oct	Nov	Dec
Cost per 1000 gallons - 2016 Chemical Budget			0.1406	0.1395	0.1038	0.0939	0.0832	0.0811	0.1298	0.1357	0.1655	0.1158	0.1093	0.1181
Cost per 1000 gallons - 2015 Chemical Budget			0.1183	0.0929	0.1169	0.1087	0.1178	0.1058	0.1541	0.1538	0.0778	0.0789	0.0987	0.0980
Cost per 1000 gallons - 2014 Actual Cost			0.1439	0.1329	0.0987	0.0747	0.0438	0.0845	0.1227	0.1377	0.1664	0.1040	0.0922	0.0843

Chamian	Part	SD Allocated	VTD	News
<u>Chemical</u>	Number	to Plant	<u>YTD</u>	<u>Notes</u>
2016 Central District System Delivery - Budget			13,516,195.84	Updated for 2016 Budgeted SD entered into hyperion as of May 29
2015 Central District System Delivery - Budget			13,418,971.48	Budgeted 2015 District Total System Delivery in T-gal
2014 Central District System Delivery - Actual			13,980,550.14	Actual 2014 District Total System Delivery in T-gal
2013 Central District System Delivery - Actual			13,034,192.28	Actual 2013 District Total System Delivery in T-gal
KRS II Plant:				
2014 Monthly Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		129,525.00	Actual 2014 Chemicals used in units (lbs./gal) by month
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		132,794.00	
CHM,HFS ACID,23%,BULK	1200647		110,198.00	
CHM,PACL,DELPC2020, BULK	1200702		1,053,567.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201171 1200667		8,787.00 55,030.00	
CHM,POLYMER,FILTER AID	1200007		1,294.00	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	12001127		8,224.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		4,437.00	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		16,115.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		13,483.00	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		28,671.00	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		10,775.00	
Allocated 2014 System Delivery		19%	2,625,547.32	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2013 Monthly Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		132,302.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,CHLORINE,100%,2000LB CYLINDER	1200500		142,828.00	Actual 2013 chemicals used in units (iss./gail) by month
CHM,HFS ACID,23%,BULK	1200647		90,987.00	
CHM,PACL,DELPC2020, BULK	1200702		1,017,280.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		23,549.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	
CHM,POLYMER,FILTER AID	1201127		597.00	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		13,050.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		17,669.00	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		14,800.00	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		9,910.00	
Allocated 2013 System Delivery		19%	2,447,821.31	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2-Year Average Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		130,913.50	2013/2014 average chemicals used in units (lbs./gal) by month
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		137,811.00	
CHM,HFS ACID,23%,BULK	1200647		100,592.50	
CHM,PACL,DELPC2020, BULK	1200702		1,035,423.50	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		16,168.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		27,515.00	
CHM, POLYMER, FILTER AID	1201127 1200855		945.50 10,637.00	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB	1200855		10,637.00	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870		8,057.50	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		14,141.50	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200906		14,335.50	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		10,342.50	

CHM,PACL,DELPC2020, BULK

1200702

	Part	SD Allocated		
Chemical	Number	to Plant	YTD	Notes
2-Year Average Allocated System Delivery			2,536,684.31	2013/2014 average system delivery allocated to plant by month
<u> </u>			_,	,
Historical Dosage per T-Gal Produced:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			2-year average chemical usage in units / 2-year average allocated system delivery
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			
CHM,PACL,DELPC2020, BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
2016 BRIR Budgeted Dosage per T-Gal Produced:				Historical Dosage per T-Gal Produced above with following modifications:
CHM,AMMONIA,AQUA,19%,BULK	1200566			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,CHLORINE,100%,2000LB CYLINDER	1200500			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,HFS ACID,23%,BULK	1200647			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PACL,DELPC2020, BULK	1200702			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0306	Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,POLYMER,FILTER AID	1201127			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			Made dosages zero as usage of this chemical is charged to waste disposal expense
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			Made dosages zero as usage of this chemical is charged to waste disposal expense
2016 Operations Adjustments to Budgeted Dosage pe		<u>d:</u>		Production Dept. Revisions to Budgeted Dosage in Rows 82-94 (Document explanation for adjustments):
CHM,AMMONIA,AQUA,19%,BULK	1200566			
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			
CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1200702 1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201171			
CHM,POLYMER,FILTER AID	1200667			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
50/50 Polyphosphate	Not Obtained	l		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2046 Final Adjusted Buds 1 10 Table 1				First Device of Device of Total formation in the Device of Device of
2016 Final Adjusted Budgeted Dosage per T-Gal Produ CHM,AMMONIA,AQUA,19%,BULK	uced: 1200566			Final Budgeted Dosage per T-Gal after revisions input by Production Department
CHM,CHLORINE,100%,2000LB CYLINDER	1200566			
CHM,HFS ACID,23%,BULK	1200537			
. ,,				

<u>Chemical</u> CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	Part <u>Number</u> 1201171 1200667	SD Allocated to Plant	<u>/TD</u>	<u>Notes</u>
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
50/50 Polyphosphate				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2 New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3				in new chemical not used in 2015/2014 needs to be added, list chemical description and part number at left.
2016 Budgeted System Delivery		19% 2,538	8,341.58	Current Placeholder - will be updated when revenue budget is completed
2016 Budgeted Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		1,032.61	Final 2016 Budgeted Chemicals in Units (lbs./gal.)
CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK	1200597 1200647		7,436.53 5,993.76	
CHM,PACL,DELPC2020, BULK	1200047		6,946.99	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	,	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	
CHM,POLYMER,FILTER AID	1201127		1,252.09	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	
CHM, POTASSIUM PERMANGANATE, 100%, 330LB	1200870 1200871		1,041.12 9,549.69	
CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200871		5,397.51	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		7,248.78	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	
50/50 Polyphosphate		9.	7,031.16	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2015 Actual Price per Unit:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			Actual current year price per unit incurred by facility
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM, HFS ACID, 23%, BULK	1200647 1200702			
CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900 1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916			
New Chemical #1	1200330			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
2016 Price Increase (Decrease) per Supply Chain:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			2016 Price Increases per Guidance Provided by Supply Chain.
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			

- · · ·	Part	SD Allocated		
Chemical	Number	to Plant	YTD	<u>Notes</u>
CHM,PACL,DELPC2020, BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			g
New Chemical #1				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #2 New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #3				if new chemical not used in 2015/2014 needs to be added, list chemical description and part number at left. Brirk Group will imput price increase.
2016 Budget Price per Unit:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			
CHM,PACL,DELPC2020, BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871 1200900			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704				
CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916 1200956			
50/50 Polyphosphate	1200930			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budget Expense in Dollars:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		16,870.37	2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		24,765.10	
CHM,HFS ACID,23%,BULK	1200647		24,248.27	
CHM,PACL,DELPC2020, BULK	1200702		141,202.78	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	
CHM,POLYMER,FILTER AID	1201127		1,602.68	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		25,815.23	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		23,207.86	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		2,450.80	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		2,501.44	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	
50/50 Polyphosphate			36,871.84	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BU	IDGET		299,536.37	Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)
CENTRAL DISTRICT - KRSII PLANT 2015 CHEMICAL BUI	OGET		281,109.45	
CENTRAL DISTRICT - KRSII PLANT 2013 CHEMICAL BOL	JGE1		284,093.36	
SERVING MONT ENVI 2014 ACTUAL COST			204,055.50	

Notes

Part	SD AI	located

<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant	<u>YTD</u>
Cost per 1000 gallons - 2016 Chemical Budget			0.1180
Cost per 1000 gallons - 2015 Chemical Budget			0.1115
Cost per 1000 gallons - 2014 Actual Cost			0.1082

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<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant
2016 Central District System Delivery - Budget		
2015 Central District System Delivery - Budget		
2014 Central District System Delivery - Actual		
2013 Central District System Delivery - Actual		
KRS II Plant:		
2014 Monthly Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Allocated 2014 System Delivery		19%
2013 Monthly Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900 1200916	
CHM,SODIOM HTDROXIDE,23%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916	
CHWI,50510W THIOSOELATE,ELQOID,5070,BOEK	1200330	
Allocated 2013 System Delivery		19%
2-Year Average Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,FILTER AID	1200667 1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1201127	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200833	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	

CHM, HFS ACID, 23%, BULK

CHM,PACL,DELPC2020, BULK

	Part	SD Allocated
Chemical	Number	to Plant
2-Year Average Allocated System Delivery		
		
Historical Dosage per T-Gal Produced:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
2016 BRIR Budgeted Dosage per T-Gal Produced:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	in dosages
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	in dosages
CHM,HFS ACID,23%,BULK	1200647	in dosages
CHM,PACL,DELPC2020, BULK	1200702	in dosages
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	in dosages
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	in dosages
CHM,POLYMER,FILTER AID	1201127	in dosages
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	in dosages
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	in dosages
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	in dosages
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	in dosages
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
2016 Operations Adjustments to Budgeted Dosage p	er T-Gal Produce	4.
CHM,AMMONIA,AQUA,19%,BULK	1200566	<u>1.</u>
CHM,CHLORINE,100%,2000LB CYLINDER	1200500	
CHM,HFS ACID,23%,BULK	1200537	
CHM,PACL,DELPC2020, BULK	1200047	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate	Not Obtained	i
New Chemical #2	not obtained	
New Chemical #3		
2016 Final Adjusted Budgeted Dosage per T-Gal Prod	uced:	
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	

1200647

1200702

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - KRSII COST CENTER COST CENTER #120250

CENTRAL DISTRICT - RRSII COST CENTER		
COST CENTER #120250 2016 CHEMICALS BUDGET		
2016 CHEIVICALS BUDGET		
	Part	SD Allocated
Chemical	Number	to Plant
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2016 Budgeted System Delivery		19%
2016 Budgeted Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647 1200702	
CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201171	
CHM,POLYMER,FILTER AID	1200007	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1201127	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200906	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2015 Actual Price per Unit:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	

CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,FILTER AID 1201127 CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA 1200855 CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM HYDROXIDE,25%,BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 New Chemical #1 New Chemical #2 New Chemical #3

 2016 Price Increase (Decrease) per Supply Chain:

 CHM,AMMONIA,AQUA,19%,BULK
 1200566

 CHM,CHLORINE,100%,2000LB CYLINDER
 1200597

 CHM,HFS ACID,23%,BULK
 1200647

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	Part	SD Allocated
Chemical	Number	to Plant
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
New Chemical #1		
New Chemical #2		

2016 Budget Price per Unit:

New Chemical #3

2010 Budget i nee per onte	
CHM,AMMONIA,AQUA,19%,BULK	1200566
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,FILTER AID	1201127
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956

50/50 Polyphosphate New Chemical #2 New Chemical #3

New Chemical #3

2016 Budget Expense in Dollars:

CHM,AMMONIA,AQUA,19%,BULK	1200566
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,FILTER AID	1201127
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
50/50 Polyphosphate	
New Chemical #2	

CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BUDGET

CENTRAL DISTRICT - KRSII PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - KRSII PLANT 2014 ACTUAL COST

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - KRSII COST CENTER COST CENTER #120250 2016 CHEMICALS BUDGET

> Part SD Allocated

Chemical

Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost

Number to Plant

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		No_Project												
		Plan_PreClose												
		Working												
		Revenue Model Input												
		Assumptions												
		No Trading Partner												
		2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	DECYTD
E120205_CEN-Admin & Gen	System delivery gross	1,006,381.09	985,559.51	1,082,796.80	1,019,587.34	1,167,331.71	1,245,402.83	1,371,688.64	1,287,294.47	1,152,032.17	1,153,548.37	993,207.84	1,051,365.08	13,516,195.84
E123005_NRTH-Admin & Ge	System delivery gross	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E12B_Kentucky Base	System delivery gross	1,006,381.09	985,559.51	1,082,796.80	1,019,587.34	1,167,331.71	1,245,402.83	1,371,688.64	1,287,294.47	1,152,032.17	1,153,548.37	993,207.84	1,051,365.08	13,516,195.84
E12_Kentucky American	System delivery gross	1,006,381.09	985,559.51	1,082,796.80	1,019,587.34	1,167,331.71	1,245,402.83	1,371,688.64	1,287,294.47	1,152,032.17	1,153,548.37	993,207.84	1,051,365.08	13,516,195.84

KENTUCKY AMERICAN WATER 2016 BUDGET COMPARISON TO 2015 BUDGET AND 2014 ACTUAL

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>	Dec YTD
Draft State Base 2017 Chemical Budget	128,110.97	126,420.46	119,986.61	121,471.52	118,714.81	153,853.60	195,229.41	200,242.00	179,593.82	165,852.75	124,035.38	144,540.83	1,778,052.17
Final State Base 2015 Chemical Budget	115,583.04	97,947.30	108,901.94	122,195.08	128,572.59	143,087.64	173,793.88	170,869.59	133,758.85	107,689.61	118,704.49	112,585.84	1,533,689.85
Final State 2014 Actual Cost	140,301.15	155,136.48	105,783.91	104,494.76	145,676.98	133,509.10	136,300.62	189,178.95	166,990.73	174,220.28	96,985.83	107,021.71	1,655,600.50

	Part	SD Allocated									
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>
2017 Central District System Delivery - Budget			999,736.09	958,837.51	1,077,983.80	1,016,886.34	1,150,685.71	1,235,234.83	1,366,715.64	1,260,782.47	1,135,323.17
2015 Central District System Delivery - Budget			980,083.14	942,411.52	986,157.34	996,661.68	1,163,018.41	1,301,837.00	1,334,898.07	1,355,315.08	1,250,294.84
2014 Central District System Delivery - Actual			1,180,538.14	1,059,151.14	1,073,765.71	1,070,641.00	1,208,202.86	1,274,938.14	1,415,510.57	1,324,252.43	1,220,824.00
2013 Central District System Delivery - Actual			1,019,730.29	925,074.43	1,017,064.57	1,005,991.71	1,109,121.29	1,157,294.00	1,183,522.43	1,245,984.57	1,247,286.57
Kentucky River Station (KRS) Plant:	ı										
2014 Monthly Chemical Usage in Units:	•										
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	45,040.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,629.00	4,676.00	4,800.00	19,610.00	9,000.00	7,399.00	7,548.00	6,888.00	5,323.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		27,759.00	23,631.00	22,458.00	28,257.00	42,165.00	39,899.00	51,517.00	44,368.00	35,960.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,BULK	1200647		24,608.00	22,586.00	22,428.00	35,028.00	35,550.00	29,503.00	41,940.00	26,157.00	23,170.00
CHM,PACL,DELPC2020, BULK	1200702		236,908.00	266,852.00	142,406.00	158,742.00	213,064.00	121,877.00	199,475.00	315,361.00	250,300.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667 1200761		39,419.00	22,128.00	25,592.00	21,121.00	31,186.00	29,767.00	34,089.00	25,938.00	25,834.00 13,856.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		15,261.00 4,700.00	14,003.00 4,350.00	10,402.00 2,500.00	11,755.00 3,200.00	17,338.00 1,400.00	13,760.00 1,850.00	16,427.00 1,950.00	14,495.00 1,650.00	2,300.00
CHM,SODIUM HYDROXIDE,50% PUKE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,600.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200976		15,471.00	15,021.00	13,160.00	16,574.00	16,074.00	12,120.00	14,708.00	14,241.00	12,120.00
CHINI, 300 TO NI THIO 30 EL ATE, ELQOID, 30/0, BOEK	1200930		13,471.00	13,021.00	13,100.00	10,574.00	10,074.00	12,120.00	14,708.00	14,241.00	12,120.00
Allocated 2014 System Delivery		52%	612,109.03	549,169.87	556,747.52	555,127.36	626,453.18	661,055.43	733,942.23	686,624.88	632,997.24
2013 Monthly Chemical Usage in Units:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,631.00	5,862.00	6,173.00	5,048.00	5,308.00	5,879.00	6,506.00	7,021.00	6,162.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		31,744.00	26,584.00	29,200.00	28,904.00	30,522.00	37,322.00	41,285.00	41,555.00	40,988.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		102,828.00	31,334.00	0.00	0.00	0.00	0.00	0.00	0.00	157,568.00
CHM,HFS ACID,23%,BULK	1200647		27,564.00	24,868.00	29,150.00	29,298.00	26,382.00	29,429.00	26,436.00	31,555.00	24,686.00
CHM,PACL,DELPC2020, BULK	1200702		292,151.00	236,884.00	275,036.00	210,184.00	150,077.00	210,272.00	286,423.00	339,036.00	97,354.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		6,193.00	17,334.00	18,506.00	10,673.00	25,744.00	18,048.00	18,881.00	19,765.00	16,782.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		17,912.00	15,799.00	14,867.00	14,006.00	15,052.00	13,511.00	16,933.00	16,725.00	14,204.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,250.00	2,400.00	2,700.00	3,700.00	2,150.00	2,600.00	2,900.00	2,750.00	2,600.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		5,334.00	6,536.00	0.00	0.00	0.00	0.00	2,874.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		68,388.00	49,907.00	45,323.00	58,613.00	42,769.00	68,067.00	61,665.00	58,223.00	42,722.00
Allocated 2013 System Delivery		52%	528,730.15	479,651.09	527,347.98	521,606.70	575,079.39	600,056.94	613,656.38	646,043.00	646,718.09
2-Year Average Chemical Usage in Units:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,520.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,630.00	5,269.00	5,486.50	12,329.00	7,154.00	6,639.00	7,027.00	6,954.50	5,742.50
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		29,751.50	25,107.50	25,829.00	28,580.50	36,343.50	38,610.50	46,401.00	42,961.50	38,474.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		51,414.00	15,667.00	0.00	0.00	0.00	0.00	0.00	0.00	78,784.00
CHM,HFS ACID,23%,BULK	1200647		26,086.00	23,727.00	25,789.00	32,163.00	30,966.00	29,466.00	34,188.00	28,856.00	23,928.00
CHM,PACL,DELPC2020, BULK	1200702		264,529.50	251,868.00	208,721.00	184,463.00	181,570.50	166,074.50	242,949.00	327,198.50	173,827.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3,096.50	8,667.00	9,253.00	5,336.50	12,872.00	9,024.00	9,440.50	9,882.50	8,391.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		19,709.50	11,064.00	12,796.00	10,560.50	15,593.00	14,883.50	17,044.50	12,969.00	12,917.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		16,586.50	14,901.00	12,634.50	12,880.50	16,195.00	13,635.50	16,680.00	15,610.00	14,030.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,975.00	3,375.00	2,600.00	3,450.00	1,775.00	2,225.00	2,425.00	2,200.00	2,450.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2,667.00	3,268.00	0.00	0.00	0.00	0.00	1,437.00	0.00	0.00

	Part	SD Allocated									
Chemical	Number	to Plant	<u>Jan</u>	Feb	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	0.00	0.00	800.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		41,929.50	32,464.00	29,241.50	37,593.50	29,421.50	40,093.50	38,186.50	36,232.00	27,421.00
2-Year Average Allocated System Delivery			570,419.59	514,410.48	542,047.75	538,367.03	600,766.28	630,556.18	673,799.31	666,333.94	639,857.67
Historical Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0338	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0099	0.0102	0.0101	0.0229	0.0119	0.0105	0.0104	0.0104	0.0090
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0522	0.0488	0.0477	0.0531	0.0605	0.0612	0.0689	0.0645	0.0601
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0901	0.0305	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1231
CHM,HFS ACID,23%,BULK	1200647		0.0457	0.0461	0.0476	0.0597	0.0515	0.0467	0.0507	0.0433	0.0374
CHM,PACL,DELPC2020, BULK	1200702		0.4637	0.4896	0.3851	0.3426	0.3022	0.2634	0.3606	0.4910	0.2717
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0054	0.0168	0.0171	0.0099	0.0214	0.0143	0.0140	0.0148	0.0131
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0346	0.0215	0.0236	0.0196	0.0260	0.0236	0.0253	0.0195	0.0202
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0291 0.0070	0.0290 0.0066	0.0233	0.0239	0.0270 0.0030	0.0216 0.0035	0.0248	0.0234 0.0033	0.0219 0.0038
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928		0.0070	0.0066	0.0048 0.0000	0.0064 0.0000	0.0030	0.0035	0.0036 0.0021	0.0033	0.0038
CHM,SODIUM HYDROXIDE,S0%,BULK CHM,SODIUM PERMANGANATE,20%,50GA	1200928		0.0047	0.0064	0.0000	0.0000	0.0000	0.0000	0.0021	0.0000	0.0000
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		0.0000	0.0631	0.0539	0.0698	0.0000	0.0636	0.0567	0.0544	0.0000
CHIVI,30DIOWI THIO30ELATE,ELQOID,3078,BOEK	1200330		0.0733	0.0031	0.0555	0.0038	0.0430	0.0030	0.0307	0.0344	0.0423
2016 BRIR Budgeted Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0656	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0092	0.0096	0.0099	0.0222	0.0114	0.0100	0.0096	0.0101	0.0091
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0486	0.0457	0.0464	0.0515	0.0580	0.0584	0.0632	0.0626	0.0608
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0840	0.0285	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1245
CHM,HFS ACID,23%,BULK	1200647		0.0426	0.0432	0.0463	0.0579	0.0494	0.0446	0.0466	0.0420	0.0378
CHM,PACL,DELPC2020, BULK	1200702		0.4322	0.4586	0.3749	0.3323	0.2898	0.2512	0.3310	0.4765	0.2746
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0644	0.0403	0.0460	0.0380	0.0498	0.0450	0.0464	0.0378	0.0408
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0271	0.0271	0.0227	0.0232	0.0259	0.0206	0.0227	0.0227	0.0222
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0065	0.0061	0.0047	0.0062	0.0028	0.0034	0.0033	0.0032	0.0039
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0023	0.0000
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Operations Adjustments to Budgeted Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222									(0.0656)	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557									(515552)	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597										
CHM,FERRIC,CHLORID,38%,BULK	1200612										
CHM,HFS ACID,23%,BULK	1200647										
CHM,PACL,DELPC2020, BULK	1200702										
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341										
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281										
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		(0.0644)	(0.0403)	(0.0460)	(0.0380)	(0.0498)	(0.0450)	(0.0464)	(0.0378)	(0.0408)
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761										
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900										
CHM,SODIUM HYDROXIDE,50%,BULK	1200928										
CHM,SODIUM PERMANGANATE,20%,50GA	1200876							0.0450	0.0464	0.0378	0.0408
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956										
Ortho/Poly 50/50	Not Created	·	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549
New Chemical #2											
New Chemical #3											

	Part	SD Allocated									
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0092	0.0096	0.0099	0.0222	0.0114	0.0100	0.0096	0.0101	0.0091
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0486	0.0457	0.0464	0.0515	0.0580	0.0584	0.0632	0.0626	0.0608
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0840	0.0285	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1245
CHM,HFS ACID,23%,BULK	1200647		0.0426	0.0432	0.0463	0.0579	0.0494	0.0446	0.0466	0.0420	0.0378
CHM,PACL,DELPC2020, BULK	1200702		0.4322	0.4586	0.3749	0.3323	0.2898	0.2512	0.3310	0.4765	0.2746
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0271	0.0271	0.0227	0.0232	0.0259	0.0206	0.0227	0.0227	0.0222
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0065	0.0061	0.0047	0.0062	0.0028	0.0034	0.0033	0.0032	0.0039
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000	0.0000	0.0000	0.0450	0.0464	0.0401	0.0408
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ortho/Poly 50/50			0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549	0.0549
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017 Budgeted System Delivery		52%	518,363.16	497,157.25	558,934.60	527,255.56	596,630.54	640,469.26	708,642.06	653,715.71	588,665.07
2017 Budgeted Chemical Usage in Units:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		4,767.75	4,769.97	5,508.05	11,709.99	6,813.43	6,432.25	6,784.77	6,621.18	5,340.32
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		25,194.99	22,729.53	25,930.46	27,145.53	34,613.35	37,408.12	44,801.48	40,902.40	35,779.46
CHM,FERRIC,CHLORID,38%,BULK	1200612		43,539.83	14,183.16	0.00	0.00	0.00	0.00	0.00	0.00	73,266.34
CHM,HFS ACID,23%,BULK	1200647		22,090.87	21,479.78	25,890.31	30,548.16	29,491.85	28,548.39	33,009.48	27,472.96	22,252.19
CHM,PACL,DELPC2020, BULK	1200702		224,016.22	228,013.24	209,540.92	175,201.50	172,926.74	160,902.71	234,574.16	311,516.24	161,652.97
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		14,046.24	13,489.71	12,684.13	12,233.80	15,424.03	13,210.87	16,105.01	14,861.83	13,047.40
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,366.22	3,055.35	2,610.21	3,276.78	1,690.50	2,155.71	2,341.41	2,094.56	2,278.41
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	28,840.01	32,913.90	26,218.13	24,024.71
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ortho/Poly 50/50			28,463.64	27,299.21	30,691.44	28,951.93	32,761.35	35,168.56	38,911.97	35,895.93	32,323.96
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Actual Price per Unit:											
								0.1000			0.1800
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1000
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK	1201222 1200557		0.1800 0.5833	0.1800 0.5833	0.1800 0.5833	0.1800 0.5833	0.1800 0.5833	0.1800	0.1800 0.5833	0.1800 0.5833	0.5833
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER	1200557 1200597		0.5833 0.1749								
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK	1200557 1200597 1200612 1200647 1200702		0.5833 0.1749 0.1000 0.2265 0.1297								
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200557 1200597 1200612 1200647 1200702 1201341		0.5833 0.1749 0.1000 0.2265 0.1297 0.5200								
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1200557 1200597 1200612 1200647 1200702 1201341 1201281		0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100								
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200557 1200597 1200612 1200647 1200702 1201341		0.5833 0.1749 0.1000 0.2265 0.1297 0.5200								
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200557 1200597 1200612 1200647 1200702 1201341 1201281 1200667 1200761		0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400 0.3280	0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400	0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400 0.3280						
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,PHS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHOPOLY,CEDARCLEAR 417 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200557 1200597 1200612 1200647 1200702 1201341 1201281 1200667 1200761 1200900		0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400 0.3280 0.1545								
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200557 1200597 1200612 1200647 1200702 1201341 1201281 1200667 1200761		0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400 0.3280	0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400	0.5833 0.1749 0.1000 0.2265 0.1297 0.5200 0.4100 0.3400 0.3280						

	Part	SD Allocated									
Chemical	Number	to Plant	Jan	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128
New Chemical #1											
New Chemical #2											
New Chemical #3											
2016 Price Increase (Decrease) per Supply Chain:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM.CHLORINE.100%.2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #1											
New Chemical #2											
New Chemical #3											
2016 Budget Price per Unit:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1836	0.1836	0.1836	0.1836	0.1836	0.1836	0.1836	0.1836	0.1836
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200 0.4100
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281 1200667		0.4100 0.3400	0.4100 0.3400	0.4100	0.4100 0.3400	0.4100 0.3400	0.4100 0.3400	0.4100 0.3400	0.4100 0.3400	0.4100
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667		0.3280	0.3400	0.3400 0.3280	0.3400	0.3400	0.3280	0.3280	0.3280	0.3400
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.1592	0.3280
CHM,SODIUM CHLORIDE,90% PORE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900		0.1392	0.1592	0.1392	0.1392	0.1392	0.1592	0.1392	0.1392	0.1392
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		1.0094	1.0094	1.0094	1.0094	1.0094	1.0094	1.0094	1.0094	1.0094
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200976		0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191
Ortho/Poly 50/50	1200350		0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budget Expense in Dollars:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		2,864.30	2,865.63	3,309.04	7,034.95	4,093.27	3,864.27	4,076.05	3,977.77	3,208.28
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		4,539.96	4,095.70	4,672.49	4,891.43	6,237.08	6,740.68	8,072.91	7,370.32	6,447.20
CHM,FERRIC,CHLORID,38%,BULK	1200612		4,353.98	1,418.32	0.00	0.00	0.00	0.00	0.00	0.00	7,326.63
CHM,HFS ACID,23%,BULK	1200647		5,053.74	4,913.95	5,922.94	6,988.52	6,746.87	6,531.04	7,551.60	6,285.01	5,090.65
CHM,PACL,DELPC2020, BULK	1200702		29,927.42	30,461.40	27,993.60	23,406.02	23,102.13	21,495.78	31,337.91	41,616.98	21,596.01
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,607.23	4,424.68	4,160.45	4,012.74	5,059.15	4,333.22	5,282.51	4,874.74	4,279.60
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		535.78	486.30	415.45	521.55	269.07	343.11	372.67	333.38	362.64

	Part	SD Allocated									
Chemical	Number	to Plant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00	0.00	29,111.11	33,223.29	26,464.58	24,250.54
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ortho/Poly 50/50			10,816.18	10,373.70	11,662.75	11,001.73	12,449.31	13,364.05	14,786.55	13,640.45	12,283.10
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET			62,698.60	59,039.68	58,136.72	57,856.94	57,956.87	85,783.26	104,703.49	104,563.24	84,844.67
CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET		_	41,659.99	38,352.87	40,969.56	45,561.19	48,422.88	57,187.05	69,101.37	70,091.43	58,370.73
CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST			58,177.67	76,038.62	27,147.77	46,658.78	65,149.54	54,040.83	61,076.38	82,755.44	61,176.40
Cost per 1000 gallons - 2016 Chemical Budget			0.1210	0.1188	0.1040	0.1097	0.0971	0.1339	0.1478	0.1600	0.1441
Cost per 1000 gallons - 2015 Chemical Budget			0.0820	0.0785	0.0801	0.0882	0.0803	0.0847	0.0998	0.0997	0.0900
Cost per 1000 gallons - 2014 Actual Cost			0.0950	0.1385	0.0488	0.0841	0.1040	0.0817	0.0832	0.1205	0.0966
2017 Price Increase (Decrease) per Supply Chain:		_									
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,HFS ACID,23%,BULK	1200647		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Ortho/Poly 50/50			3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #2											
New Chemical #3											
2017 Budget Price per Unit:											
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1873	0.1873	0.1873	0.1873	0.1873	0.1873	0.1873	0.1873	0.1873
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
CHM,HFS ACID,23%,BULK	1200647		0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333
CHM,PACL,DELPC2020, BULK	1200702		0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5356	0.5356	0.5356	0.5356	0.5356	0.5356	0.5356	0.5356	0.5356
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		1.0397	1.0397	1.0397	1.0397	1.0397	1.0397	1.0397	1.0397	1.0397
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257
Ortho/Poly 50/50			0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914
New Chemical #2			-	-	-	-	-	-	-	-	-
New Chemical #3			-	-	-	-	-	-	-	-	-

2017 Budget Expense in Dollars:

	Part	SD Allocated									
<u>Chemical</u>	Number	to Plant	Jan	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		-	-	-	-	-	-	-	-	-
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		2,950.23	2,951.60	3,408.31	7,245.99	4,216.07	3,980.20	4,198.33	4,097.10	3,304.52
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		4,676.16	4,218.57	4,812.66	5,038.18	6,424.19	6,942.90	8,315.10	7,591.43	6,640.62
CHM,FERRIC,CHLORID,38%,BULK	1200612		4,353.98	1,418.32	-	-	-	-	-	-	7,326.63
CHM,HFS ACID,23%,BULK	1200647		5,154.82	5,012.22	6,041.40	7,128.30	6,881.81	6,661.66	7,702.64	6,410.71	5,192.46
CHM,PACL,DELPC2020, BULK	1200702		30,825.24	31,375.25	28,833.40	24,108.21	23,795.19	22,140.65	32,278.05	42,865.49	22,243.89
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		-	-	-	-	-	-	-	-	-
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		-	-	-	-	-	-	-	-	-
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		-	-	-	-	-	-	-	-	-
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,699.37	4,513.17	4,243.66	4,092.99	5,160.33	4,419.89	5,388.16	4,972.24	4,365.20
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		551.86	500.89	427.92	537.20	277.14	353.41	383.85	343.38	373.52
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		-	-	-	-	-	-	-	-	-
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		-	-	-	-	-	29,984.44	34,219.99	27,258.52	24,978.06
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		-	-	-	-	-	-	-	-	-
Ortho/Poly 50/50			11,140.67	10,684.91	12,012.63	11,331.78	12,822.79	13,764.97	15,230.14	14,049.67	12,651.60
New Chemical #2			-	-	-	-	-	-	-	-	-
New Chemical #3			-	-	-	-	-	-	-	-	-
CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET			64,352.33	60,674.93	59,779.99	59,482.64	59,577.52	88,248.12	107,716.25	107,588.54	87,076.50

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	Oct	Nov	Dec	YTD
2017 Central District System Delivery - Budget		1	1,138,544.37	983,927.84	1,041,983.08	13,366,640.84
2015 Central District System Delivery - Budget 2014 Central District System Delivery - Actual			1,139,569.79 1,143,834.00	970,664.77 1,012,083.00	998,059.83 996,809.14	13,418,971.48 13,980,550.14
2013 Central District System Delivery - Actual			1,133,795.29	985,766.43	1,003,560.71	13,034,192.28
2013 Central District System Delivery - Actual		Į.	1,133,793.29	983,700.43	1,003,300.71	13,034,132.20
Kentucky River Station (KRS) Plant: 2014 Monthly Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	45,040.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,480.00	5,504.00	5,802.00	87,659.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		32,165.00	30,359.00	24,442.00	402,980.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,BULK	1200647		22,458.00	24,835.00	23,195.00	331,458.00
CHM, PACL, DELPC2020, BULK	1200702		233,297.00	172,136.00	172,321.00	2,482,739.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341 1201281		0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281		19,697.00	25,163.00	19,344.00	319,278.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667		11,051.00	12,623.00	8,938.00	159,909.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200701		1,400.00	2,200.00	1,500.00	29,000.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200900		0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200326		0.00	0.00	0.00	1,600.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		24,112.00	26,525.00	21,474.00	201,600.00
Allocated 2014 System Delivery		52%	593,077.93	524,765.04	516,845.54	7,248,915.25
2013 Monthly Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		6,175.00	5,558.00	5,066.00	70,389.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		37,719.00	34,481.00	28,135.00	408,439.00
CHM,FERRIC,CHLORID,38%,BULK	1200612		76,332.00	77,152.00	14,320.00	459,534.00
CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK	1200647 1200702		28,641.00 134,620.00	23,234.00 269,830.00	23,087.00 251,297.00	324,330.00 2,753,164.00
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		0.00	0.00	0.00	5,800.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		17,989.00	4,936.00	0.00	174,851.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	14,852.00	21,550.00	36,402.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		17,524.00	14,337.00	16,465.00	187,335.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		4,750.00	3,650.00	4,050.00	37,500.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	14,744.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		52,854.00	26,613.00	31,148.00	606,292.00
Allocated 2013 System Delivery		52%	587,872.86	511,119.89	520,346.23	6,758,228.70
2-Year Average Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	22,520.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,827.50	5,531.00	5,434.00	79,024.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		34,942.00	32,420.00	26,288.50	405,709.50
CHM,FERRIC,CHLORID,38%,BULK	1200612		38,166.00	38,576.00	7,160.00	229,767.00
CHM,HFS ACID,23%,BULK	1200647		25,549.50	24,034.50	23,141.00	327,894.00
CHM,PACL,DELPC2020, BULK	1200702		183,958.50	220,983.00	211,809.00	2,617,951.50
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	2,900.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		8,994.50	2,468.00	0.00	87,425.50
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		9,848.50	20,007.50	20,447.00	177,840.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		14,287.50	13,480.00	12,701.50	173,622.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,075.00	2,925.00	2,775.00	33,250.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	7,372.00

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	Oct	Nov	Dec	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.00	0.00	0.00	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		38,483.00	26,569.00	26,311.00	4
2-Year Average Allocated System Delivery			590,475.39	517,942.46	518,595.89	7,0
Historical Dosage per T-Gal Produced:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0099	0.0107	0.0105	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0592	0.0626	0.0507	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0646	0.0745	0.0138	
CHM,HFS ACID,23%,BULK	1200647		0.0433	0.0464	0.0446	
CHM,PACL,DELPC2020, BULK	1200702		0.3115	0.4267	0.4084	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0152	0.0048	0.0000	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0167	0.0386	0.0394	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0242	0.0260	0.0245	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0052	0.0056	0.0054	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0652	0.0513	0.0507	
2016 BRIR Budgeted Dosage per T-Gal Produced:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0098	0.0105	0.0105	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0589	0.0618	0.0509	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0644	0.0735	0.0139	
CHM,HFS ACID,23%,BULK	1200647		0.0431	0.0458	0.0448	
CHM,PACL,DELPC2020, BULK	1200702		0.3102	0.4211	0.4098	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0332	0.0480	0.0374	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0241	0.0257	0.0246	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0052	0.0056	0.0054	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0000	0.0000	0.0000	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	
2016 Operations Adjustments to Budgeted Dosage per T-Gal Produc	ed:					
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557					
CHM,CHLORINE,100%,2000LB CYLINDER	1200597					
CHM,FERRIC,CHLORID,38%,BULK	1200612					
CHM,HFS ACID,23%,BULK	1200647					
CHM,PACL,DELPC2020, BULK	1200702					
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341					
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281					
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		(0.0332)	(0.0480)	(0.0374)	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761					
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900					
CHM,SODIUM HYDROXIDE,50%,BULK	1200928					
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0332			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956					
Ortho/Poly 50/50	Not Created		0.0549	0.0549	0.0549	
New Chemical #2						
New Chemical #3						

Charried	Part	SD Allocated	0-4	New	D	VTD
<u>Chemical</u>	Number	to Plant	<u>Oct</u>	Nov	<u>Dec</u>	YTD
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.0000	0.0000	0.0000	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0098	0.0105	0.0105	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0589	0.0618	0.0509	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.0644	0.0735	0.0139	
CHM,HFS ACID,23%,BULK	1200647		0.0431	0.0458	0.0448	
CHM,PACL,DELPC2020, BULK	1200702		0.3102	0.4211	0.4098	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.0000	0.0000	0.0000	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.0000	0.0000	0.0000	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0241	0.0257	0.0246	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0052	0.0056	0.0054	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.0332	0.0000	0.0000	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	
Ortho/Poly 50/50			0.0549	0.0549	0.0549	
New Chemical #2			0.0000	0.0000	0.0000	
New Chemical #3			0.0000	0.0000	0.0000	
2017 Budgeted System Delivery		52%	590,335.26	510,166.58	540,268.23	6,930,603.28
2017 Budgeted Chemical Usage in Units:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		5,800.55	5,377.13	5,680.26	75,605.65
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		34,780.41	31,518.11	27,479.86	388,283.71
CHM,FERRIC,CHLORID,38%,BULK	1200612		37,989.50	37,502.85	7,484.48	213,966.16
CHM,HFS ACID,23%,BULK	1200647		25,431.35	23,365.88	24,189.72	313,770.95
CHM,PACL,DELPC2020, BULK	1200702		183,107.79	214,835.47	221,407.88	2,497,695.82
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		14,221.43	13,105.00	13,277.11	165,706.56
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3,060.78	2,843.63	2,900.76	31,674.32
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		19,605.91	0.00	0.00	131,602.66
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00
Ortho/Poly 50/50			32,415.67	28,013.56	29,666.46	380,563.67
New Chemical #2			0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00
2015 Actual Price per Unit:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1800	0.1800	0.1800	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.5833	0.5833	0.5833	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1749	0.1749	0.1749	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	
CHM,HFS ACID,23%,BULK	1200647		0.2265	0.2265	0.2265	
CHM,PACL,DELPC2020, BULK	1200702		0.1297	0.1297	0.1297	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4100	0.4100	0.4100	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1545	0.1545	0.1545	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1398	0.1398	0.1398	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		0.9800	0.9800	0.9800	

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	Oct	Nov	Dec	YTD
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2128	0.2128	0.2128	
New Chemical #1						
New Chemical #2						
New Chemical #3						
2016 Drive In control (Decrees) and County Chaire						
2016 Price Increase (Decrease) per Supply Chain: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%	1.00%	
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00%	0.00%	0.00%	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00%	0.00%	0.00%	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00%	0.00%	0.00%	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	
New Chemical #1						
New Chemical #2						
New Chemical #3						
2016 Budget Price per Unit:	1201222		0.4836	0.4026	0.4026	
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222 1200557		0.1836 0.6008	0.1836 0.6008	0.1836 0.6008	
CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	
CHM,FERRIC,CHLORID,38%,BULK	1200597		0.1002	0.1000	0.1002	
CHM,HFS ACID,23%,BULK	1200612		0.2288	0.2288	0.1000	
CHM,PACL,DELPC2020, BULK	1200047		0.1336	0.1336	0.1336	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5200	0.5200	0.5200	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		0.4100	0.4100	0.4100	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592	0.1592	0.1592	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1426	0.1426	0.1426	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		1.0094	1.0094	1.0094	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2191	0.2191	0.2191	
Ortho/Poly 50/50			0.3800	0.3800	0.3800	
New Chemical #2			0.0000	0.0000	0.0000	
New Chemical #3			0.0000	0.0000	0.0000	
2015 2 1 1 5 1 1 2 1						
2016 Budget Expense in Dollars:	4204222		0.00	0.00	0.00	2.22
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.00	0.00	0.00	0.00
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3,484.77	3,230.39	3,412.50	45,421.20
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		6,267.18	5,679.34	4,951.67	69,965.97
CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK	1200612 1200647		3,798.95 5,817.95	3,750.29 5,345.43	748.45 5,533.90	21,396.62 71,781.60
CHM,PACL,DELPC2020, BULK	1200647		5,817.95 24,462.26	28,700.92	29,578.96	333,679.40
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		0.00	0.00	0.00	333,679.40
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281		0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,664.69	4,298.49	4,354.95	54,352.44
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		487.17	452.61	461.70	5,041.44
	1200300			.52.01	.01.70	5,541.44

	Part	SD Allocated				
<u>Chemical</u>	Number	to Plant	Oct	Nov	Dec	YTD
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		19,790.21	0.00	0.00	132,839.73
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00
Ortho/Poly 50/50			12,317.95	10,645.15	11,273.25	144,614.19
New Chemical #2			0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00
CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET			81,091.13	62,102.62	60,315.38	879,092.60
CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET			45,648.78	39,565.94	37,210.13	592,141.91
CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST			65,134.07	39,698.94	45,284.30	682,338.74
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,	,,,,,,
Cost per 1000 gallons - 2016 Chemical Budget			0.1374	0.1217	0.1116	0.1268
Cost per 1000 gallons - 2015 Chemical Budget			0.0773	0.0786	0.0719	0.0851
Cost per 1000 gallons - 2014 Actual Cost			0.1098	0.0757	0.0876	0.0941
2017 Price Increase (Decrease) per Supply Chain:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2.00%	2.00%	2.00%	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.00%	0.00%	0.00%	
CHM,HFS ACID,23%,BULK	1200647		2.00%	2.00%	2.00%	
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		3.00%	3.00%	3.00%	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3.00%	3.00%	3.00%	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		3.00%	3.00%	3.00%	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		2.00%	2.00%	2.00%	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		3.00%	3.00%	3.00%	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		3.00%	3.00%	3.00%	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	
Ortho/Poly 50/50			3.00%	3.00%	3.00%	
New Chemical #2						
New Chemical #3						
2017 Budget Price per Unit:						
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		0.1873	0.1873	0.1873	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6188	0.6188	0.6188	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1856	0.1856	0.1856	
CHM,FERRIC,CHLORID,38%,BULK	1200612		0.1000	0.1000	0.1000	
CHM,HFS ACID,23%,BULK	1200647		0.2333	0.2333	0.2333	
CHM,PACL,DELPC2020, BULK	1200702		0.1376	0.1376	0.1376	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		0.5356	0.5356	0.5356	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4223	0.4223	0.4223	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3502	0.3502	0.3502	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3346	0.3346	0.3346	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1639	0.1639	0.1639	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1468	0.1468	0.1468	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		1.0397	1.0397	1.0397	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2257	0.2257	0.2257	
Ortho/Poly 50/50			0.3914	0.3914	0.3914	
New Chemical #2			-	-	-	
New Chemical #3			-	-	-	

2017 Budget Expense in Dollars:

	Part	SD Allocated				
Chemical	Number	to Plant	Oct	Nov	Dec	YTD
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		-			
CHM.AMMONIA.ANHYDROUS.100%.BULK	1200557		3,589.31	3.327.30	3,514.87	46,783.84
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		6,455.20	5,849.72	5,100.23	72,064.94
CHM,FERRIC,CHLORID,38%,BULK	1200612		3,798.95	3,750.29	748.45	21,396.62
CHM,HFS ACID,23%,BULK	1200647		5,934.31	5,452.34	5,644.58	73,217.24
CHM,PACL,DELPC2020, BULK	1200702		25,196.13	29,561.95	30,466.33	343,689.78
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		· -		-	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		-	-	-	-
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		-	-	-	-
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,757.98	4,384.46	4,442.05	55,439.49
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		501.78	466.18	475.55	5,192.68
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		-	-	-	-
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		20,383.91	-	-	136,824.92
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		-	-	-	-
Ortho/Poly 50/50			12,687.49	10,964.51	11,611.45	148,952.62
New Chemical #2			-	-	-	-
New Chemical #3			-	-	-	-
CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET			83,305.07	63,756.75	62,003.50	903,562.13

Digitated District System Delivery - Budget 2015 Central District System Delivery - Budget 2015 Central District System Delivery - Actual 2013 Central District D	Chemical	Part <u>Number</u>	SD Allocated to Plant	l <u>Notes</u>
2013 Central District System Delivery - Rusiglet Subgeted 2015 Central Total System Delivery in T-gal Actual 2013 District Total System Delivery in T-gal Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemicals used in units (Bs./gal) by month Actual 2014 Chemical Usage in Units Actual 2014 Actuals - Central District has 3 plants Actual 2014 Chemical Usage in Units Actual 2014 Actuals - Central District has 3 plants Actual 2014 Chemical Usage in Units Actual 2014 Actuals - Central District has 3 plants Actual 2014 Chemical Usage in Units Actual 2014 Actuals - Central District has 3 plants Actual 2014 Chemical Usage in Units Actual 2014 Chemical Usage in Units Actual 2014 Actuals - Central District has 3 plants Actual 2014 Chemical Usage in Units Actual 2014 Actuals - Central District has 3 plants Actual 2014 Chemical Usage in Units Actual 2014 Actual 2014 Actuals - Central District has 3 plants Actual 2014	2047 Control District Control Delivery, Dudget			Undeted for 2016 Districted CD automaticate homeoica as of May 20
2013 Central District System Delivery - Actual 2013 District Total System Delivery in "Figal" 2013 District Total System Delivery in Figal 2013 District Total System Delivery	, , ,			· · · · · · · · · · · · · · · · · · ·
	, , ,			, , ,
Total Mouth Michael Usage in Units				
MM_MUNCL HYDROX SUBLAT DUPACB12,BULK	Kentucky River Station (KRS) Plant:			
CHM, AMMONIA, ANI-YOBOUS, 2001B CLY LINDER 100557				
CMM_CHORNE_BOOK_2000LB CYLINDER 1200637 1200647	· · ·			Actual 2014 Chemicals used in units (lbs./gal) by month
CMM_PRIS.CLPLORID_388_BUK				
MM, PACL DEL'PEZOR, BULK 120070				
CMM, PACL, DELPC, 2002, BULK 1200702 1201311 120				
CHM, PHOSPHATE, CRITHED, PC AURY S800, BULK		1200702		
EMM_PIOSPHATE_CRTH_PIV_CARUS 8800_BUK 1200516 EMM_POOWERE_CRAIDNC_CEBRE_COS 24_BUK 1200900 EMM_SODIUM FINDOWIDE_SONS_PURE_SOUS 704 1200905 EMM_SODIUM PERMANGANATE_20%_SOGA 1200876 EMM_SOGA 1	CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM_POLYMER_CATIONC CEDRELOC 524_BULK 1200900 1200	CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM.SDOILUM PMPORIUTE_SOR_SMUK 100928 CHM.SDOILUM PMPORIUTE_SOR_SMUK 1200928 CHM.SDOILUM PMPORIUTE_SOR_SOR_A 1200936 CHM.SDOILUM PMPORIUTE_SOR_SOR_A 1200937 CHM.ALUMCIL PMPORIUTE_SOR_SOR_A 1200937 CHM.ALUMCIL PMPORIUTE_SOR_SOR_A 1200937 CHM.STRING_CHM.SDOILUM PMPORIUTE_SOR_SOR_A 1200937 CHM.STRING_CHM.SDOILUM PMPORIUTE_SOR_SOR_A 1200938 CHM.STRING_CHM.SDOILUM PMPORIUTE_SOR_SOR_SOR_SOR_A 1200938 CHM.STRING_CHM.SDOILUM PMPORIUTE_SOR_SOR_SOR_SOR_SOR_SOR_SOR_SOR_SOR_SOR	CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK			
CHM_SDDIUM_PRENAMCANATE_20K_SOGA 1200876				
CHM_SODIUM PREMANGANATE_20%_50GA 1200956				
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200356				
System delivery allocated to plant based on 2014 actuals - Central District has 3 plants				
2013 Monthly Chemical Usage in Units: CHM_ALUM_CL HYDROX SULFAT_DLPAC812,BULK 1201222 Actual 2013 Chemicals used in units (lbs./gal) by month	CHIVI,SOUTOWI THIOSOLFATE,LIQUID,30%,BOLK	1200956		
CHM,ALUM,CL HYDROX SULFAT,DLPACB12,BULK	Allocated 2014 System Delivery		52%	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
CHM,AMMONIA,ANHYPROUS,100%,BULK 1200557	2013 Monthly Chemical Usage in Units:			
CHM,CHLORINE,100%,2000LB CYLINDER	CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK			Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,FERRIC,CHLORID,38%,BULK				
CHM, HFS ACID, 23%, BULK				
CHM,PACL,DELPC2020, BULK				
CHM, PHOS, ORTHO, POLY, CEDARCLEAR 417, TOTE				
CHM,PHOSPHATE,ORTH-0,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200701 CHM,SODIUM CHLORIDE,90% PURE,5018 704 1200928 CHM,SODIUM PERMANGANATE,20%,50GA 1200876 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1200557 CHM,CHOLRINE,100%,2000LB CYLINDER CHM,CHOLRINE,100%,2000LB CYLINDER CHM,FERRIC,CHLORID,38%,BULK 120057 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,PHS ACID,23%,BULK 1200647 CHM,PHS ACID,23%,BULK 1200647 CHM,PHOSPHATE,ORTH-0,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTH-0,POLY,CEDARCLEAR 417 CHM,POSDIUM CHLORIDE,90% PURE,50LB 704 CHM,POSDIUM CHLORIDE,90% PURE,50LB 704 CHM,POSDIUM CHLORIDE,90% PURE,50LB 704				
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,SOLB 704 1200900 CHM,SODIUM HYDROXIDE,50%,BULK 1200928 CHM,SODIUM PERMANGANATE,20%,50GA 1200876 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 Allocated 2013 System Delivery System Delivery 52% System delivery allocated to plant based on 2014 actuals - Central District has 3 plants 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1200557 CHM,AUM,CL HYDROX SULFAT,DLPAC812,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 120057 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200617 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,POSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,POSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,POSPHATE,ORTH-O,POLY,				
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,SODIUM CHLORIDE,90% PURE,5018 704 120090 CHM,SODIUM PYDRXIDE,50%,BULK 1200976 CHM,SODIUM PERMANGANATE,20%,50GA 1200976 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1200557 CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1200557 CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200612 CHM,HFS ACID,23%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200612 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-O,POLY,CEDARCLEAR 417 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,PIOSPHATE,ORTH-ORD S24,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704	·			
CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,50GA CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200647 CHM,HFS ACID,23%,BULK 1200647 CHM,PSACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTH-D,Y CARUS 8600,BULK 1201667 CHM,PHOSPHATE,ORTH-D,Y CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704	·	1200761		
CHM,SODIUM PERMANGANATE,20%,50GA CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200612 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHOP,OC 524,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200701 CHM,SODIUM CHLORIDE,90% PURE,50LB 704	CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,ALMMONIA,ANHYDROUS,100%,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CHLORINE,100%,2000LB CYLINDER 1200557 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHO,C S24,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200701 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200901	CHM,SODIUM HYDROXIDE,50%,BULK			
Allocated 2013 System Delivery 52% System delivery allocated to plant based on 2014 actuals - Central District has 3 plants 2-Year Average Chemical Usage in Units: CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1201222 2013/2014 average chemicals used in units (lbs./gal) by month CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 4 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200647 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTH-D,Y CCRARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-D,Y CRUS 8600,BULK 1200667 CHM,POSPHATE,ORTH-DY CARUS 8600,BULK 1200761 CHM,POSPHATE,ORTH-DC 524,BULK 1200761 CHM,POSPHATE,ORTH-DC 524,BULK 1200761 CHM,POSPHATE,ORTH-DC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
2-Year Average Chemical Usage in Units: CHM,ALUM,CL HVDROX SULFAT,DLPAC812,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,DRTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTHOP,DOLY,CEDARCLEAR 417 CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POSPHATE,ORTH-DLY CARUS 8600,BULK 1200701 CHM,POSPHATE,ORTHOPOLY SEODER SEOD,BULK 1200667 CHM,POSPHATE,ORTHOPOLY SEODER SEOD,BULK 1200701 CHM,POSPHATE,ORTHOPOLY SEODER S	CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK 1201222 2013/2014 average chemicals used in units (lbs./gal) by month CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200612 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,PFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900	Allocated 2013 System Delivery		52%	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200612 CHM,FERRIC,CHLORID,38%,BULK 1200647 CHM,HFS ACID,23%,BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				2013/2014 average chemicals used in units (lbs./gal) by month
CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900				
CHM SODIUM HYDROYIDE 50% BUILK 1200028	CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
1200720	CHM,SODIUM HYDROXIDE,50%,BULK	1200928		

	Part	SD Allocated	
<u>Chemical</u>	Number	to Plant	<u>Notes</u>
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
2-Year Average Allocated System Delivery			2013/2014 average system delivery allocated to plant by month
Historical Dosage per T-Gal Produced:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2-year average chemical usage in units / 2-year average allocated system delivery
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761 1200900		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900		
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876		
Chings Stom most characteristics	1200330		
2016 BRIR Budgeted Dosage per T-Gal Produced:			Historical Dosage per T-Gal Produced above with following modifications:
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667 1200761		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761		
CHM,SODIUM HYDROXIDE,50%,BULK	1200900		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM PERMANGANATE,20%,50GA	1200328		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		Dosages made 0 as this chemical is charged to waste disposal expense.
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2016 Operations Adjustments to Budgeted Dosage per T-Gal Produced:			Production Dept. Revisions to Budgeted Dosage in Rows 86-99 (Document explanation for adjustments):
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647 1200702		
CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1200702		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201341		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200261		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50	Not Created	l e	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. $$
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.

<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant	<u>Notes</u>
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:			Final Budgeted Dosage per T-Gal after revisions input by Production Department
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		This buggeted bosuge per Foundation revisions input by Froudedon bepartment
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2017 Budgeted System Delivery		52%	Current Placeholder - will be updated when revenue budget is completed
2017 Budgeted Chemical Usage in Units:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		Final 2016 Budgeted Chemicals in Units (lbs./gal.)
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2015 Actual Price per Unit:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		Actual current year price per unit incurred by facility
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		

<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant	Notes .
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
New Chemical #1			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
2016 Price Increase (Decrease) per Supply Chain:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2016 Price Increases per Guidance Provided by Supply Chain.
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		2010 File Interestes per educative Frontee by Supply Chain.
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
New Chemical #1			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
2016 Budget Price per Unit:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200928		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budget Expense in Dollars:	1201222		2016 Purious of Character United States of United States of Character Charac
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK CHM,AMMONIA,ANHYDROUS,100%,BULK	1201222		2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CHLORINE,100%,2000LB CYLINDER	1200557		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		

	Part
<u>Chemical</u>	Number
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200876
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
Ortho/Poly 50/50	
New Chemical #2	
New Chemical #3	

SD Allocated to Plant Notes

If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.

Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)

CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET

CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST

Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost

2017 Price Increase (Decrease) per Supply Chain:

CHM, ALUM, CL HYDROX SULFAT, DLPAC812, BULK 1201222 CHM.AMMONIA.ANHYDROUS.100%.BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM, HFS ACID, 23%, BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM, PHOSPHATE, ORTHO, POLY, CEDARCLEAR 417 1201281 CHM, PHOSPHATE, ORTH-PLY CARUS 8600, BULK 1200667 CHM, POLYMER, CATIONC CEDRFLOC 524, BULK 1200761 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM HYDROXIDE,50%,BULK 1200928 1200876 CHM, SODIUM PERMANGANATE, 20%, 50GA 1200956 CHM, SODIUM THIOSULFATE, LIQUID, 30%, BULK

Ortho/Poly 50/50 New Chemical #2 New Chemical #3

2017 Budget Price per Unit:

1201222 CHM.ALUM.CL HYDROX SULFAT.DLPAC812.BULK CHM, AMMONIA, ANHYDROUS, 100%, BULK 1200557 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,FERRIC,CHLORID,38%,BULK 1200612 CHM, HFS ACID, 23%, BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE 1201341 CHM, PHOSPHATE, ORTHO, POLY, CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM, POLYMER, CATIONC CEDRFLOC 524, BULK 1200761 CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 1200900 CHM,SODIUM HYDROXIDE,50%,BULK 1200928 CHM,SODIUM PERMANGANATE,20%,50GA 1200876 CHM, SODIUM THIOSULFATE, LIQUID, 30%, BULK 1200956 Ortho/Poly 50/50 New Chemical #2

2017 Budget Expense in Dollars:

New Chemical #3

2016 Price Increases per Guidance Provided by Supply Chain.

If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.

	Part	SD Allocated	
Chemical	Number	to Plant	No
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50			
New Chemical #2			
New Chemical #3			

CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET

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<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant
2017 Central District System Delivery - Budget		
2015 Central District System Delivery - Budget		
2014 Central District System Delivery - Actual		
2013 Central District System Delivery - Actual		
Kentucky River Station (KRS) Plant:		
2014 Monthly Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647 1200702	
CHM,PACL,DELPC2020, BULK		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341 1201281	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201281	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200701	
CHM,SODIUM HYDROXIDE,50%,BULK	1200900	
CHM,SODIUM PERMANGANATE,20%,50GA	1200328	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Allocated 2014 System Delivery		52%
2013 Monthly Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Allocated 2013 System Delivery		52%
2-Year Average Chemical Usage in Units:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667 1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761	
CHM,SODIUM HYDROXIDE,50%,BULK	1200900	
CHIVI, SUDIUIVI HTUKUKIDE, SU70, BULK	1200928	

Chemical	Part Number	SD Allocated to Plant	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	toriant	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
CHIVI,30DIOWI THIO30LFATE,LIQUID,30%,BOLK	1200930		
2-Year Average Allocated System Delivery			
Historical Dosage per T-Gal Produced:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876 1200956		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
2016 BRIR Budgeted Dosage per T-Gal Produced:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		in dosages
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		in dosages
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		in dosages
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		in dosages
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		in dosages
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		in dosages
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
2016 Operations Adjustments to Budgeted Dosage per T-Gal Produced:			
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,FERRIC,CHLORID,38%,BULK	1200612		
CHM,HFS ACID,23%,BULK	1200647		
CHM,PACL,DELPC2020, BULK	1200702		
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		
CHM,SODIUM PERMANGANATE,20%,50GA	1200876		
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		
Ortho/Poly 50/50	Not Created		
New Chemical #2			
New Chemical #3			

	Part	SD Allocated
Chemical	Number	to Plant
2016 Final Adjusted Budgeted Dosage per T-Gal Produced:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50		
New Chemical #2		
New Chemical #3		
2017 Budgeted System Delivery		52%
2017 Budgeted Chemical Usage in Units:		
CHAIA ALLINA CLUMDDON CHUEAT DUDA COAR DUUK	1201222	

2017 Budgeted Chemical Usage in Units:	
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200876
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
Ortho/Poly 50/50	

Ortho/Poly 50/50 New Chemical #2 New Chemical #3

2015 Actual Price per Unit:

CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200876

<u>Chemical</u> CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	Part <u>Number</u> 1200956	SD Allocated to Plant
New Chemical #1		
New Chemical #2		
New Chemical #3		
2016 Price Increase (Decrease) per Supply Chain:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761 1200900	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,50GA	1200928	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200876	
New Chemical #1	1200330	
New Chemical #2		
New Chemical #3		
2016 Budget Price per Unit:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597 1200612	
CHM,FERRIC,CHLORID,38%,BULK CHM,HFS ACID,23%,BULK	1200612	
CHM,PACL,DELPC2020, BULK	1200047	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50		
New Chemical #2 New Chemical #3		
New Citement #3		
2016 Budget Expense in Dollars:		
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200667 1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200761	
CHIVI,300 FORE,3070 FORE,30EB /04	1200300	

Chaminal	Part	SD Allocated
<u>Chemical</u>	Number	to Plant
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50		
New Chemical #2		
New Chemical #3		

CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET

CENTRAL DISTRICT - KY RIVER STATION PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - KY RIVER STATION PLANT 2014 ACTUAL COST

Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost

2017 Price Increase (Decrease) per Supply Chain:

CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200876
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956

Ortho/Poly 50/50 New Chemical #2 New Chemical #3

2017 Budget Price per Unit:

CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,FERRIC,CHLORID,38%,BULK	1200612
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,50GA	1200876
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
Ortho/Poly 50/50	

Ortho/Poly 50/50 New Chemical #2 New Chemical #3

2017 Budget Expense in Dollars:

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	Part	SD Allocated
Chemical	Number	to Plant
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	1201222	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,FERRIC,CHLORID,38%,BULK	1200612	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	1201341	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,50GA	1200876	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Ortho/Poly 50/50		
New Chemical #2		
New Chemical #3		

CENTRAL DISTRICT - KY RIVER STATION PLANT 2016 CHEMICAL BUDGET

KAW_R_AGDR1_NUM070_032416 Page 82 of 122

	Part	SD Allocated											
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov
2017 Central District System Delivery - Budget			999,736.09	958,837.51	1,077,983.80	1,016,886.34	1,150,685.71	1.235.234.83	1,366,715.64	1,260,782.47	1,135,323.17	1,138,544.37	983,927.84
2015 Central District System Delivery - Budget			980,083.14	942,411.52	986,157.34	996,661.68		1,301,837.00	1,334,898.07	1,355,315.08		1,139,569.79	970,664.77
2014 Central District System Delivery - Actual			1,180,538.14	1,059,151.14	1,073,765.71	1,070,641.00		1,274,938.14		1,324,252.43		1,143,834.00	1,012,083.00
2013 Central District System Delivery - Actual			1,019,730.29	925,074.43	1,017,064.57	1,005,991.71	1,109,121.29	1,157,294.00	1,183,522.43		1,247,286.57	1,133,795.29	985,766.43
Richmond Road Station (RRS) Plant:													
2014 Monthly Chemical Usage in Units:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,137.00	1,836.00	2,434.00	15,397.00	2,819.00	2,752.00	2,336.00	5,604.00	3,019.00	3,619.00	1,766.00
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	1,200.00	750.00	0.00	200.00	750.00	750.00	200.00	200.00	200.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		14,088.00	18,186.00	19,546.00	21,339.00	21,440.00	21,722.00	23,063.00	25,515.00	26,556.00	22,717.00	14,205.00
CHM,HFS ACID,23%,BULK	1200647		9,537.00	10,529.00	8,882.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,MINI BULK	1200648		0.00	0.00	4,061.00	15,659.00	18,794.00	18,856.00	16,131.00	16,120.00	18,800.00	19,323.00	12,912.00
CHM,PACL,DELPC2020, BULK	1200702		132,989.00	197,321.00	162,382.00	142,893.00	140,894.00	158,018.00	146,345.00	229,353.00	270,230.00	304,904.00	124,736.00
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	8,587.00	16,929.00	16,844.00	18,488.00	15,285.00	16,001.00	16,108.00	17,639.00	11,500.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		491.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		8,952.00	12,454.00	6,114.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200815		440.00 4,782.00	550.00 4,851.00	440.00 5,527.00	150.00	1,170.00	495.00	660.00	770.00	935.00 0.00	825.00 0.00	550.00 0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BOLK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761 1201531		0.00	0.00	0.00	5,068.00 0.00	5,156.00 345.00	0.00 6,968.00	0.00 6,562.00	0.00 4,607.00	4,732.00	4,645.00	5,170.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201331		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		411.00	739.00	1,350.00	50.00	650.00	500.00	1,050.00	400.00	900.00	600.00	950.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	926.00	278.00	198.00	6.00	0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		10,870.00	11,335.00	4,979.00	7,654.00	1,938.00	4,054.00	2,374.00	8,403.00	9,762.00	7,974.00	7,688.00
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		1,750.00	1,200.00	1,750.00	1,750.00	1,550.00	1,200.00	1,650.00	1,400.00	1,650.00	1,500.00	1,550.00
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Allocated 2014 System Delivery		29%	346,724.05	311,072.69	315,364.99	314,447.26	354,849.18	374,449.33	415,735.45	388,932.94	358,556.01	335,944.05	297,248.78
2013 Monthly Chemical Usage in Units:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		2,208.00	895.00	1,600.00	223.00	1,968.00	3,681.00	2,961.00	6,123.00	2,850.00	2,236.00	1,998.00
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	900.00	380.00	2,000.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		10,076.00	8,901.00	10,636.00	14,401.00	18,882.00	23,283.00	37,202.00	28,997.00	29,001.00	21,394.00	13,064.00
CHM,HFS ACID,23%,BULK	1200647		5,910.00	3,955.00	4,921.00	7,541.00	12,139.00	13,788.00	15,796.00	14,352.00	16,541.00	12,166.00	7,671.00
CHM,HFS ACID,23%,MINI BULK	1200648		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PACL,DELPC2020, BULK	1200702		102,058.00	58,099.00	69,785.00	111,216.00	167,402.00	147,292.00	260,057.00	208,763.00	150,640.00	121,741.00	116,956.00
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	151.00	12,101.00	7,374.00	7,272.00	8,259.00	6,454.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		2,834.00	1,951.00	2,203.00	3,290.00	2,591.00	4,695.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		495.00	330.00	275.00	330.00	605.00	660.00	385.00	605.00	550.00	220.00	605.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		7,648.00	2,387.00	2,585.00	2,692.00	5,205.00	2,645.00	5,802.00	1,379.00	3,454.00	3,475.00	3,524.00
CHM, POLYMER, CATIONC CEDRFLOC524, MINIBULK	1201531		0.00	0.00 880.00	0.00	0.00	0.00	0.00 0.00	0.00	0.00	0.00	0.00	0.00 550.00
CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200871		1,430.00 779.00	801.00	1,100.00 600.00	1,732.00 700.00	1,000.00	950.00	2,044.00 900.00	1,044.00 350.00	1,705.00	4,015.00 350.00	800.00
CHM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,050.00 0.00	0.00	0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200328		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		2,775.00	2,000.00	1,550.00	1,500.00	2,000.00	1,300.00	2,150.00	1,650.00	1,450.00	1,450.00	1,400.00
	1200332			•		,	,	,			,	,	•
Allocated 2013 System Delivery		29%	299,494.78	271,694.36	298,711.86	295,459.77	325,748.92	339,897.25	347,600.54	365,945.67	366,328.07	332,995.68	289,519.60
2-Year Average Chemical Usage in Units:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,672.50	1,365.50	2,017.00	7,810.00	2,393.50	3,216.50	2,648.50	5,863.50	2,934.50	2,927.50	1,882.00
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	450.00	190.00	1,000.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	600.00	375.00	0.00	100.00	375.00	375.00	100.00	100.00	100.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		12,082.00	13,543.50	15,091.00	17,870.00	20,161.00	22,502.50	30,132.50	27,256.00	27,778.50	22,055.50	13,634.50

	Part SD	Allocated										
<u>Chemical</u>		to Plant Jan	Feb	Mar	Apr	May	Jun	<u>Jul</u>	Aug	Sep	Oct	Nov
CHM,HFS ACID,23%,BULK	1200647	7,723	50 7,242.00	6,901.50	3,770.50	6,069.50	6,894.00	7,898.00	7,176.00	8,270.50	6,083.00	3,835.50
CHM,HFS ACID,23%,MINI BULK	1200648	(0.00	2,030.50	7,829.50	9,397.00	9,428.00	8,065.50	8,060.00	9,400.00	9,661.50	6,456.00
CHM,PACL,DELPC2020, BULK	1200702	117,523	50 127,710.00	116,083.50	127,054.50	154,148.00	152,655.00	203,201.00	219,058.00	210,435.00	213,322.50	120,846.00
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	4,293.50	8,464.50	8,422.00	9,244.00	7,642.50	8,000.50	8,054.00	8,819.50	5,750.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	245		0.00	0.00	0.00	75.50	6,050.50	3,687.00	3,636.00	4,129.50	3,227.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	1,417		1,101.50	1,645.00	1,295.50	2,347.50	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	4,476	,	3,057.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	467		357.50	240.00	887.50	577.50	522.50	687.50	742.50	522.50	577.50
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	6,215		4,056.00	3,880.00	5,180.50	1,322.50	2,901.00	689.50	1,727.00	1,737.50	1,762.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	172.50	3,484.00	3,281.00	2,303.50	2,366.00	2,322.50	2,585.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	715		550.00	866.00	0.00	0.00	1,022.00	522.00	852.50 975.00	2,007.50	275.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900 1200928	595	00 770.00 00 0.00	975.00 0.00	375.00 0.00	825.00 0.00	725.00 0.00	975.00 463.00	375.00 139.00	99.00	475.00 3.00	875.00 0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200928	5,435		2,489.50	3,827.00	969.00	2,027.00	1,187.00	4,201.50	4,881.00	3,987.00	3,844.00
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200880	2,262		1,650.00	1,625.00	1,775.00	1,250.00	1,900.00	1,525.00	1,550.00	1,475.00	1,475.00
CHM,30010W THIO30ELATE,0KT,100%,30EB	1200332	2,202	30 1,000.00	1,030.00	1,023.00	1,773.00	1,230.00	1,300.00	1,323.00	1,330.00	1,473.00	1,473.00
2-Year Average Allocated System Delivery		323,109	42 291,383.53	307,038.43	304,953.51	340,299.05	357,173.29	381,668.00	377,439.30	362,442.04	334,469.86	293,384.19
Historical Dosage per T-Gal Produced:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.0	52 0.0047	0.0066	0.0256	0.0070	0.0090	0.0069	0.0155	0.0081	0.0088	0.0064
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0005	0.0028	0.0000	0.0000
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.0		0.0020	0.0012	0.0000	0.0003	0.0010	0.0010	0.0003	0.0003	0.0003
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.0		0.0492	0.0586	0.0592	0.0630	0.0789	0.0722	0.0766	0.0659	0.0465
CHM,HFS ACID,23%,BULK	1200647	0.0		0.0225	0.0124	0.0178	0.0193	0.0207	0.0190	0.0228	0.0182	0.0131
CHM,HFS ACID,23%,MINI BULK	1200648	0.0		0.0066	0.0257	0.0276	0.0264	0.0211	0.0214	0.0259	0.0289	0.0220
CHM,PACL,DELPC2020, BULK	1200702	0.3		0.3781	0.4166	0.4530	0.4274	0.5324	0.5804	0.5806	0.6378	0.4119
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0		0.0140	0.0278	0.0247	0.0259	0.0200	0.0212	0.0222	0.0264	0.0196
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.0		0.0000	0.0000	0.0000	0.0002	0.0159	0.0098	0.0100	0.0123	0.0110
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.0		0.0036	0.0054	0.0038	0.0066	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.0		0.0100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.0		0.0012 0.0132	0.0008 0.0127	0.0026	0.0016 0.0037	0.0014 0.0076	0.0018	0.0020	0.0016	0.0020 0.0060
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761 1201531	0.0 0.0		0.0000	0.0000	0.0152 0.0005	0.0037	0.0076	0.0018 0.0061	0.0048 0.0065	0.0052 0.0069	0.0088
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201331	0.0		0.0008	0.0028	0.0003	0.0000	0.0080	0.0001	0.0003	0.0060	0.0009
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971	0.0		0.0018	0.0028	0.0024	0.0020	0.0027	0.0014	0.0024	0.0014	0.0030
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.0		0.0000	0.0000	0.0000	0.0000	0.0012	0.0004	0.0003	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.0		0.0081	0.0125	0.0028	0.0057	0.0012	0.0111	0.0135	0.0119	0.0131
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.0		0.0054	0.0053	0.0052	0.0035	0.0050	0.0040	0.0043	0.0044	0.0050
2016 BRIR Budgeted Dosage per T-Gal Produced:	4200557			0.0054	0.0240	0.0057	0.0005	0.0054	0.0454	2 2222	2.222	0.0050
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.0		0.0064 0.0000	0.0248	0.0067	0.0086 0.0000	0.0064 0.0000	0.0151	0.0082	0.0087 0.0000	0.0063 0.0000
CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200585 1200588	0.0		0.0000	0.0000 0.0012	0.0000 0.0000	0.0000	0.0000	0.0000 0.0010	0.0000 0.0003	0.0000	0.0003
CHM,CHLORINE,100%,2000LB CYLINDER	1200588	0.0		0.0479	0.0568	0.0568	0.0601	0.0009	0.0701	0.0003	0.0657	0.0459
CHM,HFS ACID,23%,BULK	1200557	0.0		0.0219	0.0120	0.0171	0.0184	0.0190	0.0185	0.0231	0.0037	0.0129
CHM,HFS ACID,23%,MINI BULK	1200648	0.0		0.0064	0.0120	0.0265	0.0252	0.0194	0.0207	0.0262	0.0288	0.0123
CHM,PACL,DELPC2020, BULK	1200702	0.3		0.3681	0.4041	0.4344	0.4077	0.4888	0.5632	0.5869	0.6350	0.4065
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0		0.0272	0.0538	0.0475	0.0494	0.0368	0.0411	0.0449	0.0525	0.0387
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.0		0.0097	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.0	38 0.0156	0.0175	0.0161	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.0	0.0000	0.0000	0.0000	0.0010	0.0186	0.0158	0.0118	0.0132	0.0138	0.0183
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	0.0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.0		0.0031	0.0012	0.0023	0.0019	0.0023	0.0010	0.0027	0.0014	0.0029
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.0		0.0000	0.0000	0.0000	0.0000	0.0022	0.0007	0.0006	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.0	14 0.0364	0.0158	0.0243	0.0055	0.0108	0.0057	0.0216	0.0272	0.0237	0.0257

	Part	SD Allocated											
Chemical	Number	to Plant	<u>Jan</u>	Feb	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		•											
2016 Operations Adjustments to Budgeted Dosage per T-Ga													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557												
CHM,CARBON,PAC LIGNITE,900LB	1200585												
CHM,CARBON,PAC WOOD BASED,750LB	1200588												
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		/·			()	/a a	(((
CHM,HFS ACID,23%,BULK	1200647		(0.0223)	(0.0233)	(0.0219)	(0.0120)	(0.0171)	(0.0184)	(0.0190)	(0.0185)	(0.0231)	(0.0181)	(0.0129)
CHM, HFS ACID, 23%, MINI BULK	1200648		0.0223	0.0233	0.0219								
CHM,PACL,DELPC2020, BULK	1200702		0.0000	0.0000	(0.0272)	(0.0530)	(0.0475)	(0.0404)	(0.0250)	(0.0444)	(0.0440)	(0.0535)	(0.0207)
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201523 1201281		0.0000 (0.0014)	0.0000	(0.0272)	(0.0538)	(0.0475)	(0.0494)	(0.0368)	(0.0411)	(0.0449)	(0.0525)	(0.0387)
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281		(0.0014)										
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		(0.0129)	(0.0200)	(0.0097)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		(0.0123)	(0.0200)	(0.0037)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761												
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531												
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871												
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900												
CHM,SODIUM HYDROXIDE,50%,BULK	1200928												
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880												
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952												
50/50 Polyphosphate	Not Obtained	Ŀ	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105	0.06105
New Chemical #2													
New Chemical #3													
2017 Final Adjusted Budgeted Dosage per T-Gal Produced:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0048	0.0044	0.0064	0.0248	0.0067	0.0086	0.0064	0.0151	0.0082	0.0087	0.0063
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.0000	0.0000	0.0019	0.0012	0.0000	0.0003	0.0009	0.0010	0.0003	0.0003	0.0003
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0348	0.0435	0.0479	0.0568	0.0568	0.0601	0.0725	0.0701	0.0775	0.0657	0.0459
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647		0.0000 0.0223	0.0000 0.0233	0.0000 0.0283	0.0000 0.0249	0.0000 0.0265	0.0000 0.0252	0.0000 0.0194	0.0000 0.0207	0.0000 0.0262	0.0000 0.0288	0.0000 0.0217
CHM,PACL,DELPC2020, BULK	1200648 1200702		0.0223	0.0233	0.3681	0.4041	0.0265	0.0232	0.0194	0.5632	0.0262	0.6350	0.4065
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4003
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201231		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0138	0.0156	0.0175	0.0161	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.0000	0.0000	0.0000	0.0000	0.0010	0.0186	0.0158	0.0118	0.0132	0.0138	0.0183
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0017	0.0025	0.0031	0.0012	0.0023	0.0019	0.0023	0.0010	0.0027	0.0014	0.0029
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0007	0.0006	0.0000	0.0000
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.0314	0.0364	0.0158	0.0243	0.0055	0.0108	0.0057	0.0216	0.0272	0.0237	0.0257
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50/50 Polyphosphate			0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611	0.0611
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017 Budgeted System Delivery		29%	293,622.49	281,610.58	316,603.84	298,659.52	337,956.39	362,788.47	401,404.38	370,291.81	333,444.42	334,390.48	288,979.61
2016 Budgeted Chemical Heave in United													
2016 Budgeted Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		1,416.35	1,236.17	2,024.92	7,417.88	2,279.56	3,116.33	2,557.20	5,582.47	2,728.98	2,913.96	1,829.64
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	602.36	356.17	0.00	96.89	362.07	357.03	93.00	99.54	97.22
CHM,CHLORINE,100%,2000LB CYLINDER	1200588		10,231.61	12,260.78	15,150.28	16,972.78	19,201.22	21,801.74	29,093.78	25,949.65	25,833.02	21,953.50	13,255.20
CHM,HFS ACID,23%,BULK	1200537		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- ,,					2.20		2.50		2.30		2.20	2.20	

	Part	SD Allocated											
Chemical	Number	to Plant	<u>Jan</u>	Feb	Mar	Apr	May	<u>Jun</u>	Jul	Aug	<u>Sep</u>	Oct	Nov
CHM,HFS ACID,23%,MINI BULK	1200648		6,540.63	6,556.10	8,967.09	7,436.40	8,949.65	9,134.40	7,787.47	7,673.69	8,741.67	9,616.82	6,276.40
CHM,PACL,DELPC2020, BULK	1200702		99,524.51	115,614.41	116,539.51	120,675.36	146,809.70	147,901.11	196,196.33	208,558.79	195,697.11	212,336.00	117,484.18
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		4,049.63	4,391.56	5,548.71	4,813.55	4,910.55	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	328.58	6,751.01	6,335.80	4,386.19	4,400.59	4,623.52	5,301.59
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		503.87	697.07	978.83	356.17	785.73	702.42	941.39	357.03	906.72	472.80	850.66
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	894.08	264.68	184.13	5.97	0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		9,205.24	10,261.45	4,998.56	7,269.71	1,845.74	3,927.75	2,292.16	8,000.25	9,078.32	7,937.12	7,431.21
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			17,926.65	17,193.28	19,329.74	18,234.18	20,633.38	22,149.47	24,507.10	22,607.57	20,357.91	20,415.67	17,643.18
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Actual Price per Unit:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833	0.5833
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749	0.1749
CHM,HFS ACID,23%,BULK	1200647		0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265	0.2265
CHM,HFS ACID,23%,MINI BULK	1200648		0.2650	0.2650	0.2650	0.2650	0.2650	0.2650	0.2650	0.2650	0.2650	0.2650	0.2650
CHM,PACL,DELPC2020, BULK	1200702		0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100	0.4100
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059
CHM.POTASSIUM PERMANGANATE.100%.55LB	1200871		2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398	0.1398
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026	0.9026
CHM,SODIUM THIOSULFATE, DRY, 100%, 50LB	1200952		0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890	0.4890
50/50 Polyphosphate													
New Chemical #2													
New Chemical #3													
2016 Price Increase (Decrease) per Supply Chain:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CARBON,PAC LIGNITE,900LB	1200585		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CARBON,PAC WOOD BASED,750LB	1200588		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
CHM,HFS ACID,23%,MINI BULK	1200648		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Chemical	Part Number	SD Allocated to Plant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	<u>Sep</u>	Oct	Nov
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	to ridite	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
50/50 Polyphosphate													
New Chemical #2													
New Chemical #3													
2016 Budget Price per Unit:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008	0.6008
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662	0.8662
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288
CHM,HFS ACID,23%,MINI BULK	1200648		0.2677	0.2677	0.2677	0.2677	0.2677	0.2677	0.2677	0.2677	0.2677	0.2677	0.2677
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974	0.3974
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281		0.4100 0.6800										
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.3400	0.8400	0.3400		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200667 1200815		2.4823	2.4823	2.4823	0.3400 2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823	2.4823
CHM,POLYMER,CATIONC CEDRFLOC 406,30LB	1200813		0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280	0.3280
CHM,POLYMER,CATIONC CEDRFLOC 524,BOLK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200701		0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059	0.5059
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426	0.1426
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296	0.9296
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036	0.5036
50/50 Polyphosphate			0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374	0.4374
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budget Expense in Dollars:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		850.89	742.65	1,216.50	4,456.38	1,369.47	1,872.18	1,536.27	3,353.74	1,639.47	1,750.60	1,099.18
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	521.77	308.52	0.00	83.92	313.63	309.26	80.55	86.22	84.21
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		1,843.67	2,209.31	2,729.98	3,058.38	3,459.93	3,928.52	5,242.50	4,675.95	4,654.93	3,955.87	2,388.50
CHM,HFS ACID,23%,BULK	1200647		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,MINI BULK	1200648		1,750.60	1,754.74	2,400.05	1,990.36	2,395.38	2,444.83	2,084.32	2,053.87	2,339.71	2,573.95	1,679.88
CHM,PACL,DELPC2020, BULK	1200702		13,295.97	15,445.50	15,569.09	16,121.62	19,613.03	19,758.84	26,210.84	27,862.40	26,144.14	28,367.01	15,695.29
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		1,328.29	1,440.45	1,820.00	1,578.86	1,610.68	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	166.23	3,415.35	3,205.29	2,218.98	2,226.27	2,339.05	2,682.09
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		80.20	110.95	155.80	56.69	125.06	111.80	149.84	56.83	144.32	75.26	135.40
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	127.47	37.74	26.25	0.85	0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		8,557.51	9,539.40	4,646.84	6,758.18	1,715.87	3,651.38	2,130.88	7,437.32	8,439.52	7,378.63	6,908.32
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			7,840.35	7,519.61	8,454.00	7,974.85	9,024.16	9,687.23	10,718.36	9,887.59	8,903.68	8,928.94	7,716.38
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2016 CH	HEMICAL BUDGET		35,547.49	38,762.61	37,514.01	42,303.83	39,479.81	44,954.05	51,719.40	57,893.66	54,598.86	55,456.38	38,389.24

Chemical	Part SD Allocated Number to Plant	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov
<u>Criemedi</u>	<u>ivaniser</u> <u>to riunt</u>	3411	ico	<u>ividi</u>	<u>1791</u>	iviay	3011	<u> </u>	лиь	<u>эср</u>	<u> </u>	<u>1404</u>
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2015 C		50,146.14	41,750.22	44,861.37	54,306.15	52,098.82	58,311.67	63,885.69	59,524.62	55,074.56	43,108.81	59,136.56
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2014 A	ACTUAL COST	37,752.52	48,641.45	53,520.29	42,766.09	67,443.63	45,653.52	41,137.30	71,431.86	64,576.38	85,749.95	37,391.11
Cost per 1000 gallons - 2016 Chemical Budget		0.1211	0.1376	0.1185	0.1416	0.1168	0.1239	0.1288	0.1563	0.1637	0.1658	0.1328
Cost per 1000 gallons - 2015 Chemical Budget		0.1742	0.1508	0.1549	0.1410	0.1525	0.1525	0.1629	0.1495	0.1500	0.1038	0.2074
Cost per 1000 gallons - 2014 Actual Cost		0.1089	0.1564	0.1697	0.1360	0.1901	0.1219	0.0990	0.1837	0.1801	0.2553	0.1258
cost per 1000 ganons 2017/10tdar cost		0.1003	0.1501	0.1037	0.1500	0.1301	0.1213	0.0330	0.1037	0.1001	0.2333	0.1250
Note: Approximately \$55k of chemicals purchased for	m Aquatic Control, Inc. (Algimycin Ap	plication?) were p	aid on invoices	and are not refle	ected in the abov	e chemical usag	e amounts.					
2017 Price Increase (Decrease) per Supply Chain:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CARBON,PAC LIGNITE,900LB	1200585	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CARBON,PAC WOOD BASED,750LB	1200588	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,HFS ACID,23%,BULK	1200647	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,HFS ACID,23%,MINI BULK	1200648	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,PACL,DELPC2020, BULK	1200702	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
50/50 Polyphosphate		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #2												
New Chemical #3												
2017 Budget Price per Unit:												
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188	0.6188
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.9654	0.9654	0.9654	0.9654	0.9654	0.9654	0.9654	0.9654	0.9654	0.9654	0.9654
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.8922	0.8922	0.8922	0.8922	0.8922	0.8922	0.8922	0.8922	0.8922	0.8922	0.8922
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856
CHM,HFS ACID,23%,BULK	1200647	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333
CHM,HFS ACID,23%,MINI BULK	1200648	0.2730	0.2730	0.2730	0.2730	0.2730	0.2730	0.2730	0.2730	0.2730	0.2730	0.2730
CHM,PACL,DELPC2020, BULK	1200702	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.4093	0.4093	0.4093	0.4093	0.4093	0.4093	0.4093	0.4093	0.4093	0.4093	0.4093
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223	0.4223
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	2.5320	2.5320	2.5320	2.5320	2.5320	2.5320	2.5320	2.5320	2.5320	2.5320	2.5320
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346	0.3346
CHM, POLYMER, CATIONC CEDRFLOC524, MINIBULK	1201531	0.5160	0.5160	0.5160	0.5160	0.5160	0.5160	0.5160	0.5160	0.5160	0.5160	0.5160
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.5187	0.5187	0.5187	0.5187	0.5187	0.5187	0.5187	0.5187	0.5187	0.5187	0.5187

	Part	SD Allocated											
<u>Chemical</u>	<u>Number</u>	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	Oct	Nov
50/50 Polyphosphate			0.4505	0.4505	0.4505	0.4505	0.4505	0.4505	0.4505	0.4505	0.4505	0.4505	0.4505
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017 Budget Expense in Dollars:													
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		876.42	764.92	1,252.99	4,590.07	1,410.56	1,928.34	1,582.36	3,454.35	1,688.65	1,803.12	1,132.16
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.00	0.00	537.42	317.77	0.00	86.44	323.04	318.54	82.97	88.81	86.74
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	1	1,898.98	2,275.59	2,811.88	3,150.13	3,563.73	4,046.38	5,399.77	4,816.23	4,794.58	4,074.55	2,460.15
CHM,HFS ACID,23%,BULK	1200647		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,HFS ACID,23%,MINI BULK	1200648		1,785.61	1,789.84	2,448.05	2,030.16	2,443.29	2,493.72	2,126.01	2,094.95	2,386.51	2,625.43	1,713.48
CHM,PACL,DELPC2020, BULK	1200702	13	3,694.85	15,908.87	16,036.16	16,605.27	20,201.42	20,351.61	26,997.16	28,698.27	26,928.47	29,218.03	16,166.15
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	1	1,354.86	1,469.26	1,856.40	1,610.44	1,642.89	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.00	0.00	0.00	0.00	169.55	3,483.66	3,269.40	2,263.36	2,270.79	2,385.83	2,735.73
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		82.61	114.28	160.47	58.39	128.82	115.16	154.34	58.53	148.65	77.51	139.46
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	0.00	0.00	0.00	0.00	0.00	131.29	38.87	27.04	0.88	0.00
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	8	8,814.24	9,825.58	4,786.24	6,960.92	1,767.34	3,760.92	2,194.80	7,660.44	8,692.71	7,599.99	7,115.57
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate		8	8,075.56	7,745.19	8,707.62	8,214.10	9,294.89	9,977.85	11,039.91	10,184.21	9,170.79	9,196.81	7,947.87
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		_											
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2017 CHEM	CAL BUDGET	36	6,583.12	39,893.53	38,597.23	43,537.26	40,622.48	46,244.07	53,218.08	59,587.74	56,191.16	57,070.94	39,497.30

Chemical	Part <u>Number</u>	SD Allocated to Plant Dec	YTD	Notes
<u>Criemical</u>	Number	to Flant Dec	110	<u>Notes</u>
2017 Central District System Delivery - Budget		1,041,983.08	13,366,640.84	Updated for 2016 Budgeted SD entered into hyperion as of May 29
2015 Central District System Delivery - Budget		998,059.83	13,418,971.48	Budgeted 2015 District Total System Delivery in T-gal
2014 Central District System Delivery - Actual		996,809.14	13,980,550.14	Actual 2014 District Total System Delivery in T-gal
2013 Central District System Delivery - Actual		1,003,560.71	13,034,192.28	Actual 2013 District Total System Delivery in T-gal
Richmond Road Station (RRS) Plant:				
2014 Monthly Chemical Usage in Units:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	3,141.00	45,860.00	Actual 2014 Chemicals used in units (lbs./gal) by month
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	0.00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	1,206.45	5,456.45	Left blank in template.
CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK	1200597 1200647	28,436.00 0.00	256,813.00 28,948.00	
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647	24,664.00	165,320.00	
CHM,PACL,DELPC2020, BULK	1200702	241,526.00	2,251,591.00	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	21,922.00	159,303.00	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.00	491.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00	27,520.00	
CHM, POLYMER, CATIONIC CEDRFLOC 408,50LB	1200815	990.00	7,975.00	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761 1201531	0.00 10,742.00	25,384.00 43,771.00	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201331	0.00	0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	1,300.00	8,900.00	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.00	1,408.00	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	15,057.00	92,088.00	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	2,850.00	19,800.00	
Allocated 2014 System Delivery		29% 292,762.85	4,106,087.58	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2013 Monthly Chemical Usage in Units:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	8,571.00	35,314.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	3,280.00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	4,800.00	4,800.00	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	13,322.00	229,159.00	
CHM,HFS ACID,23%,BULK	1200647 1200648	7,843.00 0.00	122,623.00 0.00	
CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK	1200648	113,945.00	1,627,954.00	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702	0.00	0.00	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	6,807.00	48,418.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00	17,564.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00	0.00	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	110.00	5,170.00	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	3,638.00	44,434.00	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB	1201531 1200871	0.00 1,980.64	0.00 16,480.64	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200871	1,980.64 850.00	9,130.00	
CHM,SODIUM HYDROXIDE,50%,BULK	1200908	0.00	0.00	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	2,835.00	2,835.00	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	1,750.00	20,975.00	
Allocated 2013 System Delivery		294,745.78	3,828,142.27	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2-Year Average Chemical Usage in Units:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	5,856.00	40,587.00	2013/2014 average chemicals used in units (lbs./gal) by month
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	1,640.00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	3,003.23	5,128.23	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	20,879.00	242,986.00	

	Part S	SD Allocated		
<u>Chemical</u>	Number	to Plant Dec	YTD	<u>Notes</u>
CHM,HFS ACID,23%,BULK	1200647	3,921.	50 75,785.50	
CHM,HFS ACID,23%,MINI BULK	1200648	12,332.	00 82,660.00	
CHM,PACL,DELPC2020, BULK	1200702	177,735.	50 1,939,772.50	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	10,961.	00 79,651.50	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	3,403.	50 24,454.50	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.0	00 8,782.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.0	00 13,760.00	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	550.		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	1,819.		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	5,371.	,	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	990.		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	1,075.		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.0		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	8,946.		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	2,300.	00 20,387.50	
2-Year Average Allocated System Delivery		293,754.	3,967,114.93	2013/2014 average system delivery allocated to plant by month
Historical Dosage per T-Gal Produced:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.01		2-year average chemical usage in units / 2-year average allocated system delivery
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.01		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.07		
CHM,HFS ACID,23%,BULK	1200647	0.01		
CHM,HFS ACID,23%,MINI BULK	1200648	0.04		
CHM,PACL,DELPC2020, BULK	1200702	0.60		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.03		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.01		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200815 1200761	0.00		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761	0.00		
CHM.POTASSIUM PERMANGANATE.100%.55LB	1201331	0.00		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971	0.00		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.00		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.03		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.00		
2016 BRIR Budgeted Dosage per T-Gal Produced:				Historical Dosage per T-Gal Produced above with following modifications:
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.02		Und 2004 de la companya de 2 de la companya de la c
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.01		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.07		
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647 1200648	0.01 0.04		
CHM,PACL,DELPC2020, BULK	1200048	0.60		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.07		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323	0.00		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281	0.00		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00		2011 2011 and a supposed to 2 year average, as it appears that system delivery him detween plants was materially uniferent in 2011.
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.00		Made dosages zero, as chemical usage is charged to waste disposal expense
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.00		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.01		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	0.00		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.00		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.00		Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.02	57	Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 201:
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	Part	SD Allocated			
Chemical Chemical	Number	to Plant	Dec	YTD	<u>Notes</u>
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.0000		Made dosages zero, as chemical usage is charged to waste disposal expense
2016 Operations Adjustments to Budgeted Dosage per T-Ga	l Produced:				Production Dept. Revisions to Budgeted Dosage in Rows 106-124 (Document explanation for adjustments):
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557				
CHM,CARBON,PAC LIGNITE,900LB	1200585				
CHM,CARBON,PAC WOOD BASED,750LB	1200588				
CHM,CHLORINE,100%,2000LB CYLINDER	1200597				
CHM,HFS ACID,23%,BULK	1200647		(0.0134)		
CHM,HFS ACID,23%,MINI BULK	1200648				
CHM,PACL,DELPC2020, BULK	1200702				
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		(0.0749)	(0.0488)	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281				
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171				
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815				
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761				
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531				
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871				
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900 1200928				
CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200928				
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200880				
50/50 Polyphosphate	Not Obtained	ı	0.06105		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2	Not Obtained		0.00103		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2017 Final Adjusted Budgeted Dosage per T-Gal Produced:					Final Budgeted Dosage per T-Gal after revisions input by Production Department
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.0200		
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.0000		
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.0103 0.0713		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597 1200647		0.0713		
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647		0.0421		
CHM,PACL,DELPC2020, BULK	1200048		0.6071		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.0000		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323		0.0000		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0000		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.0000		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.0000		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.0183		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0037		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.0000		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.0257		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.0000		
50/50 Polyphosphate			0.0611		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2017 Budgeted System Delivery		29%	306,030.43	3,925,782.41	Current Placeholder - will be updated when revenue budget is completed
2016 Budgeted Chemical Usage in Units:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		6,121.39	39,224.86	Final 2016 Budgeted Chemicals in Units (lbs./gal.)
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.00	0.00	S
CHM,CARBON,PAC WOOD BASED,750LB	1200588		3,139.33	5,203.59	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		21,825.21	233,528.79	
CHM,HFS ACID,23%,BULK	1200647		0.00	0.00	

CHM,POTASSIUM PERMANGANATE,100%,55LB

1200871

	D+	CD Allesented		
Chemical	Part Number	SD Allocated to Plant Dec	YTD	<u>Notes</u>
CHM,HFS ACID,23%,MINI BULK	1200648	12,890.		NOTES
CHM,PACL,DELPC2020, BULK	1200048	185,790.		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323	0.		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281	0.		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201171	0.		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.		
CHM,POLYMER,CATIONC CEDRI LOC 408,50EB	1200761	0.		
CHM,POLYMER,CATIONC CEDRI LOC 324,BOLK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	5,614.		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201331	0.0		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	1,123.		
CHM,SODIUM HYDROXIDE,50%,BULK	1200908	0.0		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	7,869.		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.0		
50/50 Polyphosphate	1200332	18,684.		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2		0.		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3		0.0		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3		0.	0.00	The well-mind death 2013/2017 needs to be deded, its chemical description and part number at left.
2015 Actual Price per Unit:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	0.58	33	Actual current year price per unit incurred by facility
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.91	00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	0.84	10	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	0.17	19	
CHM,HFS ACID,23%,BULK	1200647	0.22	55	
CHM,HFS ACID,23%,MINI BULK	1200648	0.26	50	
CHM,PACL,DELPC2020, BULK	1200702	0.12	97	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.39	74	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.41	00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.68	00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.34	00	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	2.48	23	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.32	30	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.50	59	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	2.35	94	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	0.15	15	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.13	98	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	0.90	26	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.48	90	
50/50 Polyphosphate				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per t
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per u
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per t
2016 Price Increase (Decrease) per Supply Chain:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	3.0	<u> 1%</u>	2016 Price Increases per Guidance Provided by Supply Chain.
CHM,CARBON,PAC LIGNITE,900LB	1200585	3.0		2010 File increases per duidance Frovided by Supply Chain.
CHM,CARBON,PAC LIGHTE,500LB CHM,CARBON,PAC WOOD BASED,750LB	1200588	3.0		
CHM,CHLORINE,100%,2000LB CYLINDER	1200588	3.0		
CHM,HFS ACID,23%,BULK	1200537	1.0		
CHM,HFS ACID,23%,MINI BULK	1200648	1.0		
CHM,PACL,DELPC2020, BULK	1200048	3.0		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.0		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323	0.0		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.0		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.0		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.0		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.0		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	0.0		
CULA DOTACCULA DEDIALACIONALET 4000/ EELD	4200074	0.0	200	

0.00%

	Part	SD Allocated			
<u>Chemical</u>	<u>Number</u>	to Plant	<u>Dec</u>	YTD	<u>Notes</u>
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		2.00%		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		3.00%		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		3.00%		V
50/50 Polyphosphate New Chemical #2					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price incre
New Chemical #2					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price incre If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price incre
New Chemical #5		<u> </u>			if new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. Brit Group will hiput price incre
2016 Budget Price per Unit:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6008		2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.9373		
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.8662		
CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK	1200597 1200647		0.1802 0.2288		
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200648		0.2677		
CHM,PACL,DELPC2020, BULK	1200702		0.1336		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.3974		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4100		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.6800		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		2.4823		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.3280		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		0.5059		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.3594		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592		
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.1426		
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		0.9296		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB 50/50 Polyphosphate	1200952		0.5036 0.4374		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			0.4374		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budget Expense in Dollars:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3,677.50	23,564.82	2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200585 1200588		0.00 2,719.31	0.00 4,507.39	
CHM,CHLORINE,100%,2000LB CYLINDER	1200588		3,932.75	42,080.27	
CHM,HFS ACID,23%,BULK	1200537		0.00	0.00	
CHM,HFS ACID,23%,MINI BULK	1200648		3,450.25	26,917.93	
CHM,PACL,DELPC2020, BULK	1200702		24,820.63	248,904.37	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.00	0.00	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		0.00	0.00	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		0.00	7,778.29	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		2,840.34	19,093.60	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		178.86	1,381.02	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928		0.00	192.31	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880		7,315.93	74,479.77	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952		0.00	0.00	for any horizontal and a 2002 (2004 and a horizontal description and any horizontal for
50/50 Polyphosphate New Chemical #2			8,171.67 0.00	104,826.82 0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2 New Chemical #3			0.00	0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Cheffical #3			0.00	0.00	n new chemical not used in 2015/2014 needs to be added, list chemical description and part number at left.
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2016 CHE	MICAL BUDGET		57,107.24	553,726.57	Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)

CHM, SODIUM PERMANGANATE, 20%, MINI BULK

CHM,SODIUM THIOSULFATE,DRY,100%,50LB

1200880

1200952

0.9575

0.5187

	Part	SD Allocated			
Chemical	Number	to Plant	Dec	YTD	<u>Notes</u>
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2015 CHEMICAL	BUDGET		55,030.34	637,234.95	
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2014 ACTUAL CO	OST		44,871.58	640,935.68	
Cost per 1000 gallons - 2016 Chemical Budget			0.1866	0.1410	
Cost per 1000 gallons - 2015 Chemical Budget			0.1877	0.1617	
Cost per 1000 gallons - 2014 Actual Cost			0.1533	0.1561	
Note: Approximately \$55k of chemicals purchased form Aquati	c Control. Inc	(Algimycin Anı	1		
Total representation visit in the state of t		· (,g , e ,	•		
2017 Price Increase (Decrease) per Supply Chain:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		3.00%		2016 Price Increases per Guidance Provided by Supply Chain.
CHM,CARBON,PAC LIGNITE,900LB	1200585		3.00%		
CHM,CARBON,PAC WOOD BASED,750LB	1200588		3.00%		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%		
CHM,HFS ACID,23%,BULK	1200647		2.00%		
CHM,HFS ACID,23%,MINI BULK	1200648		2.00%		
CHM,PACL,DELPC2020, BULK	1200702		3.00%		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		3.00%		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		3.00%		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		3.00%		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		3.00%		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815		2.00%		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761		2.00%		
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531		2.00%		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		3.00%		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900 1200928		3.00%		
CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200928		3.00% 3.00%		
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200880		3.00%		
50/50 Polyphosphate	1200332		3.00%		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price incre
New Chemical #2			3.00%		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price incre
New Chemical #3					If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price incre
2017 Budget Price per Unit:					
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557		0.6188		2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,CARBON,PAC LIGNITE,900LB	1200585		0.9654		
CHM,CARBON,PAC WOOD BASED,750LB	1200588		0.8922		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1856		
CHM,HFS ACID,23%,BULK	1200647		0.2333		
CHM,HFS ACID,23%,MINI BULK	1200648		0.2730		
CHM,PACL,DELPC2020, BULK	1200702		0.1376		
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523		0.4093		
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281		0.4223		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.7004		
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3502		
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200815 1200761		2.5320 0.3346		
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761		0.3346		
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201531		2.4302		
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		0.1639		
CHM,SODIUM HYDROXIDE,50%,BULK	1200900		0.1468		
CHM CODILIM DEDMANGANATE 200/ MINI DILLY	1200920		0.1400		

	Part	SD Allocated		
<u>Chemical</u>	Number	to Plant Dec	YTD	<u>Notes</u>
50/50 Polyphosphate		0.4505		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2		0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3		0.0000		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2017 Budget Expense in Dollars:				
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	3,787.82	24,271.76	2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CARBON,PAC LIGNITE,900LB	1200585	0.00	0.00	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	2,800.89	4,642.61	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	4,050.73	43,342.68	
CHM,HFS ACID,23%,BULK	1200647	0.00	0.00	
CHM,HFS ACID,23%,MINI BULK	1200648	3,519.25	27,456.28	
CHM,PACL,DELPC2020, BULK	1200702	25,565.25	256,371.51	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	0.00	0.00	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	0.00	0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	0.00	0.00	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	0.00	0.00	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	0.00	7,933.85	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	2,897.15	19,475.47	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	0.00	0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	184.23	1,422.45	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	0.00	198.08	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	7,535.41	76,714.16	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	0.00	0.00	
50/50 Polyphosphate		8,416.82	107,971.62	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2		0.00	0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3		0.00	0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2017 CHE	MICAL BUDGET	58,757.55	569,800.47	Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)
<u> </u>	, and the second	·		

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - RICHMOND ROAD STATION COST CENTER COST CENTER #120251 2016 CHEMICALS BUDGET

<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant
2017 Central District System Delivery - Budget		
2015 Central District System Delivery - Budget		
2014 Central District System Delivery - Actual		
2013 Central District System Delivery - Actual		
2015 Central District System Delivery Actual		
Richmond Road Station (RRS) Plant:		
2014 Monthly Chemical Usage in Units:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
Allocated 2014 System Delivery		29%
		29%
2013 Monthly Chemical Usage in Units:	1200557	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB	1200585	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB	1200585 1200588	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER	1200585 1200588 1200597	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK	1200585 1200588 1200597 1200647	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200585 1200588 1200597 1200647 1200648	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK	1200585 1200588 1200597 1200647 1200648 1200702	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,PHATE,ORTHO,POLY,CEDARCLEAR 417	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHSACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4600,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4600,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4200,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,PHOSPHATE,ORTH-DLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,501B CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1201531 1200871 1200900	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1200667 1200815 1200761 1200531 1200761 1200900 1200908	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1200871 1200900 1200928 1200980	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1200667 1200815 1200761 1200531 1200761 1200900 1200908	
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM CHORIDE,90% PURE,50LB 704 CHM,SODIUM CHORIDE,90% BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1200871 1200900 1200928 1200980	29%
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM PRANAGANATE,20%,MINI BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units:	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1201171 1200667 1200815 1200761 1200761 1200900 1200928 1200980 1200952	
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,PFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1200171 1200667 1200815 1200761 1200531 1200928 1200928 1200928 1200952	
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4500,BULK CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,POLYMER,CATIONC GEDRFLOC 524,MINIBULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM PROXIDE,50%,BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB	1200585 1200588 1200597 1200648 1200702 1201523 1201281 1201171 1200667 1200155 1200761 1201531 1200871 1200890 1200928 1200880 1200952	
2013 Monthly Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,PFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,POLYMER,CATIONC CEDRFLOC 524,MINIBULK CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB Allocated 2013 System Delivery 2-Year Average Chemical Usage in Units: CHM,AMMONIA,ANHYDROUS,100%,BULK	1200585 1200588 1200597 1200647 1200648 1200702 1201523 1201281 1200171 1200667 1200815 1200761 1200531 1200928 1200928 1200928 1200952	

	Part	SD Allocated
Chemical	Number	to Plant
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
2-Year Average Allocated System Delivery		
Historical Dosage per T-Gal Produced:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM, POLYMER, CATIONS CEDRFLOS 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761 1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1201531	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200871	
CHM,SODIUM HYDROXIDE,50%,BULK	1200908	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200328	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
2016 BRIR Budgeted Dosage per T-Gal Produced:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	A section of the sect
CHM,CARBON,PAC LIGNITE,900LB	1200585	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647 1200648	
CHM,PACL,DELPC2020, BULK	1200048	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM.PHOSPHATE.ORTHO.POLY.CEDARCLEAR 417	1201281	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	s, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	,
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	3, creating discrepencies in dosages. Also split Dec dosages between Nov/Dec, as no chemical issuances recorded in SAP for Nov. 2014

	Part
Chemical	Number
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952
CHIVI, SODIOWI THIOSOLI ATE, DICT, 10070, SOLD	1200332
2016 Operations Adjustments to Budgeted Dosage per T-Gal Pr	roduced:
HM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CARBON,PAC LIGNITE,900LB	1200585
HM,CARBON,PAC WOOD BASED,750LB	1200588
HM,CHLORINE,100%,2000LB CYLINDER	1200597
HM,HFS ACID,23%,BULK	1200647
HM,HFS ACID,23%,MINI BULK	1200648
HM,PACL,DELPC2020, BULK	1200702
HM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523
HM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323
HM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281
HM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201171
HM,POLYMER,CATIONS CEDRFLOG 408,50LB	1200815
HM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
HM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531
HM,POTASSIUM PERMANGANATE,100%,55LB	1200871
HM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
HM,SODIUM HYDROXIDE,50%,BULK	1200928
HM,SODIUM PERMANGANATE,20%,MINI BULK	1200880
HM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952
0/50 Polyphosphate	Not Obtained
ew Chemical #2	
ew Chemical #3	
017 Final Adjusted Budgeted Dosage per T-Gal Produced:	
HM,AMMONIA,ANHYDROUS,100%,BULK	1200557
HM,CARBON,PAC LIGNITE,900LB	1200585
HM,CARBON,PAC WOOD BASED,750LB	1200588
HM,CHLORINE,100%,2000LB CYLINDER	1200500
HM,HFS ACID,23%,BULK	1200647
HM,HFS ACID,23%,MINI BULK	1200648
HM,PACL,DELPC2020, BULK	1200702
HM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702
HM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323
HM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281
HM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1201171
HM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815
HM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200813
HM,POLYMER,CATIONC CEDRFLOC 524,BULK HM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1200761
HM,POTASSIUM PERMANGANATE,100%,55LB	1200871
HM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
HM,SODIUM HYDROXIDE,50%,BULK	1200928
HM,SODIUM PERMANGANATE,20%,MINI BULK	1200880
HM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952
0/50 Polyphosphate	
ew Chemical #2	
ew Chemical #3	
017 Budgeted System Delivery	
16 Budgeted Chemical Usage in Units:	

 2016 Budgeted Chemical Usage in Units:

 CHM,AMMONIA,ANHYDROUS,100%,BULK
 1200557

 CHM,CARBON,PAC LIGNITE,900LB
 1200585

 CHM,CARBON,PAC WOOD BASED,750LB
 1200588

 CHM,CHLORINE,100%,2000LB CYLINDER
 1200597

1200647

CHM,HFS ACID,23%,BULK

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	Part	SD Allocated
Chemical	Number	to Plant
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2045 4 4 10 1 11 11		
2015 Actual Price per Unit:	4200557	
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588 1200597	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK CHM,HFS ACID,23%,MINI BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200648	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1200702	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201323	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 408,30LB	1200813	
CHM,POLYMER,CATIONC CEDRFLOC 324,BOLK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,50%,BULK	1200900	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200928	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200880	
50/50 Polyphosphate	1200952	nit
New Chemical #2		nit
New Chemical #3		nit
The Colonical Ho		"""

CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 1200585 CHM,CARBON,PAC LIGNITE,900LB CHM,CARBON,PAC WOOD BASED,750LB 1200588 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,HFS ACID,23%,MINI BULK 1200648 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK 1201523

CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM, POLYMER, CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK

CHM,POTASSIUM PERMANGANATE,100%,55LB

2016 Price Increase (Decrease) per Supply Chain:

1201281

1201171

1200667

1200815

1200761

1201531

1200871

KENTUCKY AMERICAN WATER CENTRAL DISTRICT - RICHMOND ROAD STATION COST CENTER COST CENTER #120251 2016 CHEMICALS BUDGET

Chemical CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HVDROXIDE,50%,BULK CHM,SODIUM PERMANGANATE,20%,MINI BULK CHM,SODIUM THIOSULFATE,DRY,100%,50LB	Part <u>Number</u> 1200900 1200928 1200880 1200952	SD Allocated to Plant
50/50 Polyphosphate	1200332	ase.
New Chemical #2		ase.
New Chemical #3		ase.
2016 Budget Price per Unit:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
50/50 Polyphosphate New Chemical #2		
New Chemical #2 New Chemical #3		
New Chemical #3		
2016 Budget Expense in Dollars:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200815 1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		

CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2016 CHEMICAL BUDGET

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - RICHMOND ROAD STATION COST CENTER COST CENTER #120251 2016 CHEMICALS BUDGET

 Pert
 SD Allocated

 Chemical
 Number
 to Plant

CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2014 ACTUAL COST

Cost per 1000 gallons - 2016 Chemical Budget Cost per 1000 gallons - 2015 Chemical Budget Cost per 1000 gallons - 2014 Actual Cost

Note: Approximately \$55k of chemicals purchased form Aquatic Control, Inc. (Algimycin App

2017 Drice Ingresse (Decresse) nor Cumply Chains	
2017 Price Increase (Decrease) per Supply Chain:	4200555
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557
CHM,CARBON,PAC LIGNITE,900LB	1200585
CHM,CARBON,PAC WOOD BASED,750LB	1200588
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,HFS ACID,23%,BULK	1200647
CHM,HFS ACID,23%,MINI BULK	1200648
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,50%,BULK	1200928
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952

50/50 Polyphosphate ase.

New Chemical #2 ase.

New Chemical #3 ase.

2017 Budget Price per Unit: CHM,AMMONIA,ANHYDROUS,100%,BULK 1200557 CHM,CARBON,PAC LIGNITE,900LB 1200585 CHM,CARBON,PAC WOOD BASED,750LB 1200588 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM, HFS ACID, 23%, BULK 1200647 CHM,HFS ACID,23%,MINI BULK 1200648 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK 1201523 CHM, PHOSPHATE, ORTHO, POLY, CEDARCLEAR 417 1201281 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM, POLYMER, CATIONC CEDRFLOC 408, 50LB 1200815 CHM, POLYMER, CATIONC CEDRFLOC 524, BULK 1200761 CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK 1201531 CHM, POTASSIUM PERMANGANATE, 100%, 55LB 1200871 CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 1200900 CHM, SODIUM HYDROXIDE, 50%, BULK 1200928 CHM, SODIUM PERMANGANATE, 20%, MINI BULK 1200880 CHM, SODIUM THIOSULFATE, DRY, 100%, 50LB 1200952 KAW_R_AGDR1_NUM070_032416 Page 102 of 122

KENTUCKY AMERICAN WATER CENTRAL DISTRICT - RICHMOND ROAD STATION COST CENTER COST CENTER #120251 2016 CHEMICALS BUDGET

Chemical	Part Number	SD Allocated to Plant
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2017 Budget Expense in Dollars:		
CHM,AMMONIA,ANHYDROUS,100%,BULK	1200557	
CHM,CARBON,PAC LIGNITE,900LB	1200585	
CHM,CARBON,PAC WOOD BASED,750LB	1200588	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,HFS ACID,23%,MINI BULK	1200648	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	1201523	
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	1201281	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	1200815	
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	1200761	
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	1201531	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,50%,BULK	1200928	
CHM,SODIUM PERMANGANATE,20%,MINI BULK	1200880	
CHM,SODIUM THIOSULFATE,DRY,100%,50LB	1200952	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		

CENTRAL DISTRICT - RICH. ROAD STATION PLANT 2017 CHEMICAL BUDGET

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Chemical	Part Number	SD Allocated to Plant	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>
														
2017 Central District System Delivery - Budget			999,736.09	958,837.51	1,077,983.80	1,016,886.34		1,235,234.83			1,135,323.17	1,138,544.37	983,927.84	1,041,983.08
2015 Central District System Delivery - Budget			980,083.14	942,411.52	986,157.34	996,661.68	,,-	1,301,837.00	1,334,898.07	1,355,315.08	1,250,294.84	1,139,569.79	970,664.77	998,059.83
2014 Central District System Delivery - Actual			1,180,538.14	1,059,151.14	1,073,765.71	1,070,641.00		1,274,938.14	1,415,510.57	1,324,252.43	1,220,824.00	1,143,834.00	1,012,083.00	996,809.14
2013 Central District System Delivery - Actual			1,019,730.29	925,074.43	1,017,064.57	1,005,991.71	1,109,121.29	1,157,294.00	1,183,522.43	1,245,984.57	1,247,286.57	1,133,795.29	985,766.43	1,003,560.71
KRS II Plant:														
2014 Monthly Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		11,972.00	10,756.00	7,838.00	3,718.00	3,596.00	11,714.00	14,833.00	18,400.00	14,976.00	10,154.00	12,261.00	9,307.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		10,605.00	9,644.00	8,837.00	8,019.00	3,506.00	14,152.00	20,568.00	14,010.00	14,617.00	9,700.00	9,975.00	9,161.00
CHM,HFS ACID,23%,BULK	1200647		12,175.00	11,851.00	12,325.00	7,467.00	2,580.00	8,017.00	10,968.00	11,154.00	11,142.00	7,316.00	8,127.00	7,076.00
CHM,PACL,DELPC2020, BULK	1200702		136,593.00	127,074.00	81,349.00	68,587.00	39,778.00	65,530.00	100,644.00	110,791.00	131,965.00	77,581.00	57,212.00	56,463.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		2,965.00	2,661.00	3,107.00	54.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	58.00	6,315.00	5,889.00	7,824.00	8,275.00	8,335.00	6,251.00	6,018.00	6,065.00
CHM,POLYMER,FILTER AID	1201127		0.00	0.00	0.00	122.00	78.00	38.00	611.00	383.00	48.00	0.00	14.00	0.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		900.00	450.00	1,350.00	900.00	450.00	900.00	0.00	450.00	0.00	1,924.00	900.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		1,376.00	783.00	588.00	929.00	459.00	0.00	302.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	1,540.00	3,135.00	3,685.00	3,685.00	2,145.00	1,155.00	770.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		1,628.00	1,388.00	2,088.00	316.00	512.00	1,517.00	1,240.00	895.00	900.00	1,286.00	811.00	902.00
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,146.00	23,923.00	1,602.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		994.00	820.00	752.00	926.00	1,331.00	843.00	1,159.00	777.00	908.00	943.00	829.00	493.00
Allocated 2014 System Delivery		19%	221,705.06	198,908.58	201,653.20	201,066.38	226,900.50	239,433.38	265,832.89	248,694.61	229,270.75	214,812.03	190,069.19	187,200.76
2013 Monthly Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		9,432.00	6,359.00	5,483.00	5,638.00	10,327.00	11,615.00	15,880.00	14,886.00	16,632.00	13,856.00	10,078.00	12,116.00
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		8,748.00	5,742.00	6,348.00	8,203.00	10,430.00	9,909.00	18,709.00	17,139.00	16,795.00	15,635.00	12,631.00	12,539.00
CHM,HFS ACID,23%,BULK	1200647		6,427.00	5,347.00	5,827.00	6,256.00	6,748.00	5,600.00	8,810.00	9,239.00	10,117.00	9,515.00	7,708.00	9,393.00
CHM,PACL,DELPC2020, BULK	1200702		93,043.00	70,762.00	50,073.00	58,590.00	68,978.00	43,159.00	125,310.00	108,084.00	118,912.00	83,562.00	83,960.00	112,847.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		1,537.00	1,421.00	1,638.00	1,672.00	2,027.00	1,990.00	2,254.00	1,963.00	2,498.00	2,433.00	1,870.00	2,246.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,FILTER AID	1201127			27.00	7.00	6.00	11.00	55.00	187.00	93.00	83.00	9.00	115.00	4.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		2,250.00	950.00	477.00	2,154.00	965.00	897.00	900.00	1,016.00	837.00	1,254.00	450.00	900.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		770.00	523.00	557.00	575.00	1,566.00	1,113.00	2,215.00	2,394.00	3,110.00	1,928.00	1,444.00	1,474.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		750.00	633.00	199.00	773.00	1,727.00	1,384.00	1,873.00	1,317.00	1,518.00	1,518.00	1,510.00	1,598.00
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		899.00	715.00	843.00	1,047.00	1,025.00	779.00	593.00	1,026.00	548.00	831.00	840.00	764.00
Allocated 2013 System Delivery		19%	191,505.35	173,728.98	191,004.73	188,925.24	208,292.98	217,339.81	222,265.51	233,995.90	234,240.42	212,926.75	185,126.94	188,468.70
2-Year Average Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		10,702.00	8,557.50	6,660.50	4,678.00	6,961.50	11,664.50	15,356.50	16,643.00	15,804.00	12,005.00	11,169.50	10,711.50
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		9,676.50	7,693.00	7,592.50	8,111.00	6,968.00	12,030.50	19,638.50	15,574.50	15,706.00	12,667.50	11,303.00	10,850.00
CHM,HFS ACID,23%,BULK	1200647		9,301.00	8,599.00	9,076.00	6,861.50	4,664.00	6,808.50	9,889.00	10,196.50	10,629.50	8,415.50	7,917.50	8,234.50
CHM,PACL,DELPC2020, BULK	1200702		114,818.00	98,918.00	65,711.00	63,588.50	54,378.00	54,344.50	112,977.00	109,437.50	125,438.50	80,571.50	70,586.00	84,655.00
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		2,251.00	2,041.00	2,372.50	863.00	1,013.50	995.00	1,127.00	981.50	1,249.00	1,216.50	935.00	1,123.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	29.00	3,157.50	2,944.50	3,912.00	4,137.50	4,167.50	3,125.50	3,009.00	3,032.50
CHM,POLYMER,FILTER AID	1201127		0.00	13.50	3.50	64.00	44.50	46.50	399.00	238.00	65.50	4.50	64.50	2.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		1,575.00	700.00	913.50	1,527.00	707.50	898.50	450.00	733.00	418.50	1,589.00	675.00	450.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		1,073.00	653.00	572.50	752.00	1,012.50	556.50	1,258.50	1,197.00	1,555.00	964.00	722.00	737.00
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	0.00	0.00	770.00	1,567.50	1,842.50	1,842.50	1,072.50	577.50	385.00
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		1,189.00	1,010.50	1,143.50	544.50	1,119.50	1,450.50	1,556.50	1,106.00	1,209.00	1,402.00	1,160.50	1,250.00
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,573.00	11,961.50	801.00	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		946.50	767.50	797.50	986.50	1,178.00	811.00	876.00	901.50	728.00	887.00	834.50	628.50

	Part	SD Allocated												
Chemical	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
2-Year Average Allocated System Delivery			206,605.21	186,318.78	196,328.96	194,995.81	217,596.74	228,386.60	244,049.20	241,345.25	231,755.58	213,869.39	187,598.06	187,834.73
<u> </u>														
Historical Dosage per T-Gal Produced:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.0518	0.0459	0.0339	0.0240	0.0320	0.0511	0.0629	0.0690	0.0682	0.0561	0.0595	0.0570
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0468	0.0413	0.0387	0.0416	0.0320	0.0527	0.0805	0.0645	0.0678	0.0592	0.0603	0.0578
CHM,HFS ACID,23%,BULK	1200647		0.0450	0.0462	0.0462	0.0352	0.0214	0.0298	0.0405	0.0422	0.0459	0.0393	0.0422	0.0438
CHM,PACL,DELPC2020, BULK	1200702		0.5557	0.5309	0.3347	0.3261	0.2499	0.2379	0.4629	0.4534	0.5413	0.3767	0.3763	0.4507
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0109	0.0110	0.0121	0.0044	0.0047	0.0044	0.0046	0.0041	0.0054	0.0057	0.0050	0.0060
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0001	0.0145	0.0129	0.0160	0.0171	0.0180	0.0146	0.0160	0.0161
CHM,POLYMER,FILTER AID	1201127		0.0000	0.0001	0.0000	0.0003	0.0002	0.0002	0.0016	0.0010	0.0003	0.0000	0.0003	0.0000
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.0076	0.0038	0.0047	0.0078	0.0033	0.0039	0.0018	0.0030	0.0018	0.0074	0.0036	0.0024
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871		0.0052 0.0000	0.0035 0.0000	0.0029 0.0000	0.0039 0.0000	0.0047 0.0000	0.0024 0.0034	0.0052 0.0064	0.0050 0.0076	0.0067 0.0080	0.0045 0.0050	0.0038 0.0031	0.0039 0.0020
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200871		0.0058	0.0054	0.0058	0.0000	0.0000	0.0034	0.0064	0.0076	0.0080	0.0050	0.0031	0.0020
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		0.0000	0.0034	0.0000	0.0028	0.0001	0.0004	0.0004	0.0046	0.0516	0.0000	0.0002	0.0007
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916		0.0046	0.0000	0.0041	0.0051	0.0054	0.0036	0.0036	0.0037	0.0031	0.0037	0.0044	0.0033
CHWI,30DIOW THIO30LIATE,EIQOID,3070,BOEK	1200930		0.0040	0.0041	0.0041	0.0031	0.0034	0.0030	0.0030	0.0037	0.0031	0.0041	0.0044	0.0033
2017 BRIR Budgeted Dosage per T-Gal Produced:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.0540	0.0541	0.0389	0.0233	0.0307	0.0487	0.0578	0.0669	0.0689	0.0559	0.0588	0.0572
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0478	0.0485	0.0438	0.0403	0.0307	0.0502	0.0739	0.0626	0.0685	0.0590	0.0595	0.0580
CHM,HFS ACID,23%,BULK	1200647		0.0549	0.0596	0.0611	0.0341	0.0206	0.0284	0.0372	0.0410	0.0464	0.0392	0.0417	0.0440
CHM,PACL,DELPC2020, BULK	1200702		0.6161	0.6389	0.4034	0.3163	0.2397	0.2270	0.4250	0.4400	0.5471	0.3751	0.3714	0.4522
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.0134	0.0134	0.0154	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0003	0.0278	0.0246	0.0294	0.0333	0.0364	0.0291	0.0317	0.0324
CHM,POLYMER,FILTER AID	1201127		0.0000	0.0000	0.0000	0.0006	0.0003	0.0002	0.0023	0.0015	0.0002	0.0000	0.0001	0.0000
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		0.0062	0.0039	0.0029	0.0037	0.0045	0.0023	0.0047	0.0048	0.0068	0.0045	0.0038	0.0039
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000	0.0000	0.0000	0.0000	0.0032	0.0059	0.0074	0.0080	0.0050	0.0030	0.0021
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.0073	0.0070	0.0104	0.0027	0.0049	0.0061	0.0059	0.0044	0.0053	0.0065	0.0061	0.0067
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0127	0.1043	0.0075	0.0000	0.0000
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017 Operations Adjustments to Budgeted Dosage pe	er T-Gal Produce	ed:												
CHM,AMMONIA,AQUA,19%,BULK	1200566													
CHM,CHLORINE,100%,2000LB CYLINDER	1200597													
CHM,HFS ACID,23%,BULK	1200647													
CHM,PACL,DELPC2020, BULK	1200702													
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		(0.0134)	(0.0134)	(0.0154)	(0.0003)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	(0.0003)	(0.0278)	(0.0246)	(0.0294)	(0.0333)	(0.0364)	(0.0291)	(0.0317)	(0.0324)
CHM,POLYMER,FILTER AID	1201127													
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855													
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870													
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871					0.0037	0.0045							
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900													
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916													
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956													
50/50 Polyphosphate	Not Obtaine	d d	0.038226204	0.038226204	0.038226204	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823	0.03823
New Chemical #2														
New Chemical #3														
2017 Final Adjusted Budgeted Dosage per T-Gal Produ	uced:													
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.0540	0.0541	0.0389	0.0233	0.0307	0.0487	0.0578	0.0669	0.0689	0.0559	0.0588	0.0572
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.0478	0.0485	0.0438	0.0403	0.0307	0.0502	0.0739	0.0626	0.0685	0.0590	0.0595	0.0580
CHM,HFS ACID,23%,BULK	1200647		0.0549	0.0596	0.0611	0.0341	0.0206	0.0284	0.0372	0.0410	0.0464	0.0392	0.0417	0.0440
CHM,PACL,DELPC2020, BULK	1200702		0.6161	0.6389	0.4034	0.3163	0.2397	0.2270	0.4250	0.4400	0.5471	0.3751	0.3714	0.4522

	Part	SD Allocated												
Chemical	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	Jun	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
CHM.PHOSPHATE.ORTH-PLY CARUS 4100.BULK	1201171	<u>to riune</u>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POLYMER,FILTER AID	1201127		0.0000	0.0000	0.0000	0.0006	0.0003	0.0002	0.0023	0.0015	0.0002	0.0000	0.0001	0.0000
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		0.0062	0.0039	0.0029	0.0037	0.0045	0.0023	0.0047	0.0048	0.0068	0.0045	0.0038	0.0039
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.0000	0.0000	0.0000	0.0037	0.0045	0.0032	0.0059	0.0074	0.0080	0.0050	0.0030	0.0021
CHM.SODIUM CHLORIDE.90% PURE.50LB 704	1200900		0.0073	0.0070	0.0104	0.0027	0.0049	0.0061	0.0059	0.0044	0.0053	0.0065	0.0061	0.0067
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0127	0.1043	0.0075	0.0000	0.0000
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50/50 Polyphosphate	1200330		0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382	0.0382
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017 Budgeted System Delivery		19%	187,750.44	180,069.68	202,445.36	190,971.25	216,098.78	231,977.10	256,669.20	236,774.95	213,213.69	213,818.63	184,781.65	195,684.42
2017 Budgeted Chemical Usage in Units:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		10,138.46	9,737.28	7,868.79	4,443.13	6,630.09	11,301.25	14,827.14	15,845.32	14,697.16	11,949.48	10,858.78	11,196.93
CHM,CHLORINE,100%,2000LB CYLINDER	1200500		8,980.82	8,730.60	8,871.71	7,703.76	6,636.28	11,655.85	18,961.53	14,828.03	14,606.02	12,608.92	10,988.56	11,341.71
CHM,HFS ACID,23%,BULK	1200537		10,310.37	10,728.58	12,373.42	6,517.00	4,441.97	6,596.47	9,548.11	9,707.79	9,885.06	8,376.58	7,697.24	8,607.68
CHM,PACL,DELPC2020, BULK	1200702		115,673.48	115,038.65	81,668.56	60,395.85	51,789.31	52,652.14	109,082.50	104,192.28	116,653.37	80,198.90	68,622.37	88,491.44
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,FILTER AID	1201127		0.00	0.00	0.00	115.87	74.29	36.82	589.94	364.64	44.64	0.00	13.61	0.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		1,165.26	708.84	590.31	714.24	964.30	539.17	1,215.12	1,139.63	1,446.10	959.54	701.91	770.40
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	714.24	964.30	746.02	1,513.47	1,754.19	1,713.46	1,067.54	561.43	402.45
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		1,378.67	1,256.54	2,096.20	517.16	1,066.21	1,405.33	1,502.84	1,052.99	1,124.33	1,395.52	1,128.22	1,306.65
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,995.22	22,247.54	1,594.59	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			7,176.99	6,883.38	7,738.72	7,300.11	8,260.64	8,867.60	9,811.49	9,051.01	8,150.35	8,173.47	7,063.50	7,480.27
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Actual Price per Unit:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250
CHM,CHLORINE,100%,2000LB CYLINDER	1200500		0.1230	0.1749	0.1230	0.1230	0.1749	0.1230	0.1749	0.1749	0.1230	0.1749	0.1230	0.1749
CHM,HFS ACID,23%,BULK	1200597		0.1745	0.2265	0.1745	0.1749	0.1745	0.1749	0.2265	0.1745	0.2265	0.1745	0.2265	0.2265
CHM,PACL,DELPC2020, BULK	1200047		0.2203	0.1297	0.2203	0.2203	0.1297	0.2203	0.1297	0.1297	0.1297	0.1297	0.1297	0.1297
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1200702		0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200171		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,FILTER AID	1201127		1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700	2.2700
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594	2.3594
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545	0.1545
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900	0.0900
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128	0.2128
New Chemical #1	1200330		0.2120	0.2120	0.2120	0.2120	0.2120	0.2120	0.2120	0.2120	0.2120	0.2120	0.2120	0.2120
New Chemical #2														
New Chemical #3														
2016 Price Increase (Decrease) per Supply Chain:														
CHM.AMMONIA.AQUA.19%.BULK	1200566		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,HFS ACID,23%,BULK	1200647		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
5, 5.4610,2570,00EK	1200047		1.00/0	1.00/0	1.00/0	1.00/0	1.00/0	1.00/0	1.00/0	1.0070	1.0070	1.00/0	1.00/0	1.0070

	Part	SD Allocated												
<u>Chemical</u>	Number	to Plant	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,FILTER AID	1201127		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #1														
New Chemical #2														
New Chemical #3														
2016 Budget Price per Unit:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287	0.1287
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802	0.1802
CHM,HFS ACID,23%,BULK	1200647		0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288	0.2288
CHM,PACL,DELPC2020, BULK	1200702		0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336	0.1336
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400	0.3400
CHM,POLYMER,FILTER AID	1201127		1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800
CHM, POLYMER, SLUDGE CEDARFLOC 312,55GA	1200855		1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200	1.6200
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381	2.3381
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302	2.4302
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592	0.1592
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918	0.0918
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191	0.2191
50/50 Polyphosphate			0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800	0.3800
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016 Budget Expense in Dollars:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		1,305.32	1,253.67	1,013.10	572.05	853.62	1,455.03	1,908.99	2,040.08	1,892.25	1,538.49	1,398.06	1,441.60
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		1,618.28	1,573.19	1,598.62	1,388.16	1,195.81	2,100.30	3,416.74	2,671.91	2,631.90	2,272.04	1,980.06	2,043.70
CHM,HFS ACID,23%,BULK	1200647		2,358.71	2,454.38	2,830.68	1,490.90	1,016.19	1,509.08	2,184.33	2,220.86	2,261.41	1,916.32	1,760.90	1,969.18
CHM,PACL,DELPC2020, BULK	1200702		15,453.39	15,368.58	10,910.51	8,068.58	6,918.79	7,034.06	14,572.87	13,919.56	15,584.30	10,714.17	9,167.60	11,822.01
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POLYMER,FILTER AID	1201127		0.00	0.00	0.00	148.32	95.09	47.13	755.12	466.74	57.14	0.00	17.42	0.00
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		2,724.50	1,657.34	1,380.20	1,669.97	2,254.63	1,260.63	2,841.07	2,664.57	3,381.11	2,243.51	1,641.15	1,801.27
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		0.00	0.00	0.00	1,735.77	2,343.46	1,813.00	3,678.06	4,263.07	4,164.09	2,594.36	1,364.41	978.04
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		219.44	200.00	333.65	82.32	169.71	223.68	239.21	167.60	178.96	222.12	179.58	207.98
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	274.96	2,042.32	146.38	0.00	0.00
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate			2,727.25	2,615.68	2,940.71	2,774.04	3,139.04	3,369.69	3,728.37	3,439.38	3,097.13	3,105.92	2,684.13	2,842.50
New Chemical #2			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BU	DGET		26,406.90	25,122.86	21,007.47	17,930.11	17,986.34	18,812.60	33,324.73	32,128.73	35,290.62	24,753.30	20,193.31	23,106.28
		г												
CENTRAL DISTRICT - KRSII PLANT 2015 CHEMICAL BUD	OGET		21,773.31	16,445.45	21,651.30	20,344.50	25,729.19	25,859.96	38,643.06	39,135.77	18,269.43	16,893.54	17,989.49	18,374.45
CENTRAL DISTRICT - KRSII PLANT 2014 ACTUAL COST			31,913.62	26,439.28	19,907.99	15,013.18	9,948.56	20,234.23	32,605.22	34,235.37	38,157.62	22,330.22	17,524.45	15,783.62

	Part	SD Allocated												
Chemical	Number	to Plant	<u>Jan</u>	Feb	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
Cost per 1000 gallons - 2016 Chemical Budget			0.1406	0.1395	0.1038	0.0939	0.0832	0.0811	0.1298	0.1357	0.1655	0.1158	0.1093	0.1181
Cost per 1000 gallons - 2015 Chemical Budget			0.1183	0.0929	0.1169	0.1087	0.1178	0.1058	0.1541	0.1538	0.0778	0.0789	0.0987	0.0980
Cost per 1000 gallons - 2014 Actual Cost			0.1439	0.1329	0.0987	0.0747	0.0438	0.0845	0.1227	0.1377	0.1664	0.1040	0.0922	0.0843
· -														
2017 Price Increase (Decrease) per Supply Chain:		_												
CHM,AMMONIA,AQUA,19%,BULK	1200566		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,HFS ACID,23%,BULK	1200647		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CHM,PACL,DELPC2020, BULK	1200702		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1201127		0.00% 0.00%	2.00% 2.00%	2.00% 2.00%	2.00% 2.00%	2.00% 2.00%	2.00% 2.00%	2.00% 2.00%	2.00%	2.00% 2.00%	2.00% 2.00%	2.00% 2.00%	2.00%
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200855 1200870		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.00% 3.00%	3.00%	3.00%	3.00%	3.00%
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		2.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
50/50 Polyphosphate	1200550		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
New Chemical #2					5.5575		5.55.7	5.55.1	5.55.1	5.55.1	5.55.7		5.55.7	5.55.1
New Chemical #3														
2017 Budget Price per Unit:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856	0.1856
CHM,HFS ACID,23%,BULK	1200647		0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333	0.2333
CHM,PACL,DELPC2020, BULK	1200702		0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376	0.1376
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004	0.7004
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502
CHM, POLYMER, FILTER AID	1201127		1.2800	1.3056	1.3056	1.3056	1.3056	1.3056	1.3056	1.3056	1.3056	1.3056	1.3056	1.3056
CHM, POLYMER, SLUDGE CEDARFLOC 312,55GA	1200855		1.6200	1.6524 2.4082	1.6524	1.6524	1.6524 2.4082	1.6524 2.4082	1.6524	1.6524	1.6524 2.4082	1.6524	1.6524 2.4082	1.6524 2.4082
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871		2.4082 2.5031	2.4082	2.4082 2.5031	2.4082 2.5031	2.4082	2.5031	2.4082 2.5031	2.4082 2.5031	2.4082	2.4082 2.5031	2.5031	2.4082
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639	0.1639
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		0.0936	0.1033	0.1033	0.1033	0.1033	0.1033	0.0946	0.1033	0.0946	0.1033	0.1033	0.1033
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916		0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257	0.2257
50/50 Polyphosphate	1200330		0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914	0.3914
New Chemical #2			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Chemical #3			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017 Budget Expense in Dollars:														
CHM,AMMONIA,AQUA,19%,BULK	1200566		1,344.48	1,291.28	1,043.50	589.21	879.23	1,498.68	1,966.25	2,101.28	1,949.02	1,584.64	1,440.00	1,484.85
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		1,666.83	1,620.39	1,646.58	1,429.81	1,231.69	2,163.31	3,519.24	2,752.06	2,710.86	2,340.20	2,039.46	2,105.01
CHM,HFS ACID,23%,BULK	1200647		2,405.89	2,503.47	2,887.29	1,520.72	1,036.52	1,539.26	2,228.01	2,265.28	2,306.64	1,954.64	1,796.12	2,008.57
CHM,PACL,DELPC2020, BULK	1200702		15,916.99	15,829.64	11,237.82	8,310.64	7,126.35	7,245.08	15,010.06	14,337.15	16,051.83	11,035.59	9,442.63	12,176.67
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHM, POLYMER, FILTER AID	1201127		0.00	0.00	0.00	151.29	96.99	48.07	770.22	476.08	58.28	0.00	17.77	0.00
CHM, POLYMER, SLUDGE CEDARFLOC 312,55GA	1200855		0.00 2,806.24	0.00	0.00 1,421.61	0.00	0.00 2,322.27	0.00	0.00 2,926.30	0.00 2,744.50	0.00 3,482.55	0.00	0.00	0.00
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871		2,806.24 0.00	1,707.06 0.00	1,421.61 0.00	1,720.07 1,787.84	2,322.27 2,413.76	1,298.45 1,867.39	2,926.30 3,788.40	2,744.50 4,390.96	3,482.55 4,289.01	2,310.81 2,672.19	1,690.38 1,405.34	1,855.31 1,007.38
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200971		226.02	206.00	343.66	84.79	174.80	230.39	246.38	4,390.96 172.63	184.33	2,672.19	1,405.34	214.22
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		0.00	0.00	0.00	0.00	0.00	0.00	0.00	283.21	2,103.59	150.78	0.00	0.00
CHM,SODIUM THIONOXIDE,25%,BOEK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50/50 Polyphosphate	1200330		2,809.07	2,694.16	3,028.93	2,857.26	3,233.21	3,470.78	3,840.22	3,542.56	3,190.05	3,199.10	2,764.65	2,927.78
,			_,,	_,	-,0.55	_,	-,	-, 0 0	-,	-,50	-,-50.05	-,	_,	_,,

Chemical	Part <u>Number</u>	SD Allocated to Plant	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	Sep	<u>Oct</u>	Nov	<u>Dec</u>
New Chemical #2 New Chemical #3			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL	BUDGET		27,175.52	25,852.00	21,609.39	18,451.62	18,514.82	19,361.42	34,295.08	33,065.72	36,326.15	25,476.74	20,781.33	23,779.77

Chemical	Part Number	SD Allocated to Plant	<u>YTD</u>	Notes
<u>CHEMICUI</u>	<u>Ivamber</u>	torium	110	Notes
2017 Central District System Delivery - Budget			13,366,640.84	Updated for 2016 Budgeted SD entered into hyperion as of May 29
2015 Central District System Delivery - Budget			13,418,971.48	Budgeted 2015 District Total System Delivery in T-gal
2014 Central District System Delivery - Actual			13,980,550.14	Actual 2014 District Total System Delivery in T-gal
2013 Central District System Delivery - Actual			13,034,192.28	Actual 2013 District Total System Delivery in T-gal
KRS II Plant:				
2014 Monthly Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		129,525.00	Actual 2014 Chemicals used in units (lbs./gal) by month
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		132,794.00	
CHM,HFS ACID,23%,BULK	1200647		110,198.00	
CHM,PACL,DELPC2020, BULK	1200702		1,053,567.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		8,787.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		55,030.00	
CHM, POLYMER, FILTER AID	1201127		1,294.00	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		8,224.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871		4,437.00 16,115.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	12008/1		13,483.00	
CHM,SODIUM HYDROXIDE,90% PORE,50LB 704 CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		28,671.00	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916		10,775.00	
Allocated 2014 System Delivery		19%	2,625,547.32	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2013 Monthly Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		132,302.00	Actual 2013 Chemicals used in units (lbs./gal) by month
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		142,828.00	
CHM,HFS ACID,23%,BULK	1200647		90,987.00	
CHM,PACL,DELPC2020, BULK	1200702		1,017,280.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		23,549.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	
CHM,POLYMER,FILTER AID	1201127		597.00	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		13,050.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871		17,669.00 0.00	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200871		14,800.00	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900		0.00	
CHM,SODIUM THIONOXIDE,25%,BOEK 403	1200916		9,910.00	
,			2,2-2	
Allocated 2013 System Delivery		19%	2,447,821.31	System delivery allocated to plant based on 2014 actuals - Central District has 3 plants
2-Year Average Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		130,913.50	2013/2014 average chemicals used in units (lbs./gal) by month
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		137,811.00	
CHM,HFS ACID,23%,BULK	1200647		100,592.50	
CHM,PACL,DELPC2020, BULK	1200702		1,035,423.50	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		16,168.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		27,515.00	
CHM,POLYMER,FILTER AID	1201127		945.50	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		10,637.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		11,053.00	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		8,057.50	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		14,141.50	
CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916 1200956		14,335.50	
CHIVI,30010IVI THIO30LFATE,LIQUID,30%,BULK	1200956		10,342.50	

CHM,PACL,DELPC2020, BULK

1200702

	Part	SD Allocated		
Chemical	Number		/TD	Notes
2-Year Average Allocated System Delivery	Number		6,684.31	
z-fear Average Allocated System Delivery		2,53	0,084.31	2013/2014 average system delivery allocated to plant by month
Historical Dosage per T-Gal Produced:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			2-year average chemical usage in units / 2-year average allocated system delivery
CHM,CHLORINE,100%,2000LB CYLINDER	1200500			2 year overlage chemical assign in anito / 2 year overlage anotative y
CHM,HFS ACID,23%,BULK	1200557			
CHM,PACL,DELPC2020, BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
cimposion mososi mejaldolojisovijsosi	1200330			
2017 BRIR Budgeted Dosage per T-Gal Produced:				Historical Dosage per T-Gal Produced above with following modifications:
CHM,AMMONIA,AQUA,19%,BULK	1200566			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,HFS ACID,23%,BULK	1200647			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PACL,DELPC2020, BULK	1200702			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.0306	Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,POLYMER,FILTER AID	1201127		0.0500	Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			Made dosages zero as usage of this chemical is charged to waste disposal expense
CHM.POTASSIUM PERMANGANATE.100%.330LB	1200870			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			Used 2014 dosages only as opposed to 2-year average, as it appears that system delivery mix between plants was materially different in 2013, creating discrepencies
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			Made dosages zero as usage of this chemical is charged to waste disposal expense
, 4, , , , ,				
2017 Operations Adjustments to Budgeted Dosage pe	er T-Gal Produce	d:		Production Dept. Revisions to Budgeted Dosage in Rows 82-94 (Document explanation for adjustments):
CHM,AMMONIA,AQUA,19%,BULK	1200566	_		
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			
CHM,PACL,DELPC2020, BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
50/50 Polyphosphate	Not Obtaine	<mark>b</mark>		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2017 Final Adjusted Budgeted Dosage per T-Gal Prod	uced:			Final Budgeted Dosage per T-Gal after revisions input by Production Department
CHM,AMMONIA,AQUA,19%,BULK	1200566			
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			
CHW DVCI DEIDC3030 BIIIA	1200702			

CHM, HFS ACID, 23%, BULK

1200647

	Part	SD Allocated		
Chemical	Number	to Plant	YTD	<u>Notes</u>
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
50/50 Polyphosphate				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2017 Budgeted System Delivery		19%	2,510,255.15	Current Placeholder - will be updated when revenue budget is completed
2017 Budgeted Chemical Usage in Units:				
CHM,AMMONIA,AQUA,19%,BULK	1200566		129,493.81	Final 2016 Budgeted Chemicals in Units (lbs./gal.)
CHM,CHLORINE,100%,2000LB CYLINDER	1200597		135,913.81	That 2010 badgeted chemicals in Oints (1657)gail.)
CHM,HFS ACID,23%,BULK	1200537		104,790.27	
CHM,PACL,DELPC2020, BULK	1200702		1,044,458.85	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171		0.00	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667		0.00	
CHM,POLYMER,FILTER AID	1201127		1,239.81	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855		0.00	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870		10,914.82	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871		9,437.10	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900		15,230.65	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916		26,837.35	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956		0.00	
50/50 Polyphosphate			95,957.52	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #2			0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3			0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2015 Actual Price per Unit:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			Actual current year price per unit incurred by facility
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			
CHM,HFS ACID,23%,BULK	1200647			
CHM,PACL,DELPC2020, BULK	1200702			
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171			
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667			
CHM,POLYMER,FILTER AID	1201127			
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855			
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870			
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900			
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916			
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956			
New Chemical #1				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #2				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price per unit.
2016 Price Increase (Decrease) per Supply Chain:				
CHM,AMMONIA,AQUA,19%,BULK	1200566			2016 Price Increases per Guidance Provided by Supply Chain.
CHM,CHLORINE,100%,2000LB CYLINDER	1200597			• • • • • • • • • • • • • • • • • • • •

Chemical CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,FILTER AID CHM,POLYMER,SILUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK New Chemical #1	Part Number 1200702 1201171 1200667 1201127 1200855 1200870 1200970 1200901 1200916	SD Allocated to Plant	YTD	Notes If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
New Chemical #2 New Chemical #3				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase.
2016 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK	1200566 1200597 1200647			2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200702 1201171 1200667 1201127 1200855 1200870 1200871			
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200900 1200916 1200956			
50/50 Polyphosphate New Chemical #2 New Chemical #3	1200330			If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
2016 Budget Expense in Dollars: CHM,AMMONIA,AQUA,19%,BULK	1200566		16,672.25	2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CHLORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,FILTER AID	1200597 1200647 1200702 1201171 1200667 1201127		24,490.72 23,972.94 139,534.42 0.00 0.00 1,586.95	
CHM, POLYMER, SLUDGE CEDARFLOC 312,55GA CHM, POTASSIUM PERMANGANATE, 100%, 330LB CHM, POTASSIUM PERMANGANATE, 100%, 55LB CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 CHM, SODIUM HYDROXIDE, 25%, BULK 403	1200855 1200870 1200871 1200900 1200916		0.00 25,519.95 22,934.25 2,424.24 2,463.67	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 50/50 Polyphosphate New Chemical #2 New Chemical #3	1200956		0.00 36,463.86 0.00 0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BU	DGET		296,063.26	Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)
CENTRAL DISTRICT - KRSII PLANT 2015 CHEMICAL BUI CENTRAL DISTRICT - KRSII PLANT 2014 ACTUAL COST	OGET		281,109.45 284,093.36	

Cost per 1000 gallons - 2015 Chemical Budget		Part	SD Allocated	
Cost per 1000 gallons - 2014 Actual Cost Cost per 1000 gallons - 2014 Actual Cost Cost per 1000 gallons - 2014 Actual Cost CHM, AMMONIA, AQUA, 19%, BULK 120056 CHM, CHLORINE, 100%, 2000LB CYLINDER 120057 CHM, HS ACID, 23%, BULK 120067 CHM, PIOSPHATE, ORTH-PLY CARUS 8600, BULK 1200167 CHM, PIOSPHATE, ORTH-PLY CARUS 8600, BULK 120117 CHM, POTASSIUM PERMANCANATE, 100%, 2301B 1200875 CHM, POTASSIUM PERMANCANATE, 100%, 251B 1200870 CHM, POTASSIUM PERMANCANATE, 100%, 551B 1200870 CHM, SODIUM CHLORIDE, 30% PURE, 501B 704 1200970 CHM, SODIUM HTIOSULFATE, IUQIU 3,30%, BULK 1200970 CHM, SODIUM HTIOSULFATE, IUQIU 3,30%, BULK 1200976 CHM, POTASSIUM PERMANCANATE, 100%, 551B 14 CHM, SODIUM HTIOSULFATE, IUQIU 3,30%, BULK 1200976 CHM, SODIUM CHLORIDE, 30%, SOURCH 1000976 CHM, SODIUM HTIOSULFATE, IUQIU 3,30%, BULK 1200976 CHM, SODIUM CHLORIDE, 30%, SOURCH 1000976 CHM, SODIUM CHLORIDE, 30%, SOURCH 1000977 CHM, PROSPHATE, SOURCH 1000977 CHM, PROSPHATE, SOURCH 1000977 CHM, PROSPHA	Chemical	Number	to Plant YTD	<u>Notes</u>
2017 Price Increase (Decrease) per Supply Chain: CHM, AMMONIA, AQUA, 19%, BULK 1200566 1200597 1200566 1200597 1200566 1200597 1200567 1	Cost per 1000 gallons - 2016 Chemical Budget		0.1179	
2017 Price Increase (Decrease) per Supply Chain: CHM, AMMONIA, AQUA, 19%, BULK 1200566 2016 Price Increases per Guidance Provided by Supply Chain. CHM, CHLORINE, 100%, 2000LB CYLINDER 1200647 CHM, PRACU, DELPC2020, BULK 1200647 CHM, PRACU, DELPC2020, BULK 1200702 CHM, POSPHATE, ORTH-PLY CARUS 4100, BULK 1201171 CHM, PHOSPHATE, ORTH-PLY CARUS 4600, BULK 1200167 CHM, POLYMER, FLICTER AID 1201127 CHM, POLYMER, FLICTER AID 1201127 CHM, POTASSIUM PERMANGANATE, 100%, 530LB 1200875 CHM, POTASSIUM PERMANGANATE, 100%, 55LB 1200871 CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 1200990 CHM, SODIUM THORONDIE, 25%, BULK 403 1200916 CHM, SODIUM THORONDIE, 25%, BULK 403 1200916 CHM, SODIUM THOSULFATE, LQUID, 30%, BULK 1200956 50/50 Polyphosphate New Chemical #12 New Chemical #12 New Chemical #13 Finew chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budget Price per Unit: CHM, AMMONIA, AQUA, 15%, BULK 120056 CHM, PICTOR PLOY, 1000, 1000 BC/LINDER 1200597 CHM, HISPACIO, 23%, BULK 1200567 CHM, PICTOR PLOY, 2000, BC/LINDER 1200597 CHM, PICTOR PLOY, 2000, BC	Cost per 1000 gallons - 2015 Chemical Budget		0.1115	
CHM, CHORNIE, 100%, 2000LB CYLINDER 1200567 120064	Cost per 1000 gallons - 2014 Actual Cost		0.1082	
CHM, CHORNIE, 100%, 2000LB CYLINDER 1200567 120064				
CHM,CHLORINE,100%,2000LB CYLINDER 120057 CHM,HFS ACID,23%,BULK 120067 CHM,PHS ACID,23%,BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 4010,BULK 1201171 CHM,POLYMER,FULDGE CEDARFLOC 312,556A 1200870 CHM,POLYMER,FULDGE CEDARFLOC 312,556A 1200870 CHM,POTASSIUM PERMANGANATE,100%,3301B 1200870 CHM,POTASSIUM PERMANGANATE,100%,3301B 1200870 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200870 CHM,SODIUM CHLORIDE,90% PURE,SplB 704 1200900 CHM,SODIUM HYDROXIDE,SSK,BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 SO/50 Polyphosphate If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new c				
CHM_HFS ACID_23%_BULK 1200647 CHM_PACL_DELPC202D_ BULK 1200702 CHM_PHOSPHATE_ORTH_PLY CARUS 4100_BULK 1201171 CHM_PHOSPHATE_ORTH_PLY CARUS 8600_BULK 1200667 CHM_POLYMER_FILETR AID 1201127 CHM_POLYMER_FILETR AID 1201127 CHM_POLYMER_SILUPGE CEDARRIOC 312_55GA 1200855 CHM_POTASSIUM PERMANGANATE_100%_53BL 1200870 CHM_POTASSIUM PERMANGANATE_100%_55BL 1200871 CHM_SODIUM CHLORIDE_50% PURE_50LB 704 1200900 CHM_SODIUM HYDROXIDE_25%_BULK 403 1200916 CHM_SODIUM HYDROXIDE_25%_BULK 403 1200916 CHM_SODIUM HYDROXIDE_25%_BULK 403 1200956 S0/50 Polyphosphate				2016 Price Increases per Guidance Provided by Supply Chain.
CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1201667 CHM,POLYMER,FILTER AID 1201127 CHM,POLYMER,FILTER AID 1201127 CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,SOLB 704 1200900 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 S0/50 Polyphosphate New Mile Permander at left. BRIR Group will input price increase. New Chemical #2 New Chemical #2 New Chemical #3 New Chemical #3 New Frice per Unit: CHM,MMONIA,AQUA,19%,BULK 120056 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,PSPACL,DELPC2020,BULK 1200702 CHM,PSPACL,DELPC2020,BULK 1201171				
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 CHM,POLYMER,FILTER AID 1201127 CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA 1200855 CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,POTASSIUM PERMANGANATE,100%,35LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200905 CHM,SODIUM THIOSULFATE,LIQUID,30%, BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%, BULK 403 1200916 S0/50 Polyphosphate				
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,FILTER AID 1201127 CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA 1200855 CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200916 CHM,SODIUM HYDROXIDE,25%,BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 SO/SO Polyphosphate New Chemical #2 New Chemical #2 New Chemical #3 SO/SO Polyphosphate New Chemical #4				
CHM, POLYMER, SLUDGE CEDARFLOC 312,55GA 1200855 CHM, POTASSIUM PERMANGANATE, 100%, 330LB 1200870 CHM, POTASSIUM PERMANGANATE, 100%, 330LB 1200870 CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 1200900 CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704 12009016 CHM, SODIUM THIOSULFATE, LIQUID, 30%, BULK 1200916 CHM, SODIUM THIOSULFATE, LIQUID, 30%, BULK 1200956 50/50 Polyphosphate New Chemical #2 New Chemical #2 New Chemical #3 New Chemical #4 New Chemical would be subject to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budget Price per Unit: CHM, AMMONIA, AQUA, 19%, BULK 120056 CHM, CHLORINE, 100%, 2000LB CYLINDER 1200647 CHM, HFS ACID, 23%, BULK 1200647 CHM, PACL, DELPC2020, BULK 1200702 CHM, PHOSPHATE, ORTH-PLY CARUS 4100, BULK 120171				
CHM,POITASSIUM PERMANGANATE,100%,330LB 1200870 CHM,POTASSIUM PERMANGANATE,100%,351LB 1200870 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM HYDROXIDE,25%,BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 S0/50 Polyphosphate New Chemical #2 New Chemical #3 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. New Chemical #3 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 1200566 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200670 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 50/50 Polyphosphate New Chemical #2 New Chemical #3 12017 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 120056 CHM,CHLORINE,100%,2000LB CYLINDER 120057 CHM,CHLORINE,100%,2000LB CYLINDER 120057 CHM,CHLORINE,100%,2000LB CYLINDER 120057 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 50/50 Polyphosphate New Chemical #2 New Chemical #3 Solve Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 120056 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 CHM,SODIUM THOSUIDE,25%,BULK 403 1200916 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 SO/SO Polyphosphate New Chemical #2 New Chemical #2 New Chemical #3 SO/T Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 1200566 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,CHLORINE,100%,2000LB CYLINDER 1200647 CHM,HFS ACID,23%,BULK 1200647 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
CHM,SODIUM HYDROXIDE,25%,BULK 403 CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 50/50 Polyphosphate New Chemical #2 New Chemical #3 1200916 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budgeted Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 1200566 2016 Budgeted Price per Chemical After Price Increase Assumption CHM,FS ACID,23%,BULK 120067 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 50/50 Polyphosphate New Chemical #2 New Chemical #3 Solid Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,FS ACID,23%,BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 Solid Budget Price per Unit: CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 Solid Budget Price per Chemical After Price Increase Assumption If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. Brice here in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2016 Budgeted Price per Chemical After Price Increase Assumption CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK CHM,CHLORINE,100%,2000LB CYLINDER CHM,CHLORINE,100%,2000LB CYLINDER CHM,PACL,DELPC2020, BULK CHM,PACL,DELPC2020, BULK CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1200172 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171				
New Chemical #2 New Chemical #3 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK CHM,CHORINE,100%,2000LB CYLINDER CHM,CHORINE,100%,2000LB CYLINDER CHM,HFS ACID,23%,BULK CHM,PACL,DELPC2020, BULK CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171		1200930		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. RRIR Group will input price increase
New Chemical #3 If new Chemical not used in 2013/2014 needs to be added, list chemical description and part number at left. BRIR Group will input price increase. 2017 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 120056 2016 Budgeted Price per Chemical After Price Increase Assumption CHM,CHLORINE,100%,2000LB CYLINDER 1200597 1200647 1200647 1200647 1200702				
2017 Budget Price per Unit: CHM,AMMONIA,AQUA,19%,BULK 1200566 2016 Budgeted Price per Chemical After Price Increase Assumption CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171				
CHM,AMMONIA,AQUA,19%,BULK 1200566 2016 Budgeted Price per Chemical After Price Increase Assumption CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 120171				
CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171	2017 Budget Price per Unit:			
CHM,HFS ACID, 23%, BULK 1200647 CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100, BULK 1201171	CHM,AMMONIA,AQUA,19%,BULK	1200566		2016 Budgeted Price per Chemical After Price Increase Assumption
CHM,PACL,DELPC2020, BULK 1200702 CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171	CHM,CHLORINE,100%,2000LB CYLINDER	1200597		
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171				
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667				
CHM,POLYMER,FILTER AID 1201127				
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA 1200855				
CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870				
CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871				
CHM,SODIUM CHLORIDE,50% PURE,50LB 704 1200900 CHM,SODIUM HYDROXIDE,25%,BULK 403 1200916				
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK 1200956 50/50 Polyphosphate If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.		1200956		If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left
New Chemical #2 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.				
New Chemical #3 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.				
2017 Budget Expense in Dollars:	_			
CHM,AMMONIA,AQUA,19%,BULK 1200566 17,172.42 2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit			,	2016 Budgeted Chemical Usage in Units multiplied by 2016 Budgeted Price per Unit
CHM,CHLORINE,100%,2000LB CYLINDER 1200597 25,225.44			•	
CHM,HFS ACID,23%,BULK 1200647 24,452.40				
CHM,PACL,DELPC2020, BULK 1200702 143,720.46			,	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK 1201171 0.00				
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK 1200667 0.00				
CHM,POLYMER,FILTER AID 1201127 1,618.69 CHM,POLYMER.SLUDGE CEDARFLOC 312.55GA 1200855 0.00			•	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA 1200855 0.00 CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870 26,285.55				
CHM,POTASSIUM PERMANGANATE,100%,330LB 1200870 26,285.55 CHM,POTASSIUM PERMANGANATE,100%,55LB 1200871 23,622.28				
CHM,SODIUM CHLORIDE,90% PURE,50LB 704 1200900 2,496.97				
CHM,SODIUM HYDROXIDE,25%,BULK 403 1200916 2,537.58				
CHIN, SOUTION INTORONIDE 2,200, BOLK 403 100 2,307.30 (2,307.30 CH), SODIJUM THIOSULFATE, LIQUID, 30%, BULK 1200956 0.00				
50/50 Polyphosphate 37,557.78 If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.				If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
			_	

	Chemical	Part <u>Number</u>	SD Allocated to Plant	<u>YTD</u>	<u>Notes</u>
New Chemical #2				0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
New Chemical #3				0.00	If new chemical not used in 2013/2014 needs to be added, list chemical description and part number at left.
CENTRAL DISTRICT	- KRSII PLANT 2016 CHEM	IICAL BUDGET		304,689.56	Total 2016 Cost Center Chemical Budget by Month (Compare to 2015 Budget and 2014 Actual Cost Below for Reasonableness)

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<u>Chemical</u>	Part <u>Number</u>	SD Allocated to Plant
2017 Central District System Delivery - Budget 2015 Central District System Delivery - Budget 2014 Central District System Delivery - Actual		
2013 Central District System Delivery - Actual		
KRS II Plant:		
2014 Monthly Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM, HFS ACID, 23%, BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK CHM,POLYMER,FILTER AID	1200667 1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1201127	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200833	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200071	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200900	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200916	
CHWI,30010W THIO30ELATE,ELQOID,30%,BOEK	1200330	
Allocated 2014 System Delivery		19%
2013 Monthly Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
Allocated 2013 System Delivery		19%
2-Year Average Chemical Usage in Units:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	

CHM, HFS ACID, 23%, BULK

CHM,PACL,DELPC2020, BULK

	Part	SD Allocated
Chemical	Number	to Plant
2-Year Average Allocated System Delivery		
Historical Dosage per T-Gal Produced:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
2017 BRIR Budgeted Dosage per T-Gal Produced:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	; in dosages
CHM,CHLORINE,100%,2000LB CYLINDER	1200500	in dosages
CHM,HFS ACID,23%,BULK	1200647	in dosages
CHM,PACL,DELPC2020, BULK	1200702	in dosages
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	in dosages
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	in dosages
CHM,POLYMER,FILTER AID	1201127	in dosages
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	in dosages
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	in dosages
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	; in dosages
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	in dosages
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
2017 Operations Adjustments to Budgeted Dosage p	er T-Gal Produced	d:
CHM,AMMONIA,AQUA,19%,BULK	1200566	=
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate	Not Obtained	l
New Chemical #2		
New Chemical #3		
2017 Final Adjusted Budgeted Dosage per T-Gal Prod	luced:	
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
OUR ALIES A SID 2207 DULL	42000:-	

1200647

1200702

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - KRSII COST CENTER

COST CENTER #120250 2016 CHEMICALS BUDGET		
	Part	SD Allocated
<u>Chemical</u>	Number	to Plant
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2017 Budgeted System Delivery		19%
2017 Budgeted Chemical Heaga in Unite		
2017 Budgeted Chemical Usage in Units: CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200500	
CHM,HFS ACID,23%,BULK	1200597	
CHM,PACL,DELPC2020, BULK	1200047	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2015 Actual Price per Unit:	4200555	
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM, POLYMER, FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	

New Chemical #1 New Chemical #2 New Chemical #3 2016 Price Increase (Decrease) per Supply Chain: CHM,AMMONIA,AQUA,19%,BULK 1200566 CHM,CHLORINE,100%,2000LB CYLINDER 1200597 CHM,HFS ACID,23%,BULK 1200647

CHM,SODIUM CHLORIDE,90% PURE,50LB 704

CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK

CHM,SODIUM HYDROXIDE,25%,BULK 403

1200900

1200916

1200956

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	Part	SD Allocated
Chemical	Number	to Plant
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
New Chemical #1		
New Chemical #2		

2016 Budget Price per Unit:

New Chemical #3

2010 Budgett Hee per Office	
CHM,AMMONIA,AQUA,19%,BULK	1200566
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,FILTER AID	1201127
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956

50/50 Polyphosphate New Chemical #2 New Chemical #3

New Chemical #3

2016 Budget Expense in Dollars:

CHM,AMMONIA,AQUA,19%,BULK	1200566
CHM,CHLORINE,100%,2000LB CYLINDER	1200597
CHM,HFS ACID,23%,BULK	1200647
CHM,PACL,DELPC2020, BULK	1200702
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667
CHM,POLYMER,FILTER AID	1201127
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956
50/50 Polyphosphate	
New Chemical #2	

CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BUDGET

CENTRAL DISTRICT - KRSII PLANT 2015 CHEMICAL BUDGET CENTRAL DISTRICT - KRSII PLANT 2014 ACTUAL COST

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	Part	SD Allo
<u>Chemical</u>	Number	to P
Cost per 1000 gallons - 2016 Chemical Budget		
Cost per 1000 gallons - 2015 Chemical Budget		
Cost per 1000 gallons - 2014 Actual Cost		
cost per 1000 gamons 2017/ictual cost		
2017 Price Increase (Decrease) per Supply Chain:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2017 Budget Price per Unit:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
CHM,POLYMER,FILTER AID	1201127	
CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA	1200855	
CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POTASSIUM PERMANGANATE,100%,55LB	1200871	
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200900	
CHM,SODIUM HYDROXIDE,25%,BULK 403	1200916	
CHM,SODIUM THIOSULFATE,LIQUID,30%,BULK	1200956	
50/50 Polyphosphate		
New Chemical #2		
New Chemical #3		
2017 Budget Expense in Dollars:		
CHM,AMMONIA,AQUA,19%,BULK	1200566	
CHM,CHLORINE,100%,2000LB CYLINDER	1200597	
CHM,HFS ACID,23%,BULK	1200647	
CHM,PACL,DELPC2020, BULK	1200702	
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	1201171	
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	1200667	
	1201127	
CHM,POLYMER,FILTER AID	1200855	
CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA		
CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870	
CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB	1200870 1200871	
CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB CHM,POTASSIUM PERMANGANATE,100%,55LB CHM,SODIUM CHLORIDE,90% PURE,50LB 704	1200870	
CHM,POLYMER,FILTER AID CHM,POLYMER,SLUDGE CEDARFLOC 312,55GA CHM,POTASSIUM PERMANGANATE,100%,330LB	1200870 1200871 1200900	

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KENTUCKY AMERICAN WATER CENTRAL DISTRICT - KRSII COST CENTER COST CENTER #120250 2016 CHEMICALS BUDGET

> Part SD Allocated

Number

to Plant

New Chemical #2 New Chemical #3

CENTRAL DISTRICT - KRSII PLANT 2016 CHEMICAL BUDGET

Chemical

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		No_Project												
		Plan_PreClose												
		Working												
		Revenue Model Input												
		Assumptions												
		No Trading Partner												
		2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	DECYTD
E120205_CEN-Admin & Gen	System delivery gross	999,736.09	958,837.51	1,077,983.80	1,016,886.34	1,150,685.71	1,235,234.83	1,366,715.64	1,260,782.47	1,135,323.17	1,138,544.37	983,927.84	1,041,983.08	13,366,640.84
E123005_NRTH-Admin & Gen	System delivery gross	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E12B_Kentucky Base	System delivery gross	999,736.09	958,837.51	1,077,983.80	1,016,886.34	1,150,685.71	1,235,234.83	1,366,715.64	1,260,782.47	1,135,323.17	1,138,544.37	983,927.84	1,041,983.08	13,366,640.84
E12_Kentucky American	System delivery gross	999,736.09	958,837.51	1,077,983.80	1,016,886.34	1,150,685.71	1,235,234.83	1,366,715.64	1,260,782.47	1,135,323.17	1,138,544.37	983,927.84	1,041,983.08	13,366,640.84

Witness: Kevin N. Rogers

71. Reference the Kentucky American Water application generally. Provide, for each of the past five years, the volume of water sold, volume of each chemical utilized, kwhs of electricity utilized, and volume of fuel utilized.

Response:

Year	kWh	Water Sold (000s Gals)	Fuel Used (Gals)
2011	51,024,875	11,912,443	1414
2012	57,553,212	12,508,400	2220
2013	51,598,846	11,425,674	552
2014	52,186,785	11,809,349	4783
2015	52,891,512	12,150,635	1566

Chemical 2011	Lbs
Ammonia - Anhyd,100%-Bulk	106,577
Ammonia - Aqua,19%-Bulk	122,006
Carbon - PAC, Aqua Nuchar Carbon	43,960
Chlorine ,100%	846,755
Copper Sulfate, 20%	6,250
Ferric Chlor Polymr, 10% AS2820	382,714
Ferric Chloride,38%-Bulk	32,604
HFS Acid,23%	514,947
PACL, Delpc2020/Strnsn70-Bulk	4,717,743
PolyAluminum Chloride/Polymer Blend	1,087,858
Polymer Filter Aid	120
Polymr, An, Cedar Floc 551	2,535
Polymr,Cat,CedarFloc 524	280,250
Polymr,Cat,CedarFloc 526	253
Polymr, Non, Superfloc 1986N	8,602
Pot.Permanganate,100%-55LB	46,142
Sod.Permanganate, 20%-5GA	31,786
Sodium Chloride, 90% Pure-50LB	25,058
Sodium Hydrox,25%-Bulk	91,218
Sodium Hydrox,30%-55GA	90,086
Sodium Hydrox,50%	268,041
Sulfuric Acid, 38.5%-55GA	65,215
Zn Ortho(Sulfate) ,(1:10)-Bulk	348,380

Chemical 2012	Lbs
Ammonia - Anhyd,100%-Bulk	111,570
Ammonia - Aqua,19%-Bulk	87,980
Carbon - PAC, Aqua Nuchar Carbon	30,500
Chlorine ,100%	880,400
Copper Sulfate, 20%	18,700
Ferric Chlor Polymr, 10% AS2820	304,300
Ferric Chloride,38%-Bulk	1,034,700
HFS Acid,23%	727,620
PACL,Delpc2020/Strnsn70-Bulk	4,387,360
Polymr, An, Cedar Floc 551	1,350
Polymr,Cat,CedarFloc 524	314,400
Polymr, Non, Superfloc 1986N	7,440
Pot.Permanganate,100%	25,331
Sod.Permanganate, 20%-5GA	33,853
Sodium Chloride, 90% Pure-50LB	51,540
Sodium Hydrox,25%-Bulk	84,260
Sodium Hydrox,30%	69,538
Sodium Hydrox,50%	467,780
Sulfuric Acid,38.5%-55GA	76,976
Zn Ortho(Sulfate) ,(1:10)-Bulk	494,560

Chemical 2013	Lbs
CHM,ACID,SULFURIC,38.5%,55GA	47,811
CHM, AMMONIA, ANHYDROUS, 100%, BULK	105,703
CHM, AMMONIA, AQUA, 19%, BULK	132,302
CHM,CARBON,PAC LIGNITE,900LB	3,280
CHM,CARBON,PAC WOOD BASED,750LB	23,983
CHM,CHLORINE,100%	788,759
CHM,FERRIC,CHLORID PLYMR AS2820,10%,BULK	342,397
CHM,HFS ACID,23%	697,683
CHM,PACL,DELPC2020, BULK	6,124,098
CHM,PHOS,ORTHO,POLY,CEDARCLEAR 417,TOTE	464,891
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	41,113
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	63,922
CHM,POLYMER,ANIONC CEDRFLOC 551,55GA	930
CHM,POLYMER,ANIONC POL-EZ2706,55GA	1,670
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	5,170
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	274,970
CHM,POLYMER,FILTER AID	597
CHM,POTASSIUM PERMANGANATE, 100%	37,312
CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704	61,430
CHM,SODIUM HYDROXIDE,30%,55GA	55,696
CHM,SODIUM HYDROXIDE,50%	62,472
CHM,SODIUM PERMANGANATE,20%	22,056

Chemical 2014	Lbs
CHM,ACID,SULFURIC,38.5%,55GA	2,920
CHM,ALUM,CL HYDROX SULFAT,DLPAC812,BULK	90,080
CHM,AMMONIA,ANHYDROUS,100%,BULK	131,753
CHM,AMMONIA,AQUA,19%,BULK	129,525
CHM,CARBON,PAC WOOD BASED,750LB	10,556
CHM,CHLORINE,100%	770,720
CHM,COPPER SULFATE,100%,5LB	237
CHM,FERRIC,CHLORID PLYMR AS2820,10%,BULK	36,775
CHM,HFS ACID,23%	625,331
CHM,PACL,DELPC2020, BULK	5,581,812
CHM,PHOS,ORTH-PLY CARUS 8600	570,931
CHM,PHOSPHATE,ORTHO,POLY,CEDARCLEAR 417	491
CHM,PHOSPHATE,ORTH-PLY CARUS 4100,BULK	8,787
CHM,POLYMER,ANIONC CEDRFLOC 551,55GA	465
CHM,POLYMER,ANIONC POL-EZ2706,55GA	72
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	7,425
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	223,894
CHM,POLYMER,FILTER AID	1,294
CHM,POTASSIUM PERMANGANATE,100%	20,552
CHM,SODIUM CHLORIDE,90% PURE,50LB 704	50,433
CHM,SODIUM HYDROXIDE,25%,BULK 403	28,671
CHM,SODIUM HYDROXIDE,50%	8,648
CHM,SODIUM PERMANGANATE,20%,50GA	87,261

Chemical 2015	Lbs
CHM,AMMONIA,ANHYDROUS,100%,BULK	111,562
CHM,AMMONIA,AQUA,19%,BULK	134,310
CHM,CARBON,PAC WOOD BASED,750LB	28,244
CHM,CHLORINE,100%,2000LB CYLINDER	772,759
CHM,FERRIC,CHLORID,38%,BULK	1,692,974
CHM,HFS ACID,23%	525,517
CHM,PHOSPHATE,ORTH-PLY CARUS 8500,BULK	16,958
CHM,PHOSPHATE,ORTH-PLY CARUS 8600,BULK	383,283
CHM,PACL,DELPC2020, BULK	5,079,542
CHM,POLYMER,CATIONC CEDRFLOC 524,BULK	101,981
CHM,POLYMER,CATIONC CEDRFLOC 408,50LB	5,500
CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	2,325
CHM,POTASSIUM PERMANGANATE,100%,55LB	23,961
CHM,SODIUM PERMANGANATE,20%	74,445
CHM, SODIUM CHLORIDE, 90% PURE, 50LB 704	38,085
CHM,SODIUM HYDROXIDE,50%,BULK	262,335
CHM,POLYMER,FILTER AID	619
CHM,PHOS,ORTH-PLY CARUS 8600,MINI BULK	170,334
CHM,POLYMER,CATIONC CEDRFLOC524,MINIBULK	42,722

Witness: Kevin N. Rogers/Linda C. Bridwell

72. Reference the Kentucky American Water application. Describe the "need to begin removing waste from the KRS II intake structure beginning in 2016" as referenced on page 16, lines 9-10 of Ms. Bridwell's testimony, and state why this was not previously required.

Response:

The intake structure was determined to have an accumulation of solids on the caisson floor found during periodic diving inspections. After removal of solids several times after the plant in-service date, it was determined that a more routine cleaning schedule is needed. The year 2016 is the first year that the scheduled cleaning will be performed. Sludge accumulation rates were unknown until a history developed.

Witness: Kevin N. Rogers

73. Reference the Kentucky American Water application generally. Provide the waste disposal costs in each of the past five years. Include both the volume of waste removed as well as the annual removal costs.

Response:

Year	Waste Removed (Tons)	Cost
2011	30,518	\$423,621
2012	10,728	\$390,068
2013	32,173	\$483,213
2014	10,624	\$328,242
2015	37,815	\$368,694

Witness: Kevin N. Rogers/Linda C. Bridwell

74. Reference the Kentucky American Water application generally. Provide the underlying assumptions and calculations showing how the estimated waste removal costs for KRS II were determined.

Response:

Waste removal costs for KRS II are determined consistent with the other treatment facilities. The additional waste removal costs were determined by historical actual vendor invoice data charged for the removal of sludge from the intake structure caisson. An estimated removal of once per year, by contractor, per historical reference was used for budgetary and rate case filing purposes.

Witness: Linda C. Bridwell

75. Reference the Kentucky American Water application generally. For each entity included in contract services, provide the actual costs incurred in each of the past five years.

Response:

Please refer to the attachment for actual costs incurred from January 1, 2011 through December 31, 2015. The attachment details the breakdown of the entities included in contract services in the last five years.

Kentucky-American Water Company KAW_R_AGDR1_NUM075_032416 Contract Services Expense January 1, 2011 - Dececember 31, 2015

G/L Acct	G/L Acct Description	Vendor/Description	2011	2012	2013	2014	2015
	Contr Svc-Eng SS	K & A Industries Inc	2011	\$0	\$41	\$1,345	(\$875)
	Contr Svc-Eng SS	Laurel Oak Properties		\$0	•	. ,-	186
	Contr Svc-Eng SS	Randy Walker Electric		\$0		804	
53110011	Contr Svc-Eng SS	Sentinel Offender Service		\$0	938		
53110011	Contr Svc-Eng SS	Tyco Integrated Security LLC		\$0		1,557	314
	Contr Svc-Eng SS	U S Security Associates Inc		\$0			376
	Contr Svc-Eng SS	Yoh Services, LLC		\$0			2,016
	Contr Svc-Eng AG	CDP Engineers Inc.		\$0	111	1,972	(1,972)
	Contr Svc-Eng AG	GRIR Non-Inventory		\$0		27,741	66,246
	Contr Svc-Eng AG	Integrated Engineering PLLC		\$0		17,868	5,847
	Contr Svc-Eng AG Contr Svc-Eng AG	Perfection Group, Inc. Randy Walker Electric		\$0 \$0		1,259	
	•	Reclass - Capital Additions		\$0 \$0		103	
	Contr Svc-Eng AG Contr Svc-Eng AG	Reclass - Capital Additions Reclass - Indirect Overhead		\$0 \$0		(38,310)	(25,845)
	Contr Svc-Eng AG	Reversal - Use Tax		\$0 \$0			(324)
	Contr Svc-Eng AG	Shield Environmental Association Inc		\$0			5,724
	Contr Svc-Other SS	Dorma - Carolina		\$0 \$0	333		3,72.
	Contr Svc-Other SS	General Rubber & Plastic		\$105			
	Contr Svc-Other SS	Tyco Integrated Security LLC		\$0		318	
	Contr Svc-Other WT	A/P - Pcard Accruals		\$104	383	(315)	(454)
	Contr Svc-Other Oper WT	Accruals - Misc	\$68	(\$12,922)		, ,	, ,
53150013 (Contr Svc-Other Oper WT	ADS Environmental Services Inc	2,895	\$0			
53150013 (Contr Svc-Other WT	ADS, LLC		\$0		5,202	
53150013	Contr Svc-Other WT	American Water Capital Corp		\$0	(1,903)		
53150013	Contr Svc-Other WT	Aquatic Control Inc		\$12,642			
53150013	Contr Svc-Other WT	Art's Rental Equipment		\$0			261
53150013	Contr Svc-Other WT	Axis Enterprises Inc		\$1,063			
53150013 (Contr Svc-Other WT	Bluegrass Area Development District		\$0		7,950	7,950
53150013 (Contr Svc-Other WT	Buycrash		\$0			224
53150013 (Contr Svc-Other Oper WT	C B Construction Co	5,040	\$0			
	Contr Svc-Other WT	Calibration Labor		\$0		1,601	
	Contr Svc-Other WT	Central Equipment		\$0		749	
	Contr Svc-Other WT	Commonwealth Communications Of KY		\$0	2,353	2,680	
	Contr Svc-Other Oper WT	Commonwealth Communications Of KY		\$521			
	Contr Svc-Other WT	Concentra Medical Centers		\$0	4,338		
	Contr Svc-Other WT	Continental Hydrodyne		\$0			1,979
	Contr Svc-Other WT	Critter Control		\$611			389
	Contr Svc-Other Oper WT	Dickersons Refrigeration	559	\$110			
	Contr Svc-Other WT	Electrical Apparatus Service Association		\$2,515		F 064	4 454
	Contr Svc-Other WT Contr Svc-Other WT	Evoqua Water Technologies LLC Feeney Wireless LLC		\$0 \$0		5,061 90	1,461
	Contr Svc-Other WT	GE Analytical Instruments Inc		\$5,595		90	
	Contr Svc-Other Oper WT	GE Analytical Instruments Inc	5,446	\$3,3 5 3 \$0			
	Contr Svc-Other WT	Geochemical Testing	3,440	\$0 \$0		1,382	
	Contr Svc-Other WT	Glenwood Electric Inc		\$0		2,239	
	Contr Svc-Other WT	Greenwater Laboratories		\$0	600	2,233	
	Contr Svc-Other WT	GRIR Non-Inventory		\$0		44,657	40,029
	Contr Svc-Other WT	Grott Locksmith Center Inc		\$0		•	345
53150013 (Contr Svc-Other WT	Hach Co		\$23,680	96,592	88,154	(21,890)
53150013 (Contr Svc-Other Oper WT	Hach Co.	72,697	\$42,366			
53150013 (Contr Svc-Other Oper WT	Hall Brothers Mowing & More		\$400			
53150013	Contr Svc-Other WT	Herb Geddes Fence Company		\$0	1,495		
53150013	Contr Svc-Other Oper WT	Industrial Scientific Corp	1,764	\$0			
53150013 (Contr Svc-Other Oper WT	Ivey Mechanical Company LLC	905	\$0			
53150013 (Contr Svc-Other WT	J K Christopher Excavating		\$15,550	4,270	8,400	
	Contr Svc-Other Oper WT	J K Christopher Excavating	109,115	\$37,378			
	Contr Svc-Other WT	Kebco Inc		\$4,983		1,593	3,226
	Contr Svc-Other Oper WT	Kebco Inc	5,478	\$5,014			
	Contr Svc-Other WT	Landmark Sprinkler Inc		\$0	385	385	385
	Contr Svc-Other WT	Lexington Tree Service Inc		\$0	2,855		
	Contr Svc-Other Oper WT	Lexington Tree Service Inc	2,193	\$813			
	Contr Svc-Other Oper WT Contr Svc-Other WT	Lexington Window Cleaning		\$465			
	Contr Svc-Other WT	Living Waters Co Inc Martins Sanitation Service Inc		\$1,161 \$0		334	
	Contr Svc-Other WT	Metro Towing LLC		\$0 \$0		334	129
	Contr Svc-Other WT	Miller Septic Service		\$0 \$0	318	371	129
	Contr Svc-Other WT	Monthie Mechanical Inc		\$1,128	3,489	2,012	716
	Contr Svc-Other Oper WT	Monthie Mechanical Inc	1,001	\$2,023	3,403	2,012	710
	Contr Svc-Other WT	Occupational Health & Hygiene	1,001	\$0	530		
	Contr Svc-Other WT	Orkin Exterminating Co		\$487	763	571	
	Contr Svc-Other Oper WT	Orkin Exterminating Co	715	\$195			
	Contr Svc-Other WT	Owens Communications Inc		\$0		650	
	Contr Svc-Other Oper WT	Pace Analytical Services Inc		\$240			
	Contr Svc-Other Oper WT	Pearce Blackburn Roofing Inc		\$410			
	Contr Svc-Other WT	Pettit Environmental Inc		\$0			1,431
53150013	Contr Svc-Other WT	Phenova Inc.		\$0			527
53150013 (Contr Svc-Other WT	Pop-A-Lock Of Lexington		\$0	45		

G/L Acct	G/L Acct Description	Vendor/Description	2011	2012	2013	2014	2015
	Contr Svc-Other Oper WT	Radden & Son Inc	1,295	\$0	2013	2014	2013
53150013	Contr Svc-Other WT	Reclass - Chemicals		\$0		(42,855)	
	Contr Svc-Other WT	Reversal - Use Tax		(\$3,531)			
	Contr Svc-Other WT	Rodney Cobb - Rodney Lawn Care	6.440	\$8,455	25,068	6,591	631
	Contr Svc-Other Oper WT Contr Svc-Other WT	Rodney Cobb - Rodney Lawn Care Roto Rooter	6,419	\$11,766 \$0		1,383	251
	Contr Svc-Other Oper WT	Safety Kleen Systems Inc	509	\$0 \$0		1,303	231
	Contr Svc-Other WT	Scientific Equipment Service		\$0	2,821	666	1,381
53150013	Contr Svc-Other Oper WT	Scientific Equipment Srvc	3,564	\$1,683			
	Contr Svc-Other WT	Siemens Industry Inc		\$1,938	3,344		
	Contr Svc-Other Oper WT	Siemens Industry Inc	429	\$0			4.420
	Contr Svc-Other WT Contr Svc-Other Oper WT	Siemens Water Technology Siemens Water Technology	5,792	\$1,123 \$4,760			1,438
	Contr Svc-Other WT	Simplex Grinnell	3,792	\$4,760	19,448	9,783	16,927
	Contr Svc-Other Oper WT	Simplex Grinnell	6,353	\$0		-,	
53150013	Contr Svc-Other Oper WT	Sonnys Plumbing Repair	500	\$0			
53150013	Contr Svc-Other Oper WT	Stanley Steemer	99	\$0			
	Contr Svc-Other WT	Stephen Hillenmeyer Landscape Services		\$4,316	49,121		
	Contr Svc-Other Oper WT	Stephen Hillenmeyer Landscape Services	13,830	\$1,605			
	Contr Svc-Other WT	Terminix Terminix Intl		\$156 \$406	575	1,004	993
	Contr Svc-Other Oper WT Contr Svc-Other WT	The Evergreen Group		\$406 \$0			3,023
	Contr Svc-Other Oper WT	The Evergreen Group		\$304			3,023
	Contr Svc-Other WT	Thoroughbred Gates & Security LLC		\$135	253	1,964	
53150013	Contr Svc-Other WT	Trueup - Amortization		\$0		(1,611)	
	Contr Svc-Other WT	United Rentals Inc		\$0			45
	Contr Svc-Other Oper WT	UVP, LLC	241	\$0			
	Contr Svc-Other Oper WT	Wilson Nurseries Inc	1,090	\$0	***	(670)	240
	Contr Svc-Other TD Contr Svc-Other Oper TD	A/P - Pcard Accruals Accruals - Misc	(7,502)	\$175 \$5,675	488	(673)	210
	Contr Svc-Other Oper TD	ADS Environmental Services Inc	2,062	\$3,073			
	Contr Svc-Other TD	Aerotek Environmental	2,002	\$3,317			
	Contr Svc-Other TD	All American Gasket		\$785			
53150014	Contr Svc-Other TD	Allied Waste Services		\$0	390		
	Contr Svc-Other TD	Appriss		\$0	50	50	10
	Contr Svc-Other TD	Barney Millers		\$0		657	507
	Contr Svc-Other TD	Better Bilt LLC		\$0 \$0		1.000	168
	Contr Svc-Other TD Contr Svc-Other Oper TD	Big Auger Machine & Tool Borismetrics	330	\$0 \$0		1,980	
	Contr Svc-Other TD	Buycrash	330	\$30	50	300	250
	Contr Svc-Other TD	Caskey Group LLC		\$0	-		817
53150014	Contr Svc-Other TD	Champion Industries Inc		\$0		269	
53150014	Contr Svc-Other TD	Citation Equipment Inc		\$40	2,482	158	251
	Contr Svc-Other TD	City Electric Motor Company		\$0		595	
	Contr Svc-Other TD	Cliffs Truck Service		\$0		1,176	
	Contr Svc-Other Oper TD Contr Svc-Other Oper TD	Commonwealth Communications Of KY Edward Hall Trucking & Excavating	849 1,000	\$0 \$1,000			
	Contr Svc-Other TD	Equipment Sales & Rentals	1,000	\$1,000	1,022	1,293	740
	Contr Svc-Other TD	Fast Signs		\$0	1,022	1,233	71
	Contr Svc-Other TD	Fedex Freight East Inc		\$549			
53150014	Contr Svc-Other TD	Fedex Office		\$0	62		
	Contr Svc-Other TD	Feeney Wireless LLC		\$0		1,043	
	Contr Svc-Other TD	Fencing Hume Mercer		\$0			1,768
	Contr Svc-Other TD	Fluid Conservation		\$0 \$0			180 168
	Contr Svc-Other TD Contr Svc-Other TD	Funeral Flowers G & G Paving & Construction Inc		\$0 \$0		2,374	100
	Contr Svc-Other TD	Garda Cl Central Inc		\$635		2,374	
	Contr Svc-Other TD	General Rubber & Plastic		\$437	414	204	449
53150014	Contr Svc-Other TD	Grott Locksmith Center		\$23	157		
	Contr Svc-Other Oper TD	Hach Co	136	\$0			
	Contr Svc-Other TD	HG Wilson & Sons Contractors Inc		\$0	5,678	834	171,801
	Contr Svc-Other TD	Hydraflo Inc	45.525	\$0	26		
	Contr Svc-Other Oper TD Contr Svc-Other TD	J K Christopher Excavating Jiffy Fastening Systems Inc	15,535	\$750 \$0			159
	Contr Svc-Other TD	JPW Associates Inc		\$0		2,412	133
	Contr Svc-Other TD	Kebco Inc		\$0		8,770	
53150014	Contr Svc-Other Oper TD	Kebco Inc	3,275	\$0			
53150014	Contr Svc-Other Oper TD	Kentucky Underground Protection	34,776	\$15,414			
	Contr Svc-Other TD	Kentucky Underground Protection Inc		\$11,900	3,945	4,100	(1,973)
	Contr Svc-Other TD	Kings Helper Inc		\$0	365	325	2,795
	Contr Svc-Other TD Contr Svc-Other TD	Kort CBO II L2GDCA Certificate		\$0 \$190	685		
	Contr Svc-Other TD	Lexington Quarry Co		\$190	1,559	7,693	5,119
	Contr Svc-Other TD	Lexington Trailer		\$0 \$0	1,097	.,055	3,113
	Contr Svc-Other TD	Lynn Imaging Front Count		\$0	594	828	1,407
53150014	Contr Svc-Other TD	Mago Construction Company LLC		\$650	(42)	6,405	4,948
	Contr Svc-Other TD	Mason and Shirley Plumbing		\$0		655	
	Contr Svc-Other TD	Neptune Equipment Co		\$0	28,323		
	Contr Svc-Other Oper TD	Neptune Equipment Company	4,170	\$21,050		450	4.0
	Contr Svc-Other TD Contr Svc-Other TD	Norfolk Southern Corp Orkin Exterminating Co		\$0 \$0	103	159 91	16
	Contr Svc-Other Oper TD	Orkin Exterminating Co	400	\$0 \$0	103	J.	
	Contr Svc-Other TD	Pop-A-Lock Of Lexington		\$0 \$0	45	55	
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G/L Acct	G/L Acct Description	Vendor/Description	2011	2012	2013	2014	2015
53150014	Contr Svc-Other TD	Premier Safety & Service		\$2,161	5,000		
53150014	Contr Svc-Other Oper TD	Randy Walker Electric		\$243			
53150014	Contr Svc-Other TD	Reclass - Capital Addition		\$0			3,569
	Contr Svc-Other TD	Reclass - Capital Overhead		\$0		(828)	
	Contr Svc-Other TD	Reclass - Invoices		\$0	5,276		
	Contr Svc-Other TD	Reversal - Use Tax		\$0	(1,603)	(703)	(48)
	Contr Svc-Other TD	Reversal Of July Reversing Entry		(\$12,615) \$719	7 920	1 462	
	Contr Svc-Other TD Contr Svc-Other Oper TD	Rodney Cobb - Rodney Lawn Care Rodney Cobb - Rodney Lawn Care	16,922	\$5,231	7,839	1,462	
	Contr Svc-Other TD	Saf Ti Co Inc	10,522	\$0	158	847	
	Contr Svc-Other TD	Signal Boards Inc		\$0	529	585	
53150014	Contr Svc-Other TD	Simplex Grinnell		\$0	1,762		367
53150014	Contr Svc-Other TD	Standlee Hay Company Inc		\$0	4		
53150014	Contr Svc-Other TD	Stephen Hillenmeyer Landscape Services		\$0	713		
53150014	Contr Svc-Other TD	The Grasshopper		\$0	44,578		
53150014	Contr Svc-Other Oper TD	The Grasshopper	38,690	\$20,570			
	Contr Svc-Other TD	The Mailroom		\$0			158
	Contr Svc-Other TD	Ufirst Laundry Services		\$208		439	5,929
	Contr Svc-Other TD	United Parcel Service		\$60	11		324
	Contr Svc-Other TD	United Rentals Inc		\$0 60	219	14.525	4,684
	Contr Svc-Other TD	Vanguard Utility Services Inc		\$0 \$0		14,626	20
	Contr Svc-Other TD Contr Svc-Other Oper TD	Voiceshot LLC Walgreens		\$0 \$8			30
	Contr Svc-Other TD	WW Grainger		\$0 \$0		(46)	869
	Contr Svc-Other Oper CA	Accenture LLP - ACH	51,434	\$50,579		(40)	803
	Contr Svc-Other Oper CA	Accrual - Misc	(498)	\$0,575			
	Contr Svc-Other Oper CA	Accrual - Tax	(430)	\$42			
	Contr Svc-Other Oper CA	Accrual - Telephone	(109)	(\$189)			
	Contr Svc-Other Oper CA	Accruals - Pcard	1,218	(\$1,218)			
	Contr Svc-Other Oper CA	Advanced Pressure Wash & Restoration	275	\$0			
53150015	Contr Svc-Other CA	Amos Exteriors Inc		\$0	8,825		
53150015	Contr Svc-Other Oper CA	Bluegrass Irrigation	264	\$0			
53150015	Contr Svc-Other Oper CA	Central Ready Mix Concrete		\$369			
53150015	Contr Svc-Other Oper CA	D & K Meter And Hydrant Repair	675	\$0			
53150015	Contr Svc-Other Oper CA	Elink Design		\$82			
53150015	Contr Svc-Other Oper CA	Equipment Sales & Rentals	173	\$0			
53150015	Contr Svc-Other CA	Fish Window Cleaning Inc		\$933			
53150015	Contr Svc-Other Oper CA	Garda Cl Central Inc	4,034	\$707			
	Contr Svc-Other CA	HG Wilson & Sons Contractors Inc		\$0	17,347		
	Contr Svc-Other Oper CA	Idmodeling Inc		\$553			
	Contr Svc-Other Oper CA	Intelliwire	179	\$105			
	Contr Svc-Other CA	Johnny Pipewrench LLC		\$0	222		
	Contr Svc-Other CA	Kentucky Underground Protection Inc		\$0	40,124	35,417	71,131
	Contr Svc-Other Oper CA	Language Services	9,075	\$4,745	470		
	Contr Svc-Other CA	Lexington Trailer	205	\$0	176		
	Contr Svc-Other Oper CA Contr Svc-Other Oper CA	Lexington Trailer Maintenance Associates	205	\$0 \$88			
	Contr Svc-Other Oper CA	Martin, Darrell	300	\$00 \$0			
	Contr Svc-Other CA	Neptune Equipment Company	300	\$0 \$0	1,193		
	Contr Svc-Other Oper CA	Neptune Equipment Company	1,960	\$0	1,155		
	Contr Svc-Other CA	ORC Inc.	-,	\$12,282	6,349		
	Contr Svc-Other Oper CA	ORC International Inc	17,961	\$11,920	5,5 15		
	Contr Svc-Other Oper CA	Pop A Lock Of Lexington	•	\$55			
53150015	Contr Svc-Other CA	Reclass - Capital Addition		\$0			56
53150015	Contr Svc-Other CA	Reclass - Invoices		\$0	(17,841)		
53150015	Contr Svc-Other CA	Reversal - Use Tax		(\$1,074)	(1,165)		(684)
	Contr Svc-Other Oper CA	RKM Research & Communications	3,927	\$0			
53150015	Contr Svc-Other Oper CA	Roark Fencing		\$1,218			
	Contr Svc-Other CA	TFH LLC		\$5,517			
	Contr Svc-Other CA	Vebridge		\$0	5,848		
	Contr Svc-Other Oper CA	Vebridge	998	\$0			
	Contr Svc-Other Oper CA	Vertex Business Services	825	\$0	200		
	Contr Svc-Other CA	Voiceshot LLC		\$0	300	204	(40)
	Contr Svc-Other AG	A/P - Pcard Accruals		\$135	689	901	(10)
	Contr Svc-Other AG Contr Svc-Other Oper AG	Accenture Accrual - Misc	(60)	\$0 (\$300)	8,194		
	Contr Svc-Other Oper AG	Accrual - Iviisc	(60) 190	(\$300) \$153			
	Contr Svc-Other Oper AG	Accrual - Westlaw Legal	(1)	(\$551)			
	Contr Svc-Other Oper AG	Allied Communications	636	\$360			
	Contr Svc-Other AG	Allied Waste Services	050	\$1,621	1,108	14,329	
	Contr Svc-Other Oper AG	Allied Waste Services		\$1,615	_,	,5_5	
	Contr Svc-Other Oper AG	American National Red Cross		\$4,325			
	Contr Svc-Other AG	American Red Cross		\$0	774		
	Contr Svc-Other AG	Appriss		\$0	10		10
	Contr Svc-Other AG	Aurico		\$0			1,722
53150016	Contr Svc-Other AG	Barney Millers Inc		\$0	557		
53150016	Contr Svc-Other AG	Battery Solutions		\$0			4,818
53150016	Contr Svc-Other Oper AG	Battery Solutions		\$979			
53150016	Contr Svc-Other Oper AG	Big Auger Machine & Tool,	175	\$0			
	Contr Svc-Other AG	Boxwood Tech		\$0	1,490		
	Contr Svc-Other AG	Buycrash		\$0		1,018	
	Contr Svc-Other Oper AG	Buycrash		\$20	_		
53150016	Contr Svc-Other AG	Cahill Surveyors Inc		\$0	3,154		

G/L Acct	G/L Acct Description	Vendor/Description	2011	2012	2013	2014	2015
53150016	Contr Svc-Other AG	Career Concepts Inc		\$0		2,544	
	Contr Svc-Other AG	CCNC Office Furniture		\$0			1,590
	Contr Svc-Other AG	CDP Engineers Inc.		\$0	1,618	9,116	
	Contr Svc-Other AG	CFC Canon		\$0		2,836	2,505
	Contr Svc-Other AG Contr Svc-Other Oper AG	Champion Industries Inc	605	\$0 \$006		119	
	Contr Svc-Other AG	Charles W Buford & Sons Inc Citation Equipment Inc	605	\$906 \$0	104		
	Contr Svc-Other Oper AG	Citation Equipment Inc		\$118	104		
	Contr Svc-Other AG	Commerce Lexington Inc		\$0	1,349	1,300	0
53150016	Contr Svc-Other AG	Commonwealth Communications Of KY		\$70	2,321	3,353	
53150016	Contr Svc-Other Oper AG	Commonwealth Communications Of Ky	3,537	\$1,565			
53150016	Contr Svc-Other Oper AG	Computer Financial Consultants	1,825	\$0			
	Contr Svc-Other AG	D C Elevator Co Inc		\$0			1,754
	Contr Svc-Other AG	Dickersons Refrigeration Inc	050	\$540	960	484	
	Contr Svc-Other Oper AG	Dickerson'S Refrigeration, Inc.	863	\$185			
	Contr Svc-Other Oper AG Contr Svc-Other AG	Diligent Board Member Services Diligent Board Member Services Inc		\$1,964 \$1,051	5,185	7,349	8,477
	Contr Svc-Other AG	Dixon Electric Inc		\$566	2,622	7,545	0,477
	Contr Svc-Other Oper AG	Dixon Electric Inc	5,001	\$614	_,		
	Contr Svc-Other AG	Dorma Usa Inc	.,	\$0		109	
53150016	Contr Svc-Other Oper AG	Eades, Stanley R Phd	4,593	\$1,613			
53150016	Contr Svc-Other AG	Eagle Safety Eyewear		\$0	477		
	Contr Svc-Other Oper AG	Edward Hall Trucking & Excavating	7,600	\$0			
	Contr Svc-Other AG	Elink Design		\$375	144	40	
	Contr Svc-Other AG	Equip Sales Bizzell		\$0			135
	Contr Svc-Other AG	Equipment Depot		\$0 \$0	446	190	102
	Contr Svc-Other AG	Equipment Sales & Rentals		\$0 \$14.076		1,171	102
	Contr Svc-Other Oper AG Contr Svc-Other Oper AG	Ernst & Young - Pittsburgh Fast Signs	116	\$14,976 \$0			
	Contr Svc-Other AG	Fedex Office	110	\$584			
	Contr Svc-Other AG	First Advantage LNS Screening		\$0	369	191	
	Contr Svc-Other AG	Fullers Saw Shop		\$0		73	
53150016	Contr Svc-Other AG	Garda Cl Central Inc		\$411	3,355		3,250
53150016	Contr Svc-Other AG	Garda Cl West Inc		\$1,496	5,965	8,710	8,397
53150016	Contr Svc-Other AG	General Rubber & Plastic		\$0		108	
	Contr Svc-Other AG	GIS DM3 Modification		\$253			
	Contr Svc-Other AG	Grainger		\$0	984		
	Contr Svc-Other AG	Grant Thornton LLP		\$0	5,944		
	Contr Svc-Other AG	GRIR Non-Inventory		\$0	02	608	15,404
	Contr Svc-Other AG Contr Svc-Other Oper AG	Grott Locksmith Center Inc Grott Locksmith Center Inc	890	\$691 \$5	92	380	1,012
	Contr Svc-Other AG	Guardian Security	650	\$0		170	
	Contr Svc-Other AG	Hales Cleaning Service		\$0 \$0	7,111	170	
	Contr Svc-Other Oper AG	Happys General Contracting	12,931	\$4,126	-,		
	Contr Svc-Other AG	Happys General Contracting Mnt	,	\$3,182	14,141		
53150016	Contr Svc-Other Oper AG	Heekin, William C		\$3,099			
53150016	Contr Svc-Other Oper AG	Herb Geddes Fence Company	795	\$0			
53150016	Contr Svc-Other AG	HG Wilson & Sons Contractors Inc		\$0			710
	Contr Svc-Other Oper AG	Hillenmeyer, Stephen F	150	(\$150)			
	Contr Svc-Other AG	Hotel Business Center		\$0		1	
	Contr Svc-Other AG	Image360 Lex KY	2.500	\$0			408
	Contr Svc-Other Oper AG Contr Svc-Other AG	Insight Integrated Engineering PLLC	2,506	\$1,486		6.106	
	Contr Svc-Other AG	J K Christopher Excavating		\$0 \$0	190	6,106	
	Contr Svc-Other Oper AG	J K Christopher Excavating	20,175	\$1,080	130		
	Contr Svc-Other AG	JPW Associates Inc	20,173	\$1,080		837	
	Contr Svc-Other AG	Kebco Inc		\$1,001	7,573	30,082	
	Contr Svc-Other Oper AG	Kebco Inc	3,128	\$0	,-	,	
53150016	Contr Svc-Other AG	Kentucky ECIS Support		\$24,885	14,346		
53150016	Contr Svc-Other Oper AG	Kentucky Underground Storage I	1,739	\$369			
53150016	Contr Svc-Other AG	Kmart		\$0	19		
	Contr Svc-Other AG	Korterra Implementation Services		\$0			438
	Contr Svc-Other AG	KY BOA Subscription Fees		\$1,051			
	Contr Svc-Other Oper AG	Ky Dept Of Housing Bldgs & Con	100	\$0	200		
	Contr Svc-Other AG Contr Svc-Other Oper AG	Landmark Sprinkler Inc		\$0 \$175	300		
	Contr Svc-Other AG	Landmark Sprinkler Inc Laurel Hill GIS Inc		\$377			
	Contr Svc-Other AG	Laurel Oak Properties		\$377 \$0	2,117		
	Contr Svc-Other AG	Lexington Fayette Urban County		\$0	2,117	1	
	Contr Svc-Other Oper AG	Lexington Trailer	50	\$0			
	Contr Svc-Other AG	Lexington Tree Service Inc		\$0	3,925		
53150016	Contr Svc-Other Oper AG	Lexington Tree Service Inc	2,193	\$459			
	Contr Svc-Other Oper AG	Lexington Window Cleaning	375	\$0			
	Contr Svc-Other AG	LexisNexis OCC Health Solutions		\$0	166		
	Contr Svc-Other Oper AG	LexisNexis OCC Health Solutions	157	\$49			
	Contr Svc-Other AG	LexisNexis Screening Solutions		\$0	530		
	Contr Svc-Other Oper AG	LexisNexis Screening Solutions	1,039	\$0 \$0		CEO	200
	Contr Svc-Other AG Contr Svc-Other AG	Lynn Imaging Front Counter National Society Of Bl		\$0 \$0	250	659	290
	Contr Svc-Other AG	Newtech Systems Inc		\$0 \$0	250	567	
	Contr Svc-Other Oper AG	Newtech Systems Inc	360	\$0 \$0		307	
	Contr Svc-Other AG	ORC Inc.		(\$1,978)	23,930	38,862	42,472
	Contr Svc-Other Oper AG	ORC Research Inc	5,987	\$1,924	•	•	•
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G/L Acct	G/L Acct Description	Vendor/Description	2011	2012	2013	2014	2015
53150016	Contr Svc-Other AG	Orkin Exterminating Co		\$961	1,946	2,703	204
53150016	Contr Svc-Other Oper AG	Orkin Exterminating Co	1,119	\$480			
53150016	Contr Svc-Other Oper AG	Overhead Door Co Of Lexington		\$1,724			
53150016	Contr Svc-Other AG	Overhead Door Corp		\$25	2,678	1,451	
53150016	Contr Svc-Other AG	Owens Communications Inc		\$0		1,378	
53150016	Contr Svc-Other Oper AG	Pearce Blackburn Roofing Inc	260	\$0			
53150016	Contr Svc-Other AG	Peoplefinders.Com		\$0	26		
53150016	Contr Svc-Other AG	Perfection Group Inc		\$2,519	3,778	2,519	4,110
53150016	Contr Svc-Other Oper AG	Perfection Group Inc	2,804	\$336			
53150016	Contr Svc-Other AG	PFM Asset Management LLC		\$0			6,000
53150016	Contr Svc-Other Oper AG	Pop A Lock Of Lexington		\$45			
53150016	Contr Svc-Other AG	PwC		\$0	14,528	0	846
53150016	Contr Svc-Other Oper AG	PwC		\$6,459			
53150016	Contr Svc-Other AG	Randy Walker Electric		\$0	5,785	3,250	333
53150016	Contr Svc-Other Oper AG	Randy Walker Electric		\$896			
53150016	Contr Svc-Other AG	Reclass - Capital Overhead		\$0		(17,790)	(4,600)
53150016	Contr Svc-Other AG	Reclass - E&Y Invoices		(\$14,976)			
53150016	Contr Svc-Other AG	Reclass - ECN Code Red		\$0			1,548
53150016	Contr Svc-Other AG	Reclass - Granton Thornton		\$0	(12,517)		
53150016	Contr Svc-Other AG	Reversal - Use Tax		(\$1,718)	(1,956)	(2,855)	(2,228)
53150016	Contr Svc-Other AG	Rodney Cobb - Rodney Lawn Care		\$0	526	3,014	2,034
53150016	Contr Svc-Other Oper AG	Rodney Cobb - Rodney Lawn Care	42	\$404			
53150016	Contr Svc-Other Oper AG	Roto Rooter	827	\$0			
53150016	Contr Svc-Other AG	Samba Holdings Inc		\$0	2,149		2,048
53150016	Contr Svc-Other AG	SHPE Career Center		\$0	275		
53150016	Contr Svc-Other AG	Simplex Grinnell		\$0		3,000	192
53150016	Contr Svc-Other Oper AG	Simplex Grinnell	7,722	\$5,266			
53150016	Contr Svc-Other Oper AG	Stephen Hillenmeyer Landscape	7,249	\$0			
53150016	Contr Svc-Other AG	Stephen Hillenmeyer Landscape Services		\$181	2,275	64	(15,314)
53150016	Contr Svc-Other AG	Stoll Keenon Ogden PLLC		\$0		798	6,138
53150016	Contr Svc-Other Oper AG	Sutherland & Associates	5,093	\$10,185			
53150016	Contr Svc-Other Oper AG	Tebco Of Kentucky Inc	100	\$0			
53150016	Contr Svc-Other Oper AG	Tech Systems Inc	1,344	\$0			
53150016	Contr Svc-Other AG	The Home Depot		\$0	190		
53150016	Contr Svc-Other AG	The Mailroom		\$0		20	
53150016	Contr Svc-Other Oper AG	Thoroughbred Gates & Security	2,357	\$425			
53150016	Contr Svc-Other AG	Thoroughbred Gates & Security LLC		\$90	331	3,138	
53150016	Contr Svc-Other AG	Towers Watson Pennsylvania, Inc.		\$0	214		
53150016	Contr Svc-Other Oper AG	Tri State Rfngsheet M	355	\$0			
53150016	Contr Svc-Other AG	United Parcel Service		\$26	41		1,036
53150016	Contr Svc-Other AG	United Rentals Inc		\$0			622
53150016	Contr Svc-Other AG	Veba Earmarking		\$0	228		
53150016	Contr Svc-Other AG	Vebridge		\$1,139			2,234
53150016	Contr Svc-Other Oper AG	Vebridge	350	\$0			
53150016	Contr Svc-Other AG	Vital Records Control		\$0	1,038	2,060	
53150016	Contr Svc-Other AG	Vulcan Fire Systems Inc		\$0	339	420	
	Contr Svc-Other Oper AG	Vulcan Fire Systems Inc	358	\$320			
53150016	Contr Svc-Other Oper AG	Walgreens	12	\$5			
	Contr Svc-Other Oper AG	West Payment Center Thomson	5,543	\$773			
53150016	Contr Svc-Other Oper AG	Worksmart LLC	1,625	\$0			
	Contr Svc-Other Oper AG	WS Construction		\$983			
53150016	Contr Svc-Other AG	Yale Kentuckiana		\$1,002	1,203	(1,078)	
	Contr Svc-Other Oper AG	Yale Kentuckiana Inc	674	\$0			
	Contr Svc-Temp EE TD	Aerotek Environmental		\$1,890			
53151016	Contr Svc-Temp EE AG	A/P - Pcard Accruals		\$0		(89)	
53151016	Contr Svc-Temp EE	Accruals - Misc	14,830	(\$13,626)			
53151016	Contr Svc-Temp EE AG	Aerotek Environmental		\$17,937	2,340		
53151016	Contr Svc-Temp EE	Aerotek Environmental	27,206	\$44,377			
	Contr Svc-Temp EE AG	Baptist Health Occupational Medicine		\$0			37
	Contr Svc-Temp EE AG	Garda Cl Central Inc		\$2,380	228		
53151016	Contr Svc-Temp EE	Garda CL Central Inc		\$111			
	Contr Svc-Temp EE AG	Garda Cl West Inc		\$0	659	55	
	Contr Svc-Temp EE AG	Integrated Engineering PLLC		\$0		10,386	
	Contr Svc-Temp EE AG	Lexington Fayette Urban County		\$0		33	
	Contr Svc-Temp EE AG	PwC		\$0			644
	Contr Svc-Temp EE AG	Reclass - Transfer Charges		\$0		(6,159)	
	Contr Svc-Temp EE AG	Reversal - Use Tax		\$0	(213)		(106)
	Contr Svc-Temp EE AG	Samba Holdings, Inc.		\$0		917	
	Contr Svc-Temp EE AG	Sewer Service Charge		\$108			
	Contr Svc-Temp EE AG	Vebridge		\$28	63	1,177	1,057
	Contr Svc-Temp EE	VeBridge	4,020	\$1,045			
	Contr Svc-Temp EE AG	Winchester Municipal Utilities		\$8,922			
	Contr Svc-Temp EE AG	Yoh Services, LLC		\$0	28,889	29,661	33,697
	Contr Svc-Lab Testng	Accruals - Pcard	(624)	\$0			
	Contr Svc-Lab Testng	Cedarchem		\$424			
	Contr Svc-Lab Testng	Eurofins Eaton Analytical		\$0			10,560
	Contr Svc-Lab Testng	Evoqua Water Technologies LLC		\$0		924	8,526
	Contr Svc-Lab Testng	Fouser Enviornmental Services	4,621	\$1,260			
	Contr Svc-Lab Testng	Fouser Environmental Services		\$603	2,810	12,439	33,244
	Contr Svc-Lab Testng	Geochemical Testing		\$2,774	5,771	4,353	673
	Contr Svc-Lab Testng	Geochemical Testing	4,973	\$2,927			
	Contr Svc-Lab Testng	Greenwater Laboratories		\$0	1,200	300	4,000
53152000	Contr Svc-Lab Testng	Greenwater Laboratories	400	\$400			

G/L Acct	G/L Acct Description	Vendor/Description	2011	2012	2013	2014	2015
53152000 C	ontr Svc-Lab Testng	GRIR Non-Inventory		\$0		775	1
53152000 C	ontr Svc-Lab Testng	Lynn Imaging Front Counter		\$0			138
53152000 C	ontr Svc-Lab Testng	Outside Analytical Testing	1,679	\$0			
53152000 C	ontr Svc-Lab Testng	Pace Analytical Services Inc		\$0		2,012	
53152000 C	ontr Svc-Lab Testng	Pace Analytical Services Inc	2,460	\$0			
53152000 C	ontr Svc-Lab Testng	Reclass - Subcont Samples To States	180	\$0			
53152000 C	ontr Svc-Lab Testng	Reversal - Use Tax		\$0			(445
53152000 C	ontr Svc-Lab Testng	Scientific Equipment Services		\$0			1,448
53152000 C	ontr Svc-Lab Testng	Scientific Equipment Srvc		\$1,139			
53152000 C	ontr Svc-Lab Testng	Siemens Industry Inc		\$0	5,220	(824)	
53152000 C	ontr Svc-Lab Testng	Siemens Water Technology		\$0			1,168
53152000 C	ontr Svc-Lab Testng	Simplex Grinnell		\$769			
53152000 C	ontr Svc-Lab Testng	Teklab Inc	138	\$0			
53153000 C	ontr Svc-Acctg Oper AG	Ernst & Young - Pittsburgh		\$1,112			
53153000 C	ontr Svc-Accounting	KPMG		\$0			277,133
53153000 C	ontr Svc-Acctg Oper AG	PwC	7,698	\$0			
53154000 C	ontr Svc-Audit Fees	Amortization - Prepaid Audit Fees		\$37,439	108,840	95,282	103,348
53154000 C	ontr Svc-Audit Fees Oper AG	Prepaid Audit Fees - PwC	93,627	\$65,525			
53154000 C	ontr Svc-Audit Fees	Reversal - Sales Tax		\$0	(51)		
53155000 C	ontr Svc-Legal	Accruals - Legal		\$31,583	(16,787)	(1,520)	7,253
53155000 C	ontr Svc-Legal	Accruals - Legal	(8,861)	(\$2,328)			
53155000 C	ontr Svc-Legal	Amortization - King & Spalding	273	\$0			
53155000 C	ontr Svc-Legal	Bingham Doll		\$108			
53155000 C	ontr Svc-Legal	Bingham Greenebaum Doll LLP		\$5,243			
53155000 C	ontr Svc-Legal	Dinsmore & Shohl LLP		\$0			5,076
53155000 C	ontr Svc-Legal	Frost Brown Todd	31,933	\$5,121			
53155000 C	ontr Svc-Legal	Gallatin County News		\$25			
53155000 C	ontr Svc-Legal	Goss Samford, PLLC		\$1,802	615		
53155000 C	ontr Svc-Legal	Greenebaum Doll & McDonald PLL	69,117	\$0			
	ontr Svc-Legal	Huffmaster Crisis Response LLC	1,183	\$591			
53155000 C	ontr Svc-Legal	Mago Construction Company, LLC		\$0			5,236
	ontr Svc-Legal	Major Lindsey & Africa LLC	18,900	\$0			
53155000 C	ontr Svc-Legal	Reclass - Gen Leg Inv Real Estate	2,959	\$0			
53155000 C	ontr Svc-Legal	Reclass - Stoll Invoice	,	\$1,051			
53155000 C	ontr Svc-Legal	Reversal - Use Tax		\$0	(4,949)		
	ontr Svc-Legal	Reversal Of July Reversing Entry		(\$24,007)	,,,,,,		
	ontr Svc-Legal	Steptoe & Johnson PLLC	4,968	\$0			
	ontr Svc-Legal	Stoll Keenon Ogden PLLC	,,,,,,	\$25,414	133,327	176,139	112,252
	ontr Svc-Legal	Stoll Keenon Ogden PLLC	182,350	\$151,635	,-	-,	,
	ontr Svc-Legal	Tim H. Parson & Bubalo Rotman	- /	\$2,000			
	ontr Svc-Outplacemt	Career Concepts Inc		\$0			3,922
		Total Contract Services	\$490,436	\$396,812	\$461,085	\$313,997	\$438,502

Witness: Linda C. Bridwell

76. Reference the Kentucky American Water application generally. Identify any anticipated changes in contract services for the Base Period and Test Period relative to prior periods.

Response:

During the Base Period, a sales tax audit was performed by the Kentucky Department of Revenue. This one-time event required contract services that were not included in the Forecast Period, which contributes to the overall decrease in total expense observed between the Base and Forecast periods. In addition, the Company's anticipated cost reduction efforts for lab testing also contribute to the overall decrease in expense observed.

Witness: Linda C. Bridwell

77. Reference the Kentucky American Water application. Regarding page 16, lines 21-22 of Ms. Bridwell's testimony, explain the reasons for the "expected increases in security costs, trash removal, janitorial expense and grounds keeping" and provide all supporting assumptions, workpapers, and calculations showing how the underlying forecast was determined. Include all excel files. If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items. Building Maintenance & Services is one of them.

Building Maintenance & Services: AC52546000-Grounds Keeping includes a reduction due to a new contract. AC52550000-Janitorial includes an increase due to a new contract. AC52571000-Security Service increased based upon prior year historical and the plan. AC52578000-Trash Removal increased based upon prior year historical and the plan. For the calculations, please refer to the workpapers provided in response to Item 3 of the Commission Staff's first request for information.

Witness: Linda C. Bridwell

78. Reference the Kentucky American Water application, and for each entity included in building maintenance and services category per page 16, lines 16-22 of Ms. Bridwell's testimony, provide the actual costs incurred in each of the past five years.

Response:

Please refer to the attachment.

Kentucky-American Building Maintenance & Services

Account	AC Name	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
52532011	Electricity - Source of Supply	\$0	\$0	\$0	\$0	\$553
52532013	Electricity - Water Treatment	4,222	2,365	8,185	12,709	7,980
52532014	Electricity - Transmission & Distribution	58,589	53,243	43,948	45,223	48,795
52532016	Electricity - Admin & General	73,338	73,503	78,844	70,404	74,187
52546011	Grounds Keeping - Source of Supply	0	368	0	20,560	1,514
52546013	Grounds Keeping - Water Treatment	0	18,932	3,975	66,255	26,724
52546014	Grounds Keeping - Transmission & Distribution	0	22,048	2,899	75,994	28,444
52546016	Grounds Keeping - Admin & General	0	1,204	0	47,123	121,872
52548013	Heating Oil/Gas - Water Treatment	0	0	0	0	2,197
52548014	Heating Oil/Gas - Transmission & Distribution	27,661	14,670	15,335	22,085	17,685
52548016	Heating Oil/Gas - Admin & General	16,614	14,237	8,345	8,720	6,635
52550013	Janitorial - Water Treatment	29,192	13,347	16,188	10,102	5,737
52550014	Janitorial - Transmission & Distribution	891	122	322	2,573	11,294
52550016	Janitorial - Admin & General	104,497	87,005	78,854	68,507	65,333
52571011	Security Service - Source of Supply	0	0	17,435	16,681	19,053
52571014	Security Service - Transmission & Distribution	0	0	0	0	237
52571016	Security Service - Admin & General	136	3,808	2,676	49,774	44,704
52571100	Add'l Security Costs	177,354	121,526	53,137	772	0
52578013	Trash Removal - Water Treatment	846	3,727	9,665	8,657	10,717
52578014	Trash Removal - Transmission & Distribution	9,906	11,775	12,765	6,098	3,645
52578016	Trash Removal - Admin & General	4,224	2,956	15,714	12,334	13,411
52583011	Water & WW - Source of Supply	50,329	47,177	65,637	56,363	63,569
52583013	Water & WW - Water Treatment	0	21	0	0	0
52583016	Water & WW - Admin & General	22,367	29,321	19,511	33,051	27,692
Grand Total		\$580,167	\$521,352	\$453,434	\$633,985	\$601,979

Witness: Linda C. Bridwell

79. Reference the Kentucky American Water application generally. Regarding page 17, lines 1-4 of Ms. Bridwell's testimony, explain the reasons for the expected increases in telecommunications expenses and provide all supporting assumptions, workpapers, and calculations showing how the underlying forecast was determined. Include all excel files. If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for a few expense items. The expected increase in telecommunications expense is mostly attributed to the Company's efforts to increase efficiency by upgrading smartphones for Field Operations personnel. For the calculations, please refer to the workpapers provided in response to Item 3 of the Commission Staff's first request for information.

Witness: Linda C. Bridwell

80. Reference the Kentucky American Water application generally. Provide the actual costs incurred in each of the past five years for telecommunications expenses.

Response:

Please refer to the attachment for a summary of the actual costs incurred in the last five years for telecommunications expenses.

Kentucky-American Water Company Telecommunications Expense Historical Five Years

G/L Acct	G/L Acct Description	2011	2012	2013	2014	2015
52574013	Telephone - Water Treatment	\$0	\$16,857	\$24,521	\$22,447	\$15,814
52574014	Telephone - Transmission & Distribution	1,128	0	2	4,333	4,107
52574015	Telephone - Customer Accounting	110,864	117,560	90,980	113,188	101,188
52574016	Telephone - Admin & General	46,685	57,737	42,220	35,867	23,777
52574113	Cell Phone - Water Treatment	974	884	2,100	3,708	6,000
52574114	Cell Phone - Transmission & Distribution	11,271	15,312	12,735	1,889	1,555
52574115	Cell Phone - Customer Accounting	0	3,803	6,030	5,587	7,876
52574116	Cell Phone - Admin & General	72,331	82,358	97,618	77,171	68,000
52574200	Data Lines - Admin & General	0	0	0	0	53
	Total Expense	\$243,253	\$294,511	\$276,207	\$264,191	\$228,370

Witness: Linda C. Bridwell

81. Reference the Kentucky American Water application generally. Regarding page 17, lines 5-7 of Ms. Bridwell's testimony, explain the reasons for the expected increases in postage, printing and stationary expenses and provide all assumptions, supporting workpapers, and calculations showing how the underlying forecast was determined. Include all excel files. If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items.

As presented in the Kentucky American Water application, there was actually an expected decrease in postage, printing, and stationary expenses. However, Account 52566700 for printing expense was erroneously excluded from the 2015, 2016, and 2017 budgets, thus understating the total forecasted expense for postage, printing, and stationary expenses.

Please see workpaper W/P - 3-15 for detail of decrease from Base year to Forecast year. Please notice no printing expense is included in the 2016 and 2017 amounts.

Witness: Linda C. Bridwell

82. Reference the Kentucky American Water application generally. Provide the actual costs incurred in each of the past five years for postage, printing, and stationary expenses.

Response:

Please refer to the attachment for the actual costs incurred in the past five years for Postage, Printing, & Stationary expenses.

Kentucky-American Water Company Postage, Printing, & Stationary Expenses Historical Five Years

G/L Acct	G/L Acct Description	2011	2012	2013	2014	2015
52562511	Overnight Shipping - Source of Supply	\$0	\$0	\$0	\$74	\$0
52562513	Overnight Shipping - Water Treatment	2,799	10,574	17,010	11,198	13,428
52562514	Overnight Shipping - Transmission & Distribution	54	12	106	805	300
52562516	Overnight Shipping - Admin & General	21,946	11,633	2,254	1,998	3,678
52566016	Postage - Admin & General	4,832	3,312	3,797	2,472	3,786
52566700	Printing	0	0	432	2,903	9,292
	Total Expense	\$29,630	\$25,531	\$23,598	\$19,451	\$30,484

Witness: Linda C. Bridwell

83. Reference the Kentucky American Water application. Regarding page 17, lines 8-11 of Ms. Bridwell's testimony, explain the reasons for the expected increases in each category of other supplies and services expenses and provide all supporting assumptions, calculations, and workpapers showing how the underlying forecast was determined. Include all excel files. If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items.

AC52526100-Credit line fees, the line of credit was extended to the year 2020 from 2018 with two additional one year options. This increased the credit fees \$15,056 per the plan. AC52571500-Software licenses, Microsoft licenses increasing \$19,107. AC 52582000-Uniforms is planned to increase \$3,895. AC 52562000-Office & Admin Supplies increased \$8545. This plan year does not include an Office Max rebate. Other accounts were up or down slightly. This accounts for the \$45,411 increase between base year and forecast year. For calculations, please refer to the workpapers provided in response to Item 3 of the Commission Staff's First Request for Information.

Witness: Linda C. Bridwell

84. Reference the Kentucky American Water application. Regarding page 17, lines 8-11 of Ms. Bridwell's testimony, provide the actual costs incurred in each of the past five years for each category included in other supplies and services.

Response:

Please refer to the attachment.

Kentucky-American Office Supplies & Services Expense

Account	AC Name	<u>2011</u>	<u> 2012</u>	<u>2013</u>	<u>2014</u>	<u> 2015</u>
52526100	Credit Line Fees Interco	\$36,608	\$39,936	\$63,477	\$79,983	\$84,993
52562013	Office & Admin Supplies - Water Treatment	12,372	13,774	19,973	17,599	12,216
52562014	Office & Admin Supplies - Transmssn & Distr	15,485	9,564	11,233	4,921	12,898
52562015	Office & Admin Supplies - Customer Accounting	(2,083)	(283)	0	0	768
52562016	Office & Admin Supplies - Admin & General	22,543	21,400	16,296	(3,396)	36,532
52571500	Software Licenses	29,863	39,388	39,146	38,637	60,643
52582013	Uniforms - Water Treatment	15,372	17,904	16,509	14,040	15,347
52582014	Uniforms - Transmission & Distribution	23,162	20,714	16,415	7,340	14,317
52542016	Forms - Admin & General	2,136	1,755	2,038	1,595	2,514
52562011	Office & Admin Supplies - Source of Supply	38	870	0	0	0
52512500	Books & Publications	0	0	0	104	113
52582016	Uniforms - Admin & General	0	827	2,093	1,638	2,105
52582012	Uniforms - Pumping	0	111	111	(111)	158
Grand Total		\$155,497	\$165,961	\$187,291	\$162,348	\$242,604

Witness: Linda C. Bridwell

85. Reference the Kentucky American Water application generally. Identify each software license. For each such license, provide the current term of the license, the current annual cost of the license, and the cost increases expected during the Base Period and Test Period. For each such increase, state if the increase is contractual pursuant to the current license agreement.

Response:

The attached is a listing of current software for Kentucky American Water as well as American Water. The attachment indicates whether the software is purchased or provided on terms, and the amount of either the purchase or term in 2013 through year to date by year.

Because of the limited amount of term software, the forecast does not include specific cost increases for each term software but is a combined amount.

Project Description	(Multiple Items)
.,	(1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Sum of Total Cost	Canay/Oney	Tumo	MFG	Software	Year	2042	2014	2015	2016	2017	Crond Total
Company KENTUCKY	Capex/Opex Capex	Type Purchase	Adobe	Software Acrobat XI Pro v11	2012	2013	2014 1,501	2015	2016	2017	Grand Total 1,501
KENTUCKY	Capex	Purchase	Cisco	Application Experience DATA and			545	535			1,080
KENTUCKY	Capex	Purchase	Cisco	Unified Communications Manager Exp		709	343	348			1,056
KENTUCKY	Capex	Purchase	Cisco	Wide Area Application Services		17,310		1,338			18,648
KENTUCKY	Capex	Purchase	Symantec	Backup Exec 2012		17,010	653	1,000			653
KENTUCKY	Capex	Purchase Total	- Cymanio	243/4P 2/00 2012		18,019	2,699	2,220			22,938
KENTUCKY	Capex Total					18,019	2,699	2,220			22,938
KENTUCKY	Opex	Term	Adobe	Premiere Pro Creative Cloud		10,010	_,,	54			54
KENTUCKY	Opex	Term Total						54			54
KENTUCKY	Opex	Purchase	Adobe	Acrobat Pro				383	369		751
KENTUCKY	Opex	Purchase	Adobe	Acrobat XI Pro v11		375		374			749
KENTUCKY	Opex	Purchase	Adobe	LiveCycle Designer v11				299			299
KENTUCKY	Opex	Purchase Total				375		1,055	369		1,799
KENTUCKY	Opex Total					375		1,109	369		1,853
KENTUCKY Total						18,394	2,699	3,330	369		24,791
LAUREL OAK PROPERTIES	Capex	Term	RedHat	Enterprise Server Premium		88,119	2,307				90,426
LAUREL OAK PROPERTIES	Capex	Term	RedHat	Enterprise Server Smart Management		17,026		0.400			17,026
LAUREL OAK PROPERTIES	Capex	Term	RedHat	Enterprise Server Standard		27,381	0.007	3,190			30,571
LAUREL OAK PROPERTIES	Capex	Term Total	Adaba	A		132,526	2,307	3,190			138,023
LAUREL OAK PROPERTIES LAUREL OAK PROPERTIES	Capex	Purchase Purchase	Adobe Adobe	Acrobat XI Pro v11 Captivate v6		7,132 793					7,132 793
LAUREL OAK PROPERTIES	Capex Capex	Purchase	Adobe	Captivate v6 Captivate v7		2,378					2,378
LAUREL OAK PROPERTIES	Capex	Purchase	Adobe	Creative Suite	2,891	4,578					7,468
LAUREL OAK PROPERTIES	Capex	Purchase	Avatier	Password Station	2,031	87,000					87,000
LAUREL OAK PROPERTIES	Capex	Purchase	BMC	Control M		07,000		285,000			285,000
LAUREL OAK PROPERTIES	Capex	Purchase	Centrify	(blank)		895		200,000			895
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	AnyConnect Mobile - license		657	270				927
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	ASA 5500 Botnet Traffic		-	2.430				2,430
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Finesse Server - license			540				540
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Identity Services Engine Advanced		2,754					2,754
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Identity Services Engine Base		270					270
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Identity Services Engine Virtual		12,938					12,938
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	IOS Unified Communications -		400					400
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Mobility Services Engine Base				40,497			40,497
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Mobility Services Engine Virtual				2,697			2,697
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Prime Network Analysis Module				1,605			1,605
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	TelePresence Management Suite				1,988			1,988
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	TelePresence Management Suite -				2,950			2,950
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Unified Border Element Enterprise			1,632				1,632
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Unified Communications Manager Enh		4 700	113	40.500			113
LAUREL OAK PROPERTIES	Capex	Purchase	Cisco	Unified Communications Manager Exp		1,700		13,536			15,236 1,000
LAUREL OAK PROPERTIES LAUREL OAK PROPERTIES	Capex	Purchase Purchase	Cisco	Wide Area Application Services Netscaler VPX 10 MBPS Standard		1,000 2,694					2,694
LAUREL OAK PROPERTIES	Capex Capex	Purchase	Gotham Technology HP	Insight Control		2,094	4,559				4,559
LAUREL OAK PROPERTIES	Capex	Purchase	HP	INSIGHT CTL ML/DL BDL		988	4,559				988
LAUREL OAK PROPERTIES	Capex	Purchase	HP	Integrated Lights-Out Advanced		654					654
LAUREL OAK PROPERTIES	Capex	Purchase	HP	Integrated Lights-Out Essentials		00-		452			452
LAUREL OAK PROPERTIES	Capex	Purchase	HP	Mainstream Endurance Enterprise Mains				4,546			4,546
LAUREL OAK PROPERTIES	Capex	Purchase	HP	Network Automation (v.			61,739	,			61,739
LAUREL OAK PROPERTIES	Capex	Purchase	HP	OneView with iLO Advanced				1,999			1,999
LAUREL OAK PROPERTIES	Capex	Purchase	HP	Value Endurance Enterprise Boot				1,891			1,891
LAUREL OAK PROPERTIES	Capex	Purchase	IBM	license	223						223
LAUREL OAK PROPERTIES	Capex	Purchase	IBM	monitoring and management		512,713					512,713
LAUREL OAK PROPERTIES	Capex	Purchase	IBM	SOW NNOS-9FUTCJ Domino serve			81,120				81,120
LAUREL OAK PROPERTIES	Capex	Purchase	IBM	V7000	40,437						40,437
LAUREL OAK PROPERTIES	Capex	Purchase	LiteSpeed	Standard for SQL Server		1,286					1,286
LAUREL OAK PROPERTIES	Capex	Purchase	McAfee	VirusScan Enterprise for Storage		8,940					8,940
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	B17-00159-SLP - MS Streets/Trips		37			40.505		37
LAUREL OAK PROPERTIES LAUREL OAK PROPERTIES	Capex	Purchase Purchase	Microsoft Microsoft	CoreCAL ALNG LicSAPk MVL Pltfrm Microsoft MapPoint 2013 - License			1.982		18,565		18,565
LAUREL OAK PROPERTIES	Capex	Purchase Purchase	Microsoft Microsoft	Microsoft MapPoint 2013 - License Microsoft SQL Server 2012 Std			23,512				1,982 23,512
LAUREL OAK PROPERTIES	Capex Capex	Purchase Purchase	Microsoft Microsoft	Microsoft SQL Server 2012 Std Microsoft Streets & Trips 2013			23,512 129				23,512 129
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	Microsoft Windows Server 2012 -			39,489				39,489
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	MS EA Sys Center Srvr	1,676		55,403				1,676
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	MS EA WinServer Datacenter Lic/SA	4,614						4,614
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	OfficeProPlus ALNG LicSAPk MVL Pltfrm	.,0.7				44,835		44,835
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	PrictSvrCAL ALNG LicSAPk MVL UsrCAL					25,312		25,312
	Jupan			,					,		,

LAUREL OAK PROPERTIES											
	Capex	Purchase	Microsoft	Pro DesktopwMDOP ALNG LicSAPk MVL		348,899					348,899
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	SharePointSvr ALNG LicSAPk MVL					13,046		13,046
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	SQLSvrStd ALNG LicSAPk MVL			14,088				14,088
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL			57,587				57,587
		Purchase		VisioPro ALNG LicSAPk MVL			37,307	20.000	44.000		
LAUREL OAK PROPERTIES	Capex		Microsoft					28,986	11,092		40,078
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	VisioStd ALNG LicSAPk MVL		46,791					46,791
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	WinEntforSAwMDOP ALNG UpgrdSAPk MVL Pltf					14,281		14,281
LAUREL OAK PROPERTIES	Capex	Purchase	Microsoft	WinSvrDataCtr ALNG LicSAPk MVL 1Proc			207,649				207,649
LAUREL OAK PROPERTIES	Capex	Purchase	NetBrain	NetBrain Enterprise			6,600				6,600
LAUREL OAK PROPERTIES		Purchase	Orion	IP Address Manager IPX		12.427	0,000				12,427
	Capex										
LAUREL OAK PROPERTIES	Capex	Purchase	RSA	Authentication Manager Enterprise Ed		14,097					14,097
LAUREL OAK PROPERTIES	Capex	Purchase	Securicon	Password Self Service			40,419				40,419
LAUREL OAK PROPERTIES	Capex	Purchase	SolarWinds	SolarWinds Storage Manager			16,197				16,197
LAUREL OAK PROPERTIES	Capex	Purchase	SolarWinds	SolarWinds Virtualization Manager				44,653			44,653
LAUREL OAK PROPERTIES	Capex	Purchase	Symantec	Backup Exec 2014			653				653
LAUREL OAK PROPERTIES	Capex	Purchase	Symantec	Backup Exec 2014 Agent for Windows			1,171				1,171
LAUREL OAK PROPERTIES	Capex	Purchase	Techsmith	Snaglt v11		78	.,.,.				78
					0.500	70					
LAUREL OAK PROPERTIES	Capex	Purchase	VMware	vCenter	9,563						9,563
LAUREL OAK PROPERTIES	Capex	Purchase	VMware	vSphere Enterprise Plus	5,097	60,417					65,514
LAUREL OAK PROPERTIES	Capex	Purchase	VMware	vSphere Enterprise Standard		10,157					10,157
LAUREL OAK PROPERTIES	Capex	Purchase	(blank)	ADAPTIVA	71,993						71,993
LAUREL OAK PROPERTIES	Capex	Purchase	(blank)	Dragon NaturallySpeaking Premium		233					233
LAUREL OAK PROPERTIES	Capex	Purchase	(blank)	Identity SVC Engine SGL VM		108,195					108,195
LAUREL OAK PROPERTIES	Capex	Purchase	(blank)	PowerShell Studio 2014		100,100	1,215				1,215
					4.050	0.700	1,215				
LAUREL OAK PROPERTIES	Capex	Purchase	(blank)	vFoglight Pro	1,353	2,706					4,059
LAUREL OAK PROPERTIES	Capex	Purchase	(blank)	(blank)		7,334					7,334
LAUREL OAK PROPERTIES	Capex	Purchase Total			137,846	1,261,141	563,095	430,801	127,132		2,520,015
LAUREL OAK PROPERTIES	Capex Total				137,846	1,393,666	565,402	433,992	127,132		2,658,038
LAUREL OAK PROPERTIES Total					137,846	1,393,666	565,402	433,992	127,132		2,658,038
SERVICE COMPANY	Capex	Purchase	AB SCIEX	Analyst 1.6	, , , , , , , , , , , , , , , , , , , ,	, ,		7,041	, -		7,041
SERVICE COMPANY	Capex	Purchase	Agilent	MassHunter				68,247			68,247
SERVICE COMPANY	Capex	Purchase	ARIS	ARIS Connect Server			570,095	00,247			570,095
SERVICE COMPANY	Capex	Purchase	Avaya	Workforce Management			82,562				82,562
SERVICE COMPANY	Capex	Purchase	Basis Technologies	Transport Expresso			259,600		148,800		408,400
SERVICE COMPANY	Capex	Purchase	BMC	Remedy			2,500,000				2,500,000
SERVICE COMPANY	Capex	Purchase	Cisco	AnyConnect Mobile - license			191				191
SERVICE COMPANY	Capex	Purchase	Digital Map Products	(blank)			270,000				270,000
SERVICE COMPANY	Capex	Purchase	Exceed	(hlash)			-,				4,093
								4 093			
				(blank)			2 000 000	4,093			
SERVICE COMPANY	Capex	Purchase	Fathom	2.0			2,000,000				2,000,000
SERVICE COMPANY SERVICE COMPANY	Capex Capex	Purchase Purchase	Fathom Hach	2.0 Omnion v4			2,000,000	5,675			2,000,000 5,675
SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY	Capex Capex Capex	Purchase Purchase Purchase	Fathom Hach MetroHM USA	2.0 Omnion v4 Tiamo 2.x			2,000,000				2,000,000 5,675 925
SERVICE COMPANY SERVICE COMPANY	Capex Capex	Purchase Purchase	Fathom Hach	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL		10,969	2,000,000	5,675			2,000,000 5,675 925 10,969
SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY	Capex Capex Capex	Purchase Purchase Purchase	Fathom Hach MetroHM USA	2.0 Omnion v4 Tiamo 2.x		10,969 30,204	2,000,000	5,675			2,000,000 5,675 925
SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY	Capex Capex Capex Capex Capex	Purchase Purchase Purchase Purchase	Fathom Hach MetroHM USA Microsoft	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL			2,000,000	5,675			2,000,000 5,675 925 10,969
SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY SERVICE COMPANY	Capex Capex Capex Capex Capex Capex	Purchase Purchase Purchase Purchase Purchase Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0			150,000	5,675 925			2,000,000 5,675 925 10,969 30,204 150,000
SERVICE COMPANY	Capex Capex Capex Capex Capex Capex Capex	Purchase Purchase Purchase Purchase Purchase Purchase Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas				5,675 925 24,250			2,000,000 5,675 925 10,969 30,204 150,000 49,250
SERVICE COMPANY	Capex Capex Capex Capex Capex Capex Capex Capex Capex	Purchase Purchase Purchase Purchase Purchase Purchase Purchase Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server			150,000 25,000	5,675 925			2,000,000 5,675 925 10,969 30,204 150,000 49,250 600
SERVICE COMPANY	Capex	Purchase Purchase Purchase Purchase Purchase Purchase Purchase Purchase Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori			150,000	5,675 925 24,250 600			2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition			150,000 25,000	5,675 925 24,250 600 1,884,534			2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira		30,204	150,000 25,000 61,950	5,675 925 24,250 600			2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank)			150,000 25,000 61,950	5,675 925 24,250 600 1,884,534			2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SOI	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine		30,204	150,000 25,000 61,950	5,675 925 24,250 600 1,884,534			2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank)		30,204	150,000 25,000 61,950 10,222 13,179	5,675 925 24,250 600 1,884,534	4,053		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOLARWINGS SOLARWINGS SOLARWINGS	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor		30,204	150,000 25,000 61,950	5,675 925 24,250 600 1,884,534	4,053		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12		30,204	150,000 25,000 61,950 10,222 13,179	5,675 925 24,250 600 1,884,534 269,718	4,053		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard		30,204 121,180 11,608	150,000 25,000 61,950 10,222 13,179	5,675 925 24,250 600 1,884,534 269,718	4,053		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail	7055	30,204	150,000 25,000 61,950 10,222 13,179	5,675 925 24,250 600 1,884,534 269,718	4,053		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Stsendlard vSphere Standard	7,255	30,204 121,180 11,608 2,734	150,000 25,000 61,950 10,222 13,179	5,675 925 24,250 600 1,884,534 269,718	4,053		2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail		30,204 121,180 11,608 2,734 1,353	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718	·		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 11,608 2,734 7,255 1,353
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Stsendlard vSphere Standard	7,255	121,180 11,608 2,734 1,353 178,048	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118	152,853		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware	Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro		30,204 121,180 11,608 2,734 1,353	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118	·		2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Stsendlard vSphere Standard	7,255	121,180 11,608 2,734 1,353 178,048	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118	152,853		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank)	Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro	7,255	121,180 11,608 2,734 1,353 178,048	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118	152,853		2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware VMware (blank) Apptio AutoCAD	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Enterprise Standard vSphere Standard vFoglight Pro (blank) Map 3D	7,255 7,255	121,180 11,608 2,734 1,353 178,048 178,048	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000	152,853 152,853 26,405		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206 321,000 106,968
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red	7,255 7,255	121,180 11,608 2,734 1,353 178,048 7,916	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000 582,500	152,853 152,853		2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 321,000 106,968 1,747,500
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank)	7,255 7,255	121,180 11,608 2,734 1,353 178,048 178,048	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000 582,500 58,500	152,853 152,853 26,405 582,500	582,500	2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206 321,000 106,968 1,747,500 175,500
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000	150,000 25,000 61,950 10,222 13,179 52	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 321,000 58,500 294,000	152,853 152,853 26,405 582,500 294,000	582,500 294,000	2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,2
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) (blank)	7,255 7,255	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000 582,500 58,500 58,500 294,000 1,256,000	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968
SERVICE COMPANY	Capex Opex Opex Opex Opex Opex Opex Opex	Purchase SaaS SaaS SaaS SaaS SaaS SaaS SaaS S	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia Adobe	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) (blank) Creative Cloud	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000 582,500 58,500 294,000 1,256,000 1,492	152,853 152,853 26,405 582,500 294,000	582,500 294,000	2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968 13,974
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snagtl v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) (blank) (blank) (blank) (creative Cloud InDesign Creative Cloud	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000 58,500 294,000 1,492 435	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968 1,3974 652
SERVICE COMPANY	Capex	Purchase SaaS SaaS SaaS SaaS SaaS SaaS SaaS S	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware VMoare (blank) Apptio AutoCAD ECN Salesforce.com Taulia Adobe Adobe	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) (blank) Creative Cloud	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 2,265,200 321,000 582,500 58,500 294,000 1,256,000 1,492	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968 13,974
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia Adobe Adobe Adobe Adobe	Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) (blank) Creative Cloud InDesign Creative Cloud Photoshop Creative Cloud	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 321,000 582,500 58,500 58,500 294,000 1,492 435 108	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206 321,000 106,968 1,747,500 182,000 3,232,968 13,974 652 290
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia Adobe Adobe Adobe Adobe Adobe	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) Creative Cloud Photoshop Creative Cloud Premiere Pro Creative Cloud	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 321,000 58,500 58,500 294,000 1,256,000 1,492 435 108 217	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968 13,974 652 290 217
SERVICE COMPANY	Capex	Purchase Pur	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia Adobe Adobe Adobe Adobe Adobe Adobe Adobe AppSpace	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) Map 3D Code Red (blank) (blank) Creative Cloud InDesign Creative Cloud Promiere Pro Creative Cloud AppSpace	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916 4,948	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 321,000 582,500 58,500 58,500 294,000 1,492 435 108	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 925 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968 13,974 652 290 217 28,421
SERVICE COMPANY	Capex	Purchase	Fathom Hach MetroHM USA Microsoft Microsoft Neptune Pink Elephant PowerFlow Solutions SAP SAP SAP SAP SOlarWinds SolarWinds Techsmith VMware VMware VMware (blank) Apptio AutoCAD ECN Salesforce.com Taulia Adobe Adobe Adobe Adobe Adobe	2.0 Omnion v4 Tiamo 2.x SysCtrSvrMgmtSteDataCtr ALNG LicSAPk MVL WinSvrDataCtr ALNG LicSAPk MVL 1Proc Fathom 2.0 PinkAtlas PowerFlow Server Fiori HANA Runtime Edition LVM, WorkManager, Lumira (blank) SolarWinds Additional Polling Engine SolarWinds Web Performance Monitor Snaglt v12 vSphere Enterprise Standard vSphere Essentials Kit for Retail vSphere Standard vFoglight Pro (blank) Map 3D Code Red (blank) (blank) Creative Cloud Photoshop Creative Cloud Premiere Pro Creative Cloud	7,255 7,255 72,647	121,180 11,608 2,734 1,353 178,048 7,916 117,000 124,916	150,000 25,000 61,950 10,222 13,179 52 5,942,850 5,942,850	5,675 925 24,250 600 1,884,534 269,718 118 2,265,200 321,000 58,500 58,500 294,000 1,256,000 1,492 435 108 217	152,853 152,853 26,405 582,500 294,000 902,905	582,500 294,000	2,000,000 5,675 10,969 30,204 150,000 49,250 600 61,950 1,884,534 269,718 131,402 13,179 4,053 169 11,608 2,734 7,255 1,353 8,546,206 321,000 106,968 1,747,500 175,500 882,000 3,232,968 13,974 652 290 217

SERVICE COMPANY SERVICE COMPANY	Opex Opex	Term Term	RedHat RedHat	Enterprise Server Smart Management Enterprise Server Standard		16,116 192,939		373.097	957,814		16,116 1,523,850
SERVICE COMPANY	Opex	Term Total	Neurial	Enterprise derver dianuaru		291,363	7,239	403,770	958,508		1,660,880
SERVICE COMPANY	Opex	Purchase	ACR Publications	ACR Training Material SWL		291,303	120,000	403,770	330,300		120,000
SERVICE COMPANY	Opex	Purchase	Adobe	Acrobat Pro		166	120,000	7,511	3,343		11,020
SERVICE COMPANY	Opex	Purchase	Adobe	Acrobat X Standard v10	1,965	100		7,511	3,343		1,965
SERVICE COMPANY	Opex	Purchase	Adobe	Acrobat XI Pro v11	1,965	10,135	13.507	2,991			26,632
SERVICE COMPANY							13,307	2,991			
	Opex	Purchase	Adobe	Acrobat XI Standard v11		2,749					2,749
SERVICE COMPANY	Opex	Purchase	Adobe	Captivate v6		808		050			808 352
SERVICE COMPANY	Opex	Purchase	Adobe	Captivate v8				352 966			352 966
SERVICE COMPANY	Opex	Purchase	Adobe	Captivate v9	4.050			900			
SERVICE COMPANY	Opex	Purchase	Adobe	CLPC 5.X Acrobat Standard	1,250		040				1,250
SERVICE COMPANY	Opex	Purchase	Adobe	Photoshop CS6 v13			616				616
SERVICE COMPANY	Opex	Purchase	Adobe	Photoshop Elements v11		636					636
SERVICE COMPANY	Opex	Purchase	Adobe	Photoshop Elements v12		80	239				318
SERVICE COMPANY	Opex	Purchase	Adobe	Photoshop Elements v13			79				79
SERVICE COMPANY	Opex	Purchase	Advizor	(blank)			9,000				9,000
SERVICE COMPANY	Opex	Purchase	BarTender	Professional Edition		1,482					1,482
SERVICE COMPANY	Opex	Purchase	BMC	Incident Management		343					343
SERVICE COMPANY	Opex	Purchase	Browsium	lon				1,796			1,796
SERVICE COMPANY	Opex	Purchase	CardScan	(blank)			712				712
SERVICE COMPANY	Opex	Purchase	Cassidian	Communicator NXT		39,451					39,451
SERVICE COMPANY	Opex	Purchase	Compuware	(blank)		25,000					25,000
SERVICE COMPANY	Opex	Purchase	CyberLock	Cyberkeys		700	700				1,400
SERVICE COMPANY	Opex	Purchase	Double Check	(blank)				98,500			98,500
SERVICE COMPANY	Opex	Purchase	Dyntek Services	(blank)	537,116		89,626				626,742
SERVICE COMPANY	Opex	Purchase	FaveQuest	MyEventApps					4,900		4,900
SERVICE COMPANY	Opex	Purchase	Fusion Storm	(blank)	108,750						108,750
SERVICE COMPANY	Opex	Purchase	Help Systems	Robot/Schedule/Alert				18,520			18,520
SERVICE COMPANY	Opex	Purchase	IBM	SmartCloud		745,148					745,148
SERVICE COMPANY	Opex	Purchase	ISI	Telemanagement				18,476			18,476
SERVICE COMPANY	Opex	Purchase	Jboss	Ent Application Platform		11,245					11,245
SERVICE COMPANY	Opex	Purchase	LogMeIn	Rescue		2,160					2,160
SERVICE COMPANY	Opex	Purchase	Micro Strategies	Professional	838	004					838
SERVICE COMPANY	Opex	Purchase	Mindjet	for Windows v11		384					384
SERVICE COMPANY	Opex	Purchase	MiniTab	Statistical Software v16		5,755	5.004	0.454			5,755
SERVICE COMPANY	Opex	Purchase	MiniTab	Statistical Software v17		0.050	5,064	3,151			8,215
SERVICE COMPANY SERVICE COMPANY	Opex	Purchase	Novell Novell	Platespin Migrate/Server Workload		2,059					2,059
SERVICE COMPANY	Opex	Purchase		Platespin Protect Ent Server Workload ETAP Licenses		3,603			11,900		3,603 11,900
SERVICE COMPANY	Opex Opex	Purchase Purchase	Operation Technology Oracle	Enterprise Database			484,128		11,900		484.128
SERVICE COMPANY	Opex	Purchase	Oracle	Netflow Traffic Analyzer Module		2,485	484,128				2,485
SERVICE COMPANY	•	Purchase	Orion	Network Performance Monitor		2,465					2,465
SERVICE COMPANY	Opex Opex	Purchase	Orion	Network Performance Monitor SLX		4,140					4,140
SERVICE COMPANY	Opex	Purchase	People Cube	Asure Software		4,140	8,540				8,540
SERVICE COMPANY	Opex	Purchase	People Cube	Resource Management			0,540	15,998			15.998
SERVICE COMPANY	Opex	Purchase	People Cube	Workspace Manager				8,277			8,277
SERVICE COMPANY	Opex	Purchase	PWC	Game of Threats				30,000			30,000
SERVICE COMPANY	Opex	Purchase	SAP	Appendix 18				3,193			3,193
SERVICE COMPANY	Opex	Purchase	SolarWinds	Solarwinds				0,100	21,869		21,869
SERVICE COMPANY	Opex	Purchase	SolarWinds	SolarWinds Engineers Toolset		327			21,000		327
SERVICE COMPANY	Opex	Purchase	SolarWinds	Solarwinds SCADA		021		2,937			2,937
SERVICE COMPANY	Opex	Purchase	SuccessFactors	(blank)				387,073			387,073
SERVICE COMPANY	Opex	Purchase	Symantec	PGP Desktop Professional		175		,			175
SERVICE COMPANY	Opex	Purchase	Techsmith	Camtasia Studio v8			236				236
SERVICE COMPANY	Opex	Purchase	Techsmith	Snaglt Enterprise License				143	142		285
SERVICE COMPANY	Opex	Purchase	Techsmith	Snaglt v11	602	4,082	212				4,896
SERVICE COMPANY	Opex	Purchase	Techsmith	Snaglt v12		.,	516	410			927
SERVICE COMPANY	Opex	Purchase	VMware	Site Recover				2,916			2.916
SERVICE COMPANY	Opex	Purchase	VMware	vCloud			3,994	2,010			3,994
SERVICE COMPANY	Opex	Purchase	VMware	vSphere Enterprise			4,193				4,193
SERVICE COMPANY	Opex	Purchase	VMware	Workstation v10			206				206
SERVICE COMPANY	Opex	Purchase	VMware	Workstation v9		206					206
SERVICE COMPANY	Opex	Purchase	(blank)	Dragon NaturallySpeaking Professional		233					233
SERVICE COMPANY	Opex	Purchase	(blank)	Essential SWL		87,381					87,381
SERVICE COMPANY	Opex	Purchase	(blank)	Remot Print Manager	204	2.,001					204
SERVICE COMPANY	Opex	Purchase	(blank)	RMA-Q2ID for Win v6	201		(150)				(150)
SERVICE COMPANY	Opex	Purchase	(blank)	(blank)		1,246	29,884	41,157			72,286
SERVICE COMPANY	Opex	Purchase Total		` <i>`</i>	650,726	954,994	771,300	644,368	42,154		3,063,542
SERVICE COMPANY	Opex Total				723,372	1,371,273	778,539	2,304,138	1,903,568	876,500	7,957,390
SERVICE COMPANY Total					730,627	1,549,321	6,721,389	4,569,338	2,056,420	876,500	16,503,596

Grand Total 868,473 2,961,381 7,289,491 5,006,659 2,183,921 876,500 19,186,425

Witness: Linda C. Bridwell

86. Reference the Kentucky American Water application. Regarding page 17, lines 16-22 of Ms. Bridwell's testimony, explain the reasons for the expected decrease in miscellaneous expenses and provide all supporting assumptions, calculations, and workpapers showing how the underlying forecast was determined. Include all excel files. If this information has been provided previously, identify the specific page references where such information can be found.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items.

The reason for the decrease in Miscellaneous Expense is the elimination from the Base Year of Penalties \$309,395, Injuries and Damages of \$234 and Charitable Contributions of \$125,054 as shown in the workpapers. Please refer to the response to Item 3 of the Commission Staff's First Request for Information, workpaper 3-20, pages 450 to 544 of 746. The excel spreadsheet was also provided as part of that response.

Witness: Linda C. Bridwell

87. Reference the Kentucky American Water application generally. Provide the actual costs incurred in each of the past five years for miscellaneous expenses.

Response:

Please refer to the attachment.

Kentucky-American Miscellaneous Expense

<u>Account</u>	AC Name	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
52001300	M & S Oper - Water Treatment	\$66,968	\$95,574	\$66,130	\$46,175	\$72,367
52001400	M & S Oper - Transmission & Distribution	126,144	121,129	106,466	109,413	62,671
52001600	M & S Oper - Admin & General	64,621	34,585	15,033	15,526	28,678
52501200	Misc Oper - Pumping	(3,480)	(340)	166	286	16
52501300	Misc Oper - Water Treatment	68,580	28,506	13,365	10,392	14,967
52501400	Misc Oper - Transmission & Distribution	57,107	66,904	69,852	78,835	66,730
52501600	Misc Oper - Admin & General	128,646	76,575	170,824	79,636	144,668
52514905	Customer Education Communication - Printed	29,568	10,654	5,411	6,008	3,589
52522000	Community Relations	35,327	402	686	0	13,482
52524000	Co Dues/Membership Deductible	1,640	90,727	75,335	87,637	90,632
52527000	Directors Fees	37,253	31,585	40,093	38,065	38,700
52554500	Lab Supplies	142,696	109,469	97,118	72,299	112,184
52564000	Penalties Nondeductible	32	5	121	30	309,445
52568000	Research & Development	19,096	20,670	21,999	22,439	22,346
52579000	Trustee Fees	65,488	22,225	16,759	14,225	20,176
52585000	Discounts Available	(34,875)	(26,518)	(54,646)	(51,604)	(40,479)
52001200	M & S Oper - Pumping	(17)	470	696	334	728
52549000	Injuries and Damages	10,691	30,005	0	0	11,798
52514500	Charitable Donations - Health/Education/Environmnt	0	131,109	112,895	75,636	93,432
52514600	Charitable Donations - Community	0	56,717	26,104	30,564	41,235
52514700	Community Partnerships	0	66,390	138,800	79,532	79,815
52515000	Community Relations - Events	0	12,637	18,065	18,345	14,302
52556500	Low Income Pay Program	0	70,500	40,000	54,248	60,000
52514903	Customer Education Communication - Issues	0	1,529	2,118	7,501	18,267
52514904	Customer Education Communication - Conservation	0	77,274	66,534	75,991	85,897
52515001	Community Relations - Specialty	0	22,107	14,268	16,373	13,247
52548100	Hiring Costs	0	778	418	500	1,717
52586000	PO Small Price Differences - within tolerance	0	310	(234)	97	488
52514909	Customer Education - Video & Photo	0	963	6,339	1,704	919
52549500	Inventory Physical Write-off Scrap	0	14,235	111,789	(4,656)	28,244
52514901	Customer Education Communication - Reg	0	2,013	2,524	9,284	2,769
52514907	Customer Education - Press Releases	0	0	1,565	829	25
52540000	Amort Bus Services Proj Exp	0	0	1,371	308	828
52001100	M & S Oper - Source of Supply	573	0	(49,542)	96	117
52514000	Charitable Contribution Deductible	50	0	0	0	4,418
Grand Total		\$816,106	\$1,169,191	\$1,138,419	\$896,046	\$1,418,417

Witness: Linda C. Bridwell

88. Reference the Kentucky American Water application. Provide the actual costs incurred in each of the past five years for rent expense, per page 18, lines 1-4 of Ms. Bridwell's testimony.

Response:

Please refer to the attachment for a summary of the actual costs incurred in the past five years for Rent Expense.

Kentucky-American Water Company Rent Expense Historical Five Years

G/L Acct	G/L Acct Description	2011	2012	2013	2014	2015
54110013	Real Property Rents - Water Treatment	\$0	\$0	\$0	\$5,795	\$0
54110014	Real Property Rents - Transmission & Distribution	5,388	6,842	6,690	6,493	6,897
54140011	Equipment Rents - Source of Supply	0	0	0	528	0
54140013	Equipment Rents - Water Treatment	0	1,113	141	1,393	4,408
54140014	Equipment Rents - Transmission & Distribution	0	89	1,259	279	548
54140016	Equipment Rents - Admin & General	26,645	44,379	28,171	17,641	6,256
	Total Expense	\$32,033	\$52,423	\$36,260	\$32,130	\$18,110

Witness: Kevin N. Rogers

89. Reference the Kentucky American Water application generally. Identify all vehicles included in the Company's transportation expenses. For each such vehicle, identify when the vehicle was acquired, the make and model, the purpose of the vehicle, and whether the vehicle is leased or owned.

Response:

Please see attachment.

Unit #	Acquired Date	Year	Make	Model	Series	Business Purpose/Department	Workforce/Description	Owned/Leased?
21863	7/31/2015	2015	CHEVY	EQUINOX LT 4X4	LT W/1LT	Administration	Safety Lead	Owned
4901	12/28/2009	2010	TOYO	TACOMA	TACOMA	Engineering	Specialist Engineering	Owned
13185	3/7/2014	2014	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Engineering	Specialist Engineering	Owned
11293	12/20/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Engineering	Specialist Engineering	Owned
21864	8/13/2015	2015	CHEVY	EQUINOX LT 4X4	LT W/1LT	Engineering	Director of Engineering	Owned
11283	12/17/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Field Service Representative	Owned
11288	12/17/2010	2011	TOYO	TACOMA ACCESS CAB 2WD	PRERUNNER V6	Field Operations	Field Service Representative	Owned
11282	12/20/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Field Service Representative	Owned
11281	12/20/2010	2010	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Field Service Representative	Owned
11291	12/17/2010	2011	TOYO	TACOMA ACCESS CAB 2WD	PRERUNNER V6	Field Operations	Field Service Representative	Owned
11285	12/20/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Field Service Representative	Owned
13180	3/14/2014	2014	TOYO	TACOMA	ACCESS CAB 4X4 V6	Field Operations	Field Service Representative	Owned
11284	12/20/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Field Service Representative	Owned
11286	12/20/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Field Service Representative	Owned
11290	12/17/2010	2011	TOYO	TACOMA ACCESS CAB 2WD	PRERUNNER V6	Field Operations	Field Service Representative	Owned
11300	12/30/2010	2011	TOYO	TACOMA	4X4 ACCESS CAB	Field Operations	Field Service Representative	Owned
11298	12/30/2010	2011	TOYO	TACOMA	4X4 ACCESS CAB	Field Operations	Field Service Representative	Owned
11289	12/17/2010	2011	TOYO	TACOMA ACCESS CAB 2WD	PRERUNNER V6	Field Operations	Field Service Representative	Owned
11296	12/30/2010	2011	TOYO	TUNDRA REG CAB 4WD	GRADE LARGE V8	Field Operations	Field Service Representative - Stand By	Owned
12435	12/18/2012	2013	TOYO	TACOMA ACCESS CAB 4WD	PRERUNNER V6	Field Operations	Meter Reader	Owned
11301	12/20/2010	2011	TOYO	TACOMA	4X4 ACCESS CAB	Field Operations	Meter Reader	Owned
11292	12/17/2010	2011	TOYO	TACOMA ACCESS CAB 2WD	PRERUNNER V6	Field Operations	Meter Reader	Owned
11302	12/20/2010	2011	TOYO	TACOMA	4X4 ACCESS CAB	Field Operations	Meter Reader	Owned
12418	12/18/2012	2013	TOYO	TACOMA ACCESS CAB 4WD	PRERUNNER V6	Field Operations	Meter Reader	Owned
21865	7/31/2015	2015	CHEV	EQUINOX LT	4X4	Field Operations	Supervisor	Owned
13182	7/22/2014	2014	FORD	F-550	4X4 SD SUPER CAB	Field Operations	Crew Leader/Jr. Backhoe Operator	Owned
16203	12/9/2015	2016	FREIGHTL	2016 FREI 114SD	Tandem Axle	Field Operations	Backhoe Operator	Owned
50914	9/16/2005	2005	GMC	C8	8500 MAINTENANC	Field Operations	Backhoe Operator	Owned
12426	7/25/2013	2013	FORD	F-450 CHASSIS	4X4 SD SUPER CAB	Field Operations	Crew Leader	Owned
13181	6/20/2014	2014	FORD	F-550	4X4 SD SUPER CAB	Field Operations	Crew Leader	Owned
11327	11/19/2010	2011	FORD	F-250 CHASSIS		Field Operations	Crew Leader	Owned
12166	6/25/2012	2012	FORD	F-450 CHASSIS	4X4 SD REGULAR CAB 1	Field Operations	Crew Leader	Owned
12165	7/10/2012	2012	FORD	F-450 CHASSIS	4X4 SD REGULAR CAB 1	Field Operations	Crew Leader	Owned
12428	8/16/2013	2013	FORD	F-450 CHASSIS	4X4 SD SUPER CAB	Field Operations	Crew Leader	Owned
12429	8/2/2013	2013	FORD	F-450 CHASSIS	4X4 SD SUPER CAB	Field Operations	Crew Leader	Owned
13577	8/28/2015	2015	FORD	F-550	4X4 SD SUPER CAB	Field Operations	Crew Leader	Owned
22053	11/13/2015	2015	CHEVY	SILVERADO 2500 HD		Field Operations	Crew Leader	Owned
13578	8/28/2015	2015	FORD	F-550	4X4 SD SUPER CAB	Field Operations	Crew Leader	Owned
13179	3/14/2014	2014	TOYO	TACAMA	ACCESS CAB 4X4 V6	Field Operations	Crew Leader	Owned
12427	7/9/2013	2013	FORD	F-450 CHASSIS	4X4 SD SUPER CAB	Field Operations	Utility	Owned

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Unit #	Acquired Date	Year	Make	Model	Series	Business Purpose/Department	Workforce/Description	Owned/Leased?
3072	11/24/2009	2010	TOYO	TACOMA	ACCESS CAB 4X4 V6	Field Operations	Utility	Owned
12289	7/13/2012	2012	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Field Operations	Utility	Owned
13580	12/23/2014	2015	FORD	F-650	4X4 SD REGULAR CAB	Field Operations	Utility	Owned
13222	4/3/2014	2013	FORD	F-750	4X4 SD REGULAR CAB	Field Operations	Utility	Owned
92023	12/15/2008	2009	INTERNATL	4300V LP	4300M7 4300M7	Field Operations	Utility	Owned
92024	12/31/2008	2003	DODG	RAM PICKUP	DC3L63 RAM 350	Field Operations	Utility	Owned
12290	5/15/2012	2013	FORD	EXPLORER	4X4	Field Operations	Manager Field Services	Owned
3070	11/24/2009	2013	TOYO	TUNDRA	DOUBLE CAB 4WD	Field Operations	Operations Specialist	Owned
12425	12/21/2012	2010	FORD	F-150	XL SUPERCAB	Field Operations	Operations Specialist Operations Specialist	Owned
11260	10/13/2010	2013	FORD	ESCAPE 4WD	XLT			Owned
12325	6/15/2012	2010	TOYO	TUNDRA	DOUBLE CAB 4WD	Field Operations	Operations Specialist	Owned
-			TOYO			Field Operations	Operations Supervisor	+
11287	12/17/2010	2011		TACOMA	ACCESS CAB 2WD	Field Operations	Operations Supervisor	Owned
12433	12/21/2012	2013	FORD	F-150 SUPERCREW	XL SUPERCREQ	Field Operations	Operations Supervisor	Owned
11299	1/11/2011	2011	FORD	F250 SD 4WD	XL	Production	Maintenance Tech II (KRS)	Owned
11448	6/22/2011	2011	FORD	F-350 CHASSIS	XL 4X4 SUPER CAB	Production	Maintenance Tech. II (RRS)	Owned
13147	8/21/2014	2014	FORD	F-350 CHASSIS	XL 4X4 SUPER CAB	Production	Maintenance Tech. II (KRS)	Owned
11447	8/23/2011	2011	FORD	F-450 CHASSIS	XL 4X4 SUPER CAB	Production	Maintenance Tech. II (RRS)	Owned
3071	11/24/2009	2010	TOYO	TACOMA	ACCESS CAB 4X4 V6	Production	Wastewater Operator Millersburg	Owned
1147	12/5/1994	1995	INTE	4700	4000-SERIES 4X2	Production	RRS, SLUDGE PRESS	Owned
12291	5/11/2012	2013	FORD	EXPLORER	4DR 4X4	Production	Supt Central Production	Owned
11408	3/1/2011	2011	TOYO	TUNDRA	5.7L V8 4X4 DBL CAB	Production	Supervisor Production - RRS	Owned
11410	3/1/2011	2011	TOYO	TUNDRA	5.7L V8 4X4 DBL CAB	Production	Supervisor Production - KRS	Owned
11294	12/30/2010	2011	TOYO	TUNDRA	5.7L V8 4X4 DBL CAB	Production	Specialist Maintenance Service	Owned
11280	12/20/2010	2011	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Production	Operations Specialist	Owned
11456	7/29/2011	2011	FORD	F-350 CHASSIS	XL 4X4 SUPER CAB	Production	Specialist Maintenance Service	Owned
12276	3/26/2012	2012	FORD	F-250	4X4 SD REGULAR CAB 8	Production	Specialist Maintenance Service	Owned
1017	4/20/2010	2009	HINO	HINO	MODEL 268A	Production	KRS II, SLUDGE PRESS	Owned
11295	12/30/2010	2011	TOYO	TUNDRA	5.7L V8 4X4 DBL CAB	Production	Production Technician (Wastewater)	Owned
12434	12/18/2012	2013	TOYO	TACOMA ACCESS CAB 4WD	BASE V6	Production	Operations Generalist II	Owned
12324	11/30/2012	2012	FORD	F-350 CHASSIS	XLT	Production	Operations Generalist II	Owned
12323	11/30/2012	2012	FORD	F-350 CHASSIS	XLT	Production	Operations Generalist II	Owned
12322	12/12/2012	2012	FORD	F-350 CHASSIS	XLT	Production	Operations Generalist II	Owned
11346	11/30/2010	2009	FORD	F-650	XL REG CAB	Production	OWENTON, DUMP	Owned
11409	3/1/2011	2011	TOYO	TUNDRA	5.7L V8 4X4 DBL CAB	Production	Supt Operations II	Owned
11012	6/15/2010	2010	TOYO	TUNDRA	V8 4X4 DBL CAB	Production	Field Operations Supervisor	Owned
12417	12/21/2012	2013	FORD	ESCAPE	LS AWD	Water Quality	Specialist Water Quality	Owned
12416	12/13/2012	2013	FORD	ESCAPE	LS AWD	Water Quality	Specialist Water Quality	Owned
21862	7/31/2015	2015	CHEV	EQUINOX LT	4X4	Water Quality	Technician Water Quality	Owned
13184	3/4/2014	2014	FORD	ESCAPE	LS AWD	Water Quality	Sr. Specialist Cross Connection	Owned
21565	#REF!	2011	WAYM	WAYMATIC	TRAILER	Administration	TRAILER, WATER	Owned

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Unit #	Acquired Date	Year	Make	Model	Series	Series Business Workforce/E		Owned/Leased?
82160	#REF!	2008	CASE	580SM 580SM	580SM 580SM BACKHO	Field Operations	DIST, BACKHOE	Owned
21633	#REF!	2012	CASE	580SN	BACKHOE	Field Operations	DIST, BACKHOE	Owned
21651	#REF!	2012	CASE	SV185	LOADER	Field Operations	DIST, LOADER	Owned
62113	#REF!	2006	CASE	CX31B CX31B	CX31B CX31B	Field Operations	DIST, EXCAVATOR	Owned
21720	#REF!	2013	CASE	CX36B	EXCAVATOR	Field Operations	DIST, EXCAVATOR	Owned
13270	#REF!	2014	CASE	CX36B	EXCAVATOR	Field Operations	DIST, EXCAVATOR	Owned
13552	#REF!	2015	CASE	CX36B	EXCAVATOR	Field Operations	DIST, EXCAVATOR	Owned
1148	#REF!	1999	TRLR	PORTABLE PUMP	PORTABLE PUMP	Field Operations	TRAILER	Owned
1149	#REF!	1991	TRLR	MC122-7 SE	CHEMICAL TRAILER	Field Operations	TRAILER	Owned
1150	#REF!	1999	TRLR	MC122-7 SE	TRAILER	Field Operations	TRAILER, CHEMICAL	Owned
4240	#REF!	1990	TRLR	STIG T3500	STIG T3500	Field Operations	TRAILER	Owned
4615	#REF!	2005	CONL	C-8	C12BL	Field Operations	TRAILER	Owned
4636	#REF!	2005	DITC	Т9В	TRAILER	Field Operations	TRAILER	Owned
4649	#REF!	2006	VACT	VMT TRAILER	TRAILER	Field Operations	TRAILER	Owned
4683	#REF!	2008	MILL	M4D16B TRAILER	M4D16B TRAILER	Field Operations	TRAILER	Owned
4686	#REF!	2008	IMPL	WF-10-16 TRAILER	WF-10-16 TRAILE	Field Operations	TRAILER	Owned
4825	#REF!	2009	QUIP	CONTRAIL QC-8	CONTRAIL QC-8	Field Operations	TRAILER	Owned
4826	#REF!	2009	QUIP	CONTRAIL QC-8	CONTRAIL QC-8	Field Operations	TRAILER	Owned
4828	#REF!	2008	TEXA	WATERDOG 1000	WATERDOG 1000	Field Operations	TRAILER	Owned
11349	#REF!	2011	TOWM	TOWMASTER	TRAILERS	Field Operations	TRAILER	Owned
13437	#REF!	2015	PJ TRL	83" D7	TRAILERS	Field Operations	TRAILER, DUMP	Owned
13546	#REF!	2014	LEXI	UT TRAILER	TRAILERS	Field Operations	TRAILER, SAFETY	Owned
13503	#REF!	2013	WACH	LX VMT	TRAILERS	Field Operations	TRAILER VALVE MNTCE	Owned
21700	#REF!	2012	WACH	HYDRO VAC TRAILER	TRAILERS	Field Operations	TRAILER	Owned
21724	#REF!	2013	TOWM	T-24	TRAILERS	Field Operations	TRAILER	Owned
50919	#REF!	2006	TOWM	T-20	BACKHOE TRAILER	Field Operations	TRAILER	Owned
62114	#REF!	2007	CONR	C12BL TRAILER	C12BL TRAILER	Field Operations	TRAILER	Owned
4115	#REF!	1997	CARO	BOAT	BOAT	Production	KRS I, BOAT	Owned
21559	#REF!	1990	YALE	FORKLIFT	FORKLIFT	Production	KRS I, FORKLIFT	Owned
11422	#REF!	2010	GATO	GATOR MADE	TRAILERS	Production	KRS I, TRAILER	Owned
1162	#REF!	1998	HUST	BOAT TRAILER	BOAT TRAILER	Production	KRS I, TRAILER	Owned
4525	#REF!	1999	JOHN	310E BACKHOE	310E BACKHOE	Production	KRS II, BACKHOE	Owned
15200	#REF!	2014	TRACKER	1860 GRIZZLEY JON	Boat	Production	KRS II, BOAT	Owned
1041	#REF!	2010	TOYO	TOYOTA	FORKLIFT	Production	KRS II, FORKLIFT	Owned
11420	#REF!	2010	GATO	GATOR MADE	TRAILER	Production	KRS II, TRAILER	Owned
15201	#REF!	2014	TRLSTAR	U18	TRAILER	Production	KRS II, BOAT TRAILER	Owned
21612	#REF!	2012	CASE	CX36B	CX36B	Production	OWENTON, EXCAVATOR	Owned
21626	#REF!	2012	WACH	TRAILER	TRAILER	Production	OWENTON, DIST	Owned
4682	#REF!	2008	MILL	M4D16B TRAILER	M4D16B TRAILER	Production	OWENTON, TRAILER	Owned
21830	#REF!	2013	CASE	580 SN	310E BACKHOE	Production	OWENTON, BACKHOE	Owned

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Unit #	Acquired Date	Year	Make	Model	Series	Business Purpose/Department	Workforce/Description	Owned/Leased?
4116	#REF!	1997	OLYM	BOAT	BOAT	Production	OWENTON, BOAT	Owned
71158	#REF!	2007	CASE	580SM 580SM	580SM 580SM	Production	RRS, BACKHOE	Owned
13500	#REF!	2014	TOYO	FORKLIFT	FORKLIFT	Production	RRS, FORKLIFT	Owned
13574	#REF!	2014	GATO	GATO MADE ENCLOSED	TRAILER	Production	RRS, TRAILER	Owned
1164	#REF!	2000	TRLR	LAWN TRAILER	LAWN TRAILER	Production	RRS, TRAILER	Owned
11421	#REF!	2010	GATO	GATOR MADE	TRAILER	Production	RRS, TRAILER	Owned
4757	#REF!	2007	MGS	GLW20M-10066	GLW20M-10066	Production	RRS, TRAILER	Owned

Witness: Kevin N. Rogers

90. Reference the Kentucky American Water application generally. Provide the actual costs incurred in each of the past five years for transportation expense.

Response:

Please refer to the attachment for a summary of actual costs incurred in the past five years for transportation expense.

Kentucky-American Water Company Transportation Expense Historical Five Years

G/L Acct	G/L Acct Description	2011	2012	2013	2014	2015
55000000	Transportation (O&M) - Natural Account	\$0	\$51,978	(\$16,225)	(\$11,293)	(\$9,401)
55000012	Transportation Oper - Pumping	0	118	104	16	0
55000013	Transportation Oper - Water Treatment	70	141	559	179	(43)
55000014	Transportation Oper - Transmission & Distribution	(488)	7,588	4,224	2,784	87
55000015	Transportation Oper - Customer Accounting	136	10	0	0	(33)
55000016	Transportation Oper - Admin & Gen	45,406	37,519	16,150	10,259	4,492
55000023	Transportation Maint - Water Treatment	0	47	24	231	388
55000024	Transportation Maint - Transmission & Distribution	0	297	368	137	194
55000100	Transportation Capital Credits	(94,754)	(145,689)	(21,987)	(68,611)	(103,399)
55010100	Transportation Lease Costs	1,881	16,413	90,101	1,294	37,915
55010200	Transportation Lease Fuel	360,810	361,458	332,673	343,072	236,129
55010300	Transportation Lease Maint	158,834	176,256	161,502	212,685	270,054
55010400	Transportation - Employee Reimbursement to Company	(1,807)	(868)	0	6	0
55010500	Transportation - Reimburse Employee Personal Use	5,186	1,767	2,557	4,669	5,823
	Total Expense	\$475,275	\$507,035	\$570,051	\$495,430	\$442,206

Witness: Linda C. Bridwell

91. Reference the Kentucky American Water application generally. Does the Company have a bad debt reserve? If so, provide, for each of the past five years as well as for the Base Period and Test Period, the beginning balance in the reserve, the amount added to the reserve, the amounts written off, and the ending balances. Include an excel file with your response.

Response:

Please refer to the response to Item 92 of this request for information.

Witness: Linda C. Bridwell

- **92.** Reference the Kentucky American Water application generally. Provide, for each of the past three years:
 - a. the amount of bad debts written-off,
 - b. the amount of bad debts written off that were subsequently recovered,
 - c. the amount of any additions to a bad debt reserve, if applicable, and
 - d. the total revenues from water sales.

Response:

- a. Please refer to the attachment for bad debts written off for the past three years.
- b. Bad debt recoveries for 2015, 2014 and 2013 were \$74,296, \$44,250 and \$42,866 respectively.
- c. Please refer to the attachment.
- d. The total billed revenue for water sales only (no sewer) for 2015, 2014 and 2013 were \$80,249,248, \$87,103,300 and \$88,715,102 respectively.

(\$982,251)

79,535

(902,716)

279,745

(982,251)

20,221

(1,261,996)

(\$902,716)

(898,642)

4,074

(\$898,642)

151,697

(746,944)

Kentucky American
KAW_R_AGDR1_NUM092_032416

Test Year 9/1/16-8/31/17

Acct 14300000 Beg Balance

Acct 14300000 End Balance

Acct 14300000 Activity (Provision)

(61,057)

(1,032,542)

(58,204)

(1,090,746)

(121,043)

(1,211,789)

Accumulated Write Offs Acct 14300000 Beg Balance Acct 14300000 Activity (Provision) Acct 14300000 End Balance Write Offs Acct Acct 57010015 & 57010016 Activity	Sep 2016 (\$1,046,379) 45,173 (1,001,205) 116,163	Oct 2016 (\$1,001,205) (113,913) (1,115,119) 73,144	Nov 2016 (\$1,115,119) 19,890 (1,095,229) 101,669	Dec 2016 (\$1,095,229) 150,348 (944,881)	Jan 2017 (\$944,881) (12,284) (957,165) 26,080	Feb 2017 (\$957,165) (124,782) (1,081,947) (12,741)	Mar 2017 (\$1,081,947) 45,113 (1,036,834) 28,264	Apr 2017 (\$1,036,834) 67,180 (969,655)	May 2017 (\$969,655) (172,871) (1,142,526) 90,559	Jun 2017 (\$1,142,526) 138,541 (1,003,985) 72,137	Jul 2017 (\$1,003,985) (6,565) (1,010,550) 51,539	Aug 2017 (\$1,010,550) (178,319) (1,188,870) 36,309
Base Year 5/1/15-4/30/16												
Accumulated Write Offs Acct 14300000 Beg Balance Acct 14300000 Activity (Provision) Acct 14300000 End Balance	May 2015 (\$811,249) (58,268) (869,517)	Jun 2015 (\$869,517) (5,302) (874,819)	Jul 2015 (\$874,819) 22,605 (852,214)	Aug 2015 (\$852,214) (24,855) (877,069)	Sep 2015 (\$877,069) 14,319 (862,750)	Oct 2015 (\$862,750) (29,118) (891,868)	Nov 2015 (\$891,868) 43,677 (848,191)	Dec 2015 (\$848,191) 133,312 (714,879)	Jan 2016 (\$714,879) (261,450) (976,328)	Feb 2016 (\$976,328) (50,604) (1,026,933)	Mar 2016 (\$1,026,933) 36,048 (990,884)	Apr 2016 (\$990,884) (3,712) (994,597)
Write Offs Acct Acct 57010015 & 57010016 Activity	135,207	65,193	60,007	81,049	135,829	94,137	79,789	85,307	25,087	(12,256)	27,187	17,870
Year 2015-Actual												
Accumulated Write Offs Acct 14300000 Beg Balance Acct 14300000 Activity (Provision) Acct 14300000 End Balance Write Offs Acct Acct 57010015 & 57010016 Activity	Jan (\$746,944) (55,036) (801,981) 134,706	Feb (\$801,981) (20,178) (822,159) 71,000	Mar (\$822,159) 35,655 (786,505)	Apr (\$786,505) (24,744) (811,249)	May (\$811,249) (58,268) (869,517)	Jun (\$869,517) (5,302) (874,819) 65,193	Jul (\$874,819) 22,605 (852,214) 60,008	Aug (\$852,214) (24,855) (877,069)	Sep (\$877,069) 14,319 (862,750)	Oct (\$862,750) (29,118) (891,868)	Nov (\$891,868) 43,677 (848,191)	Dec (\$848,191) 133,312 (714,879) (30,858)
Year 2014-Actual												
Accumulated Write Offs	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

(\$971,485) (\$1,032,542) (\$1,090,746) (\$1,211,789) (\$1,274,003) (\$1,346,942) (\$1,422,292) (\$1,282,217) (\$1,261,996)

(1,346,942)

(62,214)

(1,274,003)

(72,939)

140,075

(1,282,217)

(75,350)

(1,422,292)

Write Offs Acct Acct 57010015 & 57010016 Activity	166,632	103,175	195,588	157,626	176,533	132,001	18,198	53,483	(176,366)	49,087	119,929	46,159
Year 2013-Actual												
Accumulated Write Offs Acct 14300000 Beg Balance Acct 14300000 Activity (Provision) Acct 14300000 End Balance	Jan (\$656,222) (23,584) (679,807)	Feb (\$679,807) (20,968) (700,774)	Mar (\$700,774) 50,664 (650,110)	Apr (\$650,110) (72,510) (722,620)	May (\$722,620) 120,709 (601,911)	Jun (\$601,911) (521,559) (1,123,471)	Jul (\$1,123,471) 198,956 (924,515)	Aug (\$924,515) (96,501) (1,021,016)	Sep (\$1,021,016) (32,746) (1,053,762)	Oct (\$1,053,762) (263,590) (1,317,351)	Nov (\$1,317,351) (75,133) (1,392,484)	Dec (\$1,392,484) 420,999 (971,485)
Write Offs Acct Acct 57010015 & 57010016 Activity	71,144	55,278	(20,142)	66,536	(116,835)	513,577	(39,332)	143,405	62,986	319,496	196,761	(160,614)
Year 2012-Actual												
Accumulated Write Offs Acct 14300000 Beg Balance Acct 14300000 Activity (Provision) Acct 14300000 End Balance Write Offs Acct	Jan (\$542,769) 2,041 (540,728)	Feb (\$540,728) 92,771 (447,957)	Mar (\$447,957) 15,111 (432,847)	Apr (\$432,847) 72,927 (359,920)	May (\$359,920) 21,161 (338,759)	Jun (\$338,759) (27,375) (366,134)	Jul (\$366,134) (1,811) (367,945)	Aug (\$367,945) (42,514) (410,459) 83,871	Sep (\$410,459) (16,902) (427,361)	Oct (\$427,361) (60,157) (487,519)	Nov (\$487,519) (2,530) (490,049)	Dec (\$490,049) (166,173) (656,222)
Acct 57010015 & 57010016 Activity	100,982	(50,004)	19,197	(40,848)	10,759	81,227	3,427	83,871	55,259	112,795	55,711	164,330
Year 2011-Actual												
Accumulated Write Offs Acct 14300000 Beg Balance Acct 14300000 Activity (Provision) Acct 14300000 End Balance	Jan (\$406,809) (20,449) (427,258)	Feb (\$427,258) 89,173 (338,086)	Mar (\$338,086) (86,147) (424,233)	Apr (\$424,233) 33,527 (390,706)	May (\$390,706) (51,255) (441,961)	Jun (\$441,961) (16,107) (458,068)	Jul (\$458,068) (33,862) (491,930)	Aug (\$491,930) 32,598 (459,332)	Sep (\$459,332) (81,887) (541,219)	Oct (\$541,219) (3,245) (544,464)	Nov (\$544,464) (65,673) (610,137)	Dec (\$610,137) 67,367 (542,769)
Write Offs Acct Acct 57010015 & 57010016 Activity	87,859	(61,828)	114,295	(7,517)	120,006	58,110	67,972	(23,692)	139,649	5,662	157,056	(43,406)

Witness: Linda C. Bridwell

93. Reference the Kentucky American Water application generally. Itemize the customer accounting expenses included in the filing. For each category, provide the actual expenses in each of the past five years.

Response:

Please refer to the attachment.

Kentucky-American Customer Accounting Expense

<u>Account</u>	AC Name	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
52510015	Bank Service Charges - Customer Accounting	\$191,661	\$190,113	\$194,427	\$170,432	\$149,160
52520000	Collection Agencies	129,420	80,445	61,648	103,354	170,988
52542015	Forms - Customer Accounting	205,055	173,223	190,530	151,317	151,438
52566015	Postage - Customer Accounting	607,723	585,780	579,489	607,175	603,115
52514906	Customer Education - Bill Inserts	0	18,516	21,153	17,420	24,291
52501500	Misc Oper - Customer Accounting	(107)	0	0	1,352	1,054
Grand Total		\$1,133,752	\$1,048,078	\$1,047,248	\$1,051,052	\$1,100,045

Witness: Linda C. Bridwell

94. Reference the Kentucky American Water application. Provide all supporting assumptions, workpapers, and calculations underlying the forecast for customer accounting expenses, as discussed on page 18, beginning at line 21, of Ms. Bridwell's testimony.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items.

The largest increase was the adjustment for the credit card fee of \$318,900. Kentucky American is charged fees for credit card payment by the customer for payment of their monthly water bill. Please refer to the workpapers provided in response to Item 3 of the Commission Staff's first request for information. Also see the response to Item 95 of this same request.

Witness: Linda C. Bridwell

95. Reference the Kentucky American Water application generally. Did Kentucky American Water incur fees for credit card payments in the Base Period? If so, identify such fees and state the number of credit card payments in the Base Period as well as the projected percentage of credit card payments that the Company expects in the Test Period.

Response:

No, Kentucky American did not incur credit card payment fees in the Base Period. In September 2015, KAWC customers paid \$26,575 in credit card fees to a third party vendor. KAWC estimated that based on that amount, the forecasted credit card fees would be \$300,000.

Witness: Linda C. Bridwell

96. Reference the Kentucky American Water application generally. Itemize the estimated rate case costs for this proceeding and state how each component of the rate case cost claim was determined.

Response:

Please see the attachment for an itemized list of the estimated rate case costs and how each component of the rate case cost claim was determined.

Kentucky-American Water Company KAW_R_AGDR1_NUM096_032416 Estimated Rate Case Cost Components Case No. 2015-00418

		Estimated	
Service	Consultant	Cost	Origin of Cost
Cost of Capital (Rate of Return)	Financial Strategy Associates	\$35,000	Contractual cost for services rendered.
Weather Normalization	Edward Spitznagel	21,820	Contractual hourly rate charged for services rendered; includes expenses for attending hearings, travel, & other contingencies.
Rate Case Preparation	Service Company	177,000	Inflation of 5% applied to historical cost for services rendered.
Legal	Stoll Keenon Ogden	458,000	Inflation of 5% applied to historical cost for services rendered; includes cost for Towers Watson Compensation Study.
Cost of Service Study	Gannett Fleming, Inc.	77,550	Contractual hourly rate charged for services rendered; includes expenses for travel & other contingencies.
Depreciation Study	Gannett Fleming, Inc.	32,000	Contractual cost for services rendered.
Customer Notice		60,000	Estimate based on historical cost.
Miscellaneous		23,000	Estimate based on historical cost.
	Total Estimated Rate Case Expense	\$884,370	_

Witness: Linda C. Bridwell

97. Reference the Kentucky American Water application generally. Identify any regulatory commission expenses included in the Company's proposed revenue requirement, other than costs associated with the current rate case.

Response:

There are no additional regulatory commission expenses included in the Company's proposed revenue requirement, other than the costs associated with the amortization of rate case expense for Case No. 2012-00520 in the base period. Those expenses are fully amortized during the base period.

Witness: Linda C. Bridwell

- **98.** Reference the Kentucky American Water application generally. For each of the past three Kentucky American Water rate case filings, provide:
 - a. filing date,
 - b. test year,
 - c. the amount of the increase requested,
 - d. the percentage increase requested,
 - e. the amount and percentage of increase granted,
 - f. the average residential bill amount before and after the rate increase,
 - g. the average residential percentage bill increase,
 - h. whether the case was litigated or settled,
 - i. the total rate case costs incurred, and
 - j. the effective date of new rates.

Response:

Case No.	2012-00520	2010-0036	2008-00427
Filing Date	12/28/2012	2/26/2010	10/31/2008
Test Year	7/31/2014	9/30/2011	5/31/2010
Amount Requested	\$12,317,702	\$25,848,286	\$18,494,631
Percentage Increase	14.64%	38.00%	31.27%
Requested			
Amount of Increase	\$6,904,134	\$18,825,136	\$10,300,000
Authorized			
Percentage of Increase	8.08%	27.73%	17.33%
Authorized			
Average Residential	\$32.75	\$25.46	\$22.94
Bill Before			
Average Residential	\$36.30	\$32.59	\$26.73
Bill After			

Average Residential	10.85%	28.01%	16.56%
Percentage Increase			
Litigated or Settled	Litigated	Litigated	Settled
Total Rate Case Costs	\$701,178	\$596,360	\$417,097
Recorded			
Effective Date	7/28/2013	9/28/2010	06/01/09

Witness: Linda C. Bridwell

99. Reference the Kentucky American Water application generally. Provide a copy of all contracts with consultants or other third parties for rate case services claimed in this filing.

Response:

Please see the attached. The contracts are confidential and are subject to a petition for confidential treatment.

ATTACHMENT TO KAW_R_AGDR1_NUM099_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Linda C. Bridwell

100. Reference the Kentucky American Water application generally. Provide copies of all Requests for Proposal issued by or on behalf of Kentucky American Water with regard to the provision of rate case services in this case.

Response:

Please see the attached.



2300 Richmond Road Lexington, KY 40502 P 859.268.6373 F 859.268.6327

www.amwater.com

December 12, 2014

Mr. John Spanos, Vice President Gannett Fleming Valuation and Rate Consultants, LLC P.O. Box 67100 Harrisburg, PA 17106-7100

RE: RFP for Kentucky American Water Depreciation Study

Dear John:

Kentucky American Water requires an updated Depreciation Study ("Study) be prepared and filed in conjunction with our next rate case. The work requirement for this is as follows:

- 1. The basis of the study will be the same as last filed in the Company's last rate case.
- 2. We would like to continue to have one single set of depreciation rates for the water utility.
- 3. We currently have the same depreciation rates for all Water Divisions.
- 4. Sewer Divisions will not be a part of this upcoming rate case.
- 5. This will also involve the acquisition of the City of Millersburg Water and Sewer operation. This operation was purchased in 2014 and, upon acquisition, moved to the same consolidated depreciation rates as approved in the last rate case for water, with adopted depreciation rates for its sewer utility.
- 6. The depreciation study will be as of December 31, 2014.
- 7. The depreciation study will need to be completed by June 30, 2014. All initial direct testimony will need to be prepared no later than July 31, 2014.

If you are interested in providing expert testimony and performing the other work requirements noted above, please submit your response to this RFP by Wednesday, December 31, 2014. Your response should contain the following:

- 1. Total estimated cost "not to exceed" for work up to and including preparing and filing the study and direct testimony with the Kentucky Public Service Commission.
- 2. Hourly rates for Mr. Spanos and any Gannett Fleming Valuation and Rate Consultants ("Gannett Fleming") employee who would provide service to the

- Company related to the Study during the course of the rate case after it is formally filed.
- 3. General narrative discussion of your approach to the Study along with general data needs that you will require from the Company to complete the Study and time frame you will need responses returned to you in order to meet the schedule.

In addition to the scope of the work above, Gannett Fleming would be required to respond to data requests relating to the depreciation study, assist in preparing a response to an Attorney General expert report along with any other party in the proceeding, prepare rebuttal testimony and testify before the Kentucky Public Service Commission, if required. The hourly rates submitted under item 2 will be the basis for billing service performed beyond the filing of the study and testimony.

The study should include plant data through December 2014. A draft of the study will be required by June 15, 2015 and the final version of the study is needed by June 30, 2015. At the conclusion of the case, Gannett Fleming will provide the Company with a complete data file containing all the data (i.e. plant additions, retirement, etc.) used to perform the study.

If selected, Gannett Fleming would be required to meet all the time requirements and deadlines during the rate case.

Sincerely,

Linda C. Bridwell, PE

Manager, Rates & Regulation KY & TN

cc: Gary M. VerDouw

Sue Krohn



February 17, 2015

Mr. Paul Herbert Gannett Fleming, Inc PO Box 67100 Harrisburg, PA 17106-7100

Dear Paul,

Kentucky American requires a cost of service study and a related tariff design study prepared in conjunction with our next rate case. The Company plans to file the rate increase application on August 31, 2015. The revenue requirement calculation, cost of service study, and rate design need to be completed in time to file the application.

If Gannett Fleming is interested in preparing this study, please provide your response to this request for proposal by Tuesday, March 3, 2015.

Section A

The requirements of the studies are as follows:

- 1. Basis of study is Base Extra Capacity Method (including Sale for Resale Customers with special contracts and filing for DSIC approval).
- Adhere to Staff's recommendations for rate design and cost of service for Staff Report in current case.

Section B

The response to the RFP should include the following:

- 1. Total estimated cost "not to exceed" for work up to and including preparing and filing the studies and direct testimony.
- 2. Hourly rates for Mr. Herbert and any Gannett Fleming employee who would provide service to the Company during the course of the rate case after it is formally filed.

In addition to the scope of the work above, Gannett Fleming would be required to respond to data requests relating to the cost of service study and rate design, assist in preparing a response to the KYPSC Staff Report along with any other party in the proceeding, prepare rebuttal testimony and testify before the Commission if required. The hourly rates submitted under Section B will be the basis for billing service performed beyond the filing of the study and testimony.



Mr. Paul Herbert February 17, 2015 Page 2

Kentucky American Water has also been requested to review the possibility of changing the cost of service allocation for public fire service as a surcharge on all other rate classes. We would like to discuss with you the different approaches for reviewing this change.

The filing will use a 12 month test year ending March 31 2017 adjusted for known and measurable changes. Once the test year and rate base data are complete, you will be provided with an Excel spreadsheet that contains this data. The file can be used to begin developing the cost of service study model. This should be completed by July 9, 2015. The same file will be provided again which will include all proforma adjustments which supports the proposed revenue requirement. This should be completed by July 19, 2015. A draft of the cost of service study and rate design will be required by July 21, 2015, and the final version of the cost of service study and rate design is needed by August 3, 2015.

If selected, Gannett Fleming would be required to meet all time requirements and deadlines during the rate case.

If you have any questions, please give me a call.

Sincerely,

Linda C. Bridwell, PE

Rates and Regulation Manager, KY & TN

American Water Company

2300 Richmond Road Lexington, KY 40502

859-268-6373 (work)

859-537-0747 (cell)

Linda.bridwell@amwater.com



February 17, 2015

James Vander Weide Financial Strategy Associates 3606 Stoneybrook Drive Durham, NC 27705

Dear Jim:

American Water is planning to authorize the filing of a rate case for its water operations in Kentucky. We require expert testimony to support the Company's requested rate of return on equity. The work requirement for this is as follows:

- 1. Provide a recommendation for a return on equity supported by appropriate direct testimony and exhibits.
- Respond to data requests from Commission Staff, public counsel and interveners, as required.
- 3. Review and analyze direct, rebuttal, and Surrebuttal testimony of parties in the case (if required).
- 4. Prepare rebuttal and Surrebuttal testimony (if required).
- 5. Testify before the Commission on issues of equity return (if required).
- 6. Assist in preparing legal briefs (if required).

If Financial Strategy Associates is interested in providing expert testimony, please submit your response to this RFP addressing the following:

- 1. A discussion of your methodology and approach to support a return on equity.
- 2. A list of your qualifications.
- The cost to not exceed to provide a draft recommendation and testimony and a final recommendation and testimony to be filed with the Commission. Also, provide an hourly rate to be billed for services performed subsequent to the initial filing of the rate case.

We are planning to file the case on August 31, 2015. Your time frame is as follows:

ROE Recommendation 06/22/15 Draft Testimony 07/20/15 Final Testimony 07/31/15



James Vander Weide February 17, 2015

Please provide your RFP response to me by Tuesday, March 3, 2015.

advell

If you have any questions, please give me a call.

Sincerely,

Linda C. Bridwell, PE

Rates and Regulation Manager, KY & TN

American Water Company

2300 Richmond Road

Lexington, KY 40502

859-268-6373 (work)

859-537-0747 (cell)

Linda.bridwell@amwater.com

Witness: Linda C. Bridwell

101. Reference the Kentucky American Water application generally. Provide all supporting assumptions, calculations, and workpapers for the Company's claim for Insurance Other Than Group, discussed on page 19, lines 14-22 of Ms. Bridwell's testimony.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items, one of which was Insurance Other Than Group.

Insurance Other than Group for 2016 was calculated using the best estimate in coordination with our insurance brokers at the time the plan was established. The 2017 plan is based upon the 2016 plan increased by 6.30%. For the calculations, please refer to the workpapers provided in response to Item 3 of the Commission Staff's first request for information.

Witness: Linda C. Bridwell

102. Reference the Kentucky American Water application generally. Provide, separately by general liability, workers compensation and property insurance, the actual costs incurred in each of the past five years.

Response:

Please refer to the attachment for a five year history from 2011 to 2015 for the above mentioned policy premiums.

Kentucky-American Response to KAW_R_AGDR1_NUM102_032416

	<u>GL</u>	<u>wc</u>	Property	<u>Total</u>
2015	252,364	142,219	134,606	529,189
2014	209,401	163,926	138,719	512,046
2013	226,581	181,097	143,671	551,349
2012	212,222	162,845	114,738	489,805
2011	247,043	162,862	122,152	532,057
Total	\$1,147,611	\$812,949	\$653,887	\$2,614,447

Witness: Linda C. Bridwell

103. Reference the Kentucky American Water application generally. Provide all supporting assumptions, workpapers, and calculations for the maintenance, supplies and services expenses of \$2,215,590 per page 20, lines 1-4 of Ms. Bridwell's testimony, and state if labor is included in these costs.

Response:

The Kentucky American base period of May 2015 to April 2016 consists of six months of actual results (May 2015 to Oct 2015) and six months of forecast. The 2017 plan remained flat using the 2016 forecast numbers except for only a few expense items, one of which was Maintenance Supplies & Services.

All labor is included on the labor line. There is no labor included in Building Maintenance & Services. Building Maintenance & Services line was put together as stated above for 2016. The 2016 plan was used for 2017 plus a 2.00% increase. For calculations, please refer to the workpapers provided in response to Item 3 of the Commission Staff's first request for information.

Witness: Linda C. Bridwell

104. Reference the Kentucky American Water application generally. Provide, for each of the past five years, the actual the maintenance, supplies and services expenses incurred by the Company.

Response:

Please refer to the attachment.

Kentucky-American Maintenance Supply & Services Expense

Account	AC Name	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
62002100	M&S Maint - Source of Supply	\$114,196	\$41,750	\$95,499	\$12,021	\$30,511
62002300	M&S Maint - Water Treatment	317,204	300,870	349,085	130,953	181,038
62002400	M&S Maint - Transmission & Distribution	365,459	347,900	198,614	115,030	82,220
62002600	M&S Maint - Admin & General	23,736	23,238	22,733	22,695	22,029
62502300	Misc Maint - Water Treatment	0	2,954	3,410	1,793	117,182
62502400	Misc Maint - Transmission & Distribution	0	40,738	86,650	255,187	259,957
62502600	Misc Maint - Admin & General	0	110,737	128,577	163,783	209,861
62512300	Amort Def Maint - Water Treatment	176,505	133,941	116,150	116,150	112,880
62512400	Amort Def Maint - Transmission & Distribution	195,307	283,054	314,434	334,666	298,744
62520700	Misc Maint Paving/Backfill	207,985	136,512	98,871	199,073	113,703
63150026	Contract Svc-Other Maint - Admin & General	28,864	66,805	43,199	10,073	946
63150023	Contract Svc-Other Maint - Water Treatment	0	8,601	19,711	219,138	307,709
63150024	Contract Svc-Other Maint - Transmission & Distr	0	65,245	95,511	143,537	211,551
62502100	Misc Maint - Source of Supply	0	0	169	203	4,876
63150021	Contract Svc-Other Maint - Source of Supply	0	0	4,892	216,950	27,376
63110024	Contract Svc-Eng Maint - Transmission & Distr	0	0	2,708	1,354	0
63150022	Contract Svc-Other Maint - Pumping	0	0	899	(899)	0
62502420	Misc Maint - Transmission & Distribution - Mains	470	0	0	17,962	0
62502435	Misc Maint - Transmission & Distribution - Meters	0	0	0	0	201
Grand Total		\$1,429,727	\$1,562,346	\$1,581,112	\$1,959,670	\$1,980,784

Witness: Linda C. Bridwell

105. Reference the Kentucky American Water application generally. Provide the amount of expenses for memberships and dues included in the filing indicating the organization paid and the employees who participate (union, management, directors, etc.). Include both costs that are directly incurred by Kentucky American Water as well as costs allocated to the Company.

Response:

A list of organizations included in the filing is in the attachment to Item 46 of the Commission Staff's second request for information. The amount of memberships and dues included in the filing is \$100,793 for account 52540000-Co Dues/Membership Deductible for the forecasted Test Year ended August 31, 2017. Participants include non-union Managers, Directors, and other employees whose job may benefit from these memberships.

Dues and Memberships allocated to Kentucky American Water from the Support Services are \$34,212 in the forecasted test year. Participants include non-union Managers, Directors, and other employees whose job may benefit from these memberships. Please see attachment for the listing of allocated dues and memberships.

Kentucky-American Water Company Response to KAW_R_AGDR1_NUM105 AWWSC allocated Dues and Memberships list

Vendor/Description	Full name of Organization
ABIH.ORG	American Board of Industrial Hygiene
ACFE	Association of Certified Fraud Examiners.
ACMP	Association of Change Management Professionals
AICPA AICPA	American Institute of Certified Public Accountants.
AMER SOC CIVIL ENGINEERS	American Society of Civil Engineers
AMERICAN CHEMICAL SOCIETY	American Chemical Society
AMERICAN SOCIETY	
AMERICAN WATERWORKS	American Water Works Association
APAMEMBERDUESSUBS	American Planning Association
ASIS INTERNATIONAL ONLINE	American Socity for Industrial Security
ASSOC FOR FINANCIAL PRO	Association for Financial Professionals
ATD	Association for Talent Development
ATTORNEYCREDITS.COM	
BJ WHOLESALE Club	
CORPORATE EXECUTIVE BOARD	
CXO Media Inc	
E P EXECUTIVE PRESS INC	ExecutivePress.net
FCC	Federal Communications Commission
FINANCIAL ACCOUNTING STANDARDS	Financial Accounting Standards
FINANCIAL RESEARCH INSTITUTE	Financial Research Institute
Gartner	Gartner Inc.
GAWP	Georgia Association of Water Professionals
GOGOAIR.COM	Gogo Inflight Internet
GUIDESTAR USA INC	Guidestar USA INC
HAR HARVARD BUSNS REV	Harvard Business Review
HR Policy Association	intermetional Institute of Dusiness Analytics
IIBA	international Institute of Business Analytics
INST OF CERTIFIED MGMT INTERNATIONAL ULTRAVIOLE	Institute of Certified Management Accountants International Ultravoilet Association
INT'L ASSOC OF ADMIN PRO	International Association of Administrative Professionals
ISACA	Information Systems Audit and Control Association
ISC 2	ItT Certification and Security Experts
ITSMFUSA	IT Service Management Forum USA
Mississippi River Cities Towns	11 Service Management Forum OSA
MORPHO TRUST NJ ENROLLMEN	MorphoTrust USA
MSI MORNINGSTAR INC	Morningstar Stock Investor
MWC	Mobile World Congress
······································	Woshie World Congress
N.A.A.A.H.R.	National Association of African American American Resources
NATIONAL BUSINESS INST.	National Business Institute
NATIONAL SAFETY COU	National Safety Council
Nemertes	Nemertes Research
NFPA NATL FIRE PROTECT	National Fire Protection Association
NJ BOARD OF BAR EXAMINERS	
NJ SOCIETY OF CPAS	New Jersey Society of Certified Public Accountants
NOREX INC	Norex Inc.
NYS BAR ASSOCIATION	
ONLC TRAINING CENTERS	
PA ATTRNY REGISTRATN FEES	
PA PROF LICENSE FEE	Pennsylvania Professional License Fee
PAYPAL AMERICANIND AMERI	PayPal American in America
PENNSYLVANIA INSTITUTE OF CPA	Pennsylvania Institute of Certified Public Accountants
PENSACOLA AREA CHAMBER	Pensacola Area Chamber of Commerce
PROJECT MANAGEMENT INSTITUTE	Project Management Institute
PUBLIC COMPANY ACCTG OVERSIGHT	Public Company Accounting Oversight Board
Rockhurst STAR12	Rockhurst University Star12
SEC HOT TOPICS	SEC HOT TOPICS Institute
Shared Xpertise LLC	Shared Expertise LLC
SHRM	Society for Human Resource Management
	Contact of a land actual and Output in all Development
SOCIETY FOR I-O PSYCHOLO	Society for Industrial and Organizational Psychology
SOCIETY FOR I-O PSYCHOLO ST LOUIS REGIONAL CHAMBER	Society for industrial and Organizational Psychology

THE MISSOURI BAR

USC FCCCHR Foundation for Cross-Connection Control & Hydraulic Research

The institues of Internal Auditors

VMWORLD CONFERENCE VMWorld.com

SURVEYMONKEY.COM

THE INST OF INT AUDITOR

WEF WYTHE Water Environment Federation

WORLD AT WORK World at Work

Witness: Linda C. Bridwell

106. Reference the Kentucky American Water application generally. For each entity for which dues and membership expenses are included in the filing, identify any portion of dues or membership fees that are directed toward lobbying activities by the organization.

Response:

Please refer to attachment to the response to Item 46 of the Commission Staff's Second Request for Information. This response contains the May 2015 to Oct 2015 actual membership/dues listing. NAWC dues include lobbying fees but the total NAWC invoice is broken out and booked to different accounts. Account 52556000-Co dues & Memberships include only dues from the total NAWC invoice. Account 75840000-Lobbying Expenses include the portion of the NAWC invoice related to lobbying fees. No other organizations are known to include lobbying fees.

Witness: Linda C. Bridwell

107. Reference the Kentucky American Water application generally. Provide the amount of meals expenses included in the Test Period that are not deductible in the Company's income tax return.

Response:

There are none.

Witness: Linda C. Bridwell

108. Reference the Kentucky American Water application generally. Provide the pro forma Test Period depreciation expenses if the current depreciation rates had been utilized. Include an excel file with the Company's Test Period plant, by account, its current depreciation rates, and the resulting annual depreciation expense.

Response:

Please see KAW_R_AGDR1_NUM108_032416_Attachment for the pro forma test period depreciation expense calculated utilizing the current depreciation rates.

Kentucky American Water Company Summary of Depreciation Expense for the Forecasted Period Utilizing Current Depreciation Rates

Description	Amount
Life Depreciation	\$13,860,721
COR Accrual	2,313,992
CIAC Amortization Credit - Non-Tax	(1,502,224)
CIAC Amortization Credit -Tax	(297,870)
	\$14,374,619

281,770,01 688,688,52 ET8,8E2	262,870,0£ 0A8,078,5A 088,8£6	197,778,24 197,778,24 188,889	247,488,54 247,488,54 40,080,624	106'9E5	936'986 97'859'27 97'285'07	516'966 555'504'7#	576,080,01 576,080,01	626'986 469'614'Zb 980'980'01	965'965 97'924'Z#	EP6'986 56E'E84'Z#	42,740,351 42,740,351	5,90E 8,90E	T0790940 T0790940	00F90E 00F90E	Anamies T-qmi & soust-000 and 6 soust-000 and	TestalVV TestalVV TestalVV	0T 6
STZ'LLD'S	664'281'5	98E'9TI'S	896'001'5	575,290,2	601'560'5	Þ69'Þ60'S	875,460,2	E98'580'S	TAA, TTO, 2	260,620,2	997'510'5	2. DOE	10190420	DOSPOS	lanened-gmi & 154152-0023-00	1936W	II
778,847,2	73 OF OF C	952,227,2	SV0'VSL'S	268,227,2	458,725,2 052,01	EIP'654'S	202'194'S	266'Z9L'S	182'992'5	072,01	052.835,2	2.00E	05006101	0091/0E	PAYMONT & SAVES COSMOC	1936W	ZT
1,766,444	D/5'01	0/5'0I	0/5'01	0/5'01	072,01 MAA,887,1	0/5'01 0/5'01	072,01 072,01	1,766,444	045'01 045'01	012,01 012,01	045'01	5.00E	OSPORIDI OSPORIDI	001940E	2083/30-Struct & Imp-Store, Snop, Car	1936W	ÞT ET
215'255'1	E67, PEE, 1	1,337,074	956,666,1	ZE9'TÞE'T	816'676'T	661'90E'T	C84,846,1	192'05E'T	1,353,042	PZE'SSE'I	509'45E'T	2,00E	70790420	DOBNOE	MIN-UM & SILVER-CORNOR	Water	72
690'T58	S0Z'TS8	225,128	655,128	SSS, TZB	749'158	887,128	S06'TS8	120'258	861,138	822,254	176,528	S. ZOE	ODSGETDI	000506	aniovassa bruogmi & JasiloD-000206	1935W	91
650'S90'Z	650'TV0'Z	650,850,5 2,029,059	655'8TO'Z	980,110,5 981,173,81	655,800,S	605,169,£	605, (36, f	605,759,£	604, 108, 1	EOP, 178 91	651,258,1	Z.30E	00906101	30900	306000-Lake, River & Other Intakes	1916W	41
\$95'9Z9'E	161,7528,6 781,178,81	962'527'E 491'145'81	190'15E'E 941'145'HT	281,172,81 728,665,6	267,281,E \$91,178,81	856'Z£T'£	SIS,IV2,8I ESI,090,E	882,540,6 152,172,81	#5#'#10'E	619'956'Z 6EZ'TZS'ST	892,172,81 895,172,81	2,90E 2,01E	000TETOT 0000ETDT	309000	String Application (41)	Water	6T 8E
13,027,996	32,987,996	75,967,996	96Þ'056'ZT	12,937,996	964,256,51	15,915,246	312,238,21	12,815,246	32,285,246	12,715,246	966,188,51	S.I.IE	ODITEIDI	OOGTIE	Jnamqiup3 gniqmu9-000116	Water	SD
SDZ'464'9T	LEL'085'91	0,42,292,810	Z08'661'91	DEE, 100,81	Z98'998'ST	45,777,359	TE6'6Z9'ST	15,487,464	965'77E'SI	525'252'51	190'091'51	Z.I.I.E	OZITETOI	STISOO	311200-Pump Egp Electric	1936W	TZ
432,542	432,585	432,629	ET8,5Ep	917,554	432,760	E08,SE4	432,847	432,890	AEQ,SEA	TTE,SEA	ISO,EEA	Z.T.E	OELICIDI	ODETTE	377300-brump Eqp Diesel	Water	22
7,728	8ZL'L	821,7	827,7	AZT,T	827,7	827,T	827,7	821,7	827,7	BZT,T	827,7	S.IIE	OPTIETOL	STITES	synerative dos share goests	Water	EZ
(ESO'SZ)	(088,EZ)	(Z99'ZZ)	(p(p'tz)	(20,281)	(980'51)	(S58'Z1)	(202,81)	(605'ST)	(916/61)	(EST(ET)	[066,11]	S.IIE	ZSITETOT	SILSZO	Brigmu9 & 202-gp3 gmu9-052116	1936W	PZ PZ
EE9,88	BIT, TS	±09,T8	680,88	272,88	090,28	91/5'68	TEO,09	90,516	91,002	Z81/16	679,12	B.IIE B.IIE	PSITETOI	OPSILE	OT John Spring Brigmus-062116	Water	9Z SZ
45,942,576	45,968,895	46,003,213	SE2,8E0,3A	028,270,34	691'111'90	46,151,387	46,173,706	720'951'97	ZAE,815,8A	199'002'99	620'192'90	E.05E	10132010	320100	CI Juamquipa Brigmun-Unctic	1938W Yeller	27
742,340	742,340	742,340	ONE,SAT	742,340	0 pE'Z pZ	742,340	742,340	ONE,SAT	ODE, SAT	ONE, SAY	OAE,SAC	E.OZE	TOTETOT	320200	ALESAN VALID TO JOY OCCUCE	Water	82
956,177,1	1,771,358	856,177,1	856,177,1	SSE'TZZ'T	856'TLL'T	BSE'TLL'T	856,177,1	896,177,1	85E'TZZ'T	8SE'TAL'T	95E'T44'T	P.OEE	COCETOT	COCOEE	requirently in mischanie self-cooper.	Water	6Z
14,162,247	74,162,824	000'59t'pT	776,681,p1	D55'091'01	TET'S9T'bT	404'S91'DI	P8Z'99T'7T	198'991'11	TEP, T&1, pf	A10,881,91	T65'891'vI	b.OEE	10133000	OUTOEE	registered & sans toward-outset	Water	OE.
270,005,8	D71,681,6	892'941'6	99E'69T'E	97799748	£82,581,5	195'551'6	659'SET'E	ZSZ'STT'E	958,280,£	ES6'S40'E	155,620,E	P.OEE	00055101	330200	SANAT laws, brush-coocc.	Water	IE
916,80¢,1 925,817,80€	91E,380,1 8ET,058,TDE	815,880,1 815,661,50E	91E,090,1 60b, b23,30F	9ZE 2ZE 9GE	915,090,1 615,096,1	91E'950'T	91E,880,1	91E'960'I	915,860,1	91E,090,1	916,860,1	D.OEE	ODIEFIOI	000055	330A00-Clearwell	Water	32
(268,E)	6E1,0S8,10E (Q17,E)	(pSS'E)	\$666,628,805 866,628,805	(EST'E)	958,757,858 (899,27)	(287,5) E08,398,E0E	(165'7)	(IIVZ) 7II'S#9'706	301,178,042	(OPC'Z) T60'978'/67	059'006'962	P.IZE	ODIFETOI	100166	STOOTEE AND MAINS AIN & Less	Yatev Water	PE FE
(949)	(759)	(612)	(085)	(LVS)	(SIS)	(684)	(15b)	(EI+) (IIo'Z)	(98E)	(DAG,S) (AZE)	(ZZE)	PTEE	10135100	331200	HE BLUM SHAW GT-COSTEE	Water	SE
0	0	0	0	0	0	0	D from h	0	0	0	0	PITEE	OCTERIOR	937300	midt of migt smaller of cocted	Water	9E
(199)	(633)	(TC9)	(695)	(988)	(905)	(544)	(EA4)	(114)	(08E)	(826)	(916)	P.TEE	10133100	331400	AND B WES SHAW OF COLUMN	Water	LE
ETE, QIE, SE	142'091'25	691'850'25	990'996'15	PZL'S68'15	125'268'15	627,846,729	Z29'Z66'T5	722,484,12	221,126,12	708,8 pt, t2	209'210'15	A.EEE	DOEEETOT	OOGEEE	3230090-000000	Water	8E
014,8E8,2S	Z84,217,25	555,692,25	759,874,2S	DOT, 8 TE, 25	244,8SE,2S	582,006,25	728,272,857	017,S12,2S	287,211,25 4880 M	559'565'7Z	74,857,227	A.AEE	OIPEETOI	OUTPEE	CHAM-COLINE	Water	5E
(E21,7) (E22,7)	(518,81 (16,047)	(579,8) (550,8E)	(SEC,8) (SEC,8E)	(DPO'PE)	(ZEO, ZE) (OZP, Z)	(SEO'OE) (SOI'S)	(847,8) (850,85)	(82A,4) (0E0,82)	(880,A)	(TAT,E) (850,SS)	(EZO'OZ)	A.AEE A.AEE	OIMEETOI	DIIDEE	SALD SURVE CHARACTURES	Water	Tb Ob
(168,64)	(912,516)	(041,240)	(42,764)	(40,368)	(38,012)	(ZE9'SE)	(33,261)	(388,0E)	(505'87)	(56,134)	(821,ES)	A.AEE	OTMEETOL	OEINEE	334730-Wester Daves 234730-Wester Valles Cone	1936W	20
(83)	(68)	(68)	(08)	(9L)	(14)	(29)	(59)	(85)	(68)	(6)	1441	A.AEE	OTAGETOT	TEIDEE	SEATED Meter Reading Units	1916W	43
25,946,835	737,759,55	081,646,65	23,950,602	23,952,025	Z##'ES6'EZ	23,954,870	23'926'535	21,729,52	ZET'656'EZ	23,960,560	Z96'196'EZ	A.AEE	10133420	334200	enoiselleteni 1939M-00SAEE	ValeV	44
D99'296	SZI'996	019'996	960'695	185'696	490'056	522,029	4E0'IS6	625'IS6	800'ZS6	269 PRP 61	676,528	A.NEE	OTACETOL	334300	STILLEY 1959MI-00EDEE	Water	57
692,82 087,50E,0S	692,84 60,263	50,141,941 20,141,941	20,076,271 E85,883	E92'96	ZEZ'E86'61	864,458,91 685,458	HZ9'LLL'61	592'96 592'808	666°959'61	692'96 465'980'61	E9Z'96 /pT'E6E'6T	A.25.5	OTSECTOT OGSECTOT	OCCUSE	335000-Hydrants 339100-01her P/E-Intangible	1936W	7.2 7.2
ATA, EET	225,224	A78, AST	DZC,OZC	601,711	PTTATT	562'TT2	PZ8,807	P15,807	AST,EOT	PZP'659	22,269	I,eEE	DISERIOI	009666	333600 Other P/E-CPS	1956W	84
984'050't	602'796	44E'696	PDS'048	559'558	£29'098	160,204	276,287	045,077	801,217	278,087	£10'981	5,0a£	T0134010	OCTORE	quebli & snuthmus soliko cozone.	1916W	67
895'958'T	1,854,558	895'¢58'ī	895'VSB'T	895'Þ58'T	895'\$58'I	895,428,1	1,854,568	895'558'I	895,428,1	895'58'T	895,486,1	S.046	10134010	340200	Section Comp & Periph Souls	Water	05
(25,45) (25,45)	(ESL'IEZ)	(250,165)	(208,52) (508,52)	(252,85) (088,881)	(ELT, PE)	(PIB,ETI) (BBI,ES)	(%55,5df) (\$50,f5)	(620'051)	(SE2,81)	(156'91) (157'484)	(578,211) (254,211)	8.04E	OIDMEIDI OIDMEIDI	340230	340230-Comp & Periph Persons 340230-Comp & Periph Other	1916W 1916W	25 16
D	0	0	0	0	0	0	0	0	0	0	0	2.0AE	DIDAELDI	340240	MODIO COME & PRIOR CALLED LINES	1916W	ES
1,647,850	T69'6Z9'T	M81,862,1	929'985'1	3,546,346	1,521,282	1,534,228	484'E95'T	199'295'1	1,532,944	TEL'ZIS'T	698'999'T	2.04E	CTOPETOT	00E0ÞE	340300-Computer Software	Water	b2
174'504'11	TZZ'SDZ'Tl	124'504'11	TZZ'SÖZ'TT	TZZ'SOZ'TT	124'504'11	17/50/11	TZZ'SOZ'TT	127,207,11	127,204,11	12/50/11	127,207,11	5.0AE	10134010	STEOPE	360375-Computer Software - BT	Water	95
(219.2)	(827.5)	1959 51	0.005 67	(198 2)	100001	(EBO C)	(996 1)	1908 17	(1299 1)	1862 11	(985 1)	2.0ae	OTOMETOF	GZEONE STEONE	MODES CONTRACTOR SECTION	TateW	95
(001,5)	(1/5'Z) (8//'Z)	(2,443)	(5,914) (2,500)	(981'Z) (195'Z)	(2,22,2)	(826'T)	(1,944) (1,944)	(129'1) (908'1)	(£95'T)	(975'T)	(982°T)	2.0AE 2.0AE	OIDMEIDI	SZEOPE	340330-Comp Software Other	Water	85 /S
185€	896'9	SSE'7	247,4	6Z1'S	915'5	P06'5	162'9	829'9	590'Z	7,452	568,7	2.0AE	TOTAMOTO	0050ÞE	IMMEDIANCE SOURCE SOURCE	1916W	65
584,848,1	IEI,808,1	941,187,1	ZZ9'SEZ'T	1,762,967	£91'292'1	850'064'T	1,821,753	1'849,049	1,876,344	099,508,1	SE6'0E6'T	SILAE	10134100	SALLOO	341100-Trans Equip Lt Duty Trks	Water	09
Z88,808,Z	999'555'7	120,020,5	588, h26, S	2,468,120	\$2,458,254	684,174,5	EST, A8A, S	856'469'Z	ZET'TTS'Z	754,452,5 2	T99'ZES'Z	S TAE	COIPEICI	341200	341200-Trans Equip Hvy Duty Trks	Mater	19
969'998 166'08 7	418,278	866,878 866,878	297,288	67.1 168 57.1 168	157,54Z 274,751	E86,872	STO,585	144,285	285,279	116'25Z	EP2,895	2.1AE	10134100	DOLLAE	sotuA quip3 snesT-00EIAE	1916W	29
8Z9'Þ9	Z59'1/9	999'99	514'09	502'09 671'168	9/LL'79 662'/68	E08,868 94,809	268,48 042,609	798'89 199'516	168'99 78/'176	DZ6'59 Z06'476	696'99 670'966	5.5AE	10134200	347400	342600-Stores Equip Other 342000-Stores Equipment	1956W	₽9 E9
196,408,5	£88,£97,£	2,707,905	726,488,5	2,656,949	176,848,571	Z66'S99'Z	2,646,014	9/6/549,5	864,858,5	2,626,520	Z45,E03,S	2.EAE	COEMETOI	OODE NE	qiup3 əgərs2,qarl2,zlooT-000£b£	1916W	59
1,228,743	954'DEZ'T	1,232,768	1,234,781	E64, aE5, f	1,238,806	1,240,818	1,242,831	1,244,843	1,246,856	898'8tZ'T	199'052'1	2.44.5	00000000	000146E	3namqiup3 ynotstodsJ-000AAE	Water	99
TTA, ABE, I	674'P9E'T	120,286,1	E95,236,1	P95'596'T	968,286,£	801'996'T	O85,885,f	159'996'1	£26'99£'T	561'49E'T	7.00, T.00, T.00	5.266	COSPETOT	GOOSPE	Inamiglip3 balarago rawo9-000266	Water	49
A78,755 SPE,098,E	814/208/6 599/152	469,055Z	0/8'04/E	2,720,641	EE9'44Z EE9'44Z	7.87,207,E	818,225 818,225 818,225	896'549'E 809'657	3,641,024	001,808,E	9/1/909'E	2.84E 2.84E	COSPETOI COSPETOI	06199E	346190-Comm Equip Non-Telephone 346190-Remote Control & Instrument	Water	59 99
E3E,38	999'98	996'98	782,78	695'48	078,78	271,88	E74,88	277,88	970,68	875,68	649'68	3.65.5	009NETQT	946200	346200-Comm Equip Telephone	YateV	04
1,688,804	865,683,I	161'069'T	J'690,885	625'169'T	£75,560,1	1'692,967	099'E69'T	DSE, 960, I	1,695,048	794'569'T	3£4369,1	2.TAE	10134700	347000	347000-Misc Equipment	Water	LL
	CCA, CE.	116,917	TAL MET	099'961	621361	\$59.96.2	KED PET	629'661	133,122	EXASES	££9,441	2485	COSPETOT	0008AE	948000-Other Tangible Property	Water	7.7
(C##E)		001/009/0995	CUDITY CROS	588, PC 5, 1882	128 696 1995	900 150 HCRS	169762172295	5617565195	ERE 995 PCS5	21E198'6995	857/262/8995						

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	304200-Struct & Imp-Pumping	19,927	19,924	19,922	19.920	19.918	19,916	19,913	19,911	19,909	19,907	19,905	19,902	2385
1,552 1,55	304300-Struct & Imp-Treatment	87,618	87,603	87,589	87,575	87,561	87,546	87,532	87,518	87,504	87,489	87,475	87,461	1,050,472
1,177. 1,189. 1	304400-Struct & Imp-T&D	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952	23,4
1,11, 1,1, 1,11,	304500-Struct & Imp-General	11,795	11,889	11,932	11,952	11,972	11,973	11,974	11,974	11,987	12,019	12,180	12,857	144,5
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	304600-Struct & Imp-Offices	9,181	8778	9,176	9,173	00,8	9,167	9,154	191'6	9,159	9,156	9,23	9,20	109,981
1,12, 1,12	304700-Struct & Imp-Storn Shop Gar	2.988	2.988	2.988	2 988	2 588	2.988	2.988	2.988	2.988	2.988	2 988	2 988	35.8
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up 1572 3.58 3.58 3.41 3.48 3.41 3.48 3.41 3.48 3.41 3.48 3.41 3.48 3.41 3.48 3.41 3.48 3.41 3.48 3.41 3.48 3.44 3.48 3.44 3.48 3.44 3.48 3.44 3.48 3.44 3.48 3.44 3	305000-Collect & Impound Reservoirs	945	945	944	A	200	200	944	70	Ä	E	943	943	11,
1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	306000-Lake, River & Other Intakes	3,152	3,207	3,258	3,310	3,361	3,412	3,433	3,436	3,448	3,466	3,487	3,528	707
1877. 1887. 1887. 1887. 1887. 2004. 2007. 2016. 2017. 2016. 2017.	309000-Supply Mains	30,952	30,952	30,952	30,952	30,952	30,952	30,952	30,952	30,952	30,952	30,952	30,952	371,2
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	311000-Pumping Fourierrant	18.731	19,815	19.893	19.970	20,048	20126	20.158	20,162	20.181	20,208	20.240	20 302	240.
12 12 12 12 12 12 12 12	311200-Pump Egp Electric	23,624	23,769	23,913	24,135	24,357	24,579	24,723	24,945	25,245	25,345	25,845	26,176	386
11 12 12 12 12 13 13 13	311300-Pump Eqp Diesel	678	678	678	678	678	878	878	678	678	878	678	879	8,136
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	311400-Pump Eqp Hydraulic	12	12	12	12	12	12	12	32	12	12	12	12	
1,150, 1,150,	311520-Pump Eqp-SOS & Pumping	(20)	(22)	(24)	(56)	(28)	(30)	(32)	(35)	(36)	(96)	(40)	(42)	_
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	311530-Pump Egp Wir Treatment	155	0 150	152	0 (2)	D ()	183	0 5	1.49	148	147	147	346	
15,00 15,0	MOTOR No. Media	83,271	83,233	83,193	83,153	83,113	83,072	83,011	82,937	82,869	82,806	82,744	82,697	966
931 1517 1517 1518 1518 1518 1518 1518 151	320200-WT Equip Filter Media	15,020	15,020	15,020	15,020	15,020	15,020	15,020	15,020	15,020	15,020	15,020	15,020	180
1912 1913	330000-Dist Reservoirs & Standpipes	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	20
1,512 1,524 1,525 1,526 1,52	SXIDO-Deviced Tarks & Sandapes	19,128	721,91	19,126	19,125	19,124	19,124	19,123	19,122	19,121	19,121	19,120	19,119	229
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	SOCOGONG LINE STREET	3,513	3,537	1 536	3,583	3,505	3,629	3,638	3,639	3,045	1 535	3,002	3,680	27
1,	331001-T&D Mains	356,281	357,391	362,134	363,172	364,039	364,675	367,353	367,653	367,985	368,560	369,385	370,456	4,379
Color Colo	III 100-TO Mains Ain & Less	(2)	(2)	(3)	(3)	(3)	(E)	(4)	(4)	(4)	(4)	(4)	(5)	
1, 10, 10, 10, 10, 10, 10, 10, 10, 10,	331200-TD Marrs 6/4:10 En	(0)	(0)	(0)	(1)	(1)	3	(1)	(1)	(7)	(1)	(1)	(1)	
6271 612 612 612 612 612 612 612 612 612 61	331300-TD Mains 10in to 16in	0 3	0 8	0 3	0 3	0 3	0 3	0 2	0 8	0 8	0 8	0 8	0 8	
1, 10, 10, 10, 10, 10, 10, 10, 10, 10,	SECOND CONTRACTOR	97.63	(0)	(0)	(0)	(1)	(1)	(T)	(1)	(T)	(1)	(1)	(T)	250
Fig.	334100-Meters	50.543	50.833	\$1.069	51,266	51,388	51,444	51,502	51,559	51,809	51,991	52,288	52,535	618
1,100 1,10	334110-Meters Bronze Case	6	(8)	(8)	(6)	(01)	(11)	(11)	(12)	(13)	(13)	(14)	(15)	
Color Colo	334120 Meters Plastic Case	(49)	(54)	(53)	8	(69)	(24)	(52)	(84)	(68)	(36)	(86)	(103)	
1,100 1,10	334130-Meters Other	(52)	(57)	(63)	(89)	(73)	(78)	(8)	(69)	<u>8</u>	(66)	(105)	(011)	
1,155 1,15	334131-Weter Reading Units	50 520	(0)	50 514	101 50 511	80508	50.505	50 502	50.499	50.496	50.493	50.490	50.487	909
1,5,22 1,5,54 1	334300-Meter Vaults	1,969	1,968	1,967	1,986	1,965	1,964	1,963	1,962	1,961	1,960	1,959	1,958	EZ.
1,155 1,155	335000-Hydrants	19,232	19,322	19,491	19,562	19,613	19,659	19,817	19,865	19,909	19,974	20,048	20,134	238
9.011 9.024	339100-Other P/E-intangible	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	2,556	1,556	P 19
1,571 1,524 1,524 1,524 1,525 1,52	Sassou-Ciner P/C-Crs	3775	3.254	4 2 9 9 2	80E,0	3,190	3 168	3,586	2,464	4 061	B/m/B	4.018	4 544	43
1,531 1,534 1,53	MOZOCOTO & Perizh Squip	0	0	0	0	O	0	0	0	0	0	0	0	
Carlo Carl	34000Comp & Person Personal	(1,931)	(2,124)	(2,318)	(2,513)	(2,704)	(2,897)	(3,090)	(3,283)	(3,476)	(3'669)	(3,863)	(4,056)	(35)
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	340230-Comp & Periph Other	(257)	(283)	(306)	(332)	(360)	(386)	(412)	(438)	(463)	(489)	(515)	(541)	p)
17 17 17 17 17 17 17 17	340240-Comp & Penph Capital Lease	74.447	0 212 50	25 549	26.044	26.063	25 570	25 355	25,773	25.410	26.653	27.158	27.464	115
1	340315-Computer Software - BT	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	1,170
	340320-Comp Software Personal	0	0	0	0	0	0	0	0	0	0	0	0	
	340325-Comp Software Customized	(23)	(52)	(28)	(30)	(32)	(32)	(37)	(33)	(42)	3	(45)	(49)	
1,10 1,10	340500-Other Office Forlingent	(22)	[87]	(07)	(g) C	(36)	(35)	8 8	(ac)	26	24	22	(45)	
2,713 2,441 2,41	MILES fram four III Daty Tres	3,073	3,030	2,987	2,943	2,900	2,856	2,813	2,806	2,763	2,803	2,878	2,942	26
2477 2 44 2 54 1	Sel 200-Trans Equip Hey Duty Tres	5,815	5,785	5,755	5,724	5,694	5,664	5,633	5,656	5,626	5,716	5,856	5,981	89
1,200 1,20	341300-Trans Equip Autos	2,471	2,441	2,411	2,380	2,350	2,320	2,290	2,458	2,427	2,850	3,458	4,008	E 4
1,044 1,05	342000-Stores Equipment	215	215	216	216	215	216	216	216	216	216	215	225	r ri
### 2,877 2,871 2,871 2,872 2,873 2,873 2,873 2,873 2,884 2,884 2,875 2,884 2,887 2,884 2,887 2,884 2,887 2,884 2,887 2,884 2,887 2,884 2,887 2,884 2,	343000-Tools, Shop, Garage Equip	10,848	10,944	10,994	11,017	11,025	11,025	11,037	11,071	11,187	11,283	11,516	11,685	133
### 1,570 1,487 1,487 2,599 2,589 2,	344000-Laboratory Equipment	6,953	5,942	6,930	6,919	808'9	6,897	988'9	6,875	6,863	6,852	6,841	6,830	82,
### 20,044 20,044 20,131 20,131 20,131 20,131 20,131 20,139 20,131 20,13	MODO Fower Doctobed Discoment	2,872	2,871	2,871	2,870	2,869	2,869	1,375	1 354	1 337	1310	1 288	2,865	24 J
488 487 485 483 482 489 488 487 485 443 482 480 1051 1051 1051 1051 1051 1051 1051 10	M6190-Servote Control & Instrument	20,044	20,044	20,238	20,432	20,571	20,598	20,625	ZD,681	20,791	20,958	21,152	21,346	247,
7,066 7,066 7,063 7,067 7,054 7,051 7,048 7,045 7,042 7,040 7,037	H6305-Comm fiquis Telephone	498	497	495	493	492	490	488	487	485	483	482	480	S.
	347000-Misc Equipment	7,068	7,066	7,063	7,060	7,057	7,054	7,051	7,048	7,045	7,042	7,040	7,037	88

301000-Organization										c	c	c	
	0	0	0	0	0	5	0	0	0	3	3	2	
902000-Franchises	00	a c	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
SUSCIONARIO DE LANG Nights-Supply	5 0	0 0	9 0	0	0 0	0 0	0 0	0 0	0 0	9 0	0 0	0 0	
903400-Land & Land Rights-Treatment	0	0	0	0	0	0	0	0	0	9 0	0 0	0 0	0
303500-Land & Land Rights-T&D	0	0	0	0	0	0	0	0	0	0	0	0	
904100-Struct & imp-Supply	2,604	2,614	2,624	2,634	2,644	2,654	2,658	2,659	2,661	2,664	2,658	2,676	31,76
304200-Struct & Imp-Pumping	4,036	4,035	4,035	4,034	4,034	4,034	4,033	4,033	4,032	4,032	4,031	4,031	48,40
S04500-Struct & Imp-Ireadment	17,452	17,449	17,047	17,444	19/41	17,438	17,435	17,432	17,430	17,421	17,424	17,421	203,20
ACCOUNT OF THE PERSON	586	102	592	201	101	101	101	101	101	297	101	101	717
204600-Struct & Imp-Offices	481	481	480	480	480	480	480	480	480	479	479	479	5,759
SAMPLE STATES OF THE SAMPLE ST	0	٥	0	0	0	0	0	0	0	0	0	a	
904700-Struct & Imp-Store,Shop,Gar	0	0	0	0	0	0	0	0	0	0	O	0	
404800-Struct & Imp-Misc	209	208	203	202	206	202	204	503	505	200	105	200	6,053
305000-Collect & Impound Reservoirs	0	0	0	0	0	a	0	0	0	0	0	0	
306000-Lake, River & Other Intakes	0 100 0	0	0 100	0	0 200	0 1000	0 300 2	0 100	0 200 2	0 00 0	0 000	0 1000	
SUSPECION DELL'ARTING	cen's	ERO'S	SEO'S	5,045	5,080	SKO'E	SECURE OF	Seu's	2,035	CEO's	ckn's	5,035	37,142
at 1000-Pumping Equipment	4009	4.026	4047	4.058	4.074	4 090	4.096	4.097	101.6	4107	4713	4126	356 970
311200-Pump Eqp Electric	4,801	4,830	4,859	4,904	4,949	4,995	5,024	5,069	5,130	161,2	5,252	5,319	60,323
311300-Pump Eqp Diesel	137	137	137	137	137	137	137	137	137	137	137	137	1,645
311400-Pump Eqp Hydraulic	0	0	0	0	0	a	0	O	D	0	0	a	
311520-Pump Eqp-SOS & Pumping	4	4	ıņ	Νņ	ф	49	1-	-7	-7	ф	œp.	op.	(94)
311530-Pump Eqp Wtr Treatment	0	0	0	0	o	o	0	0	0	0	o	0	
311540-Pumping Equipment TD	31	E :	16	E .	31	18	8	30	06	8	8	8	396
SZOZOC-WT Equip Non-Media	16,517	16,5/0	16,552	16,554	15,546	16,538	16,525	16,511	16,497	16,484	16,472	16,463	198,79
MONTH SHOWING STREET	9 0	0 0	0	0	0	0 0	0 0	0 0	9 0	0 0	0 0	0 0	
MOTOD devides Tomas & translations	4 841	4 841	4.841	A 840	4 840	A BAD	4 840	4 840	A H39	4 639	A 839	4 890	58.078
310000 depart level Tarks	0	0	0	0	0	0	0	0	0	0	0	a	
330400-Clearwell	0	0	0	0	0	0	0	0	0	0	0	o	0
331001-T&D Mains	54,432	54,601	55,326	55,485	55,617	55,714	56,123	56,169	56,220	56,308	56,434	26,597	669,027
222200-TO Mains 4th & Lens	0	0	0	0	0	7	7	7	-1	Ę.	7	7	
331200-TD Mains 6in to 8in	0 (0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	D (0 (0 0	£ (
331300-TD Mains 10in to 16in	0 0	0 (0 0	0 0	0 (0 0	0 0	0 (0 (0 (0 (0 (
A33000-Services	83.766	DE9.59	54.189	54.783	54 377	54433	64.791	64.870	256 19	92 089	65 225	85.399	775 79
334100-Weters	4,971	8,000	5,023	5,043	5,055	5,060	5,066	5,075	5,096	5,114	5,143	5,167	60,81
334110-Meters Bronze Case	7	7	7	7	4	7	4	7	1.	7	7	7	(1)
334120-Meters Plastic Case	aņ s	φ	9	-7	1.	op I	ep 1	o,	9	0.	-10	Į.	6)
334134-Weiers Coner 434131-Meter Reading Units	Ů C	o c	ę c	, -	, .	p c	p c	ņ c	ņ c	07-	OT-	-11-	(96)
334200-Meter Installations	4.992	4.992	4.991	4.991	4.991	4.991	4.990	066.9	4.990	4.989	4.989	4.989	59.885
334300-Meter Vaults	199	196	198	198	198	198	198	198	198	198	198	197	2,376
335000-Hydrants	4,848	4,871	4,914	4,932	4,944	4,956	4,996	5,008	5,019	SE0'S	5,054	5,076	29,65
339100-Other P/E-Intangible	0	0	0	0	0	0	0	0	0	0	0	0	
339600-Other P/E-CPS	o e	0	0 1	0	0 1	0	0 (0 +	0	0	0 1	0 1	***
SAULUCCHICE FURITIVE & Equip	9 4	9 6	9 4	0.0	9 (9 4	0 (0 0	0 (9 (D 1	m 4	
Section of Period Section	9 6	9 6	9 6	9 0	9 0	9 0	3 0	0 0	9 0	2.0	9 6	9 (0	
MOSS Come & Prices Other	- 69	0	. 0	e	0	9.69	- 0	0	0	0	n	. 0	
340340-Comp & Person Capital Lease	q	0	0	a	0	0	0	0	0	0	0	0	
340300-Computer Software	0	0	0	0	0	0	0	0	0	0	0	0	
340315-Computer Software - BT	9	0	0	0	0.	0	o	0	0	0	0	0	
MOSSICOMO Software remonal	9 1	0 1	8 4	9 (0 1	0.4	0 1	0 1	0 1	0 1	n e	0.3	
MODEL COMPANY CARGOLINE	9 0	0 6	9 6	0 (0 6	9.0	0.6	0 0	0 0	9 6	0 (9 6	
340500-Other Office Equipment	9		10	0	10	10	0	0	0	10	0	0	0
341100-Trans Equip Lt Duty Tries	-611	-603	-594	-586	-577	-568	-560	-558	250	-558	-573	585-	(6,923
341200-Trans Equip Hvy Duty Trits	138-	-883	-828	-853	-849	-844	-840	-843	-839	-852	-873	-892	(10,273)
MURDO-Trans Input Autos	-37.1	•366	-362	-357	-353	-348	-343	-369	-364	428	-519	109-	(4,780)
SkildO-Tram Equip Other	0	0 (0	0	0	0 (0 1	0 +	0 1	0 1	0 1	0	a
34.2000-Stores Equipment	0 0	0	0 0	0	0 0	0 0	0 0	0 (0 0	0 0	0 0	0 (
344000-Laboratory Equipment	9 0	0	9 0	o	0	9 0	9 0	0	0 0	0 0	0 0	o	
30000 Power Operated Equipment	433	433	-433	-433	433	433	433	432	432	432	-432	432	(5,191)
345100-Comm Equip Non-Telephone	a	0	0	0	0	0	0	0	0	0	0	0	
\$46290-Remote Control & Instrument	0	0	0	0	0	0	0	0	0	0	0	0	0
346200-Comm Equip Telephone	0		5									,	
			3	0	3	0	0	a	0	0	o	0	

Company Comp	Account	¥ 64	90-10	New-36	Dec-18	lan-17	Feb-17	Mar-17	Agr-17	Marcil	78,000	Jun 27	Ampath	Expense
March Marc	902000-Franchises	9 0	0	D C	(v o	0 0	. 0	D C	n	a	0 0	(h c	9 0	
1,100, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,	60300 Land & Land Reints Supply	0	0	0	0	0	0	0	0	a	• 0	0	0	
1, 10, 10, 10, 10, 10, 10, 10, 10, 10,	03300-land & Land Rights-Pumping	0	0	0	0	0	0	0	0	0	0	0	0	0
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	DMOULTS & Lond Report resonent	0	0	O	0	O	0	0	D	0	0	0	D	0
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	03300 and & and Report AD	0	a	O	D	0	0	0	0	0	٥	a	٥	0
1,000.00.00.00.00.00.00.00.00.00.00.00.00	MATCH STATE STATE STATE OF	53,291	53,510	53,713	53,915	54,119	54,322	54,403	54,412	54,452	56 53	54,612	54,774	650,067
1,11,11 1,11,11 <t< td=""><td>MANAGEMENT & PRO-Trainment</td><td>105,070</td><td>105,053</td><td>105.036</td><td>105.019</td><td>105.002</td><td>104.985</td><td>104.968</td><td>104.950</td><td>104.933</td><td>104.916</td><td>104.899</td><td>104.887</td><td>1,259,713</td></t<>	MANAGEMENT & PRO-Trainment	105,070	105,053	105.036	105.019	105.002	104.985	104.968	104.950	104.933	104.916	104.899	104.887	1,259,713
1,2,2,21 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,24 1,2,2,2,2 1,2,2	SCHOOL SIMP-T&D	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	24,641
1,100, 1	304500 Street & trap General	12,381	12,479	12,524	12,545	12,566	12,567	12,568	12,559	12,582	12,615	12,784	13,495	151,677
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	SOMOD-Struct & Imp-Offices	9,662	859'6	9,656	9,653	9,650	9,647	9,644	9,641	9,638	9,635	9,632	9,629	115,746
515.8. 515.8. 515.8. 515.9.<	MARKET SCORES & TTO-1974C	77	7,080	2000	77	77	2000	27	7.086	17	7000	72 088	77 088	202
1,100 1,10	MANOS Street & Pro-Miss	25.634	5,625	5.615	5,606	5.596	5.587	5.577	5.568	5,558	5.549	5,530	5,530	26,98
1,12, 1,224 1,22	000000 Cased & Impound Reservoirs	945	945	944	944	944	944	944	944	944	944	943	84g	11,328
March Marc	000000 Late, River & Other Imparts	3,152	3,207	3,258	3,310	3,361	3,412	3,433	3,436	3,448	3,466	3,487	3,528	40,499
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	309000-Supply Mains	720,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	408,566
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	110000 Fower Generation (quick	7,322	7,317	7,360	7,428	7,545	7,662	6/1/2	7,895	8,134	8,373	8,612	8,851	94,279
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	111000-Pumping Equipment	23,740	23,841	23,935	24,029	24,122	24,216	24,254	24,259	24,282	24,315	24,352	24,427	289,773
11 12<	11300-Pump End Diese	816	815	815	815	815	815	9,5	B15	815	815	21°0'70	815	9.787
1, 10, 10, 10, 10, 10, 10, 10, 10, 10,	311400-Pump Eqp Hydraulic	12	j	12	15 2	12	3 23	12	12	្ន ជ	12	12	3 3	147
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	311520-Pump Eqp-SOS & Pumping	-24	-23	-28	-31	-34	-35	96-	4	E.	48	-48	.51	(449
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	311530-Pump Eqp W/tr Treatment	0	0	0	0	0	0	0	0	0	0	0	0	0
1,500	311540-Pumping Equipment TD	186	185	184	183	182	181	180	179	178	200	176	175	2,170
1,450 1,55	SOCIO- Carlo Aller Media	15,020	15,020	15,020	15,020	15,020	15,020	15,020	15.020	15.020	15.020	15,020	15,020	180.240
1398 1389	MODOO Dut Reserveirs & Standarpes	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	29,405
1,133 1,135 1,13	130100 General Tario & Standaloes	23,969	23,968	23,967	23,966	23,965	23,964	23,963	23,962	23,961	23,960	23,959	23,958	287,558
1,155 1,15	DODGO Graund level Tants	3,513	3,537	3,560	3,583	3,606	3,629	3,638	3,639	3,645	3,653	3,662	3,580	43,345
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	ADDOCCUSTORS	1,535	1,535	1,535	1,535	1,535	1,535	1,535	1,535	1,535	1,535	1,535	1,535	18,418
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	130100-TD Malms Am & Lens	e.	5	E.	6,	4	4	4	9	49	5-	5	5-	(48
17.75 17.7	SECOND Maint on to Sin	0	0	r,	7	7	4	77	17	ř.	77	7	Ÿ	9)
1777 1778 1779	33300 TO Main, 15m to 16in	0	0	0	0	0	0	0	0	0	0	0	a	0 ;
65 55 4 55 56 8 55 60 8 55 60 9 55 60 9 55 50 9 <t< td=""><td>TOTAL CONTRACT THE BUTTON OF THE PARTY OF TH</td><td>127 537</td><td>127.867</td><td>128 428</td><td>128 586</td><td>128744</td><td>1-128.867</td><td>129 531</td><td>179 749</td><td>129 910</td><td>130.133</td><td>130.451</td><td>130 798</td><td>985 055 1</td></t<>	TOTAL CONTRACT THE BUTTON OF THE PARTY OF TH	127 537	127.867	128 428	128 586	128744	1-128.867	129 531	179 749	129 910	130.133	130.451	130 798	985 055 1
4 6 7	S38100 Meters	55,514	55,833	56,092	56,308	56,443	56,504	56,568	56,675	56,905	57,105	57,A31	57,702	679,079
Secondary Seco	13411D Meters Bronse Case	αp	O)	6	.10	-11	-12	-12	-13	-14	-15	-16	-16	(145
Street S	HALLO MARKET PLACE CINC.	aj i	Sp (50	01.	.76	ri c	Lip S	-92	86-	-103	-108	-114	500(1)
2,52,52 2,52,52 <t< td=""><td>NACTOR Meter Reading Units</td><td>6</td><td>ភ្ជុំ C</td><td>P C</td><td>5/-</td><td>9 0</td><td>9 0</td><td>76.0</td><td>9F. C</td><td>-TD3</td><td>ent-</td><td>di-</td><td>171-</td><td>c)</td></t<>	NACTOR Meter Reading Units	6	ភ្ជុំ C	P C	5/-	9 0	9 0	76.0	9F. C	-TD3	ent-	di-	171-	c)
2,158 2,158 <th< td=""><td>334200-Weter Installations</td><td>55,512</td><td>55,509</td><td>55,505</td><td>55,502</td><td>55,499</td><td>55,495</td><td>55,492</td><td>55,489</td><td>55,486</td><td>55,482</td><td>55,479</td><td>55,476</td><td>665,926</td></th<>	334200-Weter Installations	55,512	55,509	55,505	55,502	55,499	55,495	55,492	55,489	55,486	55,482	55,479	55,476	665,926
1,500 1,50	334300-Meter Vaults	2,158	2,167	2,166	2,165	2,154	2,153	2,161	2,160	2,159	2,158	2,157	2,156	25,943
4,156 1,256 <th< td=""><td>335000-Hydrants</td><td>24,080</td><td>24,193</td><td>24,405</td><td>24,494</td><td>24,557</td><td>24,615</td><td>24,813</td><td>24,873</td><td>24,928</td><td>25,010</td><td>25,102</td><td>25,209</td><td>296,279</td></th<>	335000-Hydrants	24,080	24,193	24,405	24,494	24,557	24,615	24,813	24,873	24,928	25,010	25,102	25,209	296,279
9,711 9,744 9,744 9,742	339100-Other P/E-Intangible	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	18,675
1,517. 2,126 2,126 2,127 2,1	SASSOCIATION P/E-CPS	4 275	8,249	4.287	8,303	8.189	835.6 831.6	3,586	3.564	6,051	4 039	6,514 A.018	6.544	/b,5.2
1,537 1,212 1,213 <th< td=""><td>340200-Comp & Periph Equip</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>a</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></th<>	340200-Comp & Periph Equip	0	0	0	0	0	a	0	0	0	0	0	0	0
257 238 238 238 430 438 430 438 430 <td>340220-Comp & Periph Personal</td> <td>-1,931</td> <td>-2,124</td> <td>-2,316</td> <td>-2,511</td> <td>-2,704</td> <td>-2,897</td> <td>-3,090</td> <td>-3,283</td> <td>-3,476</td> <td>-3,669</td> <td>-3,863</td> <td>950'5-</td> <td>[35,922</td>	340220-Comp & Periph Personal	-1,931	-2,124	-2,316	-2,511	-2,704	-2,897	-3,090	-3,283	-3,476	-3,669	-3,863	950'5-	[35,922
NAME	340230-Camp & Periph Other	752-	-243	-309	-335	-380	-386	412	438	463	489	-515	-541	(4,788
975-86 975-96 97	90.240-Comp & Periph Lapital Lease	24.447	25.212	25.549	26.044	26.063	25.570	25.355	25.777	26.410	26.653	27.158	27.464	311.700
1	40315-Computer Software - BT	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	97,548	1,170,572
1.2 1.6 <td>A0320-Comp Software Personal</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0 1</td> <td>0 ;</td> <td>0</td> <td>0</td> <td>0 ;</td> <td>0</td> <td></td>	A0320-Comp Software Personal	0	0	0	0	0	0	0 1	0 ;	0	0	0 ;	0	
4.4. 4.4. 5.9. 7.4. 7.9. <th< td=""><td>940325-Comp Software Customized</td><td>£5.</td><td>ió s</td><td>-28</td><td>SP S</td><td>-32</td><td>si s</td><td>(F)</td><td>新</td><td>42</td><td>7</td><td>949</td><td>45</td><td>(431</td></th<>	940325-Comp Software Customized	£5.	ió s	-28	SP S	-32	si s	(F)	新	42	7	949	45	(431
2,402 2,427 2,339 <th< td=""><td>ACCORDED SOTWARE CITIES</td><td>7. 78</td><td>41</td><td>97.</td><td>87.</td><td>S SE</td><td>33 68</td><td>\$ 55</td><td>β Π</td><td>25 25</td><td>24 42</td><td>7 2</td><td>7 07</td><td>(BE</td></th<>	ACCORDED SOTWARE CITIES	7. 78	41	97.	87.	S SE	33 68	\$ 55	β Π	25 25	24 42	7 2	7 07	(BE
4,546, 4,523, 4,687, 4,671, 4,644, 4,613, 4,784, 4,813, 4,774, 4,814, 4,777, 4,824, 4,823, 5,028, 5,	341100-Trans Equip Lt Duty Triks	2,462	2,427	2,392	2,358	2,323	2,288	2,253	2,248	2,213	2,245	2,305	2,357	27,871
2,107 2,107 2,248 2,023 1,588 1,597 2,428 2,088 2,088 2,428	341200-Trans Equip Hvy Duty Trts	4,948	4,923	4,897	4,671	4,845	4,819	4,794	4,813	4,787	4,864	4,983	5,089	58,634
216 216 217 218 218 218 218 218 218 218 218 218 218	A1300-Trans Equip Autos	2,101	2,075	2,049	2,023	3,998	2,972	438,5	2,069	2,063	2,423	2,939	3,407	27,085
10,944 10,054 11,052 1,052 11	342000-Stores Equipment	216	216	216	216	216	216	216	216	216	216	216	215	2,592
\$583 \$542 \$632 \$632 \$632 \$635 \$637 \$637 \$637 \$637 \$637 \$637 \$637 \$637	343000-Tools, Shop, Garage Equip	10,848	10,944	10,994	11,017	11,025	11,025	11,037	11,071	11,167	11,283	11,516	11,685	133,631
1,550 1,440 1,456 1,450 1,451 1,450	344000-Laboratory Equipment	6,953	6,942	06,930	6,919	6,908	6,897	6,886	5,875	6,863	5,852	5,841	6,830	82,695
20,044 20,144 21,248 73,248<	M6100-Comm Equip Non-Telephone	1,510	1,487	1,465	1,443	1,421	1,399	1,376	1,354	1,332	1,310	1,286	1,265	16,650
498 487 485 483 482 890 488 487 485 483 482 480 1,088 1,066 1,065 1,060 1,067 1,064 1,062 1,046 1,042 1,040 1,037 549 552 555 557 559 561 848 546 849 51 518 537	46190-Remote Control & Instrument	20,044	20,044	20,238	20,432	20,571	20,598	20,625	20,681	20,791	20,958	21,152	21,346	247,480
(100 1), 100 (100	546200-Comm Equip Telephone	498	497	495	493	492	490	488	487	485	483	482	480	5,871
	34 BOOL Orber Tangible Droperty	2,408	250	525	7,080	(90')	561	141	9	3	5	1	(a)	04,032

Aug-16	250.15	0cr.16	Nov-15	Dec.16	Aem-17	Pet-17	Maritz	Apr.57	Mey-37	Aug-17	14617
(\$21,744,242)	(\$21,771,992)	(\$21,792,992)	(\$21,810,992)	(\$21,828,992)	(\$21,845,492)	(\$21,861,992)	(\$21,879,992)	(\$21,903,992)	(\$21,930,992)	(\$21,967,742)	(\$21,995,492)
(14,940,662)	(14,982,122)	(15,013,482)	(15,040,362)	(15,067,242)	(15,091,982)	(15,116,522)	[15,143,402]	(15,179,242)	(15,219,562)	(15,274,442)	(15,315,882)
(10,611,012)	(10,677,797)	[10,728,337]	(10,771,657)	(10,814,977)	(10,854,687)	(10,894,397)	(717,756,01)	(10,995,477)	(11,060,457)	(11,148,902)	(11,215,687)
(15,509,228)	(15,517,923)	(15,524,503)	(15,530,143)	(15,535,783)	(15,540,953)	(15,546,123)	(15,551,763)	(15,559,283)	(15,567,743)	(15,579,258)	(15,587,953)
(2,523,706)	(2,528,701)	(2,532,481)	(2,535,721)	(2,538,961)	(2,541,931)	(2,544,901)	(2,548,141)	(2,552,461)	(12,557,321)	(2,563,936)	(2,568,931)
(3,773,789)	(3,774,159)	(3,774,439)	(3,774,679)	(3,774,919)	(3,775,139)	(3,775,359)	(3,775,599)	(3,775,919)	(3,776,279)	(3,776,769)	(3,777,139)
(2,023,122)	(2,046,617)	(2,064,397)	(2,079,637)	(7,094,877)	(2,108,847)	(2,122,817)	(2,138,057)	(2,158,377)	(2,181,237)	(2,212,352)	(2,235,847)
(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)
(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)
(766,586)	(766,586)	(765,586)	(756,586)	(766,586)	(766,586)	(766,586)	(766,586)	(756,586)	(766,586)	(766,586)	(766,586)
(7,781,119)	(7,792,589)	(7,801,269)	(7,808,709)	(7,816,149)	(7,822,969)	(7,829,789)	(7,837,229)	(7,847,149)	(7,658,309)	(7,873,499)	(7,884,969)
(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)
(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)
(430,476)	(430,476)	(430,476)	(430,476)	(430,476)	(430,476)	(430,476)	(430,475)	(430,476)	(430,475)	(430,476)	(430,476)
(45,793)	145,7911	165,7711	445,791)	(KS,791)	115,7911	465,7911	115,733	(65,791)	145,7911	145,7911	145,791
15.62 ABR 7531	1543 DYK 7573	GREENSTR.	1582 111 7571	(483,453,757)	(\$41541551)	PRESENTATION.	583 743 753	(\$31,553,753)	(554 131 757)	1584 178 7571	5584.563.7571

Kentucky American Water Compeny
Case No. 2015-00418

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Witness: Linda C. Bridwell

109. Reference the Kentucky American Water application generally. State if Kentucky American Water utilized the proposed new depreciation rates to develop both its Base Period claim and its Test Period claim.

Response:

Kentucky American Water utilized the depreciation rates proposed in this case to develop its data for the future test period. The Company utilized current deprecation rates to develop its base period data.

Witness: Donald J. Petry

110. Reference the Kentucky American Water application generally. Itemize all costs charged to Kentucky American Water by affiliates (including the Service Company) in each of the past three years, and as projected for the Base Period and Test Period. Provide this information by department or activity. For each year, separately identify the costs that were a) directly charged to Kentucky American Water and b) allocated to Kentucky American Water based on an allocation factor.

Response:

Please see attachment for the costs charged to KAW by Service Company for the past three year's activity, including the base year and test year costs.

For the costs allocated to KAW by Service Company, the table below displays the past three year's activity.

Service Company costs	2013	2014	2015
Direct	\$ 2,661,389	\$ 2,293,437	\$ 2,364,034
Allocation	6,502,454	6,482,421	5,962,442
Total Service Company costs	\$ 9,163,842	\$ 8,775,857	\$ 8,326,477

For the costs charged to KAW by American Water Capital Corp. (AWCC), the table below displays the past three year's activity.

G/L Account	Account Description	2013	2014	2015
52526100	Credit Line Fees Interco	\$ 63,477	\$ 79,983	\$ 84,993
81015000	Interest Long Term Debt Intercompany	10,002,060	10,119,945	10,119,945
81315000	Interest Short Term Debt Intercompany	46,483	51,090	99,035

Kentucky-American Water Company Response to KAW_R_AGDR1_NUM110 For the 12 months ended December 31, 201x and other

SENDING_COST_ELEMENT	SENDING_COST_ELEMENT_DESC	2013	2014	2015	Base Year 5/1/15-4/30/16	Test Year 7/1/16-8/31/17
50100000	Labor Natural Account	\$3,299,488	\$3,274,165	\$3,016,219	\$3,199,703	\$3,640,245
50100001	Labor Expense Accrual	(7,796)	11,533	7,544	(109,477)	(117,012)
50109900	Labor Capitalized Credits	0	0	0	(1,233)	(1,107)
50110000	Labor Non-scheduled Overtime - Natural Account	29,299	23,516	10,959	27,872	29,517
50120000	Labor Overtime - Natural Account	93,307	62,715	75,016	42,270	44,351
50171000	Annual Incentive Plan	383,568	370,134	418,785	417,328	537,596
50171600	Compensation Exp - Options	49,298	42,554	37,143	50,427	60,362
50171800	Compensation Exp - RSU's	111,854	156,124	168,221	147,019	183,090
50185000	Severance	28,914	184,017	51,223	14,107	15,648
50421000	401k Expense	73,741	80,831	72,986	77,559	85,175
50422000	Defined Compensation Plan Expense	83,110	92,335	89,634	95,716	103,722
50423000	Employee Stock Purchase Plan Expense	9,526	8,851	9,175	8,245	8,245
50424000	DCP Restoration Expense	3,023	2,797	3,411	1,661	1,764
50425000	401k Restoration Expense	1,197	1,104	1,460	603	634
50426000	Retiree Medical Expense			(0)	2	2
50450000	Other Welfare - Natural Account	25,921	29,964	31,417	19,980	19,980
50451000	Employee Awards	8,970	7,334	6,169	7,682	7,682
50452000	Employee Physical Exams	2,241	578	1,652	1,675	1,675
50454000	Safety Incentive Awards	(20)		26	26	26
50456000	Tuition Aid	8,738	9,038	10,537	11,316	11,316
50457000	Training	35,009	25,248	32,167	32,160	32,160
50458000	Referral Bonus	230	353	35	0	0
50510000	PBOP Expense	79,190	39,551	69,195	66,998	80,577
50550000	Group Insurance Expense	509,808	481,975	435,526	439,443	473,646
50610000	Pension Expense	459,545	156,644	324,025	341,227	377,594
51110000	Waste Disposal		73		0	0
52000000	M & S (O&M) - Natural Account	2,237	(9,412)	17,672	3,296	3,296
52500000	Misc Exp (O&M) - Natural Acct	(13,918)	12,126	(38,908)	(23,023)	(23,023)
52503000	Advertising	60	215	813	(14,630)	0
52510000	Bank Service Charges - Natural Account	472	0	504	504	504
52512500	Books & Publications	196	238	1,208	1,080	1,080
52513200	Business Development	1	1	1	0	0
52514000	Charitable Contribution Deductible	391	216	203	0	0
52514100	Charitable Contribution Nondeductible	5			0	0
52514500	Charitable Donations - Health/Education/Environmnt	27	176	2,245	2,245	0
52514600	Charitable Donations - Community	4,800	4,136	2,438	1,739	0
52514902	Customer Education Communication - Third Party		81		0	0
52514905	Customer Education Communication - Printed	3,151	3,565	6,554	4,034	4,034
52514907	Customer Education - Press Releases		2,930	3,077	3,270	3,270
52514908	Customer Education - Media Editorial		9	10	10	10
52514909	Customer Education - Video & Photo	27	5	68	68	68
52514910	Customer Education - Online Development/Production	658	272		0	0
52515000	Community Relations - Events	1	170	206	73	73
52515001	Community Relations - Specialty	763	1,015	202	11	11
52520000	Collection Agencies	3		33	33	33
52522000	Community Relations	842	564	1,178	1,675	1,675
52524000	Co Dues/Membership Deductible	30,763	25,301	32,999	34,212	34,212
52525000	Condemnation Costs	0		0	0	0
52526000	Credit Line Fees		37		0	0
52526100	Credit Line Fees Interco	4,098	2,823	1,197	2,156	2,156
52527000	Directors Fees	26,971	26,837	25,711	18,252	18,252
52527100	Directors Expenses	5,503	4,037	5,345	17,329	17,329
52532000	Electricity - Natural Account	33,406	35,783	36,436	37,880	37,880
52534000	Employee Expenses	95,644	132,023	111,893	133,519	133,519
52534200	Conferences & Registration	8,449	4,506	4,050	11,784	11,784
52535000	Meals Deductible	25,884	29,573	31,682	32,238	32,238
52535100	Meals Non-Deductible	173	37	3	521	521
52540000	Amort Bus Services Proj Exp	47	1,360	6	6	6
52542000	Forms - Natural Account	(74)		11	19	19
52546000	Grounds Keeping - Natural Account	426	384	496	329	329
52548000	Heating Oil/Gas - Natural Account	1,907	1,641	652	837	837
========	Hiring Costs	9,069	15,867	19,441	21,998	21,998
52548100						
52549100 52549000	Injuries and Damages	17,454	6,556	1,843	1,667	1,667
	_	17,454 13,979	6,556 12,185	1,843 11,704	1,667 12,198	1,667 12,198

Kentucky-American Water Company Response to KAW_R_AGDR1_NUM110 For the 12 months ended December 31, 201x and other

					Base Year	Test Year
SENDING_COST_ELEMENT	SENDING_COST_ELEMENT_DESC	2013	2014	2015	5/1/15-4/30/16	7/1/16-8/31/17
52556000	Lobbying Expenses	2	3	3	1	0
52562000	Office & Admin Supplies - Natural Account	19,506	18,030	19,001	21,754	21,754
52562500	Overnight Shipping - Natural Account	9,129	9,926	9,689	7,702	7,702
52564000	Penalties Nondeductible	1,240	0	12	0	0
52566000	Postage - Natural Account	9,324	8,343	5,801	9,480	9,480
52566700	Printing	224	409	541	846	846
52567000	Relocation Expenses	12,524	17,115	19,659	13,937	13,937
52568000 52571000	Research & Development Security Service - Natural Account	(17,287) 5,672	(13,969) 4,230	(24,992) 9,302	(30,413) 6,373	(30,413) 6,373
52571100	Add'l Security Costs	3,072	4,230	36	0,373	0,373
52571500	Software Licenses	41,696	66,946	57,260	49,395	49,395
52572000	Telemetering - Source of Supply	25	128	34	0	0
52574000	Telephone - Natural Account	89,153	92,154	105,871	106,040	106,040
52574100	Cell Phone - Natural Account	19,788	20,695	15,435	21,556	21,556
52574200	Data Lines - Admin & General	79,304	83,705	90,792	99,932	99,932
52574300	Wireless - Service First - Natural Account	14	46	2	0	0
52577500	Trade Shows	42			37	37
52578000	Trash Removal - Natural Account	1,455	1,632	1,318	1,333	1,333
52579000	Trustee Fees	7			0	0
52582000	Uniforms - Natural Account	161	159	211	160	160
52583000	Water & WW - Natural Account	26		90	19	19
52599800	PCard Undistributed	3			0	0
53110000	Contract Svc-Eng - Natural Account	(1,267)	935	1,491	897	5,941
53150000	Contract Svc-Other - Natural Account	643,638	608,033	487,223	467,074	429,943
53151000	Contract Svc-Temp Empl - Natural Account	351,477	80,761	77,443	88,237	69,379
53152000 53153000	Contract Society Association	(11,412)	(15,507) 1	(13,403)	(13,513)	(13,513)
53154000	Contract Services - Accounting Contract Services - Audit Fees	428 10,554	9,429	3,049 9,027	2,991 8,861	2,991 8,861
53155000	Contract Services - Addit Fees Contract Services - Legal	37,597	60,033	125,003	88,121	88,121
53156000	Contract Services - Litigation	(850)	00,033	123,003	00,121	0
53157000	Contract Services - Outplacement	3,544	912	4,723	931	0
53158000	Contract Services - BT Related Incr Ext Costs	186,266	31,709	5,289	(1,150)	0
54110000	Rents-Real Property - Natural Account	193,603	182,288	164,138	164,435	164,435
54115000	Rents-Real Property Interco	83,952	80,626	82,555	79,897	79,897
54140000	Rents-Equipment - Natural Account	11,987	11,879	8,183	8,073	8,073
55000000	Transportation (O&M) - Natural Account	231	54	167	25	25
55010100	Transportation Lease Costs	7,778	3,556	6,067	6,195	6,195
55010200	Transportation Lease Fuel	4,510	3,520	3,628	3,836	3,836
55010300	Transportation Lease Maint	1,868	1,688	2,182	1,343	1,343
55010500	Transportation - Reimburse Employee Personal Use	3,938	3,822	5,828	5,035	5,035
55110000	Insurance Vehicle	3,952	6,388	1,580	1,980	1,980
55115000	Insurance Vehicle - Intercompany	14 200	24.064	(4)	376	376
55710000 55715000	Insurance General Liability	14,209	24,864	43,690	24,663 4,044	24,663 23,092
55720000	Insurance General Liabilty - Intercompany Insurance Workers Compensation	12,557	15,310	(39) 46,825	30,380	30,380
55720100	Insurance WC Capitalized Credits	160	13,310	40,023	0	0
55725000	Insurance Workers Compensation - Intercompany	100		(115)	11,941	11,941
55730000	Insurance Other	43,558	50,097	42,485	48,173	48,173
55735000	Insurance Other - Intercompany			2,000	0	0
57010000	Uncollectible Accounts Exp - Natural Account	(443)	491	282	302	302
59011000	Gains/Losses Non-Utility Property Disposals	750	922	(2,957)	188	188
62502600	Misc Maint - Admin & General	327,461	324,404	304,901	287,482	268,879
68011200	Depreciation Exp - Non-Utility Property	958,027	1,150,756	1,021,989	917,672	681,884
68255000	Amortization - UPAA		0		0	0
68520000	Property Taxes	5,007	3,347	4,077	4,435	7,465
68520100	Tax Discounts	(74)	(47)	(40)	(6)	(6)
68532000	FUTA	671	2,317	2,744	2,437	2,579
68533000	FICA	266,524	267,721	251,150	262,666	281,697
68535000	SUTA	39,217	32,297	27,020	30,203	31,879
68543000	Other Taxes and Licenses	7,650 (5,614)	18,629	23,387	26,291 (52,546)	26,291 (52,546)
69011000 69012000	FIT - Current	(5,614) 14,707	171,001	(108,867)	(52,546) (88,284)	(52,546) (88,284)
69021000	FIT - Prior Year Adjustment SIT - Current	14,/0/	139,218 1,353	(88,309)	(88,284)	(88,284)
69022000	SIT - Prior Year Adjustment	1,452	3,100	71	0	0
69062000	Deferred FIT - Prior Year Adjustment	(16,595)	(141,613)	84,679	89,386	89,386
		(20,000)	(= :=,010)	,0.3	33,330	25,550

Kentucky-American Water Company Response to KAW_R_AGDR1_NUM110 For the 12 months ended December 31, 201x and other

SENDING COST ELEMENT	SENDING COST ELEMENT DESC	2013	2014	2015	Base Year 5/1/15-4/30/16	Test Year 7/1/16-8/31/17
69065000	Deferred FIT - Other	17,657	(157,308)	115,011	55,602	55,602
69072000	Deferred SIT - Prior Year Adjustment	2,180	5,796	13,450	0	0
69073500	Deferred SIT - Other	2,349	1,173	971	501	501
71712000	Gains/Losses Other Non-Operating	32,310	6,069	4,574	(10,993)	(10,993)
75815000	Donations Non-deductible	519	535	382	538	0
75840000	Lobbying Expenses		34		0	0
81035000	Interest Capital Lease Intercompany	54,426	82,854	86,657	84,814	72,878
81315000	Interest Short Term Debt Intercompany	499	90		0	0
81500000	Interest Other		(100)		0	0
81815000	Interest income-LTD intercompany	0			0	0
81815100	Interest Income - STD Intercompany	(498)	(1,610)	(3,505)	(1,617)	(1,617)
82016000	Amortize Debt Exp Inside-Revolving Credit Line	1,561	1,707	1,713	857	857
Grand Total		\$9,163,842	\$8,775,857	\$8,326,477	\$8,162,441	\$8,603,000

Witness: Linda C. Bridwell

- **111.** Reference the Kentucky American Water application generally. Provide the following:
 - a. identify all non-regulated services provided by Kentucky American Water in each of the past three years, as well as for the Base Period and Test Period
 - b. identify all costs associated with the provision of these non-regulated services, and
 - c. state how such costs are reflected in the Company's filing.

Response:

- a. Kentucky American has not provided any non-regulated services in the past three years, in the Base Period, nor does it project any in the Forecasted Period. Kentucky American did provide a water treatment plant operator to the City of Millersburg beginning in October 2013 to assist them in an emergency situation. It ended up extending through August 2014 prior to the acquisition of this system under a contract operation arrangement that reimbursed Kentucky American for the additional expense.
- b. Please refer to part a.
- c. Please refer to part a.

Witness: Linda C. Bridwell

112. Reference the Kentucky American Water application generally. Regarding the property tax adjustment discussed on pages 24-25 of Ms. Bridwell's testimony, provide the underlying calculations and workpapers used to develop her property tax expense of \$5,440,027. Include the excel file(s) supporting the Company's claim.

Response:

The support which provides underlying calculations and workpapers used to develop the property tax expense of \$5,440,027 in excel can be found in WP 5-1 Property Tax in the General Tax Exhibit.

Witness: Linda C. Bridwell

- **113.** Reference the Kentucky American Water application generally. Provide, for each of the past five years as well as for the Base Period and Test Period:
 - a. the total assessed property value,
 - b. the average property tax rate,
 - c. the total property taxes paid, and
 - d. any refunds of taxes paid.

Response:

Please see the attachment which provides total assessed property value, average property tax rate, total property taxes paid and refunds of taxes paid for the past five years.

KENTUCKY AMERICAN WA			-	2011 Tax I	Bills		
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Bourbon County	itear	ruce	rinount	i ci sonai	rute	rinount	25,183.56
County	2,846,935	0.1290	3,672.55	184,655	0.1290	238.20	3,910.75
School	2,846,935	0.5550	15,800.49	184,655	0.5550	1,024.84	16,825.33
Library	2,846,935	0.0780	2,220.61	184,655	0.1178	217.52	2,438.13
Health	2,846,935	0.0780	1.053.37	184,655	0.0370	68.32	1,121.69
			,				688.37
Ag. Extension	2,846,935	0.0220	626.33	184,655	0.0336	62.04	
Soil Conservation	2,846,935	0.0070	199.29	184,655	0.0000	0.00	199.29
Clark County							20,788.70
County	1,822,527	0.0880	1,603.82	926,689	0.1096	1,015.65	2,619.48
School	1,822,527	0.5120	9,331.34	926,689	0.5120	4,744.65	14,075.99
Ext	1,822,527	0.0240	437.41	926,689	0.0374	346.58	783.99
Health	1,822,527	0.0400	729.01	926,689	0.0400	370.68	1,099.69
Library	1,822,527	0.0680	1,239.32	926,689	0.1047	970.24	2,209.56
City of Winchester (Clark County)	55,091	0.14600	80.43	0	0.15630	0.00	80.43
Fayette County							1,605,635.23
County	133,219,990	0.0800	106,575.99	49,999,510	0.0990	49,499.51	156,075.50
School	133,219,990	0.6520	868,594.33	49,999,510	0.5430	271,497.34	1,140,091.67
Ext	133,219,990	0.0032	4,263.04	49,999,510	0.0035	1,749.98	6,013.02
Soil/Water					0.0033		
	133,219,990	0.0004	532.88	49,999,510	0.0000	0.00	532.88
Health	133,219,990	0.0280	37,301.60	49,999,510	0.0280	13,999.86	51,301.40
Lextran	133,219,990	0.0600	79,931.99	49,999,510	0.0600	29,999.71	109,931.70
Full Svc	54,480,829	0.1735	94,524.24	49,999,510			94,524.24
Partial Svc	78,739,161	0.0599	47,164.76	0	0.0599	0.00	47,164.76
Franklin County							
County							510,025.12
Ext. Svc (COOP)	56,071,708	1.3000	7,289.32	1,873,578	2.4400	457.15	7,746.48
General	56.071.708	15.7000	88,032.58	1,873,578	24.0000	4,496.59	92,529.17
Health	56,071,708	4.0000	22,428.68	1,873,578	4.0000	749.43	23,178.11
Library	56,071,708	8.7000	48,782.39	1,873,578	13.0000	2,435.65	51.218.04
Soil Conservation	56,071,708	0.8000	4,485.74	1,873,578	0.0000	0.00	4,485.74
School City	56,071,708	57.1000	320,169.45	1,873,578	57.1000	10,698.13	330,867.58
Frankfort	0	19.9000	0.00	0	19.9000	0.00	0.00
Gallatin County							4,933.60
County	42,249	0.6660	281.38	417,199	0.6660	2,778.55	3,059.92
School	42,249	0.0890	37.60	417,199	0.1630	680.03	717.64
Health	42,249	0.0550	23.24	417,199	0.0550	229.46	252.70
Library	42,249	0.1160	49.01	417,199	0.1371	571.98	620.99
Ext	42,249	0.0540	22.81	417,199	0.0613	255.74	278.55
Soil Conservation	42,249	0.0090	3.80	417,199	0.0000	0.00	3.80
City of Glencoe(Gallatin County)	4,614	0.0023	10.61	149,707	0.0023	344.33	354.94
City of Sparta(Gallatin County)	1,259	0.0023	2.90	0	0.0000	0.00	0.00
Grant County							2,201.07
Grant County	226,395	0.1440	326.01	35,225	0.1440	50.72	376.73
County School	226,395	0.5250	1,188.57	35,225	0.5250	184.93	1,373.5
Williamstown School		0.8910	0.00		0.8910	0.00	0.00
Library	226,395	0.074	167.53	35,225	0.1356	47.77	215.30
Health	226,395	0.0280	63.39	35,225	0.0280	9.86	73.25
Extension Service	226,395	0.0250		35,225	0.0675	23.78	103.02
	226,395	0.0330	79.24		0.0673		22.64
Soil Conservation Mental Health	226,395	0.0100	22.64 31.70	35,225 35,225	0.0140	0.00 4.93	36.63
Harrison County							4,743.54
County	614,989	0.0990	608.84	9,783	0.1290	12.62	621.40
School	614,989	0.0330	2,533.75	9,783	0.4120	40.31	2,574.00
	614,989	0.4120		9,783 9,783		40.31 14.14	2,574.00
Library			430.49		0.1445		
Health	614,989	0.0600	368.99	9,783	0.0600	5.87	374.86
Extension Service	614,989	0.0450	276.75	9,783	0.0928	9.08	285.82
Soil Conservation Fire	614,989 614,989	0.0090 0.0620	55.35 381.29	9,783 9,783	0.0000 0.0620	0.00 6.07	55.35 387.36
	014,969	0.0620	361.29	9,103	0.0620	0.07	
Jessamine County							55,831.19
County	6,140,989	0.0640	3,930.23	128,575	0.1600	205.72	4,135.9
School	6,140,989	0.6290	38,626.82	128,575	0.6290	808.74	39,435.56
Health	6,140,989	0.0190	1,166.79	128,575	0.0230	29.57	1,196.30
Library	6,140,989	0.076	4,667.15	128,575	0.2000	257.15	4,924.30
Fire	6,140,989	0.0520	3,193.31	128,575	0.0480	61.72	3,255.03
N.Fire	6,140,989	0.0460	2,824.85	128,575	0.0460	59.14	2,883.99
As Est							

Ag Ext

2011

3,163,362.10

3,942,121.08

778,758.98

				2011 Tax E			
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Owen County							614,579.4
Extension Service	58,167,014	0.0410	23,848.48	7,953,971	0.0816	6,490.44	30,338.9
General	58,167,014	0.1180	68,637.08	7,953,914	0.1420	11,294.64	79,931.7
Health	58,167,014	0.0560	32,574.53	7,953,914	0.0560	4,454.22	37,028.7
Library	58,167,014	0.1150	66,892.07	7,953,914	0.2000	15,907.94	82,800.0
Soil Conservation	58,167,014	0.0160	9,306.72	7,953,914	0.000	0.00	9,306.7
School	58,167,014	0.5650	328,643.63	7,953,914	0.5850	46,530.73	375,174.3
City of Monterey(Owen County)	330,422	0.149	492.33	16511	0	0	492.3
City of Owenton(Owen County)	6781488	0	0	2,099,703	0.00292	6,131.13	6,131.1
City of Sparta(Owen County)	1259	0.0023	2.90	29,722	0.00230	68.36	71.2
Scott County							299,069.9
County	45,736,172	0.0670	30,643.24	3,343,709	0.1176	3,932.20	34,575.4
Ext	45,736,172	0.0170	7,775.15	3,343,709	0.0303	1,013.14	8,788.2
Health	45,736,172	0.0220	10,061.96	3,343,709	0.0220	735.62	10,797.5
Library	45,736,172	0.0660	30,185.87	3,343,709	0.0660	2,206.85	32,392.7
School	45,736,172	0.4330	198,037.62	3,343,709	0.4330	14,478.26	212,515.8
City of Georgetown	3,547,435	0.062	2,199.40	2,262,418	0.15800	3,574.62	5,774.0
City of Sadleville	201,537	0.001	282.15	17,556	0.00030	5.26	287.4
City of Stamping Ground	1003	0.003	3.02	0	0.00030	0.00	3.0
Woodford County							7,247.4
School	894,351	0.5490	4,909.99	52,955	0.5490	290.73	5,200.7
County	894,351	0.0700	626.05	52,955	0.0700	37.07	663.
Fire Dept	894,351	0.0410	366.68	52,955	0.0410	21.71	388.4
Library	894,351	0.0680	608.16	52,955	0.0680	36.01	644.
Health Dept	894,351	0.0200	178.87	52,955	0.0200	10.59	189.4
Ext. Service	894,351	0.0170	152.04	52,955	0.0180	9.53	161.5
Assessment	305.783.319		_	64.925.849			

County/City Liability State Liabiltiy Tax Bills Tax Bill

Notes: KENTUCKY AMERICAN WATER ASSESSMENT & TAXES

KENTUCKY AMERICAN WA	TEN TOSESSIVIE	11 0. 1/1/12		2011 Ta	x Bills		
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Bourbon County							(93,813)
County	10,870,254	-0.1295	(14,077)	(1,309,883)	-0.1997	2,615.44	(11,461)
School	10,624,727	-0.1580	(16,782)	(1,432,636)	-0.2340	3,352.60	(13,430)
Library	10,379,200	-0.1864	(19,348)	(1,555,388)	-0.2684	4,174.08	(15,174)
Health	10,133,673	-0.2149	(21,774)	(1,678,141)	-0.3027	5,079.88	(16,694)
Ag. Extension	9,888,147	-0.2433	(24,061)	(1,800,894)	-0.3371	6,070.00	(17,991)
Soil Conservation	9,642,620	-0.2718	(26,207)	(1,923,646)	-0.3714	7,144.45	(19,063)
Clark County	9,397,093	-0.30024		(2,046,399)	-0.4057		(104,435)
County	9,151,566	-0.3287	(30,081)	(2,169,151)	-0.4401	9,546.30	(20,535)
School	8,906,039	-0.3572	(31,809)	(2,291,904)	-0.4744	10,873.72	(20,935)
Ext	8,660,512	-0.3856	(33,397)	(2,414,657)	-0.5088	12,285.45	(21,111)
Health	8,414,985	-0.4141	(34,844)	(2,537,409)	-0.5431	13,781.50	(21,063)
Library	8,169,458	-0.4425	(36,153)	(2,660,162)	-0.5775	15,361.88	(20,791)
	7,923,931	-0.4710		(2,782,914)	-0.6118		
City of Winchester (Clark County)	7,678,404	-0.49945	(38,350)	(2,905,667)	-0.64617	18,775.60	(19,574)
	7,432,877	-0.5279		(3,028,420)	-0.6805		
	7,187,350	-0.5564		(3,151,172)	-0.7149		
Fayette County	6,941,823	-0.58482		(3,273,925)	-0.7492		(92,436)
County	6,696,297	-0.6133	(41,067)	(3,396,677)	-0.7836	26,614.91	(14,452)
School	6,450,770	-0.6417	(41,397)	(3,519,430)	-0.8179	28,785.54	(12,612)
Ext	6,205,243	-0.6702	(41,587)	(3,642,182)	-0.8522	31,040.49	(10,547)
Soil/Water	5,959,716	-0.6987	(41,638)	(3,764,935)	-0.8866	33,379.77	(8,258)
Health	5,714,189	-0.7271	(41,549)	(3,887,688)	-0.9209	35,803.37	(5,745)
Lextran	5,468,662	-0.7556	(41,320)	(4,010,440)	-0.9553	38,311.28	(3,008)
Full Svc	5,223,135	-0.7840	(40,951)	(4,133,193)	-0.9896		(40,951)
Partial Svc	4,977,608	-0.8125	(40,442)	(4,255,945)	-1.0240	43,580.09	3,138
Franklin County	4,732,081	-0.84095		(4,378,698)	-1.0583		
County	4,486,554	-0.8694		(4,501,451)	-1.0927		1,972
Ext. Svc (COOP)	4,241,027	-0.8979	(381)	(4,624,203)	-1.1270	521.16	140
General	3,995,500	-0.9263	(370)	(4,746,956)	-1.1614	551.30	181
Health	3,749,974	-0.9548	(358)	(4,869,708)	-1.1957	582.28	224
Library	3,504,447	-0.9832	(345)	(4,992,461)	-1.2301	614.10	270
Soil Conservation	3,258,920	-1.0117	(330)	(5,115,214)	-1.2644	646.77	317
School	3,013,393	-1.0402	(313)	(5,237,966)	-1.2988	680.28	367
City	2,767,866	-1.06861		(5,360,719)	-1.3331		
Frankfort	2,522,339	-1.0971	(277)	(5,483,471)	-1.3674	749.83	473
Gallatin County	2,276,812	-1.12553		(5,606,224)	-1.4018		448,961
County	2,031,285	-1.1540	(23,441)	(5,728,976)	-1.4361	82,275.96	58,835
School	1,785,758	-1.1824	(21,116)	(5,851,729)	-1.4705	86,048.71	64,933
Health	1,540,231	-1.2109	(18,651)	(5,974,482)	-1.5048	89,905.79	71,255
Library	1,294,704	-1.2394	(16,046)	(6,097,234)	-1.5392	93,847.18	77,801
Ext	1,049,177	-1.2678	(13,302)	(6,219,987)	-1.5735	97,872.89	84,571
Soil Conservation	803,651	-1.2963	(10,418)	(6,342,739)	-1.6079	101,982.93	91,565
	558,124	-1.3247		(6,465,492)	-1.6422		

					ax Bills		
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
ity of Glencoe(Gallatin County)	312,597	-1.3532	(423,003)	(6,588,245)	-1.6766		10,622,5
	67,070	-1.3816		(6,710,997)	-1.7109		
ity of Sparta(Gallatin County)	(178,457)	-1.4101	251,644	(6,833,750)	-1.7453		
	(423,984)	-1.4386		(6,956,502)	-1.7796		
rant County	(669,511)	-1.46702	40.004	(7,079,255)	-1.8139		1,432,9
Grant County	(915,038)	-1.4955	13,684	(7,202,008)	-1.8483		146,7
County School	(1,160,565)	-1.5239	17,686	(7,324,760)	-1.8826		155,5
Williamstown School	(1,406,092)	-1.5524	21,828	(7,447,513)	-1.9170		164,5
Library	(1,651,619)	-1.58085	26,110	(7,570,265)	-1.9513		173,8
Health	(1,897,146)	-1.6093	30,531	(7,693,018)	-1.9857		183,2
Extension Service	(2,142,673)	-1.6378	35,092	(7,815,771)	-2.0200		192,9
Soil Conservation	(2,388,199)	-1.6662	39,793	(7,938,523)	-2.0544		202,8
Mental Health	(2,633,726)	-1.6947	44,633	(8,061,276)	-2.0887		213,0
• • •	(2,879,253)	-1.72314		(8,184,028)	-2.1231		4070
arrison County	(3,124,780)	-1.7516	50.000	(8,306,781)	-2.1574		1,952,6
County	(3,370,307)	-1.7801	59,993	(8,429,533)	-2.1918		244,7
School	(3,615,834)	-1.8085	65,393	(8,552,286)	-2.226		255,7
Library	(3,861,361)	-1.83698	70,932	(8,675,039)	-2.2604		267,0
Health	(4,106,888)	-1.8654	76,611	(8,797,791)	-2.2948		278,5
Extension Service	(4,352,415)	-1.8939	82,430	(8,920,544)	-2.3291		290,2
Soil Conservation	(4,597,942)	-1.9224	88,389	(9,043,296)	-2.3635		302,1
Fire	(4,843,469)	-1.9508	94,487	(9,166,049)	-2.3978		314,2
	(5,088,996)	-1.97927		(9,288,802)	-2.4322		0.04=
ssamine County	(5,334,522)	-2.00772	440	(9,411,554)	-2.4665		2,312,5
County	(5,580,049)	-2.0362	113,620	(9,534,307)	-2.5009		352,0
School	(5,825,576)	-2.0646	120,277	(9,657,059)	-2.5352		365,1
Health	(6,071,103)	-2.0931	127,074	(9,779,812)	-2.5696		378,
Library	(6,316,630)	-2.12156	134,011	(9,902,565)	-2.6039		391,8
Fire	(6,562,157)	-2.1500	141,087	(10,025,317)	-2.6383		405,
N.Fire	(6,807,684)	-2.1785	148,304	(10,148,070)	-2.6726		419,
Ag Ext	(7,053,211)	-2.2069		(10,270,822)	-2.7070		
	(7,298,738)	-2.23539		(10,393,575)	-2.7413		
ven County	(7,544,265)	-2.26385		(10,516,328)	-2.7756		3,095,
Extension Service	(7,789,792)	-2.2923	178,566	(10,639,080)	-2.8100		477,5
General	(8,035,319)	-2.3208	186,480	(10,761,833)	-2.8443		492,5
Health	(8,280,845)	-2.3492	194,536	(10,884,585)	-2.8787		507,8
Library	(8,526,372)	-2.3777	202,729	(11,007,338)	-2.9130	320,646.95	523,3
Soil Conservation	(8,771,899)	-2.4061	211,064	(11,130,090)	-2.9474		539,1
School	(9,017,426)	-2.4346	219,535	(11,252,843)	-2.9817		555,0
	(9,262,953)	-2.46305		(11,375,596)	-3.016		
ty of Monterey(Owen County)	(9,508,480)	-2.492	236,905	(11,498,348)	-3.0504		236,9
	(9,754,007)	-2.51997		(11,621,101)	-3.0848		
ty of Owenton(Owen County)	(9,999,534)	-2.54843	0	(11,743,853)	-3.119		36,630,3
	(10,245,061)	-2.57688		(11,866,606)	-3.1535		
ty of Sparta(Owen County)	(10,490,588)	-2.60534	27,331,571	(11,989,359)	-3.1878		65,551,
	(10,736,115)	-2.6338		(12,112,111)	-3.2221	l	
ott County	(10,981,642)	-2.66226		(12,234,864)	-3.2565	i	3,728,0
County	(11,227,168)	-2.6907	302,091	(12,357,616)	-3.2908		708,7
Ext	(11,472,695)	-2.7192	311,963	(12,480,369)	-3.3252		726,
Health	(11,718,222)	-2.7476	321,974	(12,603,122)	-3.3595		745,
Library	(11,963,749)	-2.7761	332,124	(12,725,874)	-3.3939		764,0
School	(12,209,276)	-2.8045	342,415	(12,848,627)	-3.4282		782,
	(12,454,803)	-2.83301		(12,971,379)	-3.4626	3	
y of Georgetown	(12,700,330)	-2.861	363,415	(13,094,132)	-3.4969	457,890.85	821,3
-	(12,945,857)	-2.88992		(13,216,885)	-3.5313	3	
y of Sadleville	(13,191,384)	-2.918	38,497,473	(13,339,637)	-3.5656	47,563,930.77	86,061,4
	(13,436,911)	-2.94684		(13,462,390)	-3.6000)	
y of Stamping Ground	(13,682,438)	-2.975	40,709,305	(13,585,142)	-3.6343	49,372,505.56	90,081,
·	(13,927,965)	-3.00375		(13,707,895)	-3.6686		
oodford County	(14,173,492)	-3.03221		(13,830,647)	-3.7030		6,097,
School	(14,419,018)	-3.0607	441,319	(13,953,400)	-3.7373		962,8
County	(14,664,545)	-3.0891	453,007	(14,076,153)	-3.7717		983,
Fire Dept	(14,910,072)	-3.1176	464,834	(14,198,905)	-3.8060		1,005,
Library	(15,155,599)	-3.1460	476,802	(14,321,658)	-3.8404		1,026,8
Health Dept	(15,401,126)	-3.1745	488,909	(14,444,410)	-3.8747		1,048,5
Ext. Service	(15,646,653)	-3.2030	501,156	(14,567,163)	-3.9091		1,070,
Assessment	(10,310,944)	-	001,100	(79,344,836)	<u>-</u> .		1,010,
Assessment	(10,310,944)	=		(18,344,836)	•	=	
						=	2011
					County/City Liability	Tax Bills	243,214,657
					State Liabiltiy	Tax Bill	778,759
otes:							243,993,417

Kentucky American Water Assessment & Taxes

				2012 Tax Bill	S				
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax		
Sourbon County		•		•		•	25,398.		
County	2,803,661	0.1290	3.616.71	229.112	0.1290	295.55	3,912		
School	2,803,661	0.5540	15,532.28	229,112	0.5550	1,271.57	16,803		
Library	2,803,661	0.0820	2,299.00	229,112	0.1319	302.20	2,601		
Health	2,803,661	0.0370	1,037.34	229,112	0.0370	84.77	1,122		
Ag. Extension	2,803,661	0.0240	672.88	229,112	0.0391	89.58	762		
Soil Conservation	2,803,661	0.0070	196.26	229,112	0.0000	0.00	196		
lark County							22,731.		
County	1,825,146	0.0880	1,606.13	1,078,288	0.1044	1,125.73	2,731		
School									
	1,825,146	0.5360	9,782.78	1,078,288	0.5360	5,779.62	15,56		
Ext	1,825,146	0.0250	456.29	1,078,288	0.0371	400.04	856		
Health	1,825,146	0.0400	730.06	1,078,288	0.0400	431.32	1,16		
Library	1,825,146	0.0710	1,295.85	1,078,288	0.1042	1,123.58	2,419		
ity of Winchester (Clark County)	55,250	0.14600	80.67	0	0.15630	0.00	80		
yette County							1,744,576		
County	139,775,852	0.0800	111,820.67	60,154,944	0.0990	59,553.39	171,374		
School	139,775,852	0.6740	942,089.25	60,154,944	0.5430	326,641.35	1,268,730		
Ext	139,775,852	0.0033	4,612.59	60,154,944	0.0035	2,105.42	6,718		
Soil/Water	139,775,852	0.0004	559.10	60,154,944		0.00	559		
Health	139,775,852	0.0280	39,137.24	60,154,944	0.0280	16,843.38	55,980		
Lextran	139,775,852	0.0600	83,865.51	60,154,944	0.0600	36,092.97	119,958		
Full Svc	69,887,926	0.1735	121,255.55	26,066,264		0.00	121,25		
Partial Svc	05,067,520	0.0000	0.00	0	0.0000	0.00	0		
randar Svc ranklin County	U	0.0000	0.00	U	0.0000	0.00	U		
3									
County							525,591		
Ext. Svc (COOP)	54,756,647	1.4000	7,665.93	2,648,542	2.6000	688.62	8,354		
General	54,756,647	16.5000	90,348.47	2,648,542	24.0000	6.356.50	96,704		
Health	54,756,647	4.0000	21,902.66	2,648,542	4.0000	1,059.42	22,962		
Library	54,756,647	8.6000	47,090.72	2,648,542	12.9000	3,416.62	50,507		
Soil Conservation	54,756,647	0.9000	4,928.10	2,648,542	0.0000	0.00	4,928		
School City	54,756,647	59.6000	326,349.62	2,648,542	59.6000	15,785.31	342,134		
Frankfort	0	19.9000	0.00	0	19.9000	0.00	0		
	U	19.9000	0.00	U	19.9000	0.00			
allatin County							5,064		
County	46,681	0.0890	41.55	421,136	0.1630	686.45	728		
School	46,681	0.6750	315.10	421,136	0.6750	2,842.67	3,157		
Health	46,681	0.0550	25.67	421,136	0.0550	231.62	257		
Library	46,681	0.1160	54.15	421,136	0.1371	577.38	63		
Ext	46,681	0.0570	26.61	421,136			286		
Soil Conservation			4.20		0.0616	259.42 0.00	4		
Son Conservation	46,681	0.0090	4.20	421,136	0.0000	0.00	4		
ty of Glencoe(Gallatin County)	4,542	0.0023	10.45	150,140	0.0023	345.32	355		
ty of Sparta(Gallatin County)	1,239	0.0023	2.85	0	0.0000	0.00	0.		
rant County							2,178		
Grant County	217,807	0.1450	315.82	35,678	0.1450	51.73	36		
County School	217,807	0.5290	1,152.20	35,678	0.5290	188.74	1,340		
	211,007			33,073					
Williamstown School		0.8840	0.00	a	0.8840	0.00	0		
Library	217,807	0.081	176.42	35,678	0.1476	52.66	229		
Health	217,807	0.0280	60.99	35,678	0.0280	9.99	70		
Extension Service	217,807	0.0380	82.77	35,678	0.0780	27.83	110		
Soil Conservation	217,807	0.0100	21.78	35,678		0.00	21		
Mental Health	217,807	0.0150	32.67	35,678	0.0150	5.35	38		
arrison County							4,766		
County	604,330	0.1020	616.42	9,094	0.1290	11.73	628		
School	604,330	0.4300	2,598.62	9,094	0.4300	39.10	2,637		
Library	604,330	0.0700	423.03	9,094	0.1445	13.14	430		
Health	604,330	0.0500	302.17	9,094	0.0500	4.55	300		
Extension Service	604,330	0.0500	302.17	9,094	0.1009	9.18	311		
Soil Conservation	604,330	0.0100	60.43	9,094	0.0000	0.00	60		
Fire	604,330	0.0630	380.73	9,094	0.0630	5.73	386		
ssamine County							55,660		
County	5,994,966	0.0640	3,836.78	189,581	0.1600	303.33	4,14		
School	5,994,966			189,581			38,900		
		0.6290	37,708.34		0.6290	1,192.46			
Health	5,994,966	0.0190	1,139.03	189,581	0.0230	43.60	1,182		
Library	5,994,966	0.084	5,035.77	189,581	0.1836	348.07	5,383		
Fire	5,994,966	0.0520	3,117.38	189,581	0.0480	91.00	3,208		
N.Fire	5,994,966	0.0460	2,757.68	189,581	0.0460	87.21	2,844		

KENTUCKY AMERICAN	W

				2012 Tax Bil	ls		
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Owen County							636,308.47
Extension Service	57,925,922	0.0410	23,749.63	8,374,953	0.0816	6,833.96	30,583.59
General	57,925,922	0.1210	70,090.37	8,374,953	0.1370	11,473.69	81,564.05
Health	57,925,922	0.0560	32,438.52	8,374,953	0.0560	4,689.97	37,128.49
Library	57,925,922	0.1240	71,828.14	8,374,953	0.2000	16,749.91	88,578.06
Soil Conservation	57,925,922	0.0160	9,268.15	8,374,953	0.000	0.00	9,268.15
School	57,925,922	0.5870	340,025.16	8,374,953	0.5870	49,160.97	389,186.14
City of Monterey(Owen County)	328,459	0.1580	518.97	16,559	0.000	0.00	518.97
City of Owenton(Owen County)	6,775,804	0	0	2,052,150	0.00273	5,602.37	5,602.37
City of Sparta(Owen County)	1239	0.0023	2.85	29,807	0.0023	68.56	71.41
Scott County							305,938.42
County	44,810,945	0.0670	30,023.33	3,825,865	0.1176	4,499.22	34,522.55
Ext	44,810,945	0.0170	7,617.86	3,825,865	0.0303	1,159.24	8,777.10
Health	44,810,945	0.0220	9,858.41	3,825,865	0.0220	841.69	10,700.10
Library	44,810,945	0.0650	29,127.11	3,825,865	0.0650	2,486.81	31,613.93
School	44,810,945	0.4530	202,993.58	3,825,865	0.4530	17,331.17	220,324.75
City of Georgetown	3,360,322	0.065	2,184.21	2,559,893	0.17370	4,446.54	6,630.75
City of Sadleville	197,604	0.001	276.65	42,760	0.00070	29.93	306.58
City of Stamping Ground	1006	0.001	1.48	0	0.00000	0.00	1.48
Woodford County							7,543.38
School	876,714	0.5950	5,216.44	51,069	0.5950	303.86	5,520.30
County	876,714	0.0700	613.70	51,069	0.0700	35.75	649.45
Fire Dept	876,714	0.0430	376.99	51,069	0.0430	21.96	398.95
Library	876,714	0.0680	596.17	51,069	0.0680	34.73	630.89
Health Dept	876,714	0.0200	175.34	51,069	0.0200	10.21	185.56
Ext. Service	876,714	0.0170	149.04	51,069	0.0180	9.19	158.23
Assessment	309,638,671		-	77,018,262			

County/Ci Tax Bills State Liab Tax Bill 2012 3,349,256.21 834,355.96 4,183,612.17

Notes:

Notes:							4,183,612.17
KENTUCKY AMERICAN V	VA1					_	
				2012 Tax Bill			
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Bourbon County							(88,870)
County	10,669,926	-0.1330	(14,192)	(1,596,651)	-0.2014	3,215.23	(10,977)
School	10,429,804	-0.1623	(16,930)	(1,735,398)	-0.2364	4,102.03	(12,828)
Library	10,189,683	-0.1916	(19,527)	(1,874,145)	-0.2714	5,085.96	(14,441)
Health	9,949,561	-0.2210	(21,984)	(2,012,892)	-0.3064	6,167.01	(15,817)
Ag. Extension	9,709,439	-0.2503	(24,299)	(2,151,639)	-0.3414	7,345.19	(16,954)
Soil Conservation	9,469,318	-0.2796	(26,474)	(2,290,386)	-0.3764	8,620.50	(17,854)
Clark County	9,229,196	-0.30889		(2,429,133)	-0.4114		(94,176)
County	8,989,074	-0.3382	(30,402)	(2,567,880)	-0.4464	11,462.48	(18,939)
School	8,748,953	-0.3675	(32,154)	(2,706,626)	-0.4814	13,029.15	(19,125)
Ext	8,508,831	-0.3968	(33,766)	(2,845,373)	-0.5164	14,692.96	(19,073)
Health	8,268,710	-0.4261	(35,237)	(2,984,120)	-0.5514	16,453.89	(18,783)
Library	8,028,588	-0.4555	(36,567)	(3,122,867)	-0.5864	18,311.94	(18,255)
	7,788,466	-0.4848		(3,261,614)	-0.6214		
City of Winchester (Clark County)	7,548,345	-0.51409	(38,805)	(3,400,361)	-0.65638	2,231,942.32	2,193,137
	7,308,223	-0.5434		(3,539,108)	-0.6914		
	7,068,101	-0.5727		(3,677,855)	-0.7264		
Fayette County	6,827,980	-0.60203		(3,816,602)	-0.7614		(6,009)
County	6,587,858	-0.6313	(41,592)	(3,955,349)	-0.7964	31,499.89	(10,092)
School	6,347,736	-0.6607	(41,937)	(4,094,096)	-0.8314	34,037.82	(7,899)
Ext	6,107,615	-0.6900	(42,141)	(4,232,843)	-0.8664	36,672.87	(5,468)
Soil/Water	5,867,493	-0.7193	(42,204)	(4,371,590)	-0.9014	39,405.05	(2,799)
Health	5,627,371	-0.7486	(42,127)	(4,510,337)	-0.9364	42,234.36	108
Lextran	5,387,250	-0.7779	(41,908)	(4,649,084)	-0.9714	45,160.79	3,252
Full Svc	5,147,128	-0.8072	(41,549)	(4,787,831)	-1.0064	48,184.34	6,635
Partial Svc	4,907,006	-0.8365	(41,049)	(4,926,578)	-1.0414	51,305.02	10,256
Franklin County	4,666,885	-0.86586		(5,065,325)	-1.0764		
County	4,426,763	-0.89518		(5,204,072)	-1.1114		2,682
Ext. Svc (COOP)	4,186,641	-0.9245	(387)	(5,342,819)	-1.1464	612.50	225
General	3,946,520	-0.9538	(376)	(5,481,565)	-1.1814	647.59	271
Health	3,706,398	-0.9831	(364)	(5,620,312)	-1.2164	683.65	319
Library	3,466,276	-1.0124	(351)	(5,759,059)	-1.2514	720.69	370
Soil Conservation	3,226,155	-1.0417	(336)	(5,897,806)	-1.2864	758.69	423
School	2,986,033	-1.0711	(320)	(6,036,553)	-1.3214	797.67	478
City	2,745,911	-1.10037		(6,175,300)	-1.3564		
Frankfort	2,505,790	-1.1297	(283)	(6,314,047)	-1.3914	878.54	595
Gallatin County	2,265,668	-1.159		(6,452,794)	-1.4264		539,012
County	2,025,546	-1.1883	(24,070)	(6,591,541)	-1.4614	96,328.94	72,259
School	1,785,425	-1.2176	(21,740)	(6,730,288)	-1.4964	100,712.24	78,972
Health	1,545,303	-1.2469	(19,269)	(6,869,035)	-1.5314	105,192.68	85,924
Library	1,305,182	-1.2763	(16,657)	(7,007,782)	-1.5664	109,770.23	93,113
Ext	1,065,060	-1.3056	(13,905)	(7,146,529)	-1.6014	114,444.91	100,540
Soil Conservation	824,938	-1.3349	(11,012)	(7,285,276)	-1.6364	119,216.72	108,205
	584,817	-1.3642		(7,424,023)	-1.6714		

KENTUCKY AMERICAN V	VA1			2010 77 77			
City/County	Real	Rate	Amount	2012 Tax Bill Personal	Rate	Amount	Total Tax
City of Glencoe(Gallatin County)	344,695	-1.3935	(480,338)	(7,562,770)	-1.7064	12,905,170.75	12,424,833
on, or dienese (danatin county)	104,573	-1.4228	(100,000)	(7,701,517)	-1.7414	12,000,110.13	CCO,F&F,&I
City of Sparta(Gallatin County)	(135,548)	-1.4521	196,836	(7,840,264)	-1.7764	13,927,519.62	0
	(375,670)	-1.4815	.,	(7,979,011)	-1.8114	. ,	
Grant County	(615,792)	-1.51077		(8,117,758)	-1.8464		1,629,397
Grant County	(855,913)	-1.5401	13,182	(8,256,505)	-1.8814	155,338.87	168,521
County School	(1,096,035)	-1.5694	17,201	(8,395,251)	-1.9164	160,887.67	178,089
Williamstown School	(1,336,157)	-1.5987	21,361	(8,533,998)	-1.9514	166,533.61	187,895
Library	(1,576,278)	-1.62803	25,662	(8,672,745)	-1.9864	172,276.66	197,939
Health	(1,816,400)	-1.6573	30,104	(8,811,492)	-2.0214	178,116.85	208,221
Extension Service	(2,056,522)	-1.6867	34,686	(8,950,239)	-2.0564	184,054.15	218,741
Soil Conservation	(2,296,643)	-1.7160	39,410	(9,088,986)	-2.0914	190,088.59	229,498
Mental Health	(2,536,765)	-1.7453	44,274	(9,227,733)	-2.1264 -2.1614	196,220.15	240,494
Harrison County	(2,776,887)	-1.7746 -1.80391		(9,366,480)	-2.1014		2,183,575
County	(3,017,008) (3,257,130)	-1.8332	59,711	(9,505,227) (9,643,974)	-2.1904	215,197.57	274,908
School	(3,497,252)	-1.8625	65,138	(9,782,721)	-2.2664	221,717.63	286,855
Library	(3,737,373)	-1.8919	70,706	(9,921,468)	-2.3014	228,334.81	299,041
Health	(3,977,495)	-1.9212	76,414	(10,060,215)	-2.3364	235,049.12	311,464
Extension Service	(4,217,617)	-1.9505	82,264	(10,198,962)	-2.3714	241,860.55	324,124
Soil Conservation	(4,457,738)	-1.9798	88,254	(10,337,709)	-2.4064	248,769.11	337,023
Fire	(4,697,860)	-2.0091	94,385	(10,476,456)	-2.4414	255,774.80	350,160
	(4,937,982)	-2.03843		(10,615,203)	-2.4764		
Jessamine County	(5,178,103)	-2.06774		(10,753,950)	-2.5114		2,562,070
County	(5,418,225)	-2.0971	113,623	(10,892,697)	-2.5464	277,374.60	390,998
School	(5,658,347)	-2.1264	120,317	(11,031,444)	-2.5814	284,768.78	405,086
Health	(5,898,468)	-2.1557	127,152	(11,170,190)	-2.6164	292,260.09	419,412
Library	(6,138,590)	-2.185	134,128	(11,308,937)	-2.6514	299,848.52	433,976
Fire	(6,378,711)	-2.2143	141,244	(11,447,684)	-2.6864	307,534.08	448,779
N.Fire	(6,618,833)	-2.2436	148,502	(11,586,431)	-2.7214	315,316.77	463,819
Ag Ext	(6,858,955)	-2.2729		(11,725,178)	-2.7564		
O Ct	(7,099,076)	-2.30225		(11,863,925)	-2.7914		9.400.945
Owen County Extension Service	(7,339,198)	-2.33157 -2.3609	178,939	(12,002,672)	-2.8264 -2.8614	247 410 70	3,406,345
General	(7,579,320) (7,819,441)	-2.3902	186,900	(12,141,419) (12,280,166)	-2.8964	347,418.76 355,687.07	526,357 542,587
Health	(8,059,563)	-2.4195	195,002	(12,418,913)	-2.9314	364,052.50	559,054
Library	(8,299,685)	-2.4488	203,245	(12,557,660)	-2.9664	372,515.06	575,760
Soil Conservation	(8,539,806)	-2.4781	211,628	(12,696,407)	-3.001	381,074.75	592,703
School	(8,779,928)	-2.5075	220,152	(12,835,154)	-3.0364	389,731.56	609,884
	(9,020,050)	-2.53677		(12,973,901)	-3.0714		
City of Monterey(Owen County)	(9,260,171)	-2.5661	237,623	(13,112,648)	-3.106	0.00	237,623
	(9,500,293)	-2.59539		(13,251,395)	-3.1414		
City of Owenton(Owen County)	(9,740,415)	-2.62471	0	(13,390,142)	-3.17644	42,533,004.98	42,533,005
	(9,980,536)	-2.65402		(13,528,889)	-3.21144		
City of Sparta(Owen County)	(10,220,658)		27,425,463	(13,667,636)	-3.2464	44,371,204.65	71,796,667
	(10,460,780)	-2.71265		(13,806,383)	-3.2814		
Scott County	(10,700,901)	-2.74196		(13,945,129)	-3.3164		4,074,079
County	(10,941,023)	-2.7713	303,206	(14,083,876)	-3.3514	472,013.48	775,220
Ext	(11,181,145)	-2.8006	313,138	(14,222,623)	-3.3864	481,641.54	794,780
Health	(11,421,266)	-2.8299	323,211	(14,361,370)	-3.4214	491,366.73	814,578
Library School	(11,661,388)	-2.8592 -2.8885	333,425	(14,500,117)	-3.4564 -3.4914	501,189.04	834,614 854 888
SCHOOL	(11,901,510)	-2.8883	343,779	(14,638,864)	-3.4914 -3.5264	511,108.48	854,888
City of Georgetown	(12,141,631) (12,381,753)	-2.91783 -2.947	364,910	(14,777,611) (14,916,358)	-3.56145	531,238.73	896,149
Ong of debigetown	(12,621,875)	-2.97648	304,310	(15,055,105)	-3.5965	331,230.13	050,149
City of Sadleville	(12,861,996)		38,660,479	(15,193,852)	-3.63145	55,175,747.26	93,836,227
	(13,102,118)	-3.03511	,,	(15,332,599)	-3.6665	,,- 11120	_ 3,000,227
City of Stamping Ground	(13,342,239)		40,886,222	(15,471,346)	-3.70145	57,266,472.18	98,152,695
v r g	(13,582,361)	-3.09373	-,	(15,610,093)	-3.7365	, ,	,,500
Woodford County	(13,822,483)	-3.12305		(15,748,840)	-3.7715		6,632,901
School	(14,062,604)	-3.1524	443,304	(15,887,587)	-3.8065	604,754.03	1,048,058
County	(14,302,726)	-3.1817	455,066	(16,026,334)	-3.8415	615,644.72	1,070,711
Fire Dept	(14,542,848)	-3.2110	466,969	(16,165,081)	-3.8765	626,632.53	1,093,602
Library	(14,782,969)	-3.2403	479,013	(16,303,828)	-3.9115	637,717.47	1,116,731
Health Dept	(15,023,091)	-3.2696	491,198	(16,442,575)	-3.9465	648,899.53	1,140,097
Ext. Service	(15,263,213)	-3.2989	503,523	(16,581,322)	-3.9815	660,178.72	1,163,702
						_	
Assessment	(9,655,169)			(90,960,297)			

County/Ci Tax Bills State Liab Tax Bill 2012 271,114,675.38 834,356.96 271,949,032.34

Notes:

				13 Tax Bills			
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
ourbon County		0.8690			0.9160		26,623.
County	2,821,289	0.1290	3,639.46	229,936	0.1290	296.62	3,936.
School	2,821,289	0.5760	16,250.61	229,936	0.5760	1,324.43	17,575.
Library	2,821,289	0.0860	2,426.31	229,936	0.1263	290.41	2,716
Health	2,821,289	0.0460	1,297.79	229,936	0.0460	105.77	1,403
Ag. Extension	2,821,289	0.0250	705.32	229,936	0.0387	88.99	794
Soil Conservation	2,821,289	0.0230			0.0000		197
	2,821,289	0.0070	197.49	229,936	0.0000	0.00	
ark County							23,884
County	1,840,972	0.0930	1,712.10	1,068,592	0.1190	1,271.62	2,983
School	1,840,972	0.5590	10,291.01	1,068,592	0.5590	5,973.43	16,264
Ext	1,840,972	0.0270	497.06	1,068,592	0.0432	461.63	958
Health	1,840,972	0.0460	846.85	1,068,592	0.0460	491.55	1,338
Library	1,840,972	0.0690	1,270.27	1,068,592	0.1000	1,068.59	2,338
ty of Winchester (Clark County)	55,734	0.14600	81.37	0	0.15630	0.00	81.
yette County							2,067,359.
County	152,306,755	0.0800	121,845.40	71,114,450	0.0990	70,403.31	192,248
School	152,306,755	0.6960	1,060,055.01	71,114,450	0.6960	494,956.56	1,555,011
Ext	152,306,755	0.0034	5,178.43	71,114,450	0.0038	2,702.35	7,880
Soil/Water		0.0034			0.0030		
	152,306,755		761.53	71,114,450	0.0000	0.00	761
Health	152,306,755	0.0280	42,645.89	71,114,450	0.0280	19,912.05	62,557
Lextran	152,306,755	0.0600	91,384.05	71,114,450	0.0600	42,668.67	134,052
Full Svc	66,079,511	0.1738	114,846.19	31,970,429		0.00	114,846
Partial Svc	0	0.0000	0.00	0	0.0000	0.00	0
anklin County							
County							447,812
Ext. Svc (COOP)	41,304,172	0.0140	5,782.58	4,857,990	0.0260	1,263.08	7,045
General	41,304,172	0.1700	70,217.09	4,857,990	0.2400	11,659.18	81,876
Health	41,304,172	0.0575	23,749.90	4,857,990	0.0575	2,793.34	26,543
Library	41,304,172	0.0850	35,108.55	4,857,990	0.1221	5,931.61	41,040
Soil Conservation	41,304,172	0.0090	3,717.38	4,857,990	0.0000	0.00	3,717
School	41,304,172	0.6230	257,324.99	4,857,990	0.6230	30,265.28	287,590
City							
Frankfort	0	0.0000	0.00	0	0.0000	0.00	0
llatin County							4,925.
County	40,213	0.0890	35.79	424,288	0.1630	691.59	727
School	40,213	0.6660	267.82	424,288	0.6660	2,825.76	3,093
Health	40,213	0.0550	22.12	424,288	0.0550	233.36	255
Library	40,213	0.1160	46.65	424,288	0.1258	533.75	580
Ext	40,213	0.0570	22.92	424,288	0.0570	241.84	264
Soil Conservation	40,213	0.0090	3.62	424,288	0.0000	0.00	3
y of Glencoe(Gallatin County)	4,423	0.2300	10.17	151,453	0.2300	348.34	358
y of Sparta(Gallatin County)	1,207			0			0.
ant County							2,233.
Grant County	210,393	0.1480	311.38	35,636	0.1480	52.74	364
County School	210,393	0.5610	1,180.30	35,636	0.5610	199.92	1,380
Williamstown School	210,393	0.8840	0.00	35,636	0.8840	0.00	0
	210,393			35,636			231
Library		0.087	183.04	,	0.1355	48.29	
Health	210,393	0.0280	58.91	35,636	0.0280	9.98	68
Extension Service	210,393	0.0440	92.57	35,636	0.0995	35.46	128
Soil Conservation Mental Health	210,393 210,393	0.0100 0.0160	21.04 33.66	35,636 35,636	0 0.0160	0.00 5.70	21 39
	210,393	0.0160	33.00	33,030	0.0160	5.70	
rrison County	000 0:=	0.1000		10 77 :	0.1000	,	4,576
County	606,217	0.1020	618.34	13,754	0.1290	17.74	636
School	606,217	0.4520	2,740.10	13,754	0.4520	62.17	2,802
Library	606,217	0.0700	424.35	13,754	0.1445	19.87	444
Health	606,217	0.0500	303.11	13,754	0.0500	6.88	309
Extension Service	606,217	0.0500	303.11	13,754	0.1009	13.88	316
Soil Conservation	606,217	0.0110	66.68	13,754	0.0000	0.00	66
Fire	606,217	0.0630	0.00	13,754	0.0630	0.00	0
ssamine County							58,629.
County	6,118,702	0.0640	3,915.97	234,588	0.1300	304.96	4,220
School	6,118,702	0.6440	39,404.44	234,588	0.6440	1,510.75	40,915
Health					0.0230		
	6,118,702	0.0190	1,162.55	234,588		53.96	1,216
	0 440 70 7						
Library	6,118,702	0.092	5,629.21	234,588	0.1836	430.70	
	6,118,702 6,118,702 6,118,702	0.092 0.0520	5,629.21 3,181.73	234,588 234,588 234,588	0.1836 0.0480	430.70 112.60	6,059 3,294

KENTUCKY AMERICAN WAT

RENTUCKI AMERICAN WA	2013 Tax Bills								
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City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax		
Owen County Extension Service	EC 051 010	0.0410	00 000 00	4 201 700	0.0816	0.575.50	595,599.96		
	56,851,219		23,309.00	4,381,768		3,575.52	26,884.52		
General	56,851,219	0.1220	69,358.49	4,381,768	0.1340	5,871.57	75,230.06		
Health	56,851,219	0.0560	31,836.68	4,381,768	0.0560	2,453.79	34,290.47		
Library	56,851,219	0.1240	70,495.51	4,381,768	0.1947	8,531.30	79,026.82		
Soil Conservation	56,851,219	0.0160	9,096.20	4,381,768	0.000	0.00	9,096.20		
School	56,851,219	0.6060	344,518.38	4,381,768	0.6060	26,553.51	371,071.89		
City of Monterey(Owen County)	346,652	0.1680	582.38	16,704	0.000	0.00	582.38		
City of Owenton(Owen County)	6,830,401	0	0	2,092,293	0.22000	4,603.04	4,603.04		
City of Sparta(Owen County)	1207			30,068			0.00		
Scott County							318,453.38		
County	45,469,687	0.067	30,464.69	4,024,532	0.1094	4,402.84	34,867.53		
Ext	45,469,687	0.018	8,184.54	4,024,532	0.0299	1,203.34	9,387.88		
Health	45,469,687	0.022	10,003.33	4,024,532	0.022	885.40	10,888.73		
Library	45,469,687	0.06	27,281.81	4,024,532	0.06	2,414.72	29,696.53		
School	45,469,687	0.472	214,616.92	4,024,532	0.472	18,995.79	233,612.71		
City of Georgetown	3,372,897	0.065	2,192.38	2,581,185	0.15890	4,101.50	6,293.88		
City of Sadleville	197,166	0.150	295.75	50,563	0.10000	50.57	346.32		
City of Stamping Ground	1015	0.152	1.54	0	0.00000	0.00	1.54		
Woodford County				0	0.0000	0.00	7,979.02		
School	887,177	0.6220	5,518.24	61,504	0.6220	382.55	5,900.80		
County	887,177	0.0700	621.02	61,504	0.0700	43.05	664.08		
Fire Dept	887,177	0.0450	399.23	61,504	0.0450	27.68	426.91		
Library	887,177	0.0670	594.41	61,504	0.0670	41.21	635.62		
Health Dept	887,177	0.0200	177.44	61,504	0.0200	12.30	189.74		
Ext. Service	887,177	0.0170	150.82	61,504	0.0180	11.07	161.89		
Assessment	308,456,796		_	86,447,038					

Notes:

KENTUCKY AMERICAN WAT

County/City Liability State Liability 2013 Taxes Paid 2013 3,570,343.01 881,945.18 4,452,288.19

KENTUCKY AMERICAN WA	2013 Tax Bills								
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax		
Bourbon County		0.8079			0.7956		53.055		
County	9,869,288	0.1353	13,351	(2,125,488)	0.1338	(2,843)	10,507		
School	9,623,104	0.1350	12,994	(2,368,297)	0.1333	(3,157)	9,837		
Library	9,376,920	0.1348	12,638	(2,611,106)	0.1328	(3,468)	9,170		
Health	9,130,736	0.1345	12,284	(2,853,915)	0.1324	(3,777)	8,506		
Ag. Extension	8,884,552	0.1343	11,930	(3,096,724)	0.1319	(4,084)	7,846		
Soil Conservation	8,638,368	0.1340	11,578	(3,339,533)	0.1314	(4,389)	7,190		
Clark County	8,392,184	0.13379		(3,582,343)	0.13094		23,013		
County	8,146,000	0.1335	10,878	(3,825,152)	0.1305	(4,991)	5,887		
School	7,899,816	0.1333	10,530	(4,067,961)	0.1300	(5,288)	5,242		
Ext	7,653,632	0.1330	10,183	(4,310,770)	0.1295	(5,583)	4,599		
Health	7,407,448	0.1328	9,837	(4,553,579)	0.1290	(5,876)	3,960		
Library	7,161,264	0.1325	9,492	(4,796,388)	0.1286	(6,167)	3,325		
	6,915,080	0.1323		(5,039,197)	0.1281				
City of Winchester (Clark County)	6,668,896	0.13205	8,806	(5,282,006)	0.12763	0	8,806		
	6,422,712	0.1318		(5,524,816)	0.1272				
	6,176,528	13.16%		(5,767,625)	0.12668				
Fayette County	5,930,344	0.13131		(6,010,434)	0.12621		(15,593)		
County	5,684,160	0.1311	7,450	(6,253,243)	0.1257	(7,863)	(413)		
School	5,437,976	0.1308	7,113	(6,496,052)	0.1253	(8,137)	(1,024)		
Ext	5,191,792	0.1306	6,779	(6,738,861)	0.1248	(8,409)	(1,631)		
Soil/Water	4,945,608	0.1303	6,445	(6,981,670)	0.1243	(8,679)	(2,235)		
Health	4,699,424	0.1301	6,112	(7,224,479)	0.1238	(8,947)	(2,835)		
Lextran	4,453,240	0.1298	5,781	(7,467,289)	0.1234	(9,212)	(3,431)		
Full Svc	4,207,056	0.1296	5,451	(7,710,098)	0.1229	(9,476)	(4,024)		
Partial Svc	3,960,872	0.1293	0	(7,952,907)	0.1224	0	0		
Franklin County	3,714,688	0.12908		(8,195,716)	0.12195				
County	3,468,504	0.12883		(8,438,525)	0.12148		(46,732)		
Ext. Svc (COOP)	3,222,319	0.1286	4,143	(8,681,334)	0.1210	(10,505)	(6,362)		
General	2,976,135	0.1283	3,819	(8,924,143)	0.1205	(10,756)	(6,937)		
Health	2,729,951	0.1281	3,497	(9,166,952)	0.1201	(11,006)	(7,509)		
Library	2,483,767	0.1278	3,175	(9,409,762)	0.1196	(11,253)	(8,078)		
Soil Conservation	2,237,583	0.1276	2,855	(9,652,571)	0.1191	(11,497)	(8,643)		
School	1,991,399	0.1273	2,536	(9,895,380)	0.1186	(11,740)	(9,204)		
City	1,745,215	0.12709	0	(10,138,189)	0.11817				
Frankfort Gallatin County	1,499,031	0.1268 0.1266	0	(10,380,998)	0.1177 0.11722	0	0 (76,575)		
County	1,252,847 1,006,663		1,272	(10,623,807)		(12,687)	(11,415)		
School	760,479	0.1263 0.1261	959	(10,866,616) (11,109,425)	0.1167 0.1163	(12,087)	(11,415)		
Health	514,295	0.1251	647	(11,352,235)	0.1158	(12,917)	(12,499)		
Library	268,111	0.1259	337	(11,595,044)	0.1158	(13,146)	(12,499)		
Ext	21,927	0.1256	27	(11,837,853)	0.1133	(13,572)	(13,569)		
Ext Soil Conservation	(224,257)	0.1254	(281)	(11,837,853) (12,080,662)	0.1149	(13,596)	(13,569)		
Son Conservation	(470,441)	0.1251	(281)	(12,323,471)	0.1144	(13,018)	(14,099)		
	(470,441)	0.1249		(12,323,471)	0.1139				

KENTUCKY AMERICAN WA	Y.			0040 m =:"			
City/County	DI	D-4-	A	2013 Tax Bills	D-4- T	A	T-4-1 T
City/County City of Glencoe(Gallatin County)	Real (716,625)	Rate 0.1246	Amount (893)	Personal (12,566,280)	Rate 0.1134	Amount (14,255)	Total Tax (15,148)
City of Giencoe(Gallatin County)	(962,809)	0.1246	(893)	(12,500,280)	0.1134	(14,233)	(15,148)
City of Sparta(Gallatin County)	(1,208,993)	0.1244		(13,051,898)	0.1135		0
ony or sparta (danatin county)	(1,455,177)	0.1239		(13,294,708)	0.1120		· ·
Grant County	(1,701,361)	0.12362		(13,537,517)	0.11154		(136,809)
Grant County	(1,947,545)	0.1234	(2,403)		0.1111	(15,306)	(17,709)
County School	(2,193,729)	0.1231	(2,701)		0.1106	(15,509)	(18,210)
Williamstown School	(2,439,913)	0.1229	0	(14,265,944)	0.1101	0	0
Library	(2,686,097)	0.12263	(3,294)	(14,508,753)	0.1097	(15,909)	(19,203)
Health	(2,932,281)	0.1224	(3,589)	(14,751,562)	0.1092	(16,105)	(19,694)
Extension Service	(3,178,465)	0.1221	(3,882)	(14,994,371)	0.1087	(16,300)	(20,182)
Soil Conservation	(3,424,649)	0.1219	(4,174)		0.10823	(16,491)	(20,666)
Mental Health	(3,670,833)	0.1216	(4,465)		0.1078	(16,681)	(21,146)
**	(3,917,017)	0.12139		(15,722,799)	0.10729		(4.40.000)
Harrison County	(4,163,202)	0.12114	(7.001)	(15,965,608)	0.10681	(17,000)	(142,326)
County School	(4,409,386)	0.1209	(5,331)		0.1063	(17,236)	(22,567)
	(4,655,570)	0.1206	(5,617)		0.1059 0.1054	(17,416)	(23,033)
Library Health	(4,901,754)	0.1204 0.1201	(5,902)		0.1034	(17,594)	(23,496) (23,955)
Extension Service	(5,147,938) (5,394,122)	0.1201	(6,185) (6,468)		0.1049	(17,770) (17,944)	(24,411)
Soil Conservation	(5,640,306)	0.1193	(6,749)		0.1044	(18,115)	(24,864)
Fire	(5,886,490)	0.1194	(0,743)	(17,665,272)	0.1035	0	0
1110	(6,132,674)	0.11916		(17,908,081)	0.10303	Ü	· ·
Jessamine County	(6,378,858)	0.11891		(18,150,890)	0.10255		(166,279)
County	(6,625,042)	0.1187	(7,861)		0.1021	(18,777)	(26,638)
School	(6,871,226)	0.1184	(8,137)	(18,636,508)	0.1016	(18,936)	(27,073)
Health	(7,117,410)	0.1182	(8,410)	(18,879,317)	0.1011	(19,094)	(27,504)
Library	(7,363,594)	0.11792	(8,683)	(19,122,126)	0.1007	(19,249)	(27,932)
Fire	(7,609,778)	0.1177	(8,954)	(19,364,936)	0.1002	(19,402)	(28,356)
N.Fire	(7,855,962)	0.1174	(9,225)		0.0997	(19,552)	(28,777)
Ag Ext	(8,102,146)	0.1172		(19,850,554)	0.0992		
	(8,348,330)	0.11693		(20,093,363)	0.09877		
Owen County	(8,594,514)	0.11668		(20,336,172)	0.0983		(188,523)
Extension Service	(8,840,698)	0.1164	(10,293)		0.0978	(20,131)	(30,424)
General	(9,086,882)	0.1162	(10,557)		0.0974	(20,270)	(30,828)
Health	(9,333,066)	0.1159 0.1157	(10,820)		0.0969 0.0964	(20,407) (20,541)	(31,227)
Library Soil Conservation	(9,579,250) (9,825,434)	0.1154	(11,082) (11,342)		0.0964	(20,673)	(31,623) (32,016)
School	(10,071,618)	0.1154	(11,602)		0.0955	(20,803)	(32,405)
School	(10,317,802)	0.11494	(11,002)	(22,035,836)	0.09499	(20,003)	(32,403)
City of Monterey(Owen County)	(10,563,986)	0.1147	(12,116)		0.095	0	(12,116)
eng or momenta (e went county)	(10,810,170)	0.11445	(12,110)	(22,270,010)	0.09404	Ü	(12,110)
City of Owenton(Owen County)	(11,056,354)	0.1142	0	2,092,294	0.09357	1,958	1,958
	(11,302,539)	0.11395			0.09309		
City of Sparta(Owen County)	(11,548,723)	0.1137		(619,817)	0.0926		0
	(11,794,907)	0.11346		(816,665)	0.09215		
Scott County	(12,041,091)	0.11321		(1,013,514)	0.09167		(79,086)
County	(12,287,275)	0.11296	(13,880)	(1,210,363)	0.0912	(1,104)	(14,984)
Ext	(12,533,459)	0.11271	(14,127)		0.09073	(1,277)	(15,403)
Health	(12,779,643)	0.11246	(14,373)		0.09025	(1,448)	(15,820)
Library	(13,025,827)	0.11222	(14,617)		0.08978	(1,617)	(16,234)
School	(13,272,011)	0.11197	(14,860)		0.08931	(1,784)	(16,645)
City of Commentation	(13,518,195)	0.11172		(2,194,606)	0.08883	(0.110)	(17.457)
City of Georgetown	(13,764,379)	0.111	(15,344)		0.08836	(2,113)	(17,457)
City of Sadleville	(14,010,563) (14,256,747)	0.11122 0.111	(15,822)	(2,588,303) (2,785,151)	0.08789 0.08742	(21)	(15,843)
City of Sauleville	(14,502,931)	0.11073	(13,622)	(2,982,000)	0.08742	(34)	(13,643)
City of Stamping Ground	(14,749,115)	0.11073	(16,295)		0.08647	(46)	(16,341)
J. Samping atouiu	(14,995,299)	0.11023	(10,200)	(3,375,697)	0.086	(59)	(10,041)
Woodford County	(15,241,483)	0.11023		(3,572,546)	0.0855	(72)	(126,845)
School	(15,487,667)	0.1097	(16,996)		0.0850	(3,206)	(20,202)
County	(15,733,851)	0.1095	(17,227)		0.0846	(3,355)	(20,581)
Fire Dept	(15,980,035)	0.1092			0.0841	(3,501)	(20,958)
Library	(16,226,219)	0.1090	(17,685)		0.0836	(3,646)	(21,332)
Health Dept	(16,472,403)	0.1087	(17,913)		0.0832	(3,789)	(21,702)
Ext. Service	(16,718,587)	0.1085	(18,139)	(4,753,638)	0.0827	(3,931)	(22,070)
Assessment	(21,669,181)			(105,693,013)			

2013 County/City Liability State Liability (968,841.05) 881,946.18 (86,894.87) 2014 Taxes Paid

Notes:

KENTUCKY AMERICAN WAT 2014 Tax Bills Real City/County Rate Amount Personal Rate Amount Total Tax **Bourbon County** 27.374.94 2,855,700 0.1280 3,655.30 284,323 0.1280 363.93 4,019.23 County 2,855,700 16,363.16 284,323 0.5730 17,992.33 School 0.5730 1,629.17 Library 2,855,700 0.0890 2.541.57 284.323 0.1170 332.66 2.874.23 Health 2,855,700 0.0460 1.313.62 284 323 0.0460130 79 1.444.41 Ag. Extension 0.0260 0.0360 2,855,700 742.48 284,323 102.36 844.84 Soil Conservation 2,855,700 0.0070 199.90 284,323 0.0000 0.00 199.90 **Clark County** 25,326.96 0.0930 1.732.78 0.1108 1.296.38 3,029.15 17,410.66 County 1.863.199 1 170 016 1,863,199 0.5740 10,694.76 1,170,016 0.5740 6,715.90 School 1,863,199 0.0290 540.33 1,170,016 0.0433 506.62 1,046.94 Ext Health 1,863,199 0.0460 857.07 1,170,016 0.0460 538.21 1,395.28 Library 1.863.199 0.0710 1.322.87 1.170.016 0.0959 1.122.05 2.444.92 City of Winchester (Clark County) 56,855 0.1460 83.01 1,620 0.1499 2.43 85.44 2,345,180.65 **Fayette County** County 157.904.907 0.0800 126.323.93 89 961 572 0.0931 83.754.22 210 078 15 1,782,159.98 School 157,904,907 0.7190 1,135,336.28 89,961,572 0.7190 646,823.70 157,904,907 0.0034 5,368.77 89,961,572 0.0038 Ext 3,418.54 8,787.31 Soil/Water 157.904.907 0.0005 789.52 89.961.572 0.0000 0.00 789.52 157 904 907 44 213 37 0.0280 25 189 24 69,402,61 Health 0.0280 89 961 572 157,904,907 0.0600 89,961,572 0.0600 53,976.93 148,719.88 94,742.94 Lextran Full Svc 72,061,678 0.1738 125,243.20 0.0000 0.00 125,243.20 Partial Svo 0.0000 0.00 0 0.0000 0.00 0.00 **Franklin County** 534.151.22 County Ext. Svc (COOP) 49,159,844 0.0140 6882.38 4,299,114 0.0260 1,117.77 8,000.15 95,641.05 General 49,159,844 0.1740 85538.13 4,299,114 0.235010,102.92 Health 49.159.844 0.0575 28266.91 4.299.114 0.0575 2.471.99 30.738.90 Library Soil Conservation 0.0840 49.159.844 41294.27 4.299.114 0 1155 4,965.48 46 259 75 49,159,844 0.0090 4424.39 4,299,114 0.0000 0.00 4,424.39 49,159,844 28,073.21 349,087.00 School 0.6530 321013.78 4,299,114 0.6530 City 0.0000 0.00 0.0000 Frankfort 0 0 0.00 0.00 **Gallatin County** 5,100.75 County 39,892 0.0890 35.50 446,252 0.1630 727.39 762.89 School 39,892 0.6630 264.48 446,252 0.6630 2,958.65 3,223.13 Health 39.892 0.0550 21.94 446.252 0.0550 245.44 267.38 Library 39.892 0.1160 46.27 446.252 0.1177 525.24 571.51 0.0560 249.90 39,892 0.0560 22.34 446,252 272.24 Ext Soil Conservation 39,892 0.0090 3.59 446,252 0.0000 0.00 3.59 0.2300 365.76 City of Glencoe(Gallatin County) 4,388 0.2300 10.09 159,028 375.85 City of Sparta(Gallatin County) 1,197 0.1900 2.27 283,957 0.1900 539.52 541.79 **Grant County** 2,284.70 205.122 301.53 0.1470 0.1470 43.235 63.56 Grant County 365.08 County School 0.5610 0.5610 205,122 1,150.73 43,235 242.55 1,393.28 205,122 0.0000 0.00 43,235 0.0000 0.00 0.00 Williamstown School Library 205,122 0.0910 186.66 43,235 0.1396 60.36 247.02 205,122 0.0280 43.235 Health 57.43 0.0280 12.11 69.54 0.0490 100.51 0.1091 Extension Service 205,122 43,235 47.17 147.68 Soil Conservation 205.122 0.0109 43.235 0.0000 0.00 Mental Health 205,122 0.0160 32.82 43,235 0.0160 6.92 39.74 **Harrison County** 5,215.82 606,905 0.1020 619.04 27,851 0.1290 35.93 County 654.97 School 606,905 0.4720 2,864.59 27,851 0.4720 131.46 2,996.05 Library 606.905 0.0700 424.83 27.851 0.1445 40.24 465.08 Health 606.905 0.0475 288.28 27.851 0.0475 13.23 301.51 606,905 0.0500 303.45 27,851 0.1009 28.10 331.55 Extension Service Soil Conservation 606,905 0.0110 66.76 27,851 0.0000 0.00 66.76 606,905 0.0630382.35 27,851 0.063017.55 399.90 **Jessamine County** 62,977.46 3,868.39 405,348 6,044,353 0.0640 0.1200 486.42 4,354.81 County School 6,044,353 0.6600 39,892.73 405,348 0.6600 2,675.30 42,568.03 6,044,353 6,044,353 405,348 405,348 Health 0.0300 1,813.31 0.0300 121.60 1.934.91 0.0980 5,923.47 0.1832 Library 742.60 6.666.07 6,044,353 0.0520 3,143.06 405,348 0.0480 194.57 3,337.63 Fire

N.Fire

Ag Ext

6,044,353

6,044,353

0.0460

0.0170

2,780.40

1,027.54

405,348

405,348

0.0460

0.0300

186.46

121.60

2,966.86

1,149.14

KENTUCKY	AMERICAN WA

				2014 Tax Bills			
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Owen County							720,630.53
Extension Service	60,958,027	0.0460	28,040.69	10,995,422	0.0816	8,972.26	37,012.96
General	60,958,027	0.1240	75,587.95	10,995,422	0.1340	14,733.87	90,321.82
Health	60,958,027	0.0560	34,136.50	10,995,422	0.0560	6,157.44	40,293.93
Library	60,958,027	0.1230	74,978.37	10,995,422	0.1230	13,524.37	88,502.74
Soil Conservation	60,958,027	0.0160	9,753.28	10,995,422	0.0000	0.00	9,753.28
School	60,958,027	0.6320	385,254.73	10,995,422	0.6320	69,491.07	454,745.80
City of Monterey(Owen County)	350,335	0.1780	623.60	0	0.0000	0.00	623.60
City of Owenton(Owen County)	6,935,257	0.28200	19,557.42	2,314,118	0.1980	4,581.95	24,139.37
City of Sparta(Owen County)	1,197	0.1900	2.28	31,581	0.1900	60.00	62.28
Scott County							329,273.02
County	45,629,154	0.0670	30,571.53	5,530,267	0.0670	3,705.28	34,276.81
Ext	45,629,154	0.0180	8,213.25	5,530,267	0.0320	1,769.69	9,982.93
Health	45,629,154	0.0220	10,038.41	5,530,267	0.0220	1,216.66	11,255.07
Library	45,629,154	0.0590	26,921.20	5,530,267	0.0600	3,318.16	30,239.36
School	45,629,154	0.4760	217,194.77	5,530,267	0.4760	26,324.07	243,518.84
City of Georgetown	3,348,012	0.0650	2,176.21	2,736,844	0.0650	1,778.95	3,955.16
City of Sadleville	195,771	0.1500	293.66	52,736	0.0300	15.82	309.48
City of Stamping Ground	1,035	0.1480	1.53	0	0.0000	0.00	4.44
Woodford County							10,389.96
School	1,116,390	0.6430	7,178.39	88,837	0.6430	571.22	7,749.61
County	1,116,390	0.0700	781.47	88,837	0.0700	62.19	843.66
Fire Dept	1,116,390	0.0460	513.54	88,837	0.0460	40.87	554.40
Library	1,116,390	0.0660	736.82	88,837	0.0660	58.64	795.46
Health Dept	1,116,390	0.0200	223.28	88,837	0.0200	17.77	241.05
Ext. Service	1,116,390	0.0170	189.79	88,837	0.0180	15.99	205.78
Assessment	326,383,493		-	113,252,237		-	4,098,003.41

County/City Liability State Liability 4,098,003.41 2014 Taxes Paid 5,124,200.76

2014

1,026,197.35

Notes:

KENTUCKY AMERICAN WA				2014 Tax Bills			
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Bourbon County						<u> </u>	83,810
County	9,779,432	0.1373	13,424	1,074,991	0.1240	1,332.79	14,757
School	9,509,321	0.1372	13,043	1,131,225	0.1236	1,398.57	14,441
Library	9,239,210	0.1370	12,662	1,187,460	0.1233	1,463.95	14,126
Health	8.969.099	0.1369	12,281	1,243,694	0.1229	1,528.95	13.810
Ag. Extension	8,698,988	0.1368	11,902	1,299,928	0.1226	1,593.55	13,495
Soil Conservation	8,428,877	0.1367	11,523	1,356,162	0.1222	1,657.76	13.180
Clark County	8,158,766	0.1366	,	1,412,396.57	0.1219	-,	59,617
County	7.888.655	0.1365	10.766	1.468.631	0.1215	1.785.01	12.551
School	7,618,544	0.1364	10,389	1,524,865	0.1212	1,848.06	12,237
Ext	7,348,432	0.1363	10,012	1,581,099	0.1208	1,910.70	11,923
Health	7,078,321	0.1361	9,636	1,637,334	0.1205	1,972.95	11,609
Library	6,808,210	0.1360	9,261	1,693,568	0.1201	2,034.81	11,296
Library	6,538,099	0.1359	0,201	1,749,802	0.1198	2,001.01	11,200
City of Winchester (Clark County)	6,267,988	0.1358	8,512	1,806,036	0.1195	2,157.36	10,669
city of winchester (clark county)	5,997,877	0.1357	0,312	1,000,030	0.1191	2,137.30	10,003
	5,727,766	0.1356			0.1188		
Fayette County	5,457,655	0.1355			0.1184		685,527
County	5,187,544	0.1353	7,021	89,961,572	0.1184	106,207.91	113,229
School	4,917,432	0.1352	6,650	89,961,572	0.1177	105,894.53	112,545
Ext	4,647,321	0.1352	6,280	89,961,572	0.1174	105,581.14	111,861
Soil/Water	4,377,210	0.1350	5,910	89,961,572	0.1174	105,267.76	111,177
Health	4,107,099	0.1330	5,540	89,961,572	0.1170		110,495
Health Lextran	3,836,988	0.1349	5,172	89,961,572 89,961,572	0.1167	104,954.38 104,640.99	10,495
Full Svc							
	3,566,877	0.1347	4,803	3,084,411	0.1160	3,576.96	8,380
Partial Svc	3,296,766	0.1346	4,436	3,106,188	0.1156	3,591.40	8,027
Franklin County	3,026,655	0.1344		3,127,965.07	0.1153		00 505
County	2,756,544	0.1343	0.007	3,149,742.30	0.1149	0.000.70	36,567
Ext. Svc (COOP)	2,486,432	0.1342	3,337	3,171,520	0.1146	3,633.79	6,971
General	2,216,321	0.1341	2,972	3,193,297	0.1142	3,647.62	6,620
Health	1,946,210	0.1340	2,608	3,215,074	0.1139	3,661.29	6,269
Library	1,676,099	0.1339	2,244	3,236,851	0.1135	3,674.82	5,919
Soil Conservation	1,405,988	0.1338	1,881	3,258,628	0.1132	3,688.19	5,569
School	1,135,877	0.1337	1,518	3,280,406	0.1128	3,701.41	5,220
City	865,766	0.1335		3302182.916	0.1125		
Frankfort	595,655	0.1334	795	3,323,960	0.1121	0.00	795
Gallatin County	325,543	0.1333		3,345,737.38	0.1118		17,763
County	55,432	0.1332	74	3,367,515	0.1114	3,752.78	3,827
School	(214,679)	0.1331	(286)	3,389,292	0.1111	3,765.24	3,480
Health	(484,790)	0.1330	(645)	3,411,069	0.1107	3,777.55	3,133
Library	(754,901)	0.1329	(1,003)	3,432,846	0.1104	3,789.71	2,787
Ext	(1,025,012)	0.1327	(1,361)	3,454,624	0.1100	3,801.71	2,441
Soil Conservation	(1,295,123)	0.1326	(1,718)	3,476,401	0.1097	3,813.57	2,096
	(1,565,234)	0.1325		3,498,178	0.1094		

KENTUCKY AMERICAN WAT

KENTUCKY AMERICAN W	/A1			0014 E 2011			
City/County	Real	Rate	Amount	2014 Tax Bills Personal	Rate	Amount	Total Tax
City of Glencoe(Gallatin County)	(1,835,345)	0.1324	(2,430)	3,519,955	0.1090	3,836.82	10tai 1ax 1,4
aromoo(ammin ooung)	(2,105,457)	0.1323	(5,100)	3,541,732.46	0.1087	3,300.02	1,1
City of Sparta(Gallatin County)	(2,375,568)	0.1322	(3,140)	3,563,510	0.1083	3,859.47	7
	(2,645,679)	0.1321		3,585,286.92	0.1080		
Grant County	(2,915,790)	0.1320		3,607,064.15	0.1076		(11,0
Grant County	(3,185,901)	0.1318	(4,200)	3,628,841	0.1073	3,892.31	(3)
County School	(3,456,012)	0.1317	(4,553)	3,650,619	0.1069	3,902.95	(6
Williamstown School	(3,726,123)	0.1316 0.1315	0	3,672,396	0.1066	0.00 3,923.78	(1.9
Library Health	(3,996,234) (4,266,345)	0.1313	(5,255) (5,606)	3,694,173 3,715,950	0.1062 0.1059	3,933.96	(1,3 (1,6
Extension Service	(4,536,457)	0.1314	(5,955)	3,737,728	0.1055	3,944.00	(2,0
Soil Conservation	(4,806,568)	0.1313	(6,304)	3,759,505	0.1052	3,953.88	(2,3
Mental Health	(5,076,679)	0.1311	(6,653)	3,781,282	0.1048	3,963.61	(2,6
	(5,346,790)	0.1309	(-,,	3803059.227	0.1045	.,	
arrison County	(5,616,901)	0.1308		3,824,836.46	0.1041		(32,9
County	(5,887,012)	0.1307	(7,695)	3,846,614	0.1038	3,991.89	(3,7
School	(6,157,123)	0.1306	(8,041)	3,868,391	0.1034	4,001.02	(4,0
Library	(6,427,234)	0.1305	(8,387)	3,890,168	0.1031	4,009.99	(4,3
Health	(6,697,345)	0.1304	(8,732)	3,911,945	0.1027	4,018.81	(4,7
Extension Service	(6,967,457)	0.1303	(9,076)	3,933,723	0.1024	4,027.48	(5,0
Soil Conservation	(7,237,568)	0.1301	(9,419)	3,955,500	0.1020	4,036.00	(5,3
Fire	(7,507,679)	0.1300	(9,763)	3,977,277	0.1017	4,044.36	(5,7
t Ct	(7,777,790)	0.1299		3999054.306	0.1013		(***
ssamine County	(8,047,901)	0.1298	(10.700)	4,020,831.54	0.1010	4 000 55	(54,0
County	(8,318,012)	0.1297	(10,788)	4,042,609	0.1006	4,068.55	(6,
School Health	(8,588,123)	0.1296 0.1295	(11,129)	4,064,386 4,086,163	0.1003 0.0999	4,076.31	(7,0
Library	(8,858,234) (9,128,345)	0.1293	(11,469) (11,808)	4,107,940	0.0996	4,083.92 4,091.37	(7,3 (7,
Fire	(9,398,457)	0.1292	(12,147)	4,129,718	0.0992	4,091.57	(8,0
N.Fire	(9,668,568)	0.1291	(12,485)	4,151,495	0.0989	4,105.83	(8,3
Ag Ext	(9,938,679)	0.1290	(12,822)	4,173,272	0.0986	4,112.83	(8,7
9	(10,208,790)	0.1289	(12,022)	4195049.384	0.0982	1,112.00	(0,
ven County	(10,478,901)	0.1288		4,216,826.62	0.0979		(63,
Extension Service	(10,749,012)	0.1287	(13,831)	4,238,604	0.0975	4,132.92	(9,6
General	(11,019,123)	0.1286	(14,167)	4,260,381	0.0972	4,139.31	(10,0
Health	(11,289,234)	0.1285	(14,501)	4,282,158	0.0968	4,145.55	(10,3
Library	(11,559,346)	0.1283	(14,835)	4,303,936	0.0965	4,151.64	(10,6
Soil Conservation	(11,829,457)	0.1282	(15,168)	4,325,713	0.0961	4,157.58	(11,
School	(12,099,568)	0.1281	(15,501)	4,347,490	0.0958	4,163.36	(11,3
	(12,369,679)	0.1280		4369267.232	0.0954		
ty of Monterey(Owen County)	(12,639,790)	0.1279	(16,164)	4,391,044	0.0951	0.00	(16,1
	(12,909,901)	0.1278	(40.000)	4412821.694	0.0947	4404.00	40
y of Owenton(Owen County)	(13,180,012)	0.12766	(16,826)	4,434,599	0.0944	4,184.99	(12,
fg + (0 - 6 - +)	(13,450,123)	0.1275	(17.404)	4,456,376.16	0.0940	4 10 4 00	(10.4
y of Sparta(Owen County)	(13,720,234)	0.1274	(17,484)	4,478,153	0.0937	4,194.90	(13,2
att Caumty	(13,990,346)	0.1273 0.1272		4499930.618	0.0933 0.0930		(74
ott County County	(14,260,457) (14,530,568)	0.1272	(18,467)	4,521,707.85 4,543,485	0.0926	4,208.61	(74, (14,
Ext	(14,800,679)	0.1271	(18,794)	4,565,262	0.0923	4,212.88	(14,
Health	(15,070,790)	0.1269	(19,120)	4,587,040	0.0919	4,217.00	(14,9
Library	(15,340,901)	0.1268	(19,445)	4,608,817	0.0916	4,220.97	(15,5
School	(15,611,012)	0.1266	(19,770)	4,630,594	0.0912	4,224.78	(15,
	(15,881,123)	0.1265	(,)	4652371.234	0.0909	-,	(,
ty of Georgetown	(16,151,234)	0.1264	(20,418)	4,674,148	0.0905	4,231.95	(16,
	(16,421,346)	0.1263		4,695,926	0.0902		
ty of Sadleville	(16,691,457)	0.1262	(21,063)	4,717,703	0.0898	4,238.52	(16,8
	(16,961,568)	0.1261		4,739,480	0.0895		
y of Stamping Ground	(17,231,679)	0.1260	(21,706)	4,761,257	0.0891	4,244.48	(17,
	(17,501,790)	0.1259		4783034.62	0.0888		
oodford County	(17,771,901)	0.1257		4,804,811.85	0.0884		(115,
School	(18,042,012)	0.1256	(22,665)	4,826,589	0.0881	4,252.28	(18,
County	(18,312,123)	0.1255	(22,984)	4,848,366	0.0878	4,254.57	(18,
Fire Dept	(18,582,234)	0.1254	(23,302)	4,870,144	0.0874	4,256.72	(19,0
Library	(18,852,346)	0.1253	(23,619)	4,891,921	0.0871	4,258.72	(19,3
Health Dept Ext. Service	(19,122,457) (19,392,568)	0.1252 0.1251	(23,936) (24,252)	4,913,698 4,935,475	0.0867 0.0864	4,260.55 4,262.24	(19, (19,9
		0.1231	(۵٤۵,۴۵)		0.0004	T,&U&.&4	
Assessment	(35,315,022)	_		124,170,970		_	452,
							2014
					ounty/City Liabil	lity	452,673
				St	ate Liabiltiv		1 026 198

 Notes:
 County/City Liability
 452,673.10

 \$ State Liability
 1,026,198.35

 \$ 2015 Taxes Paid
 1,478,871.45

KENTUCKY AMERICAN WAT				2015 Toy Dillo			
City/County	Real	Rate	Amount	2015 Tax Bills Personal	Rate	Amount	Total Tax
City/County Bourbon County	Real	Rate	Amount	reisonai	Rate	Amount	41,425.19
County	4,131,348	0.1270	5,246.81	497.508	0.1270	631.84	5,878.65
School	4,131,348	0.5910	24,416.27	497,508	0.5910	2,940.27	27,356.54
Library	4,131,348	0.0920	3,800.84	497,508	0.1239	616.41	4,417.25
Health	4,131,348	0.0460	1,900.42	497,508	0.0460	228.85	2,129.27
Ag. Extension	4,131,348	0.0280	1,156.78	497,508	0.0397	197.51	1,354.29
Soil Conservation	4,131,348	0.0070	289.19	497,508	0.0000	0.00	289.19
Clark County							26,846.19
County	2,000,472	0.0930	1,860.44	1,115,545	0.1168	1,302.96	3,163.40
School	2,000,472	0.6000	12,002.83	1,115,545	0.6000	6,693.28	18,696.11
Ext	2,000,472	0.0290	580.14	1,115,545	0.0433	483.03	1,063.17
Health	2,000,472	0.0460	920.22	1,115,545	0.0460	513.15	1,433.37
Library	2,000,472	0.0710	1,420.34	1,115,545	0.0959	1,069.81	2,490.14
City of Winchester (Clark County)	56,855	0.1460	83.01	1,092	0.1499	1.64	84.65
Fayette County							2,562,955.87
County	172,798,940	0.0800	138,239.15	91,071,873	0.0915	83,330.76	221,569.91
School	172,798,940	0.7400	1,278,712.16	91,071,873	0.7400	673,931.86	1,952,644.03
Ext	172,798,940	0.0032	5,529.57	91,071,873	0.0038	3,460.73	8,990.30
Soil/Water	172,798,940	0.0005	863.99	91,071,873	0.0000	0.00	863.99
Health	172,798,940	0.0280	48,383.70	91,071,873	0.0280	25,500.12	73,883.82
Lextran	172,798,940	0.0600	103,679.36	91,071,873	0.0600	54,643.12	158,322.48
Full Svc	84,396,633	0.1738	146,681.35	0	0.0000	0.00	146,681.35
Partial Svc	0	0.0000	0.00	0	0.0000	0.00	0.00
ranklin County							
County							522,869.39
Ext. Svc (COOP)	48,678,925	0.0140	6815.05	3,614,983	0.0260	939.90	7,754.96
General	48,678,925	0.1770	86161.70	3,614,983	0.2350	8,495.21	94,656.91
Health	48,678,925	0.0575	27990.38	3,614,983	0.0575	2,078.62	30,069.00
Library	48,678,925	0.0830	40403.51	3,614,983	0.1141	4,124.70	44,528.20
Soil Conservation	48,678,925	0.0090	4381.10	3,614,983	0.0000	0.00	4,381.10
School	48,678,925	0.6530	317873.38	3,614,983	0.6530	23,605.84	341,479.22
City							
Frankfort	0	0.0000	0.00	0	0.0000	0.00	0.00
allatin County							4,986.31
County	39,028	0.0890	34.73	441,770	0.1630	720.09	754.82
School	39,028	0.6530	254.85	441,770	0.6530	2,884.76	3,139.61
Health	39,028	0.0550	21.47	441,770	0.0550	242.97	264.44
Library	39,028	0.1150	44.88	441,770	0.1154	509.80	554.68
Ext	39,028	0.0560	21.86	441,770	0.0560	247.39	269.25
Soil Conservation	39,028	0.0090	3.51	441,770	0.0000	0.00	3.51
City of Glencoe(Gallatin County)	4,293	0.2300	9.87	157,549	0.2300	362.36	372.23
City of Sparta(Gallatin County)	1,171	0.1900	2.22	281,377	0.1900	534.62	536.84
Grant County							2,423.67
Grant County	220,771	0.1460	322.33	41,290	0.1460	60.28	382.61
County School	220,771	0.5610	1,238.53	41,290	0.5610	231.64	1,470.16
Williamstown School	220,771	0.0000	0.00	41,290	0.0000	0.00	0.00
Library	220,771	0.0950	209.73	41,290	0.1347	55.62	265.35
Health	220,771	0.0280	61.82	41,290	0.0280	11.56	73.38
Extension Service	220,771	0.0550	121.42	41,290	0.1132	46.74	168.16
Soil Conservation	220,771	0.0100	22.08	41,290	0.0000	0.00	22.08
Mental Health	220,771	0.0160	35.32	41,290	0.0160	6.61	41.93
Harrison County	040.745	0.4000	050.00	00.007	0.4000	00.75	5,452.27
County	643,745	0.1020	656.63	22,287	0.1290	28.75	685.38
School	643,745	0.4730	3,044.91	22,287	0.4730	105.42	3,150.33
Library	643,745	0.0700	450.62	22,287	0.1411	31.45	482.07
Health	643,745	0.0450	289.69	22,287	0.0450	10.03	299.71
Extension Service	643,745	0.0500	321.87	22,287	0.1009	22.49	344.36
Soil Conservation Fire	643,745 643,745	0.0110 0.0630	70.81 405.56	22,287 22,287	0.0000 0.0630	0.00 14.04	70.81 419.60
							65,630.56
essamine County							
essamine County County	6,261,465	0.0640	4,007.34	349,006	0.1300	453.71	4,461.05
	6,261,465 6,261,465	0.0640 0.6720	4,007.34 42,077.04	349,006 349,006	0.1300 0.6720	453.71 2,345.32	
County School			42,077.04	349,006	0.6720	2,345.32	44,422.37
County	6,261,465	0.6720	,				
County School Health	6,261,465 6,261,465	0.6720 0.0300	42,077.04 1,878.44	349,006 349,006	0.6720 0.0300	2,345.32 104.70	44,422.37 1,983.14
Schooľ Health Library	6,261,465 6,261,465 6,261,465	0.6720 0.0300 0.1030	42,077.04 1,878.44 6,449.31	349,006 349,006 349,006	0.6720 0.0300 0.1952	2,345.32 104.70 681.26	44,422.37 1,983.14 7,130.57

2015

4,229,993.39 1,029,632.65

5,259,626.04

KENTUCKY AMERICAN WA

City County Real Rate Amount Personal Rate Amount Total Tax Owen County Extension Service 51,107,643 0.0490 25,042,75 9,878,343 0.0779 7,695,23 32,737,96 General 51,107,643 0.0240 63,373,48 9,878,343 0.0560 5,531,87 34,152,15 Library 51,107,643 0.0160 28,620,28 9,878,343 0.060 5,531,87 34,152,15 Library 51,107,643 0.0160 8,177,22 9,878,343 0.000 0.00 0.00 8,914,16 Soll Conservation 51,107,643 0.6310 322,489,23 9,878,343 0.6310 62,332,34 384,821,57 City of Monterey(Owen County) 350,245 0.1840 644.45 24,091 0.000 0.00 644.45 City of Owenton(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59,44 61.66 Scott County 46,556,280 0.0670 31,192,71 51,1868 0.06				·	2015 Tax Bills			
Extension Service 51.107,643 0.0490 25.042.75 9.878.343 0.0779 7.695.23 32.737.97 General 51.107,643 0.0240 63.373.48 9.878.343 0.1300 13.236.98 76.610.46 Health 51.107,643 0.0500 28,620.28 9.878.343 0.0560 5.531.87 34,152.15 Library 51,107,643 0.0160 81,772.2 9.878.343 0.0000 0.00 8,177.22 School 51,107,643 0.6310 322,489.23 9.878,343 0.6310 62,332.34 384,821.57 City of Monterey(Owen County) 350,245 0.1840 644.45 24,091 0.000 0.00 644.45 City of Sparta(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59.44 61.66 Scott County 46,556,280 0.0670 31,192.71 5,191,886 0.0670 3,478.56 34,671.27 Ext 46,556,280 0.0670 31,192.71 5,191,886 0.0470 2,284.33 2,		Real	Rate	Amount	Personal	Rate	Amount	
General 51,107,643 0.1240 63,373,48 9,878,343 0.1340 13,236,98 76,610.46 Health 51,107,643 0.0560 28,620.28 9,878,343 0.0130 11,22.51 34,152.15 1.1574 1.157								605,413.54
Health	Extension Service	51,107,643			9,878,343			
Library 51,107,643 0.1130 57,751.64 9,878,343 0.1130 11,162.53 68,914.16 Soil Conservation 51,107,643 0.0160 8,177.22 9,878,343 0.0000 0.00 60,00 8,177.25 School 51,107,643 0.6310 322,489.23 9,878,343 0.6310 62,332.34 384,821.57		51,107,643		63,373.48	9,878,343	0.1340	13,236.98	76,610.46
Soil Conservation School 51,107,643 51,107,643 0.6310 322,489.23 9,878,343 9,878,343 0.6310 62,332.34 384,821.57 City of Monterey(Owen County) 350,245 0.1840 644.45 24,091 0.0000 0.000 0.00 644.45 City of Owenton(Owen County) 6,935,257 0.28200 19,557,42 2.238,231 0.1780 3,984.05 23,541.47 City of Sparta(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59.44 0.1900 59.44 0.166 Scott County Scott County 351,688.29 County 46,556,280 0.0670 0.0181 0.0460 0.0440 0.0484.76 0.0032 0.0	Health	51,107,643	0.0560	28,620.28	9,878,343	0.0560	5,531.87	34,152.15
School 51,107,643 0.6310 322,489.23 9,878,343 0.6310 62,332.34 384,821.57 City of Monterey(Owen County) 350,245 0.1840 644.45 24,091 0.0000 0.00 644.45 City of Owenton(Owen County) 6,935,257 0.28200 19,557.42 2,238,231 0.1780 3,984.05 23,541.47 City of Sparta(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59.44 61.66 Scott County "**********************************	Library	51,107,643		57,751.64	9,878,343		11,162.53	
City of Monterey(Owen County) 350,245 0.1840 644.45 24,091 0.0000 0.00 644.45 City of Owenton(Owen County) 6,935,257 0.28200 19,557.42 2.238,231 0.1780 3,984.05 23,541.47 City of Sparta(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59.44 61.66 Scott County Scott County 46,556,280 0.0670 31,192.71 5,191.886 0.0670 3,478.56 34,671.27 Ext 46,556,280 0.0181 8,426.69 5,191.886 0.0322 1,671.79 10,098.47 Health 46,556,280 0.0440 2,0484.76 5,191.886 0.0322 1,671.79 10,098.47 Health 46,556,280 0.0590 27,468.21 5,191.886 0.0400 23,151.33 30,583.34 School 46,556,280 0.0590 27,468.21 5,191.886 0.0400 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 <th>Soil Conservation</th> <th>51,107,643</th> <th></th> <th>8,177.22</th> <th>9,878,343</th> <th></th> <th></th> <th>8,177.22</th>	Soil Conservation	51,107,643		8,177.22	9,878,343			8,177.22
City of Owenton(Owen County) 6,935,257 0.28200 19,557.42 2,238,231 0.1780 3,984.05 23,541.47 City of Sparta(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59.44 61.66 Scott County 46,556,280 0.0670 31,192.71 5,191,886 0.0670 3,478.56 34,671.27 Ext 46,556,280 0.0181 8,426.69 5,191,886 0.0322 1,671.79 10,098.47 Health 46,556,280 0.0440 20,484.76 5,191,886 0.0400 2,284.43 22,789.19 Library 46,556,280 0.0590 27,468.21 5,191,886 0.0600 3,115.13 30,583.34 School 46,556,280 0.4900 228,125.77 5,191,886 0.4900 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 <	School	51,107,643	0.6310	322,489.23	9,878,343	0.6310	62,332.34	384,821.57
City of Sparta(Owen County) 1,171 0.1900 2.22 31,284 0.1900 59.44 61.66 Scott County 351,688.29 County 46,556,280 0.0670 31,192.71 5,191,886 0.0670 3.478.56 34,671.79 10,098.47 Ext 46,556,280 0.0440 20,484.76 5,191,886 0.0440 2,284.43 22,769.19 Library 46,556,280 0.0590 27,468.21 5,191,886 0.0600 3,115.13 30,583.34 School 46,556,280 0.0590 228,125.77 5,191,886 0.0600 3,115.13 30,583.34 School 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.53 Woodford County School 7,380.95 117,745	City of Monterey(Owen County)	350,245	0.1840	644.45	24,091	0.0000	0.00	644.45
Scott County 46,556,280 0.0670 31,192.71 5,191,886 0.0670 3,478.56 34,671.27 Ext 46,556,280 0.0181 8,426.69 5,191,886 0.0322 1,671.79 10,098.47 Health 46,556,280 0.0440 20,484.76 5,191,886 0.0440 2,284.43 22,769.19 Library 46,556,280 0.0590 27,468.21 5,191,886 0.0400 3,115.13 30,583.34 School 46,556,280 0.4900 228,125.77 5,191,886 0.4900 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 1	City of Owenton(Owen County)	6,935,257	0.28200	19,557.42	2,238,231	0.1780	3,984.05	23,541.47
County 46,556,280 0.0670 31,192.71 5,191,886 0.0670 3,478.56 34,671.27 Ext 46,556,280 0.0181 8,426.69 5,191,886 0.0322 1,671.79 10,098.47 Health 46,556,280 0.0440 20,484.76 5,191,886 0.0440 2,284.43 22,769.19 Library 46,556,280 0.0590 27,468.21 5,191,886 0.0600 3,115.13 30,583.34 School 46,556,280 0.4900 228,125.77 5,191,886 0.4900 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.53 Woodford County 5 5 1.17,745 0.6640 781.82 8,162.77 County 1,11	City of Sparta(Owen County)	1,171	0.1900	2.22	31,284	0.1900	59.44	61.66
Ext 46,556,280 0.0181 8,426.69 5,191,886 0.0322 1,671.79 10,098.47 Health 46,556,280 0.0440 20,484.76 5,191,886 0.0440 2,284.43 22,769.19 Library 46,556,280 0.0590 27,468.21 5,191,886 0.0600 3,115.13 30,583.34 School 46,556,280 0.4900 228,125.77 5,191,886 0.4900 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.03 1.53 Woodford County 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0640 <th>Scott County</th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Scott County							
Health Library 40,556,280 (0.0440) (0.0590) (0.0440) (0.0590)	County	46,556,280		31,192.71	5,191,886		3,478.56	34,671.27
Library School 40,556,280 46,556,280 0.4900 0.0590 27,468.21 5,191,886 0.0600 3,115.13 30,583.34 d6,556,280 0.4900 228,125.77 5,191,886 0.4900 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 0.0650 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.000 0.00 1.53 Woodford County School 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 0.000 0.000 0.00 0.00 0.00 0.00 0.0								
School 40,556,280 0.4900 228,125.77 5,191,886 0.4900 25,440.24 253,566.01 City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.53 Woodford County 10,868.49 School 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0700 82.42 860.53 Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55	Health				5,191,886			
City of Georgetown 3,226,608 0.0650 2,097.30 2,776,824 0.0650 1,804.94 3,902.23 City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.03 1.53 Woodford County 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0700 82.42 860.53 Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16								
City of Sadleville 189,638 0.1424 270.04 47,487 0.0390 18.52 288.56 City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.53 Woodford County 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0700 82.42 860.53 Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	School	46,556,280	0.4900	228,125.77	5,191,886	0.4900	25,440.24	253,566.01
City of Stamping Ground 1,035 0.1480 1.53 20 0.0000 0.00 1.53 Woodford County 10,868.49 School 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0700 82.42 860.53 Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	City of Georgetown	3,226,608	0.0650	2,097.30	2,776,824	0.0650	1,804.94	3,902.23
Woodford County 10,868.49 School 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0700 82.42 860.53 Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	City of Sadleville	189,638	0.1424	270.04	47,487	0.0390	18.52	288.56
School 1,111,589 0.6640 7,380.95 117,745 0.6640 781.82 8,162.77 County 1,111,589 0.0700 778.11 117,745 0.0700 82,42 860.53 Fire Dept 1,111,589 0.0470 522,45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	City of Stamping Ground	1,035	0.1480	1.53	20	0.0000	0.00	1.53
County 1,111,589 0.0700 778.11 117,745 0.0700 82.42 860.53 Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	Woodford County							10,868.49
Fire Dept 1,111,589 0.0470 522.45 117,745 0.0470 55.34 577.79 Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	School	1,111,589	0.6640	7,380.95	117,745	0.6640	781.82	8,162.77
Library 1,111,589 0.0660 733.65 117,745 0.0660 77.72 811.37 Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16		1,111,589		778.11	117,745			
Health Dept 1,111,589 0.0200 222.32 117,745 0.0200 23.55 245.87 Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16	Fire Dept							
Ext. Service 1,111,589 0.0170 188.97 117,745 0.0180 21.19 210.16								
Assessment 333,550,206 112,342,236 4,229,993.39	Ext. Service	1,111,589	0.0170	188.97	117,745	0.0180	21.19	210.16
	Assessment	333,550,206		-	112,342,236		-	4,229,993.39

County/City Liability State Liabilti 2015 Taxes Paid

Notes: KENTUCKY AMERICAN WAT

KENTUCKY AMERICAN WA				0045 M Dill			
				2015 Tax Bills	_		
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
Bourbon County							58,230
County	6,940,373	0.1386	9,619	940,270	0.1250	1,174.95	10,794
School	6,607,847	0.1385	9,150	968,895	0.1246	1,207.24	10,358
Library	6,275,321	0.1384	8,683	997,520	0.1242	1,239.33	9,922
Health	5,942,795	0.1382	8,215	1,026,145	0.1239	1,271.21	9,487
Ag. Extension	5,610,269	0.1381	7,749	1,054,770	0.1235	1,302.89	9,052
Soil Conservation	5,277,744	0.1380	7,283	1,083,395	0.1232	1,334.36	8,618
Clark County	4,945,218	0.1379		1,112,020.43	0.1228		34,440
County	4,612,692	0.1378	6,355	1,140,645	0.1224	1,396.69	7,751
School	4,280,166	0.1376	5,892	1,169,270	0.1221	1,427.56	7,319
Ext	3,947,640	0.1375	5,429	1,197,896	0.1217	1,458.20	6,887
Health	3,615,114	0.1374	4,968	1,226,521	0.1214	1,488.64	6,456
Library	3,282,588	0.1373	4,507	1,255,146	0.1210	1,518.88	6,026
	2,950,062	0.1372		1,283,771	0.1207		
City of Winchester (Clark County)	2,617,536	0.1371	3,587	1,312,396	0.1203	1,578.75	5,166
	2,285,011	0.1369			0.1199		
	1,952,485	0.1368			0.1196		
Fayette County	1,619,959	0.1367			0.1192		652,720
County	1,287,433	0.1366	1,758	91,071,873	0.1189	108,248.13	110,006
School	954,907	0.1365	1,303	91,071,873	0.1185	107,921.41	109,224
Ext	622,381	0.1363	849	91,071,873	0.1181	107,594.70	108,443
Soil/Water	289,855	0.1362	395	91,071,873	0.1178	107,267.98	107,663
Health	(42,671)	0.1361	(58)	91,071,873	0.1174	106,941.27	106,883
Lextran	(375,197)	0.1360	(510)	91,071,873	0.1171	106,614.55	106,104
Full Svc	(707,723)	0.1359	(962)	2,893,231	0.1167	3,376.62	2,415
Partial Svc	(1,040,248)	0.1357	(1,412)	2,915,362	0.1163	3,391.99	1,980
Franklin County	(1,372,774)	0.1356		2,937,493.39	0.1160		
County	(1,705,300)	0.1355		2,959,624.67	0.1156		(2,409)
Ext. Svc (COOP)	(2,037,826)	0.1354	(2,759)	2,981,756	0.1153	3,437.15	678
General	(2,370,352)	0.1353	(3,206)	3,003,887	0.1149	3,451.88	245
Health	(2,702,878)	0.1352	(3,653)	3,026,019	0.1146	3,466.46	(187)
Library	(3,035,404)	0.1350	(4,099)	3,048,150	0.1142	3,480.88	(618)
Soil Conservation	(3,367,930)	0.1349	(4,544)	3,070,281	0.1138	3,495.14	(1,049)
School	(3,700,456)	0.1348	(4,988)	3,092,412	0.1135	3,509.24	(1,479)
City	(4,032,981)	0.1347		3114543.696	0.1131		
Frankfort	(4,365,507)	0.1346	(5,874)	3,136,675	0.1128	0.00	(5,874)
Gallatin County	(4,698,033)	0.1344		3,158,806.27	0.1124		(25,551)
County	(5,030,559)	0.1343	(6,757)	3,180,938	0.1120	3,564.05	(3,193)
School	(5,363,085)	0.1342	(7,197)	3,203,069	0.1117	3,577.35	(3,620)
Health	(5,695,611)	0.1341	(7,637)	3,225,200	0.1113	3,590.50	(4,046)
Library	(6,028,137)	0.1340	(8,076)	3,247,331	0.1110	3,603.49	(4,472)
Ext	(6,360,663)	0.1338	(8,514)	3,269,463	0.1106	3,616.32	(4,897)
Soil Conservation	(6,693,189)	0.1337	(8,951)	3,291,594	0.1103	3,628.99	(5,322)
	(7,025,714)	0.1336		3,313,725	0.1099		

KENTUCKY AMERICAN WAT

KENTUCKY AMERICAN V	VAL			2015 Tax Bills			
City/County	Real	Rate	Amount	Personal	Rate	Amount	Total Tax
City of Glencoe(Gallatin County)	(7,358,240)	0.1335	(9,823)	3,335,857	0.1095	3,653.86	(6,169)
•	(7,690,766)	0.1334		3,357,987.87	0.1092		
City of Sparta(Gallatin County)	(8,023,292)	0.1333	(10,691)	3,380,119	0.1088	3,678.09	(7,013)
	(8,355,818)	0.1331		3,402,250.45	0.1085		
Grant County	(8,688,344)	0.1330	(44.000)	3,424,381.74	0.1081	0.710.01	(68,797
Grant County	(9,020,870)	0.1329	(11,989)	3,446,513	0.1077	3,713.24	(8,275
County School	(9,353,396)	0.1328	(12,419)	3,468,644	0.1074	3,724.64	(8,695
Williamstown School	(9,685,922)	0.1327	(12.970)	3,490,776	0.1070	0.00 3,746.96	(0.539
Library Health	(10,018,448) (10,350,973)	0.1325 0.1324	(13,279) (13,707)	3,512,907 3,535,038	0.1067 0.1063	3,757.89	(9,532 (9,949
Extension Service	(10,683,499)	0.1324	(14,135)	3,557,169	0.1059	3,768.65	(10,366
Soil Conservation	(11,016,025)	0.1323	(14,163)	3,579,301	0.1056	3,779.26	(10,782
Mental Health	(11,348,551)	0.1321	(14,988)	3,601,432	0.1052	3,789.71	(11,198
77071111	(11,681,077)	0.1319	(11,000)	3623563.339	0.1049	0,100.11	(11,100
Harrison County	(12,013,603)	0.1318		3,645,694.63	0.1045		(95,740
County	(12,346,129)	0.1317	(16,261)	3,667,826	0.1042	3,820.10	(12,441
School	(12,678,655)	0.1316	(16,684)	3,689,957	0.1038	3,829.91	(12,854
Library	(13,011,181)	0.1315	(17,106)	3,712,088	0.1034	3,839.56	(13,267
Health	(13,343,706)	0.1314	(17,528)	3,734,220	0.1031	3,849.06	(13,678
Extension Service	(13,676,232)	0.1312	(17,948)	3,756,351	0.1027	3,858.40	(14,090
Soil Conservation	(14,008,758)	0.1311	(18,368)	3,778,482	0.1024	3,867.57	(14,500
Fire	(14,341,284)	0.1310	(18,787)	3,800,614	0.1020	3,876.59	(14,910
	(14,673,810)	0.1309		3822744.939	0.1016		/404 4
Jessamine County	(15,006,336)	0.1308	(00.000)	3,844,876.23	0.1013	0.000.00	(121,488
County	(15,338,862)	0.1306	(20,039)	3,867,008	0.1009	3,902.69	(16,136
School Health	(15,671,388) (16,003,914)	0.1305 0.1304	(20,455)	3,889,139	0.1006 0.1002	3,911.08 3,919.30	(16,544 (16,950
Health Library	(16,336,439)	0.1304	(20,870) (21,284)	3,911,270 3,933,401	0.1002	3,927.37	(17,357
Fire	(16,668,965)	0.1303	(21,697)	3,955,533	0.0995	3,935.28	(17,762
N.Fire	(17,001,491)	0.1302	(22,110)	3,977,664	0.0991	3,943.02	(18,167
Ag Ext	(17,334,017)	0.1299	(22,522)	3,999,795	0.0988	3,950.61	(18,571
	(17,666,543)	0.1298	(22,022)	4021926.538	0.0984	0,000.01	(10,071
Owen County	(17,999,069)	0.1297		4,044,057.83	0.0981		(124,696
Extension Service	(18,331,595)	0.1296	(23,753)	4,066,189	0.0977	3,972.43	(19,780
General	(18,664,121)	0.1295	(24,161)	4,088,320	0.0973	3,979.38	(20,182
Health	(18,996,647)	0.1293	(24,569)	4,110,452	0.0970	3,986.18	(20,583
Library	(19,329,173)	0.1292	(24,977)	4,132,583	0.0966	3,992.82	(20,984
Soil Conservation	(19,661,698)	0.1291	(25,383)	4,154,714	0.0963	3,999.29	(21,384
School	(19,994,224)	0.1290	(25,788)	4,176,846	0.0959	4,005.61	(21,783
	(20,326,750)	0.1289		4198976.849	0.0955		
City of Monterey(Owen County)	(20,659,276)	0.1287	(26,597)	4,221,108	0.0952	0.00	(26,597
au 10 . (0 a .)	(20,991,802)	0.1286	(07.400)	4243239.426	0.0948	4 000 00	(00.070
City of Owenton(Owen County)	(21,324,328)	0.12850	(27,403)	4,265,371	0.0945	4,029.30	(23,373)
Cit F.C (O C)	(21,656,854)	0.1284	(99.905)	4,287,502.00	0.0941	4.040.10	(0.4.105
City of Sparta(Owen County)	(21,989,380)	0.1283 0.1281	(28,205)	4,309,633	0.0937 0.0934	4,040.19	(24,165
Scott County	(22,321,906) (22,654,431)	0.1281		4331764.582 4,353,895.87	0.0934		(130,660
County	(22,986,957)	0.1279	(29,403)	4,376,027	0.0937	4,055.34	(25,347
Ext	(23,319,483)	0.1279	(29,800)	4,398,158	0.0927	4,060.07	(25,740
Health	(23,652,009)	0.1277	(30,197)	4,420,290	0.0920	4,064.64	(26,133
Library	(23,984,535)	0.1276	(30,593)	4.442.421	0.0916	4,069.06	(26,524
School	(24,317,061)	0.1274	(30,989)	4,464,552	0.0912	4,073.31	(26,915
	(24,649,587)	0.1273	(//	4486683.603	0.0909		, .,
City of Georgetown	(24,982,113)	0.1272	(31,777)	4,508,815	0.0905	4,081.35	(27,695
	(25,314,639)	0.1271		4,530,946	0.0902		
City of Sadleville	(25,647,164)	0.1270	(32,562)	4,553,077	0.0898	4,088.74	(28,473
	(25,979,690)	0.1268		4,575,209	0.0894		
City of Stamping Ground	(26,312,216)	0.1267	(33,344)	4,597,340	0.0891	4,095.51	(29,248
10 10	(26,644,742)	0.1266		4619471.336	0.0887		,
Woodford County	(26,977,268)	0.1265		4,641,602.63	0.0884		(188,194
School	(27,309,794)	0.1264	(34,510)	4,663,734	0.0880	4,104.45	(30,406
County	(27,642,320)	0.1262	(34,898)	4,685,865	0.0876	4,107.13	(30,791
Fire Dept	(27,974,846)	0.1261	(35,284)	4,707,996	0.0873	4,109.64	(31,175
Library	(28,307,372)	0.1260	(35,670)	4,730,128	0.0869	4,112.00	(31,558
Health Dept	(28,639,898)	0.1259	(36,055)	4,752,259	0.0866	4,114.18	(31,941
Ext. Service	(28,972,423)	0.1258	(36,439)	4,774,390	0.0862	4,116.21	(32,323
Assessment	(99,562,094)			123,402,779		_	(179,712
						_	2015
				ſ	County/City I	.iability =	(179,712.23
					State Liabilti		1,029,633.65
Notes:					016 Taxes Pa	aid	849,921.42
				2	O 1 dato 1 d		010,021.42

Kentucky American Water Assessment & Taxes

Property Tax Refunds

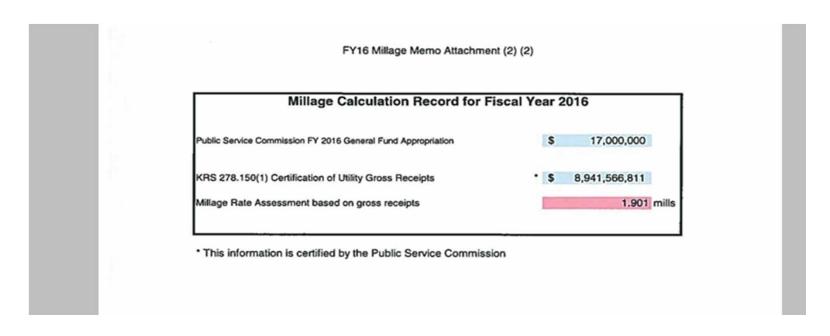
Tax Au	thority	Refund Amount	Check Date	Tax Year	Reason for Refund
Woodford County		3,143	1/6/2011	2008	2008 Amended Return
Scott County		3,784	2/14/2011	2008	2008 Amended Return
Fayette County		57,433	6/2/2011	2008	2008 Amended Return
Bourbon County		1,642	2/10/2012	2008	2008 Amended Return
Jessamine County		57	5/5/2014	2012	Tangible rate change from 0.1600 to 0.1300

Witness: Linda C. Bridwell

114. Reference the Kentucky American Water application. Provide support for the average PSC fee rate of .1901% referenced on page 25, line 10 of Ms. Bridwell's testimony.

Response:

The PSC fee rate of .1901% referenced on page 25, line 10 of Ms. Bridwell's testimony was based on the actual fee rate provided by the Commission. Please see the attachment for supporting calculation from the Commission.



PSC Millage Rate 2016

PSC FY 2016 General Fund Appropriation \$170,000,000

KRS 278.150(1) Cert of Utility Gross Receipts 8,941,566,811

Millage Rate Assessment Based on Gross Rec 0.019012328 0.001901 mills

Witness: Linda C. Bridwell

115. Reference the Kentucky American Water application. Provide support for the Taxes and Licenses adjustment of \$9,691 per page 25, line 15 of Ms. Bridwell's testimony.

Response:

Please see the response to Item 3 of the Commission Staff's First Request for Information, workpaper WP 5-4 Other General Taxes which provides support for the Taxes and Licenses adjustment of \$9,691.

Witness: Carl Meyers

116. Reference the Kentucky American Water application generally. Does Kentucky American Water file its income taxes as part of a consolidated income tax group? If so, provide a list of all companies included in the consolidated income tax return of which Kentucky American Water is a member.

Response:

Yes, Kentucky American Water is a member of the American Water Works Company, Inc. consolidated income tax group. See the attached for a list of the companies included in the consolidated group.

American Water Works Company, Inc & Subs KAW_R_AGDR1_NUM116_Attachment

Name of corporation

American Water Works Company, Inc.

American Water Enterprises, INC

AAET

American Water (USA), Inc.

American Water Capital Corp.

American Water Engineering

American Water Enterprises Holding, INC

American Water Operations and Maintenance

American Water Resources Holdings Inc.

American Water Resources of Florida

American Water Resources of Texas

American Water Services CDM

American Water Works Service Company

AWI Inc.

AW Technologies Incorporated

Bluefield Valley Water Works Company

California-American Water Company

E' Town Properties (aka Elizabethtown Properties)

Edison Water Company

Environmental Management Corporation

Hawaii-American Water Company

Illinois Lake -American Water Company

Illinois-American Water Company

Indiana-American Water Company

Iowa-American Water Company

Kentucky-American Water Company

Laurel Oak Properties Corp

Liberty Water Company

Maryland-American Water Company

Michigan-American Water Company

Missouri-American Water Company

Mt. Ebo Sewage Works

New Jersey-American Water Company

New York American Water Company

Pennsylvania-American Water Company

Tennessee-American Water Company

Thames Water North America

Virginia-American Water Company

West Virginia-American Water Company

Witness: Carl Meyers

- **117.** Reference the Kentucky American Water application generally. For each company listed in the response to the previous question:
 - a. state if the company is regulated or non-regulated, and
 - b. provide a brief description of the services provided by each company.

Response:

See the attached.

American Water Works Company, Inc & Subs KAW_R_AGDR1_NUM117_Attachment

Name of corporation	Regulated/Non-Regulated	Description
American Water Works Company, Inc.	Non-Regulated	Parent company of American Water Works Company, Inc. (AWW)
American Water Enterprises, INC	Non-Regulated	Primary operating company for non-regulated businesses. Holds some contract services contracts
AAET	Non-Regulated	Contracting entity for carbon services
American Water (USA), Inc.	Non-Regulated	Holding company
American Water Capital Corp.	Non-Regulated	Provides financing services for AWW and its subsidiaries
American Water Engineering	Non-Regulated	Provides engineering consulting services
American Water Enterprises Holding, Inc	Non-Regulated	Holding company for non-regulated businesses. Holds contracts in LA and GA.
American Water Operations and Maintenance	Non-Regulated	Contract design, build, and maintain water and wastewater facilities
American Water Resources Holdings Inc.	Non-Regulated	Holding company for AWR of Florida and AWR of Texas
American Water Resources of Florida	Non-Regulated	Sells and services home maintenance and repair projects in the state of Florida
American Water Resources of Texas	Non-Regulated	Sells and services home maintenance and repair projects in the state of Texas
American Water Services CDM	Non-Regulated	Joint venture operating the Tolt Water Treatment facility in Seattle, WA
American Water Works Service Company	Non-Regulated	Provides professional services for water and wastewater entities
AWI Inc.	Non-Regulated	Captive insurance company
AW Technologies Incorporated	Non-Regulated	Operating company that primarily provides wastewater reuse solutions and services
Bluefield Valley Water Works Company	Regulated	Water and/or wastewater utility
California-American Water Company	Regulated	Water and/or wastewater utility
E' Town Properties (aka Elizabethtown Properties)	Non-Regulated	Holds real estate for development and/or sale
Edison Water Company	Non-Regulated	Manages water contract with Township of Edison, NJ
Environmental Management Corporation	Non-Regulated	Design, build, and operate water and wastewater assets for industial/municipal customers
Hawaii-American Water Company	Regulated	Water and/or wastewater utility
Illinois Lake -American Water Company	Non-Regulated	Water transmission pipeline company
Illinois-American Water Company	Regulated	Water and/or wastewater utility
Indiana-American Water Company	Regulated	Water and/or wastewater utility
Iowa-American Water Company	Regulated	Water and/or wastewater utility
Kentucky-American Water Company	Regulated	Water and/or wastewater utility
Laurel Oak Properties Corp	Non-Regulated	Holds real estate for development and/or sale
Liberty Water Company	Non-Regulated	Manages water contract with City of Elizabeth, NJ
Maryland-American Water Company	Regulated	Water and/or wastewater utility
Michigan-American Water Company	Regulated	Water and/or wastewater utility
Missouri-American Water Company	Regulated	Water and/or wastewater utility
Mt. Ebo Sewage Works	Regulated	Water and/or wastewater utility
New Jersey-American Water Company	Regulated	Water and/or wastewater utility
New York American Water Company	Regulated	Water and/or wastewater utility
Pennsylvania-American Water Company	Regulated	Water and/or wastewater utility
Tennessee-American Water Company	Regulated	Water and/or wastewater utility
Thames Water North America	Non-Regulated	Water and/or wastewater services
Virginia-American Water Company	Regulated	Water and/or wastewater utility
West Virginia-American Water Company	Regulated	Water and/or wastewater utility

Witness: Carl Meyers

118. Reference the Kentucky American Water application generally. If the Company files its taxes as part of a consolidated group, provide a copy of the tax sharing agreement that determines how payments of each entity to the parent company are determined.

Response:

See the attachment for the tax sharing policy, which is confidential. The attachment contains confidential information and is subject to a petition for confidential treatment.

ATTACHMENT TO KAW_R_AGDR1_NUM118_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Carl Meyers

119. Reference the Kentucky American Water application generally. If the Company files a consolidated income tax return, provide the taxable income or tax loss incurred by each company included in the consolidated income tax return of which Kentucky American Water was a member for each of the past ten years.

Response:

See the attachment for the taxable income of each company in the American Water Works Company, Inc. consolidated group for the last ten years. The attachment to this question contains confidential information and is subject to a petition for confidential treatment.

ATTACHMENT TO KAW_R_AGDR1_NUM119_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Carl Meyers

120. Reference the Kentucky American Water application generally. If the Company files a consolidated income tax return, provide, for each of the past ten years, the actual income taxes paid by the consolidated group to the IRS.

Response:

The response to this question contains confidential information and is subject to a petition for a confidential treatment.

CONFIDENTIAL RESPONSE:

Witness: Carl Meyers

- **121.** Reference the Kentucky American Water application generally. If the Company files a consolidated income tax return, provide, for each of the past ten years:
 - a. the federal income taxes booked by Kentucky American Water, and
 - b. the amount of any payment made by Kentucky American Water to the parent company or other entity relating to the tax sharing agreement among members of the consolidated group.

Response:

- a. See the attachment for the current federal income tax for Kentucky American Water. This is 35% of their taxable income shown in the attachment to Item 119 of this same request.
- b. See attached to the response to Item 122 of this same request for the tax sharing amounts that show what Kentucky American Water paid/received to/from the parent company. All the companies in the group pay up to or receive from the parent company. No tax payments or allocations are made to other members of the consolidated group.

Kentucky American Water KAW_R_AGDR1_NUM121_Attachment

Tax Year	Current Federal Income Tax
2006	2,780,709
2007	1,905,310
2008	(2,605,425)
2009	3,295,943
2010	(293,612)
2011	1,347,556
2012	3,308,750
2013	5,271,347
2014	145,517
2015 estimate	4,993,267

Witness: Carl R. Meyers

122. Reference the Kentucky American Water application generally. If the Company files a consolidated income tax return, state the amount paid to each loss company by the parent or other subsidiary in each of the past ten years in compensation for tax losses incurred by that member, as well as the total payments made to members by the consolidated group.

Response:

See the attachment for the tax sharing amounts for the American Water Works Company, Inc. consolidated group for the last ten years. This attachment is confidential and is subject to a petition for confidential protection. Year 2015 is an estimate based on the group's year end tax provision while all the other years are based on the tax returns. As stated in response to Item 121 of this same request, Kentucky American Water, as well as the other members of the consolidated group, either pays to or receives from the parent company, not between members of the group.

ATTACHMENT TO KAW_R_AGDR1_NUM122_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Carl Meyers

123. Reference the Kentucky American Water application generally. If the Company files a consolidated income tax return, quantify the amount of any tax loss carryforward currently available to the consolidated group, and identify the period(s) over which these tax loss carryforwards are available to be used by the consolidated group.

Response:

Please see the attachment for the consolidated NOL carryforward, the years generated and the years each are set to expire. The attachment to this question contains confidential information and is subject to a petition for confidential treatment.

ATTACHMENT TO KAW_R_AGDR1_NUM123_032416 FILED UNDER SEAL PURSUANT TO PETITION FOR CONFIDENTIAL TREATMENT FILED ON MARCH 24, 2016

Witness: Carl Meyers

124. Reference the Kentucky American Water application generally. Provide the amount of income taxes that the consolidated group, as well as Kentucky American Water, expects to pay to the IRS for 2015, 2016, and 2017. Provide supporting calculations with your response.

Response:

This response is confidential and is subject to a petition for confidential treatment.





Witness: Carl Meyers

125. Reference the Kentucky American Water application generally. Has the Company included an NOL adjustment in its deferred income tax reserve claim? If so, quantify the NOL adjustment and provide all supporting workpapers and calculations.

Response:

Kentucky American has included an NOL adjustment in its deferred income tax reserve claim. It is included in the base period amount and is the balance as of Oct 2015. This amount is a deferred tax asset of \$1,329,935. This is the tax effect of the cumulative NOL carryforward for Kentucky American Water after the filing of the 2014 tax return. No additional change in the NOL was calculated for the forecast period. See the attachment for the Kentucky American Water cumulative NOL and tax effect.

Kentucky American Water Cumulative Net Operating Loss carryforward KAW_R_AGDR1_NUM125_Attachment

					Actual	Asset / (Liability)
					2014 CUMULATIVE	
Year Generated	2008	2010	2012	2013	NOL	Tax Effect
Remaining NOL	(2,453,235)	(356,681)	(61,814)	(928,084)	(3,799,814)	1,329,935

Witness: Carl Meyers

126. Reference the Kentucky American Water application. Identify the amount of the FIN 48 liability, if any, included in the Company's rate base claim and state if the entire liability is related to the change in the accounting method for repairs and maintenance costs.

Response:

Kentucky American has included a piece of its FIN 48 liability in its deferred income taxes included in rate base. It is included in the base period amount and is the balance as of Oct 2015. This amount is a deferred tax asset of \$2,219,021. No additional change for FIN 48 was calculated for the forecast period. The whole amount relates to the Company's change in accounting method for repairs and maintenance costs.

Witness: Carl Meyers

127. Reference the Kentucky American Water application. Provide a narrative update regarding the status of any outstanding tax issues for which a FIN 48 liability has been included in the Company's rate base claim.

Response:

The Company's FIN 48 amount included in deferred taxes and therefore included in rate base is based on the repairs deduction methodology taken on the 2008 through 2014 tax returns. The process of calculating the liability has not changed since 2008. The only changes to the amount over time is due to additional repairs deductions taken each year on the tax returns and an adjustment to reduce the liability for additional depreciation allowed on the prior years' deductions.

Witness: Carl Meyers

128. Reference the Kentucky American Water application generally. For each of the past five years and as projected for the Base Period and the Test Period, provide the Alternative Minimum Tax (if any) paid by the Company and/or the Consolidated Income Tax Group.

Response:

This response is confidential and is subject to a petition for confidential treatment.

CONFIDENTIAL RESPONSE:

Witness: Linda C. Bridwell

129. Reference the Kentucky American Water application generally. Provide calculations supporting the Company's AFUDC rate for each month of the Base Period and Test Period.

Response:

Please refer to the attachment for the calculation of the AFUDC rate which has been utilized in the case.

Kentucky American Water Company AFUDC Rate Calculations

Base Year Authorized Per Case No. 2012-00520

Forcasted Year Case No. 2015-00418

			Weighted		Weighted
	Cost p. 53 Order	Ratio p. 53 Order	Cost		Cost
Short-Term Debt	0.50%	2.39%	0.01%	Short-Term Debt	0.02%
Long-Term Debt	6.06%	51.75%	3.14%	Long-Term Debt	3.06%
Preferred Stock	8.52%	1.17%	0.10%	Preferred Equity	0.05%
Common Equity	9.70%	44.70%	4.34%	Common Equity	5.09%
		Sum	7.59%	Sum	8.22%
		Effective Tax Rate	38.90%	Effective Tax Rate	38.90%
		Total Weighted			
		Equity Cost		Total Weighted Equity	
		(Common Equity +		Cost (Common Equity +	
		Equity Portion Pref		Equity Portion Pref	
		Stock Per Filing)	4.440%	Stock Per Filing)	5.140%
	Cost of Eq	uity / Cost of Capital	58.50%	Cost of Equity / Cost of Capital	62.53%

Witness: Scott Rungren

130. Reference the Kentucky American Water application generally. Does the Company include short-term debt in its AFUDC calculation? If not, explain why short-term debt is not included.

Response:

Kentucky American Water did include short-term debt in its AFUDC calculation.

Witness: Linda C. Bridwell

- **131.** Reference the Kentucky American Water application generally. Identify any plant held for future use included in the Company's rate base. For each such plant asset, include:
 - a. the date that the asset was acquired,
 - b. a description of the asset and its eventual use,
 - c. the date by which the asset is expected to be put into service, and
 - d. a description of any current activities relating to preparing the asset to enter utility service.

Response:

a-d. Kentucky American Water did not include plant held for future use in the Company's rate base.

Witness: Linda C. Bridwell

132. Reference the Kentucky American Water application generally. Provide a five-year history of gains and losses of asset dispositions and state how such gains/losses are reflected for ratemaking purposes.

Response:

Please see below. There are no gains/losses of asset dispositions included in the Base Period or Forecast Year.

	2011	2012	2013	2014	2015
Gains/Losses on Sale of Assets	\$0	(\$18,600)	\$0	\$0	(\$33,080)

Witness: Brent O'Neill

- **133.** Reference the Kentucky American Water application generally. For each of the past ten years, provide the capital expenditures approved by the Board of Directors and the actual capital expenditures. Provide this information separately by:
 - a. normal recurring construction,
 - b. construction projects funded by others, and
 - c. major investment projects.

Response:

- a. Please see the attached file.
- b. Please see the attached file.
- c. Please see the attached file.

		Actual	Approved Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 2,452,788	\$ 2,000,000	\$ 452,788
	TOTAL PROJECTS FUNDED BY OTHERS	2,452,788	2,000,000	452,788

.		_	Actual	Approved Original	Variance
Item	Description RECURRING CONSTRUCTION ITEMS	Ez	xpenditures	Budget	Dollars
A	MAINS - NEW	\$	688,393	\$ 750,000	\$ (61,60)
В	MAINS - REPLACED/RESTORED	\$	5,268,365	\$ 3,117,000	\$ 2,151,36
C	MAINS - UNSCHEDULED	\$	198,121	\$ 335,000	\$ (136,87
D	MAINS - RELOCATED	\$	456,058	\$ 785,000	\$ (328,94
E	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	158,724	\$ 200,100	\$ (41,37
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	1,517,543	\$ 332,150	\$ 1,185,39
G	SERVICES AND LATERALS - NEW	\$	968,162	\$ 1,030,080	\$ (61,91
H	SERVICES AND LATERALS - REPLACED	\$	400,865	\$ 650,000	\$ (249,13
I	METERS - NEW	\$	618,848	\$ 542,412	\$ 76,43
J	METERS - REPLACED	\$	551,455	\$ 937,917	\$ (386,46
K	ITS EQUIPMENT AND SYSTEMS	\$	136,935	\$ 131,221	\$ 5,71
L	SCADA EQUIPMENT AND SYSTEMS	\$	305,610	\$ 140,000	\$ 165,61
M	SECURITY EQUIPMENT AND SYSTEMS	\$	165,138	\$ 245,000	\$ (79,86
N	OFFICES AND OPERATIONS CENTERS	\$	93,664	\$ 150,000	\$ (56,33
O	VEHICLES	\$	584,522	\$ 552,000	\$ 32,52
P	TOOLS AND EQUIPMENT	\$	567,056	\$ 305,000	\$ 262,05
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	2,311,469	\$ 1,454,875	\$ 856,59
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	-	\$ -	\$
S	ENGINEERING STUDIES	\$	449,091	\$ 42,020	\$ 407,07
	TOTAL RECURRING CONSTRUCTION ITEMS		15,440,019	11,699,775	3,740,24

				Α	Approved		
			Actual	Original		Variance	
Item	Description	Ex	penditures		Budget		Dollars
	INVESTMENT PROJECTS						
I12-020010	Leestown Road	\$	(2,903)	\$	-	\$	(2,903)
112-020011	New Circle Rd Main Relocation	\$	2,450,776	\$	1,009,593	\$	1,441,183
112-020012	KRS High Service Pumps	\$	727,565	\$	-	\$	727,565
112-020017	KRS Valve House Rehabilitation	\$	964,373	\$	-	\$	964,373
I12-020056	KRS Valve House 2	\$	496,064	\$	-	\$	496,064
	RRS Filter Building Replacement	\$	10,539,887	\$	11,925,000	\$	(1,385,113)
I12-020033	KY 341 Interconnect	\$	460,667	\$	-	\$	460,667
I12-020040	KRS Valve House Rehabilitation Ph 2	\$	-	\$	1,000,000	\$	(1,000,000)
112-020043	Athens Boonesboro main Extension	\$	-	\$	400,000	\$	(400,000)
112-020045	Main Office Roof Replacement	\$	2,506	\$	-	\$	2,506
I12-020046	KRS I Raw Water Intake Actuator Repl	\$	191,174	\$	-	\$	191,174
112-020047	Field Ops Road Replacement	\$	18,809	\$	-	\$	18,809
112-020048	Security Upgrades Richmond Rd Campus	\$	31,242	\$	-	\$	31,242
112-020057	Sludge Thickener Drive Upgrade	\$	521,564	\$	-	\$	521,564
112-020058	KRS2 Intake Pump Replacement	\$	601,163	\$	-	\$	601,163
I12-020059	KRS2 Transfer Switch	\$	66,400	\$	-	\$	66,400
I12-020060	KRS Reeves Drive	\$	5,740			\$	5,740
I12-300003	Northern Division Connection	\$	49,119			\$	49,119
T12-0102	Business Transformation	\$	(228,820)			\$	(228,820)
R12-K	ITS Centrally Sponsored	\$	1,690,479	\$	-	\$	1,690,479
I12-000001	Acquisitions	\$	-	\$	1,279,427	\$	(1,279,427)
·	TOTAL INVESTMENT PROJECTS		18,585,805		15,614,020		2,971,785

		Actual	Approved Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 3,214,462	\$ 1,890,900	\$ 1,323,562
	TOTAL PROJECTS FUNDED BY OTHERS	3,214,462	1,890,900	1,323,562

			Actual Original		Approved Original	Variance	
Item	Description	Ex	penditures	Budget			Dollars
	RECURRING CONSTRUCTION ITEMS						
A	MAINS - NEW	\$	982,178	\$	449,956	\$	532,222
В	MAINS - REPLACED/RESTORED	\$	3,662,352	\$	5,106,000	\$	(1,443,648)
C	MAINS - UNSCHEDULED	\$	291,349	\$	275,484	\$	15,865
D	MAINS - RELOCATED	\$	921,918	\$	515,079	\$	406,839
E	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	201,082	\$	201,500	\$	(418)
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	759,112	\$	340,764	\$	418,348
G	SERVICES AND LATERALS - NEW	\$	562,611	\$	1,101,429	\$	(538,818)
Н	SERVICES AND LATERALS - REPLACED	\$	397,836	\$	451,903	\$	(54,067)
I	METERS - NEW	\$	313,704	\$	545,701	\$	(231,997)
J	METERS - REPLACED	\$	802,895	\$	1,194,748	\$	(391,853)
K	ITS EQUIPMENT AND SYSTEMS	\$	287,264	\$	279,455	\$	7,809
L	SCADA EQUIPMENT AND SYSTEMS	\$	40,279	\$	131,313	\$	(91,034)
M	SECURITY EQUIPMENT AND SYSTEMS	\$	157,258	\$	157,575	\$	(317)
N	OFFICES AND OPERATIONS CENTERS	\$	207,245	\$	126,060	\$	81,185
O	VEHICLES	\$	691,672	\$	562,018	\$	129,654
P	TOOLS AND EQUIPMENT	\$	241,065	\$	303,463	\$	(62,398)
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	3,162,463	\$	1,242,000	\$	1,920,463
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	-	\$	-	\$	-
S	ENGINEERING STUDIES	\$	261,770	\$	42,020	\$	219,750
	TOTAL RECURRING CONSTRUCTION ITEMS		13,944,053		13,026,468		917,585

				Α	Approved		
			Actual	Original		Variance	
Item	Description	Exp	penditures		Budget	Dollars	
	INVESTMENT PROJECTS						
I12-020001	WTP for Pool 3	\$	33,935	\$	-	\$ 33,935	
I12-020007	North Upper St Main Repl	\$	-	\$	1,000,000	\$ (1,000,000)	
I12-020010	Leestown Road	\$	152,963	\$	-	\$ 152,963	
I12-020011	New Circle Rd Main Relocation	\$	287,933	\$	1,099,899	\$ (811,966)	
	KRS Valve House Rehabilitation	\$	691,347	\$	1,000,000	\$ (308,653)	
I12-020025	Pump Efficiency Repl Phase 1	\$	18,370	\$	-	\$ 18,370	
I12-020027	Russell Cave Rd	\$	(2,188)	\$	-	\$ (2,188)	
I12-020032	RRS Filter Building Replacement	\$	709,175	\$	775,000	\$ (65,825)	
I12-020033	KY 341 Interconnect	\$	758,006	\$	586,021	\$ 171,985	
I12-020034	RRS Chlorine Scrubber	\$	20,317	\$	-	\$ 20,317	
I12-020036	Storage Tank and System Nitrification	\$	-	\$	350,000	\$ (350,000)	
I12-020045	Main Office Roof Replacement	\$	391,301	\$	-	\$ 391,301	
I12-020046	KRS I Raw Water Intake Actuator Repl	\$	487,670	\$	-	\$ 487,670	
I12-020047	Field Ops Road Replacement	\$	333,943	\$	-	\$ 333,943	
I12-020048	Security Upgrades Richmond Rd Campus	\$	428,512	\$	-	\$ 428,512	
I12-300003	Northern Division Connection	\$	369,307	\$	118,110	\$ 251,197	
I12-300005	Fairgrounds Tank Area			\$	500,000	\$ (500,000)	
T12-0102	Business Transformation	\$	350,389	\$	117,256	\$ 233,133	
T12-0103	Business Transformation Other	\$	32			\$ 32	
R12-K	ITS Centrally Sponsored	\$	1,336,514	\$	319,464	\$ 1,017,050	
	Acquisitions	\$	-	\$	642,349	\$ (642,349)	
	TOTAL INVESTMENT PROJECTS		6,367,526		6,508,099	(140,573)	

		Actual	Approved Original	Variance
Item	Description	Expenditures Budget		Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 1,972,625	\$ 1,726,546	\$ 246,079
	TOTAL PROJECTS FUNDED BY OTHERS	1,972,625	1,726,546	246,079

		Actual		Approved Original		Variance		
Item	Description	Ex	kpenditures	enditures Budget			Dollars	
	RECURRING CONSTRUCTION ITEMS							
A	MAINS - NEW	\$	849,856	\$	259,999	\$	589,857	
В	MAINS - REPLACED/RESTORED	\$	1,645,060	\$	2,000,000	\$	(354,940)	
C	MAINS - UNSCHEDULED	\$	369,365	\$	275,484	\$	93,881	
D	MAINS - RELOCATED	\$	165,758	\$	480,079	\$	(314,321)	
Е	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	151,975	\$	184,993	\$	(33,018)	
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	628,707	\$	305,696	\$	323,011	
G	SERVICES AND LATERALS - NEW	\$	922,914	\$	1,042,445	\$	(119,531)	
Н	SERVICES AND LATERALS - REPLACED	\$	655,250	\$	1,011,321	\$	(356,071)	
I	METERS - NEW	\$	747,902	\$	504,240	\$	243,662	
J	METERS - REPLACED	\$	2,691,058	\$	2,862,739	\$	(171,681)	
K	ITS EQUIPMENT AND SYSTEMS	\$	216,174	\$	315,805	\$	(99,631)	
L	SCADA EQUIPMENT AND SYSTEMS	\$	1,006,570	\$	1,113,688	\$	(107,118)	
M	SECURITY EQUIPMENT AND SYSTEMS	\$	83,068	\$	210,100	\$	(127,032)	
N	OFFICES AND OPERATIONS CENTERS	\$	10,231	\$	105,050	\$	(94,819)	
O	VEHICLES	\$	475,115	\$	541,008	\$	(65,893)	
P	TOOLS AND EQUIPMENT	\$	655,282	\$	307,797	\$	347,485	
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	1,382,796	\$	1,201,991	\$	180,805	
R	CAPITALIZED TANK REHABILIATION/PAINTING			\$	-	\$	-	
S	ENGINEERING STUDIES	\$	54,556	\$	42,020	\$	12,536	
	TOTAL RECURRING CONSTRUCTION ITEMS		12,711,637		12,764,455		(52,818)	

			A atrial	Approved		,	Variance	
_		_	Actual	Original		Variance		
Item	Description	Ex	penditures		Budget		Dollars	
INVESTMENT PROJECTS								
I12-020001	New WTP On Pool 3 of Kentucky	\$	29,379	\$	-	\$	29,379	
I12-020009	US 25 Relocation - Item 7-122.50	\$	(1,612,868)	\$	-	\$	(1,612,868)	
I12-020010	Leestown Road - Item 7-223.00	\$	1,284,533	\$	-	\$	1,284,533	
I12-020025	Pump Efficiency Repl Phase 1	\$	2,570,262	\$	-	\$	2,570,262	
I12-020026	Pump Efficiency Repl Phase 2	\$	-	\$	600,000	\$	(600,000)	
I12-020027	Russell Cave Rd Sys Improvements	\$	38,957	\$	-	\$	38,957	
I12-020032	RRS Filter Building Replacement	\$	54,256	\$	-	\$	54,256	
I12-020033	KY 341 Interconnect	\$	86,925	\$	-	\$	86,925	
I12-020034	RRS Chlorine Scrubber	\$	291,365	\$	-	\$	291,365	
I12-300003	Northern Division Connection	\$	10,920,412	\$	8,959,758	\$	1,960,654	
T12-0102	Business Transformation	\$	2,355,991	\$	1,694,289	\$	661,702	
T12-0103	Business Transformation Other	\$	145,601	\$	32,257	\$	113,344	
I12010001	IP Project Unbudgeted Capital	\$	(5,255)			\$	(5,255)	
	TOTAL INVESTMENT PROJECTS		16,159,558		11,286,304		4,873,254	

			Approved	
		Actual	Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 2,252,402	\$ 1,600,000	\$ 652,402
	TOTAL PROJECTS FUNDED BY OTHERS	2,252,402	1,600,000	652,402

			Actual		Approved		Variance	
Itam	Description	Б.		Original				
Item	Description RECURRING CONSTRUCTION ITEMS	E	penditures		Budget		Dollars	
A	MAINS - NEW	\$	52,013	¢	500,000	\$	(447,987)	
B	MAINS - NEW MAINS - REPLACED/RESTORED	\$	673,049		,	-		
C C	MAINS - WISCHEDULED	9	372,392		1,015,300 239,400		(342,251) 132,992	
D	MAINS - RELOCATED	9						
E		\$	(75,499)		1,050,300		(1,125,799)	
F	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	93,539		210,000	-	(116,461)	
r G	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	229,888		205,000		24,888	
H	SERVICES AND LATERALS - NEW SERVICES AND LATERALS - REPLACED	\$	910,629		1,079,580		(168,951)	
		\$	449,290		1,605,000		(1,155,710)	
I	METERS - NEW	\$	894,302		1,200,000		(305,698)	
J	METERS - REPLACED	\$	3,601,691		2,050,000		1,551,691	
K	ITS EQUIPMENT AND SYSTEMS	\$	712,828		265,850		446,978	
L	SCADA EQUIPMENT AND SYSTEMS	\$	1,029,901		659,025		370,876	
M	SECURITY EQUIPMENT AND SYSTEMS	\$	21,266		20,000		1,266	
N	OFFICES AND OPERATIONS CENTERS	\$	465,392		80,000		385,392	
O	VEHICLES	\$	925,249		500,000	\$	425,249	
P	TOOLS AND EQUIPMENT	\$	243,251	\$	220,500	\$	22,751	
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	1,962,058	\$	1,095,000	\$	867,058	
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	-	\$	-	\$	-	
S	ENGINEERING STUDIES	\$	(267,774)	\$	120,000	\$	(387,774)	
	TOTAL RECURRING CONSTRUCTION ITEMS		12,293,465		12,114,955		178,510	

				Approved	
			Actual	Original	Variance
Item	Description	Ex	penditures	Budget	Dollars
	INVESTMENT PROJECTS				
I12-020001	New WTP On Pool 3 of Kentucky	\$	2,854	\$ -	\$ 2,854
IP-1202-6	Carrick Pike Main Extension	\$	-	\$ 50,000	\$ (50,000)
IP-1202-9	Todds and Cleveland Rd Main Ext	\$	-	\$ 799,594	\$ (799,594)
[12-0020009	US 25 Relocation	\$	1,225,541	\$ 439,188	\$ 786,353
[12-0200010	Leestown Road	\$	228,927	\$ 809,540	\$ (580,613)
IP-1202-20	KY Major Highway	\$	-	\$ 655,000	\$ (655,000)
I12-020027	Russell Cave Road Sys Impr	\$	89,292	\$ -	\$ 89,292
I12-020025	Pump Efficiency Replacement Phase 1	\$	953,765	\$ 775,348	\$ 178,417
IP-1202-37	Pump Efficiency Replacement Phase 2	\$	-	\$ 775,002	\$ (775,002)
I12-300003	Northern Division Connection	\$	3,978,519	\$ 3,830,000	\$ 148,519
IP-1232-3	Northern Division Connection	\$	(346,828)	\$ -	\$ (346,828)
CS-1201-1	Business Transformation CPS	\$	-	\$ -	\$ -
T12-0102-P	Business Transformation	\$	3,835,463	\$ 4,130,414	\$ (294,951)
T12-0103-P	Business Transformation Other	\$	562,289	\$ 91,026	\$ 471,263
	Acquisitions	\$	-	\$ 131,369	\$ (131,369)
112-010001	IP Project Unbudgeted Capital	\$	(214)		\$ (214)
	TOTAL INVESTMENT PROJECTS		10,529,608	12,486,481	(1,956,873)

			Approved	
		Actual	Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 1,820,568	\$ 2,300,000	\$ (479,432)
	TOTAL PROJECTS FUNDED BY OTHERS	1,820,568	2,300,000	(479,432)

					Approved		
			Actual	Original		Variance	
Item	Description	Ex	penditures		Budget		Dollars
	RECURRING CONSTRUCTION ITEMS						
A	MAINS - NEW	\$	165,527	\$	489,000	\$	(323,473)
В	MAINS - REPLACED/RESTORED	\$	1,884,555	\$	1,005,300	\$	879,255
C	MAINS - UNSCHEDULED	\$	272,449	\$	138,500	\$	133,949
D	MAINS - RELOCATED	\$	375,492	\$	1,050,300	\$	(674,808)
Е	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	148,799	\$	195,000	\$	(46,201)
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	283,383	\$	131,500	\$	151,883
G	SERVICES AND LATERALS - NEW	\$	592,606	\$	750,000	\$	(157,394)
Н	SERVICES AND LATERALS - REPLACED	\$	633,636	\$	267,000	\$	366,636
I	METERS - NEW	\$	861,939	\$	600,000	\$	261,939
J	METERS - REPLACED	\$	5,403,895	\$	3,769,751	\$	1,634,144
K	ITS EQUIPMENT AND SYSTEMS	\$	175,356	\$	155,540	\$	19,816
L	SCADA EQUIPMENT AND SYSTEMS	\$	1,088,482	\$	200,000	\$	888,482
M	SECURITY EQUIPMENT AND SYSTEMS	\$	51,694	\$	20,000	\$	31,694
N	OFFICES AND OPERATIONS CENTERS	\$	548,021	\$	80,000	\$	468,021
О	VEHICLES	\$	559,415	\$	500,000	\$	59,415
P	TOOLS AND EQUIPMENT	\$	160,725	\$	160,000	\$	725
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	1,891,192	\$	1,085,000	\$	806,192
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	197,663	\$	-	\$	197,663
S	ENGINEERING STUDIES	\$	470,794	\$	400,000	\$	70,794
	TOTAL RECURRING CONSTRUCTION ITEMS		15,765,624		10,996,891		4,768,733

				Approved			
			Actual	Original		Variance	
Item	Description	Ex	penditures		Budget		Dollars
	INVESTMENT PROJECTS						
12020204	Source of Supply Project Dev	\$	-			\$	-
12020607	New WTP On Pool 3 of Kentucky	\$	713,639	\$	200,000	\$	513,639
IP-1202-5	North Broadway Main Replacement	\$	(79,129)			\$	(79,129)
IP-1202-6	Carrick Pike Main Extension	\$	(129,989)	\$	980,513	\$	(1,110,502)
IP-1202-17	South Limestone Replacement	\$	(108)			\$	(108)
IP-1202-18	US 25 Relocation	\$	415,236	\$	897,983	\$	(482,747)
IP-1202-19	Leestown Road	\$	666,047	\$	1,263,746	\$	(597,699)
IP-1202-21	KRS High Service Pumping	\$	-	\$	660,000	\$	(660,000)
IP-1202-31	KRS Raw Water Access	\$	-	\$	1,000,000	\$	(1,000,000)
IP-1202-32	Lexington Operations Center	\$	138,043			\$	138,043
IP-1202-38	Russell Cave Road Sys Impr	\$	447,814			\$	447,814
IP-1232-3	Northern Division Connection	\$	344,375	\$	4,700,000	\$	(4,355,625)
IP-1233-1	Owenton WWTP Phosphorous	\$	-	\$	140,000	\$	(140,000)
CS-1201-3	Business Transformation	\$	3,511,544	\$	2,304,462	\$	1,207,082
CS-1201-4	Business Transformation Other	\$	300,972			\$	300,972
	Acquisitions	\$	-	\$	114,262	\$	(114,262)
IP-1232-1	Owenton Chemical Bulk Storage/Owenton Post Acquisition Phase 2	\$	(83,705)			\$	(83,705)
IP-1201-9	IP Project Unbudgeted Capital	\$	(1,091)			\$	(1,091)
	TOTAL INVESTMENT PROJECTS		6,243,649		12,260,966		(6,017,317)

			Approved	
		Actual	Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 2,112,707	\$ 3,560,000	\$ (1,447,293)
	TOTAL PROJECTS FUNDED BY OTHERS	2,112,707	3,560,000	(1,447,293)

				Α	Approved		
			Actual	Original		Variance	
Item	Description	Ex	penditures		Budget	Dollars	
	RECURRING CONSTRUCTION ITEMS						
A	MAINS - NEW	\$	82,273	\$	400,000	\$	(317,727)
В	MAINS - REPLACED/RESTORED	\$	999,914	\$	565,000	\$	434,914
C	MAINS - UNSCHEDULED	\$	269,042	\$	244,400	\$	24,642
D	MAINS - RELOCATED	\$	727,693	\$	950,000	\$	(222,307)
E	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	107,571	\$	200,000	\$	(92,429)
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	162,530	\$	175,000	\$	(12,470)
G	SERVICES AND LATERALS - NEW	\$	611,401	\$	874,660	\$	(263,259)
Н	SERVICES AND LATERALS - REPLACED	\$	294,286	\$	1,240,975	\$	(946,689)
I	METERS - NEW	\$	436,640	\$	971,340	\$	(534,700)
J	METERS - REPLACED	\$	2,666,027	\$	1,584,929	\$	1,081,098
K	ITS EQUIPMENT AND SYSTEMS	\$	139,408	\$	111,090	\$	28,318
L	SCADA EQUIPMENT AND SYSTEMS	\$	487,125	\$	103,500	\$	383,625
M	SECURITY EQUIPMENT AND SYSTEMS	\$	25,405	\$	10,000	\$	15,405
N	OFFICES AND OPERATIONS CENTERS	\$	147,296	\$	80,000	\$	67,296
О	VEHICLES	\$	814,084	\$	250,000	\$	564,084
P	TOOLS AND EQUIPMENT	\$	129,297	\$	117,000	\$	12,297
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	1,882,344	\$	750,000	\$	1,132,344
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	(11,628)	\$	-	\$	(11,628)
S	ENGINEERING STUDIES	\$	(46)	\$	100,000	\$	(100,046)
	TOTAL RECURRING CONSTRUCTION ITEMS		9,970,662		8,727,894		1,242,768

				A	Approved			
			Actual		Original		Variance	
Item	Description	Ex	penditures		Budget		Dollars	
	INVESTMENT PROJECTS							
	Source of Supply Project Dev	\$	(2,114,108)	\$	128,360	\$	(2,242,468)	
12020607	New WTP On Pool 3 of Kentucky	\$	30,789,847	\$	29,181,785	\$	1,608,062	
12020702	KY Major Highway	\$	(91,967)	\$	-	\$	(91,967)	
IP-1202-5	North Broadway Main Replacement	\$	1,565,365	\$	1,151,929	\$	413,436	
IP-1202-6	Carrick Pike Main Extension	\$	41,893	\$	-	\$	41,893	
IP-1202-17	South Limestone Replacement	\$	549,929	\$	532,854	\$	17,075	
IP-1202-18	US 25 Relocation	\$	1,215,244	\$	3,200,000	\$	(1,984,756)	
IP-1202-19	Leestown Road	\$	243,564	\$	-	\$	243,564	
IP-1202-31	KRS Raw Water Access	\$	-	\$	50,000	\$	(50,000)	
IP-1202-32	Lexington Operations Center	\$	2,670,832			\$	2,670,832	
CS-1201-1	Business Transformation CPS	\$	984	\$	-	\$	984	
CS-1201-3	Business Transformation CPS	\$	1,011,336	\$	4,036,079	\$	(3,024,743)	
IP-1201-10	Unallocated Eng Clearing	\$	(943)			\$	(943)	
12020201	Leestown Rd Main Improvements	\$	(150,955)	\$	-	\$	(150,955)	
12020402	KY Major Highway Relocations	\$	(36,977)	\$	-	\$	(36,977)	
IP-1201-9	IP Project Unbudgeted Capital	\$	(989)	\$	-	\$	(989)	
	Acquisitions	\$	-	\$	168,000	\$	(168,000)	
		\$	-	\$	-	\$	-	
	TOTAL INVESTMENT PROJECTS		35,693,055		38,449,007		(2,755,951)	

		Actual	Approved Original	Variance	
Item	Description	Expenditures	Budget	Dollars	
	PROJECTS FUNDED BY OTHERS				
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 2,547,151	\$ 4,700,000	\$ (2,152,849)	
	TOTAL PROJECTS FUNDED BY OTHERS	2,547,151	4,700,000	(2,152,849)	

				Approved			
			Actual	Original		Variance	
Item	Description	Ex	penditures		Budget		Dollars
	RECURRING CONSTRUCTION ITEMS						
A	MAINS - NEW	\$	641,032	\$	560,000	\$	81,032
В	MAINS - REPLACED/RESTORED	\$	592,723	\$	1,005,300	\$	(412,577)
C	MAINS - UNSCHEDULED	\$	198,334	\$	239,400	\$	(41,066)
D	MAINS - RELOCATED	\$	1,540,243	\$	1,005,300	\$	534,943
Е	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	65,173	\$	192,000	\$	(126,827)
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	182,671	\$	150,000	\$	32,671
G	SERVICES AND LATERALS - NEW	\$	1,297,273	\$	980,000	\$	317,273
Н	SERVICES AND LATERALS - REPLACED	\$	735,602	\$	1,400,000	\$	(664,398)
I	METERS - NEW	\$	615,748	\$	1,215,048	\$	(599,300)
J	METERS - REPLACED	\$	1,904,052	\$	2,000,000	\$	(95,948)
K	ITS EQUIPMENT AND SYSTEMS	\$	117,123	\$	102,000	\$	15,123
L	SCADA EQUIPMENT AND SYSTEMS	\$	64,074	\$	90,000	\$	(25,926)
M	SECURITY EQUIPMENT AND SYSTEMS	\$	14,280	\$	10,000	\$	4,280
N	OFFICES AND OPERATIONS CENTERS	\$	1,039,331	\$	560,000	\$	479,331
О	VEHICLES	\$	141,312	\$	500,000	\$	(358,688)
P	TOOLS AND EQUIPMENT	\$	51,035	\$	257,200	\$	(206,165)
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	720,748	\$	800,000	\$	(79,252)
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	58,420	\$	40,000	\$	18,420
S	ENGINEERING STUDIES	\$	38,832	\$	150,000	\$	(111,168)
	TOTAL RECURRING CONSTRUCTION ITEMS		10,018,007		11,256,248		(1,238,241)

				1	Approved		
			Actual		Original	Variance	
Item	Description	Ех	penditures	Budget			Dollars
	INVESTMENT PROJECTS						
02-02	2002 MAJOR HIGHWAY RELOCATIONS	\$	19,206	\$	-	\$	19,206
02-04	SOURCE OF SUPPLY DEVELOPMENT	\$	106,607	\$	64,200	\$	42,407
03-02	MAJOR HIGHWAY RELOCATIONS	\$	267,429	\$	-	\$	267,429
04-02	MAJOR HIGHWAY RELOCATIONS (343)	\$	25,969	\$	49,930	\$	(23,961)
05-01	GROUND STORAGE TANK	\$	-	\$	122,870	\$	(122,870)
05-08	KENTUCKY RELIABILITY IMPROVEMENT	\$	163,786	\$	80,000	\$	83,786
06-02	YARNALLTON ROAD MAIN EXTENSION	\$	(1,929)	\$	-	\$	(1,929)
06-07	NEW WTP POOL 3 OF KENTUCKY	\$	86,106,960	\$	59,986,790	\$	26,120,170
12020701	INCLINE CAR REPLACEMENT AT KRS	\$	-	\$	815,288	\$	(815,288)
12020702	MAJOR HIGHWAY RELOCATIONS 2007	\$	(23,290)	\$	-	\$	(23,290)
1202-5	NORTH BROADWAY MAIN REPLACEMENT	\$	1,264,105	\$	2,470,076	\$	(1,205,971)
1232-1	OWENTON CHEMICAL BULK STORAGE	\$	2,185	\$	29,123	\$	(26,938)
1202-6	CARRICK ROAD MAIN EXTENSION	\$	25,590	\$	2,637,494	\$	(2,611,904)
CS-1201-1	BUSINESS TRANSFORMATION	\$	211,056	\$	356,822	\$	(145,766)
		\$	-	\$	-	\$	-
	TOTAL INVESTMENT PROJECTS		88,167,674		66,612,593		21,555,081

		Actual	Approved Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 4,188,866	\$ 4,000,000	\$ 188,866
	TOTAL PROJECTS FUNDED BY OTHERS	4,188,866	4,000,000	188,866

			Actual	Approved Original		Variance	
Item	Description	Ex	penditures	Budget		Dollars	
	RECURRING CONSTRUCTION ITEMS		1				
A	MAINS - NEW	\$	49,941	\$ 535,000	\$	(485,059	
В	MAINS - REPLACED/RESTORED	\$	992,301	\$ 1,886,000	\$	(893,69	
C	MAINS - UNSCHEDULED	\$	271,187	\$ 221,937	\$	49,25	
D	MAINS - RELOCATED	\$	145,363	\$ -	\$	145,36	
E	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	110,740	\$ 427,992	\$	(317,25	
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	129,360	\$ 125,000	\$	4,36	
G	SERVICES AND LATERALS - NEW	\$	1,157,819	\$ 855,915	\$	301,90	
Н	SERVICES AND LATERALS - REPLACED	\$	1,137,151	\$ 641,603	\$	495,54	
I	METERS - NEW	\$	656,983	\$ 1,149,930	\$	(492,94	
J	METERS - REPLACED	\$	1,656,513	\$ 1,473,399	\$	183,11	
K	ITS EQUIPMENT AND SYSTEMS	\$	259,958	\$ 259,750	\$	20	
L	SCADA EQUIPMENT AND SYSTEMS	\$	45,278	\$ 51,000	\$	(5,72	
M	SECURITY EQUIPMENT AND SYSTEMS	\$	36,286	\$ 10,000	\$	26,28	
N	OFFICES AND OPERATIONS CENTERS	\$	1,800,000	\$ 146,300	\$	1,653,70	
O	VEHICLES	\$	455,970	\$ 500,000	\$	(44,03	
P	TOOLS AND EQUIPMENT	\$	224,128	\$ 218,014	\$	6,11	
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	858,216	\$ 820,600	\$	37,61	
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	97,252	\$ -	\$	97,25	
S	ENGINEERING STUDIES	\$	105,355	\$ 81,000	\$	24,35	
	TOTAL RECURRING CONSTRUCTION ITEMS		10,189,801	9,403,440		786,36	

				Approved	
			Actual	Original	Variance
Item	Description	Ex	penditures	Budget	Dollars
	INVESTMENT PROJECTS				
02-02	2002 MAJOR HIGHWAY RELOCATIONS	\$	40	\$ -	\$ 40
02-04	SOURCE OF SUPPLY DEVELOPMENT	\$	348,734	\$ 64,200	\$ 284,534
03-01	ELEVATED STORAGE TANK - 2.0 MG	\$	(31)	\$ -	\$ (31)
03-03	ELECTRICAL & RELIABILITY IMPROVEMENTS	\$	337	\$ -	\$ 337
04-02	MAJOR HIGHWAY RELOCATIONS (343)	\$	290,942	\$ 2,935,000	\$ (2,644,058)
04-03	OWEN COUNTY MAIN EXTENSIONS (343)	\$	316,963	\$ -	\$ 316,963
05-02	RUSSELL CAVE ROAD MAIN - 34,000' OF 12" (343)	\$	(196)	\$ -	\$ (196)
05-05	REPLACE TRAC-VAC SYSTEM AT RRS (332)	\$	96,037	\$ -	\$ 96,037
05-06	SLUDGE HANDLING IMPROVEMENT	\$	172,653	\$ 50,000	\$ 122,653
05-08	KENTUCKY RELIABILITY IMPROVEMENT	\$	1,359,117	\$ 1,210,964	\$ 148,153
06-01	VALVE HOUSE UPGRADES AT KRS	\$	(38,142)	\$ -	\$ (38,142)
06-02	YARNALLTON ROAD MAIN EXTENSION	\$	414,412	\$ -	\$ 414,412
06-04	OWEN COUNTY SCADA SYSTEM	\$	3,005	\$ -	\$ 3,005
06-05	MALLARD POINT PRESSURE	\$	270	\$ -	\$ 270
06-06	PARKER'S MILL PUMP & DIESEL	\$	(394)	\$ -	\$ (394)
06-07	NEW WTP POOL 3 OF KENTUCKY	\$	41,822,905	\$ 33,310,430	\$ 8,512,475
06-13	HIGHWAY RELOCATION - CLAYS MILL	\$	-	\$ 850,000	\$ (850,000)
12020701	INCLINE CAR REPLACEMENT AT KRS	\$	138,047	\$ 280,709	\$ (142,662)
12020702	MAJOR HIGHWAY RELOCATIONS 2007	\$	(102,688)	\$ -	\$ (102,688)
1202-5	NORTH BROADWAY MAIN REPLACEMENT	\$	299,377	\$ 2,350,000	\$ (2,050,623)
1232-1	OWENTON CHEMICAL BULK STORAGE	\$	81,520	\$ 824,836	\$ (743,316)
1202-6	CARRICK ROAD MAIN EXTENSION	\$	62,506	\$ -	\$ 62,506
12320507	CHEMICAL FEED IMPROVEMENTS	\$	(37,670)	\$ -	\$ (37,670)
		\$		\$ 	\$
	TOTAL INVESTMENT PROJECTS		45,227,743	41,876,139	3,351,604

			Approved	
		Actual	Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
DV	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 3,137,371	\$ 6,000,000	\$ (2,862,629)
	TOTAL PROJECTS FUNDED BY OTHERS	3,137,371	6,000,000	(2,862,629)

		Actual		Approved Original		Variance	
Item	Description	E	penditures	Budget			Dollars
rtem	RECURRING CONSTRUCTION ITEMS	L	rpenantares		Buager		Donars
A	MAINS - NEW	\$	489,878	\$	750,000	\$	(260,122)
В	MAINS - REPLACED/RESTORED	\$	2,473,473	\$	2,250,000	\$	223,473
C	MAINS - UNSCHEDULED	\$	101,183	\$	-	\$	101,183
D	MAINS - RELOCATED	\$	16,024	\$	-	\$	16,024
E	HYDRANTS, VALVES, AND MANHOLES - NEW	\$	244,947	\$	520,000	\$	(275,053)
F	HYDRANTS, VALVES, AND MANHOLES - REPLACED	\$	19,096	\$	100,000	\$	(80,904)
G	SERVICES AND LATERALS - NEW	\$	1,087,103	\$	1,303,700	\$	(216,597)
Н	SERVICES AND LATERALS - REPLACED	\$	1,242,660	\$	1,200,000	\$	42,660
I	METERS - NEW	\$	1,701,718	\$	1,150,400	\$	551,318
J	METERS - REPLACED	\$	1,330,358	\$	1,150,000	\$	180,358
K	ITS EQUIPMENT AND SYSTEMS	\$	253,947	\$	100,000	\$	153,947
L	SCADA EQUIPMENT AND SYSTEMS	\$	59,013	\$	-	\$	59,013
M	SECURITY EQUIPMENT AND SYSTEMS	\$	-	\$	-	\$	-
N	OFFICES AND OPERATIONS CENTERS	\$	140,932	\$	80,000	\$	60,932
O	VEHICLES	\$	576,684	\$	-	\$	576,684
P	TOOLS AND EQUIPMENT	\$	339,773	\$	155,000	\$	184,774
Q	PROCESS PLANT FACILITIES AND EQUIPMENT	\$	1,127,337	\$	650,000	\$	477,337
R	CAPITALIZED TANK REHABILIATION/PAINTING	\$	4,601	\$	-	\$	4,601
S	ENGINEERING STUDIES	\$	61,018	\$	100,000	\$	(38,982)
	TOTAL RECURRING CONSTRUCTION ITEMS		11,269,745		9,509,099		1,760,646

			A1		Approved		Variance
T	Description		Actual	Original		Dollars	
Item	Description INVESTMENT PROJECTS	EX	penditures		Budget		Dollars
01-05	RUSSELL CAVE ROAD TANK - 1.0 MG	\$	5,976	\$		\$	5,976
01-03	MAJOR HIGHWAY RELOCATIONS	\$	(215,782)		-	\$	(215,782)
02-01	LEESTOWN ROAD MAIN IMPROVEMENTS	\$	6,403	\$	-	\$	6,403
02-01	2002 MAJOR HIGHWAY RELOCATIONS	\$	(97)	\$	_	\$	(97)
02-02	SOURCE OF SUPPLY DEVELOPMENT	\$	694,808	\$		\$	694,808
03-01	ELEVATED STORAGE TANK - 2.0 MG	\$	(16,010)	\$	_	\$	(16,010)
04-02	MAJOR HIGHWAY RELOCATIONS (343)	\$	1,004,584	\$	_	\$	1,004,584
04-03	OWEN COUNTY MAIN EXTENSIONS (343)	\$	1,232,752	\$	440,000	\$	792,752
04-04	BUSINESS PROCESS EFFCIENCY PROJECT & ORCOM BUDGET	-	(278)	\$		\$	(278)
05-01	GROUND STORAGE TANK - 3.0 MG (342)	\$	(2,0)	\$	_	\$	(270)
05-02	RUSSELL CAVE ROAD MAIN - 34,000' OF 12" (343)	\$	68,037	\$	_	\$	68,037
05-05	REPLACE TRAC-VAC SYSTEM AT RRS (332)	\$	801,015	\$	553,000	\$	248,015
05-06	SLUDGE HANDLING IMPROVEMENT	\$	1,544,166	\$	711,000	\$	833,166
05-07	CHEMICAL FEED IMPROVEMENTS	\$	211,772	\$	150,000	\$	61,772
05-08	KENTUCKY RELIABILITY IMPROVEMENT	\$	5,064,222	\$	3,800,000	\$	1,264,222
06-01	VALVE HOUSE UPGRADES AT KRS	\$	89,096	\$	-	\$	89,096
06-02	YARNALLTON ROAD MAIN EXTENSION	\$	6,320	\$	-	\$	6,320
06-04	OWEN COUNTY SCADA SYSTEM	\$	163,461	\$	-	\$	163,461
06-05	MALLARD POINT PRESSURE	\$	82,191	\$	-	\$	82,191
06-06	PARKER'S MILL PUMP & DIESEL	\$	749,453	\$	659,000	\$	90,453
06-07	NEW WTP POOL 3 OF KENTUCKY	\$	2,992,224	\$	3,917,000	\$	(924,776)
06-13	HIGHWAY RELOCATION - CLAYS MILL	\$	(48)	\$	100,000	\$	(100,048)
12020701	INCLINE CAR REPLACEMENT AT KRS	\$	56,893	\$	250,000	\$	(193,107)
12020702	MAJOR HIGHWAY RELOCATIONS 2007	\$	1,811,645	\$	1,000,000	\$	811,645
1202-5	NORTH BROADWAY MAIN REPLACEMENT	\$	-	\$	50,000		
	KY NRW	\$	-	\$	100,000		
	SYSTEM-WIDE ENHANCEMENT	\$	-	\$	177,707	\$	(177,707)
	TOTAL INVESTMENT PROJECTS		16.352.802		11,907,707		4,595,095

		Actual	Approved Original	Variance
Item	Description	Expenditures	Budget	Dollars
	PROJECTS FUNDED BY OTHERS			
80	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$ 6,486,690	\$ 4,500,000	\$ 1,986,690
	TOTAL PROJECTS FUNDED BY OTHERS	6,486,690	4,500,000	1,986,690

				Α	Approved		
			Actual	Original		Variance	
Item	Description	E	xpenditures		Budget		Dollars
	RECURRING CONSTRUCTION ITEMS						
81	NETWORK - REPLACEMENT/RENEWAL	\$	2,126,151	\$	650,000	\$	1,476,151
82	NETWORK - EXTENSION	\$	651,509	\$	460,000	\$	191,509
83	HYDRANTS - REPLACEMENTS	\$	176,730	\$	26,000	\$	150,730
84	HYDRANTS - NEW	\$	492,568	\$	506,000	\$	(13,432)
85	SERVICES - REPLACEMENT	\$	868,071	\$	525,000	\$	343,071
86	SERVICES - NEW	\$	1,326,578	\$	1,180,100	\$	146,478
87	METERS - REPLACEMENT	\$	1,297,577	\$	600,000	\$	697,577
88	METERS - NEW	\$	1,551,511	\$	1,118,900	\$	432,611
89	ITS EQUIPMENT & SYSTEMS	\$	146,310	\$	100,000	\$	46,310
90	OFFICES AND OPERATIONS CENTERS	\$	79,428	\$	54,000	\$	25,428
91	VEHICLES	\$	694,765	\$	-	\$	694,765
92	TOOLS AND EQUIPMENT	\$	590,832	\$	150,000	\$	440,832
93	PROCESS PLANT - REPLACEMENTS	\$	845,297	\$	225,000	\$	620,297
94	PROCESS PLANT - ADDITIONS	\$	196,118	\$	50,000	\$	146,118
95	TREATMENT MEDIA REPLACEMENT & PROCESS REHAB (if capitalized)	\$	7,020	\$	-	\$	7,020
96	TANK REHABILITATION/PAINTING (if capitalized)	\$	-	\$	-	\$	-
97	COMPREHENSIVE PLANNING STUDIES (if capitalized)	\$	65,926	\$	300,000	\$	(234,074)
	TOTAL RECURRING CONSTRUCTION ITEMS		11,116,390		5,945,000		5,171,390

				Α	approved		
			Actual	Original		1	Variance
Item	Description	Exp	enditures	enditures Budget		Budget Dollar	
	INVESTMENT PROJECTS						
01-02	GROUND STORAGE TANK - 3.0 MG	\$	(732)	\$	-	\$	(732)
01-03	SCADA IMPROVEMENTS	\$	9,468	\$	-	\$	9,468
01-05	RUSSELL CAVE ROAD TANK - 1.0 MG	\$	209,888	\$	-	\$	209,888
01-07	MAJOR HIGHWAY RELOCATIONS	\$	215,782	\$	-	\$	215,782
02-01	LEESTOWN ROAD MAIN IMPROVEMENTS	\$	9,771	\$	-	\$	9,771
02-02	2002 MAJOR HIGHWAY RELOCATIONS	\$	219,992	\$	-	\$	219,992
02-04	SOURCE OF SUPPLY DEVELOPMENT	\$	436,624	\$	180,000	\$	256,624
03-01	ELEVATED STORAGE TANK - 2.0 MG	\$	270,297	\$	-	\$	270,297
03-02	MAJOR HIGHWAY RELOCATIONS	\$	31	\$	-	\$	31
03-03	ELECTRICAL & RELIABILITY IMPROVEMENTS	\$	20,805	\$	-	\$	20,805
04-02	MAJOR HIGHWAY RELOCATIONS (343)	\$	478,851	\$	530,000	\$	(51,149)
04-03	OWEN COUNTY MAIN EXTENSIONS (343)	\$	543,523	\$	170,000	\$	373,523
04-04	BUSINESS PROCESS EFFCIENCY PROJECT & ORCOM BUDGE	\$	(208,707)	\$	700,000	\$	(908,707)
05-01	GROUND STORAGE TANK - 3.0 MG (342)	\$	-	\$	750,000	\$	(750,000)
05-02	RUSSELL CAVE ROAD MAIN - 34,000' OF 12" (343)	\$	799,572	\$	800,000	\$	(428)
05-04	KRS IMPROVEMENTS	\$	(8,513)	\$	-	\$	(8,513)
05-05	REPLACE TRAC-VAC SYSTEM AT RRS (332)	\$	339,612	\$	725,000	\$	(385,388)
05-06	SLUDGE HANDLING IMPROVEMENT	\$	314,093	\$	-	\$	314,093
05-07	CHEMICAL FEED IMPROVEMENTS	\$	276,984	\$	228,460	\$	48,524
05-08	KENTUCKY RELIABILITY IMPROVEMENT	\$	944,837	\$	25,000	\$	919,837
06-01	VALVE HOUSE UPGRADES AT KRS	\$	380,264	\$	350,000	\$	30,264
06-02	YARNALLTON ROAD MAIN EXTENSION	\$	23,300	\$	50,000	\$	(26,700)
06-04	OWEN COUNTY SCADA SYSTEM	\$	447,524	\$	-	\$	447,524
06-05	MALLARD POINT PRESSURE	\$	249,695	\$	-	\$	249,695
06-06	PARKER'S MILL PUMP & DIESEL	\$	57,400	\$	-	\$	57,400
06-07	NEW WTP POOL 3 OF KENTUCKY	\$	1,676,933	\$	-	\$	1,676,933
06-13	HIGHWAY RELOCATION - CLAYS MILL	\$	48	\$	-	\$	48
92-12	BLUEGRASS WATER PROJECT	\$	37,269	\$	-	\$	37,269
98-01	INTEGRATED RESOURCE PLAN	\$	15,840	\$	-	\$	15,840
	TOTAL INVESTMENT PROJECTS		7.760.450		4.500.460		3.351.000
	I OTAL HIVEST MENT PROJECTS		7,760,450		4,508,460		3,251,990

				Approved		
Τ.			Actual	Original		Variance
Item	Description PROJECTS EXPERIENCED BY OFFICERS	Ex	penditures	Budget		Dollars
0.0	PROJECTS FUNDED BY OTHERS	1.				
80	DEVELOPER/GOVERNMENTAL CONTRIBUTIONS	\$	6,000,465	\$ 4,080,000	\$	1,920,465
	TOTAL PROJECTS FUNDED BY OTHERS		6,000,465	4,080,000		1,920,465
				Approved		
			Actual	Original	,	Variance
Item	Description	Ex	penditures	Budget		Dollars
	RECURRING CONSTRUCTION ITEMS					
81	NETWORK - REPLACEMENT/RENEWAL	\$	489,069	\$ 600,000	\$	(110,931)
82	NETWORK - EXTENSION	\$	676,942	\$ 255,000	\$	421,942
83	HYDRANTS - REPLACEMENTS	\$	23,370	\$ 25,500	\$	(2,130)
84	HYDRANTS - NEW	\$	547,823	\$ 300,000	\$	247,823
85	SERVICES - REPLACEMENT	\$	738,960	\$ 500,000	\$	238,960
86	SERVICES - NEW	\$	1,281,490	\$ 1,157,000	\$	124,490
87	METERS - REPLACEMENT	\$	485,925	\$ 416,800	\$	69,125
88	METERS - NEW	\$	1,064,681	\$ 1,121,500	\$	(56,819)
89	ITS EQUIPMENT & SYSTEMS	\$	81,511	\$ 75,500	\$	6,011
90	OFFICES AND OPERATIONS CENTERS	\$	93,531	\$ 55,000	\$	38,531
91	VEHICLES	\$	6,533	\$ -	\$	6,533
92	TOOLS AND EQUIPMENT	\$	202,116	\$ 160,000	\$	42,116
93	PROCESS PLANT - REPLACEMENTS	\$	441,263	\$ 350,000	\$	91,263
94	PROCESS PLANT - ADDITIONS	\$	10,170	\$ 50,000	\$	(39,830)
95	TREATMENT MEDIA REPLACEMENT & PROCESS REHAB (if capitalized)	\$	167,212	\$ -	\$	167,212
96	TANK REHABILITATION/PAINTING (if capitalized)	\$	-	\$ -	\$	-
97	COMPREHENSIVE PLANNING STUDIES (if capitalized)	\$	-	\$ -	\$	-
	TOTAL RECURRING CONSTRUCTION ITEMS		6,310,596	5,066,300		1,244,296

				pproved	
			Actual	Original	Variance
Item	Description	Ex	penditures	Budget	Dollars
	INVESTMENT PROJECTS				
01-02	GROUND STORAGE TANK - 3.0 MG	\$	11,298	\$ -	\$ 11,298
01-03	SCADA IMPROVEMENTS	\$	7,866	\$ -	\$ 7,866
	RUSSELL CAVE ROAD TANK - 1.0 MG	\$	928,000	\$ 766,600	\$ 161,400
-	NEW COLUMBUS PROJECT	\$	22,613	\$ -	\$ 22,613
02-01	LEESTOWN ROAD MAIN IMPROVEMENTS	\$	9,467	\$ -	\$ 9,467
02-02	2002 MAJOR HIGHWAY RELOCATIONS	\$	446	\$ -	\$ 446
02-03	REPLACE TRAVELLING SCREEN & HOUSING	\$	11,980	\$ -	\$ 11,980
02-04	SOURCE OF SUPPLY DEVELOPMENT	\$	136,001	\$ 1,500,000	\$ (1,363,999)
03-01	ELEVATED STORAGE TANK - 2.0 MG	\$	3,032,909	\$ 2,180,000	\$ 852,909
03-02	MAJOR HIGHWAY RELOCATIONS	\$	17,817	\$ -	\$ 17,817
	ELECTRICAL & RELIABILITY IMPROVEMENTS	\$	257,106	\$ 219,800	\$ 37,306
	MAJOR HIGHWAY RELOCATIONS	\$	1,271,760	\$ 910,000	\$ 361,760
04-03	OWEN COUNTY MAIN EXTENSIONS (343)	\$	214,797	\$ 240,000	\$ (25,203)
04-04	BUSINESS PROCESS EFFCIENCY PROJECT & ORCOM BUDGET	\$	-	\$ 1,322,035	\$ (1,322,035)
04-06	REPLACE FILTER MEDIA 3 & 4	\$	1,294	\$ -	\$ 1,294
05-01	GROUND STORAGE TANK - 3.0 MG (342)	\$	-	\$ 75,000	\$ (75,000)
05-02	RUSSELL CAVE ROAD MAIN	\$	392,914	\$ 500,000	\$ (107,086)
05-04	KRS VALVE MECHANICAL IMPROVEMENT	\$	199,892	\$ 350,000	\$ (150, 108)
05-05	REPLACE TRAC-VAC SYSTEM	\$	341	\$ -	\$ 341
05-06	SLUDGE HANDLING IMPROVEMENT	\$	12,041	\$ -	\$ 12,041
92-12	BLUEGRASS WATER PROJECT	\$	6,754	\$ -	\$ 6,754
96-19	CUSTOMER SERVICE SOFTWARE	\$	56	\$ -	\$ 56
98-01	INTEGRATED RESOURCE PLAN	\$	31,184	\$ -	\$ 31,184
98-08	SURGE PROTECTION KRS	\$	1,754	\$ -	\$ 1,754
	TOTAL INVESTMENT PROJECTS		6,568,291	8,063,435	(1,495,144)

Witness: Linda C. Bridwell

- **134.** Reference the Kentucky American Water application generally. For the Base Period and the Test Period, identify the forecasted rate base additions, separately by:
 - a. normal recurring construction,
 - b. construction projects funded by others, and
 - c. major investment projects.

Response:

Please refer to the Company's response to Item 3 of the Commission Staff's First Request for Information, Rate Base WP 1-1 UPIS, pages 8-19 for the Base Period and Test Year Period forecasted rate base additions separated by recurring construction, construction funded by others and major investment projects.

Witness: Scott Rungren

- **135.** Reference the Kentucky American Water application and update Exhibit 37B, pages 53 and 54, to include:
 - a. actual data for December 31, 2015 and
 - b. actual data for the latest month available.

Response:

a-b. Please see the attachment for the actual data as of December 31, 2015 and February 29, 2016.

KENTUCKY-AMERICAN WATER COMPANY Case No. 2015-00418 COMPARATIVE BALANCE SHEETS FOR THE PERIODS ENDING DECEMBER 31, 2015 AND FEBRUARY 29, 2016

DATA: _X_ BASE PERIOD _X_ FORECASTED PERIOD
TYPE OF FILING: _X_ ORIGINAL __ UPDATED __ REVISED
WORKPAPER REFERENCE NO(S).:

	Line					
		Description	2/29/2016	% Change	12/31/2015	
Militry Plant in Service	1					
CWIP 27,799,025 3.68% 26,812,584 5 Accume Prov - Depr/Amort (121,731,611) 1.28% (120,193,066) 6 UPAA 216,829 -0.62% 218,185 7 7 7 7 7 7 7 7 7	2	<u>Utility Plant</u>				
Accum Prov - Depr/Amort	3	Utility Plant in Service	\$645,606,288	0.34%	\$643,434,991	
Total Net Utility Plant S51,890,531 0.29% S50,272,695	4	CWIP	27,799,025	3.68%	26,812,584	
Total Net Utility Plant	5	Accum Prov - Depr/Amort	(121,731,611)	1.28%	(120,193,066)	
Total Net Utility Plant S51,890,531 0.29% S50,272,695 9	6	UPAA	216,829	-0.62%	218,185	
Other Property and Investments	7		-	_	_	
Other Property and Investments	8	Total Net Utility Plant	551,890,531	0.29%	550,272,695	
Non-Utility Property	9					
Accum Prov - Depr/Amort Investment in Assoc. Co's Other Investments Other Othe	10	Other Property and Investments				
Investment in Assoc. Co's Other Investments Other Investment	11	Non-Utility Property	249,738	0.00%	249,738	
Other Investments 15 Total Other Property and Investments 249,738 0.00% 249,738 18 Investments 249,738 0.00% 249,738 19 Current and Accrued Assets 20 Cash and Cash Equivalents (55,746) -92.74% (767,579) 21 Temporary Cash Investments 22 Customer Accounts 23 Receivable 5,169,571 -0.46% 5,193,486 24 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due 27 From Assoc. Co 161,860 7,6538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.29% 993,318 <th col<="" td=""><td>12</td><td>Accum Prov - Depr/Amort</td><td></td><td></td><td></td></th>	<td>12</td> <td>Accum Prov - Depr/Amort</td> <td></td> <td></td> <td></td>	12	Accum Prov - Depr/Amort			
Total Other Property and Total Other Property and Investments 249,738 0.00% 249,738 18 19 Current and Accrued Assets Cash and Cash Equivalents Customer Accounts Customer Accounts Refund due Customer Accounts Receivable Customer Accounts Receiv	13	Investment in Assoc. Co's				
16 Total Other Property and 249,738 0.00% 249,738 17 Investments 249,738 0.00% 249,738 18 Investments 249,738 0.00% 249,738 19 Current and Accrued Assets 5,169,571 -92.74% (767,579) 21 Temporary Cash Investments 25,169,571 -0.46% 5,193,486 22 Accrued Accounts (777,593) -3.63% (806,904) 23 Receivable 5,169,571 -0.46% 5,193,486 24 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due 76,538 987,592 29 Materials and Supplies 858,001 -5.29% 987,592 29 Materials and Supplies 858,001 -5.29% 993,318 30 Other 430,545 45.58% 295,749 31 Total Current and Accrued 10,84,573 7.62% 10,114,134 34 Unamortized Debt and 1,502,001 -0.76% 1,513,502 38 Unamortized Ra	14	Other Investments				
Investments 249,738 0.00% 249,738 18	15					
19 Current and Accrued Assets Cash and Cash Equivalents C55,746 -92.74% (767,579) 1 Temporary Cash Investments Customer Accounts 2 Customer Accounts Customer Accounts 3 Receivable 5,169,571 -0.46% 5,193,486 4 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 5 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 6 Income Tax Refund due From Assoc. Co 161,860 76,538 8 Misc Accounts Receivable 935,310 -5.29% 987,592 9 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 32 Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 34 Total Current and Accrued 37 Preferred Debits 1,502,001 -0.76% 1,513,502 38 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case S14,988 19.49% 430,988 40 Preliminary Survey and 1 Investigation Charges 35,093 0.00% 35,093 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 44 Total Deferred Debits 17,442,361 1.39% 17,203,309	16	Total Other Property and		<u>-</u>		
19 Current and Accrued Assets (55,746) -92.74% (767,579) 20 Cash and Cash Equivalents (55,746) -92.74% (767,579) 21 Temporary Cash Investments Temporary Cash Investments Temporary Cash Investments 22 Customer Accounts \$5,169,571 -0.46% \$5,193,486 24 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due 76,538 76,538 27 From Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Assets 10,884,573 7.62% 10,114,134 35 Deferred Debits 1,502,001 -0.76% 1,513,502 36 Unamortized Rate Case 1,502,001	17	Investments	249,738	0.00%	249,738	
20 Cash and Cash Equivalents (55,746) -92.74% (767,579) 21 Temporary Cash Investments 22 Customer Accounts 5,169,571 -0.46% 5,193,486 24 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due 76,538 27 From Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Total Current and Accrued 76,58 10,114,134 34 Total Current and Accrued 76,58 10,114,134 35 Deferred Debits 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 1,502,001 -0.76% 1,513,502 39 Expenses 514,988 <t< td=""><td>18</td><td></td><td></td><td></td><td></td></t<>	18					
Temporary Cash Investments Customer Accounts S,169,571 -0.46% S,193,486	19	Current and Accrued Assets				
22 Customer Accounts 5,169,571 -0.46% 5,193,486 24 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due 76,538 27 From Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Assets 10,884,573 7.62% 10,114,134 34 Unamortized Debt and 76,538 10,114,134 35 Deferred Debits 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 1,502,001 -0.76% 1,513,502 39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 1 1,523,0280 1.09% 15,223,726 43 Misc Deferred Debits 15,390,280 1.09% 15,223,726 44 Total Deferred Debits 17,442,361 <td>20</td> <td>Cash and Cash Equivalents</td> <td>(55,746)</td> <td>-92.74%</td> <td>(767,579)</td>	20	Cash and Cash Equivalents	(55,746)	-92.74%	(767,579)	
23 Receivable 5,169,571 -0.46% 5,193,486 24 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due Terom Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Assets 10,884,573 7.62% 10,114,134 34 Unamortized Debt and 76,500 1,502,001 -0.76% 1,513,502 38 Unamortized Debt and 76,500 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 314,988 19.49% 430,988 40 Preliminary Survey and 35,093 0.00% 35,093 41 Investigation Charges 35,093 0.00% 35,093	21	Temporary Cash Investments				
24 Accum Prov - Uncollectibles (777,593) -3.63% (806,904) 25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due From Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Assets 10,884,573 7.62% 10,114,134 34 Unamortized Debits 1,502,001 -0.76% 1,513,502 35 Deferred Debits 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 10,948 19.49% 430,988 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 10,442,361 1.39% 17,203,309 45 10,442,361 1	22	Customer Accounts				
25 Accrued Utility Revenues 4,162,624 -1.64% 4,231,934 26 Income Tax Refund due 76,538 27 From Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Assets 10,884,573 7.62% 10,114,134 34 Unamortized Debits 3 7.62% 10,114,134 35 Deferred Debits 1,502,001 -0.76% 1,513,502 38 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 1 Investigation Charges 35,093 0.00% 35,093 41 Investigation Charges 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 <td>23</td> <td>Receivable</td> <td>5,169,571</td> <td>-0.46%</td> <td>5,193,486</td>	23	Receivable	5,169,571	-0.46%	5,193,486	
Income Tax Refund due From Assoc. Co 161,860 76,538 Misc Accounts Receivable 935,310 -5.29% 987,592 Materials and Supplies 858,001 -5.02% 903,318 Other 430,545 45.58% 295,749 Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 Assets 10,884,573 7.62% 10,114,134 Total Current and Accrued 1,502,001 -0.76% 1,513,502 Unamortized Debt and 7 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 Unamortized Rate Case 39 Expenses 514,988 19.49% 430,988 Preliminary Survey and 1 Investigation Charges 35,093 0.00% 35,093 Misc Deferred Debits 15,390,280 1.09% 15,223,726 Misc Deferred Debits 17,442,361 1.39% 17,203,309 Total Deferred Debits 17,442,361 1.39% 17,203,309	24	Accum Prov - Uncollectibles	(777,593)	-3.63%	(806,904)	
27 From Assoc. Co 161,860 76,538 28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 32 Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 35 Deferred Debits 36 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 44 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	25	Accrued Utility Revenues	4,162,624	-1.64%	4,231,934	
28 Misc Accounts Receivable 935,310 -5.29% 987,592 29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 34 35 Deferred Debits 36 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	26	Income Tax Refund due				
29 Materials and Supplies 858,001 -5.02% 903,318 30 Other 430,545 45.58% 295,749 31 Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 34 35 Deferred Debits 36 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 1 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 44 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	27	From Assoc. Co	161,860		76,538	
30 Other 430,545 45.58% 295,749 31	28	Misc Accounts Receivable	935,310	-5.29%	987,592	
31 Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 34 Beferred Debits 36 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 35,093 0.00% 35,093 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46 46 47,442,361 1.39% 17,203,309	29	Materials and Supplies	858,001	-5.02%	903,318	
Total Current and Accrued 33 Assets 10,884,573 7.62% 10,114,134 34 Deferred Debits 36 Unamortized Debt and 5 1,502,001 -0.76% 1,513,502 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 35,093 0.00% 35,093 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46 46 47 44 44 44 44 44 44 44 45 45	30	Other	430,545	45.58%	295,749	
33 Assets 10,884,573 7.62% 10,114,134 34 Deferred Debits 35 Deferred Debits Total Deferred Stock Expense 36 Unamortized Debt and 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	31					
34	32	Total Current and Accrued		<u>_</u>		
Deferred Debits 36 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46 47,442,361 1.39% 17,203,309	33	Assets	10,884,573	7.62%	10,114,134	
36 Unamortized Debt and 37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	34					
37 Preferred Stock Expense 1,502,001 -0.76% 1,513,502 38 Unamortized Rate Case 39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46 14,442,361 1.39% 17,203,309	35	<u>Deferred Debits</u>				
38 Unamortized Rate Case 39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46 46 47,442,361 1.39% 17,203,309	36					
39 Expenses 514,988 19.49% 430,988 40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 44 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	37	Preferred Stock Expense	1,502,001	-0.76%	1,513,502	
40 Preliminary Survey and 41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46 46 47 48 48 48 48 48 48 49						
41 Investigation Charges 35,093 0.00% 35,093 42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46		•	514,988	19.49%	430,988	
42 Misc Deferred Debits 15,390,280 1.09% 15,223,726 43 44 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	40	•				
43 44 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46		-				
44 Total Deferred Debits 17,442,361 1.39% 17,203,309 45 46	42	Misc Deferred Debits	15,390,280	1.09%	15,223,726	
45 46	43			_		
46		Total Deferred Debits	17,442,361	1.39%	17,203,309	
47 Total Assets \$580,467,202 0.45% \$577,839,875						
	47	I otal Assets	\$580,467,202	0.45%	\$577,839,875	

KENTUCKY-AMERICAN WATER COMPANY Case No. 2015-00418 COMPARATIVE BALANCE SHEETS FOR THE PERIODS ENDING DECEMBER 31, 2015 AND FEBRUARY 29, 2016

DATA: _X_ BASE PERIOD _X_ FORECASTED PERIOD
TYPE OF FILING: _X_ ORIGINAL __ UPDATED __ REVISED

TYPE OF FILING:	_X_ ORIGINAL _	_ UPDATED _	_ REVI
WORKPAPER REF	ERENCE NO(S).:		

Line				
No.	Description	2/29/2016	% Change	12/31/2015
1				
2	Common Equity			
3	Common Stock Issued	\$36,568,777	0.00%	\$36,568,777
4	Paid-In-Capital	79,080,273	0.01%	\$79,075,032
5	Retained Earnings	55,604,765	6.52%	52,201,167
6			_	
7	Total Common Equity	171,253,814	6.53%	167,844,976
8	Preferred Stock Issued			
9	Long-Term Debt	197,999,000	0.00%	197,999,000
10	Current Portion - LTD			
11			_	
12	Total Capitalization	369,252,814	0.93%	365,843,976
13				
14	Current and Accrued Liabilities			
15	Notes Payable	27,075,981	7.51%	25,184,535
16	Accounts Payable	5,342,321	-53.00%	11,367,790
17	Accrued Taxes	3,884,976	74.29%	2,229,084
18	Accrued Interest	3,791,546	83.49%	2,066,355
19	Customer Deposits			
20	Dividends Declared			
21	Other	3,808,898	-9.49%	4,208,053
22				
23	Total Current and Accrued			
24	Liabilities	43,903,722	-2.56%	45,055,817
25				
26	<u>Deferred Credits</u>			
27	Customer Advances	12,649,355	1.47%	12,466,582
28	Deferred Income Taxes	75,756,089	0.83%	75,129,989
29	Accumulated Deferred ITC	525,302	-2.62%	539,435
30	Other	20,070,365	-5.96%	21,342,785
31				
32	Total Deferred Credits	109,001,111	-0.44%	109,478,792
33				
34	Contributions in Aid of			
35	Construction	58,309,555	1.48%	57,461,291
36				
37				
38	Total Liabilities	\$580,467,202	0.45%	\$577,839,875

Witness: Linda C. Bridwell

136. Reference the Kentucky American Water application generally. Provide the actual net cost of removal incurred by the Company in each of the past five years.

Response:

Please refer to the schedule below for removal costs net of salvage incurred by the Company in each of the past five years.

	Incurred		
	Removal Costs		
Year	Net of Salvage		
2015	\$880,663		
2014	802,752		
2013	12,175		
2012	1,225,761		
2011	845,196		

Witness: Linda C. Bridwell

- 137. Reference the Kentucky American Water application generally. Regarding page 22, lines 4-6 of Ms. Bridwell's testimony, identify all amortizations included in the Company's filing. For each such amortization, provide:
 - a. the total amount of the amortization approved,
 - b. a cite to the Order approving the amortization,
 - c. the beginning and ending dates of the amortization, and
 - d. the annual amortization expense.

Response:

- a) Approved amortization consists of:
 - Amortization of Source of Supply costs of \$2,283,202.35 over 40 years related to the Bluegrass Water Project.
 - Amortization of AFUDC Debt costs of \$6,632,164.80 related to the adoption of FAS 109 are being amortized over 40 years.
- b) The order approving amortization is:
 - The November 27, 2000 Order, Case Number 2000-00120, authorized amortization of the Bluegrass Source of Supply.
 - KAWC has not confirmed the order number authorizing amortization of the FAS 109 AFUDC Equity prior to 2008.
- c) Amortization Periods:
 - Source of Supply costs for the Bluegrass Water Project are being amortized over the period 01/01/01 to 12/31/2040.
 - AFUDC Equity costs related to the adoption of FAS 109 are being amortized over the period 01/01/1993 to 12/31/2033.
- d) Amortization Expense:
 - Amortization expense for the Bluegrass Water Project is \$4,756.67 per month or \$57,080.04 annually.
 - Amortization expense for AFUDC Equity related to the adoption of FAS 109 is \$13,817.01 per month or \$165,804.12 annually.

Witness: Linda C. Bridwell

138. Reference the Kentucky American Water application generally. Provide the actual balance for Contributions in Aid of Construction at December 31st for each of the past five years.

Response:

Please refer to the schedule below for the actual balance for Contributions in Aid of Construction net of Accumulated Amortization at December 31st for each of the past five years.

Account	12/31/2015	12/31/2014	12/31/2013	12/31/2012	12/31/2011
27111000 CIAC-Non Taxable - Mains	(\$21,295,537)	(\$20,110,068)	(\$19,762,304)	(\$17,981,825)	(\$17,792,506)
27112000 CIAC-Non Taxable - Ext Dep	(14,348,900)	(14,117,202)	(13,188,725)	(12,775,611)	(12,178,443)
27113000 CIAC-Non Taxable - Services	(9,530,440)	(8,210,993)	(20,830,013)	(19,665,985)	(18,175,632)
27114000 CIAC-Non Taxable - Meters	(15,368,634)	(13,754,488)	(1,026,588)	(1,023,118)	(830,754)
27115000 CIAC-Non Taxable - Hydrants	(2,468,488)	(1,955,321)	(1,865,838)	(1,785,934)	(1,690,488)
27116000 CIAC-Non Taxable - Other	(3,767,807)	(3,536,804)	(3,538,404)	(3,538,404)	(3,514,202)
27117000 CIAC-Non Taxable - WIP	(1,882,880)	(3,140,632)	(1,253,439)	(1,147,655)	(402,569)
27118000 CIAC-Non Taxable - Non-Utility Property	(249,725)	(249,725)	(249,725)	(249,725)	(249,725)
27121000 CIAC-Taxable - Mains	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)	(1,998,493)
27122000 CIAC-Taxable - Ext Dep	(766,586)	(766,586)	(766,586)	(766,586)	(766,586)
27123000 CIAC-Taxable - Services	(7,605,886)	(7,448,744)	(7,480,360)	(7,311,054)	(7,033,267)
27124000 CIAC-Taxable - Meters	(3,299)	(3,299)	(3,299)	(3,299)	(3,299)
27125000 CIAC-Taxable - Hydrants	(487,487)	(487,487)	(487,487)	(487,487)	(487,487)
27126000 CIAC-Taxable - Other	(430,476)	(430,476)	(440,903)	(440,903)	(440,903)
27127000 CIAC-Taxable - WIP	(41,479)	(147,342)	0	(2,502)	0
27206000 Accum Amort CIAC - Other	20,317,946	19,369,061	17,720,318	16,482,369	15,320,327
27210000 Accum Amort CIAC - Tax	2,466,880	2,177,696	1,890,869	1,606,311	1,328,786
Total: Contributions in aid of construction	(\$57,461,291)	(\$54,810,902)	(\$53,280,979)	(\$51,089,901)	(\$48,915,241)

Witness: Linda C. Bridwell/Brent E. O'Neill

139. Reference the Kentucky American Water application generally. Provide the actual balance for Advances for Construction at December 31st for each of the past five years.

Response:

Please refer to the schedule below for the actual balance for Advances for Construction at December 31st for each of the past five years.

Account	12/31/2015	12/31/2014	12/31/2013	12/31/2012	12/31/2011
25211000 Advances for Construction - NT Mains	(\$222,915)	(\$431,473)	(\$488,774)	\$0	\$0
25212000 Advances for Construction - NT Ext Deposits	(12,211,515)	(10,537,253)	(11,710,751)	(12,512,902)	(12,955,415)
25217000 Advances for Construction - NT WIP	(1,033,152)	(2,125,271)	(992,659)	(509,027)	(719,711)
Total: Customer Advances for construction	(\$13,467,582)	(\$13,093,998)	(\$13,192,183)	(\$13,021,929)	(\$13,675,126)

Witness: Linda C. Bridwell

140. Reference the Kentucky American Water application generally. Identify all components of the Company's claim for deferred debits. For each such component, provide a cite to a Commission order authorizing the inclusion of the deferred debit in rate base.

Response:

KAW has included a request for rate recovery of one deferred debit, which are the Source of Supply costs. The Commission approved a 40-year amortization of these costs and the inclusion of the unamortized portion of the costs as rate base. Initial approval was granted by the Commission in Case No. 2000-00120 in an order dated May 18, 2001, which can be found on the Commission's website.

Witness: Donald J. Petry

141. Reference the Kentucky American Water application generally. Regarding the Other Rate Base components discussed on page 32, lines 1-5 of Ms. Bridwell's testimony, describe the deferred compensation and accrued pensions included in the Company's rate base claim and state how the monthly amounts of deferred compensation and accrued pensions are determined.

Response:

The monthly pension accrual used in the calculation of accrued pensions is based upon Kentucky American Water's allocated share of American Water Works, Inc.'s 2015 pension cost. The Company's allocation was based upon the number of active participants in the plan. The quarterly pension funding payments used in the calculation of accrued pensions are based on Kentucky American Water's planned allocation of the 2015 Pension Funding schedule. The quarterly funding schedule payments are based on the active participants' valuation earnings calculated by the Company's actuary, Willis Towers Watson.