	ARF	FORM 1 - 5	
SUBMIT OR	IGINAL AND FIVE ADDITIONAL COPIES, UNLESS FILING ELECTRONICALLY		RECEIVED
L	APPLICATION FOR RATE ADJUSTMENT BEFORE THE PUBLIC SERVICE COMMISSION		JUN 282012 PUBLIC SERVICE
	For Small Utilities Pursuant to 807 KAR 5:076 (Alternative Rate Filing)		COMMISSION
	Graves County Water District (Name of Utility)		
	P. O. Box 329 (Business Mailing Address - Number and Street or PO. Box)		
	Mayfield. KY 42066 (Business Mailing Address - City: State and Zip)		
	270-247-4661 (Telephone Number)		
	BASIC INFORMATION		
	ELEPHONE NUMBER <u>and</u> E-MAIL ADDRESS of the person to whom corr g this application should be directed:	esponder	nce or
	Johnny Dowdy, Chairman		
	P.O. Box 329 (Address - Number and Street or P.O. Box)		
	Mayfield, KY 42066		
	(Address - City, State, Zip)		
	270-247-4661 ((elephone Number)		
	N/A		
	(Emoli Address)		
(For eac	ch statement below, the Applicant should check either "YES" or "NO".)		
		YES	NO
<ol> <li>a. In its immediate gross annual reve</li> </ol>	past calendar year of operation, Applicant had \$5,000,000 or less in enue.		
In its immediate	es two or more divisions that provide different types of utility service. past calendar year of operation, Applicant had \$5,000,000 or less in enue from the division for which a rate adjustment is sought.		
2. a. Applicant has file year	ed an annual report with the Public Service Commission for the past		
b. Applicant has file previous years.	ed an annual report with the Public Service Commission for the two		
3. Applicant's recor	ds are kept separate from other commonly-owned enterprises.	$\checkmark$	

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			YES	NO
4.	а.	Applicant is a corporation. A certified copy of its articles of incorporation and all amendments are attached to this application or were filed with the Public Service Commission in Case No.		V
	þ.	Applicant is a limited liability company. A certified copy of its articles of organization and all amendments are attached to this application or were filed with the Public Service Commission in Case No		V
	С.	Applicant is a limited partnership. A certified copy of its limited partnership agreement and all amendments thereto are attached to this application or were filed with the Public Service Commission in Case No		$\square$
	d.	Applicant is a sole proprietorship or partnership.		$\overline{\mathbf{V}}$
	e	Applicant is a water district organized pursuant to KRS Chapter 74.	$\square$	
	f.	Applicant is a water association organized pursuant to KRS Chapter 273.		$\Box$
5.	a	A paper copy of this application has been mailed to Office of Rate Intervention, Office of Attorney General, 1024 Capital Center Drive, Suite 200, Frankfort, Kentucky 40601-8204.		
	b.	An electronic copy of this application has been electronically mailed to Office of Rate Intervention, Office of Attorney General at rateintervention@ag.ky.gov.		$\square$
б.	a.	Applicant has 20 or fewer customers or is a sewer utility and has mailed written notice of the proposed rate adjustment to each of its customers no later than the date this application was filed with the Public Service Commission. A copy of this notice is attached to this application. <b>(Attach a copy of customer notice.)</b>		V
	b.	Applicant has more than 20 customers, is not a sewer utility, and has included written notice of the proposed rate adjustment with customer bills that were mailed by the date on which the application was filed. A copy of this notice is attached to this application. <b>(Attach a copy of customer notice.)</b>		
	C.	Applicant has more than 20 customers, is not a sewer utility, and has made arrangements to publish notice once a week for three (3) consecutive weeks in a prominent manner in a newspaper of general circulation in its service area, the first publication having been made by the date on which this Application was filed. A copy of this notice is attached to this application. (Attach a copy of customer notice.)	Z	
7.		Applicant requires a rate adjustment for the reasons set forth in the attachment entitled "Reasons for Application." (Attach completed "Reasons for Application" Attachment.)	V	

		YES	NO
8.	Applicant proposes to charge the rates that are set forth in the attachment entitled "Current and Proposed Rates." (Attach completed "Current and Proposed Rates" Attachment.)		
9.	Applicant proposes to use its annual report for the immediate past year as the test period to determine the reasonableness of its proposed rates. This annual report is for the 12 months ending December 31, <u>2010</u> .		
10.	Applicant has reason to believe that some of the revenue and expense items set forth in its most recent annual report have or will change and proposes to adjust the test period amount of these items to reflect these changes. A statement of the test period amount, expected changes, and reasons for each expected change is set forth in the attachment "Statement of Adjusted Operations." (Attach a completed copy of appropriate "Statement of Adjusted Operations." Attachment and any invoices, letters, contracts, receipts or other documents that support the expected change in costs.)		
11,	Based upon test period operations, and considering any known and measurable adjustments, Applicant requires additional revenues of \$ <u>Attach E. p2</u> _and total revenues from service rates of \$ <u>Attach E. p2</u> . The manner in which these amounts were calculated is set forth in "Revenue Requirement Calculation" Attachment. (Attach a completed "Revenue Requirement Calculation" Attachment.)	V	
12.	As of the <b>date of the filing of this application</b> , Applicant had <u>3.164</u> customers.	7	
13.	A billing analysis of Applicant's current and proposed rates is attached to this application. (Attach a completed "Billing Analysis" Attachment.)		
14.	Applicant's depreciation schedule of utility plant in service is attached. (Attach a schedule that shows per account group: the asset's original cost, accumulated depreciation balance as of the end of the test period, the useful lives assigned to each asset and resulting depreciation expense.)		
15.a.	Applicant has outstanding evidences of indebtedness, such as mortgage agreements, promissory notes, or bonds.		
b	Applicant has attached to this application a copy of each outstanding evidence of indebtedness (e.g., mortgage agreement, promissory note, bond resolution).		$\square$
c.	Applicant has attached an amortization schedule for each outstanding evidence of indebtedness.	2	

		YES	NO
16. a.	Applicant is not required to file state and federal tax returns.	$\checkmark$	
b.	Applicant is required to file state and federal tax returns.		$\checkmark$
C.	Applicant's most recent state and federal tax returns are attached to this Application. (Attach a copy of returns.)		$\checkmark$
17.	Approximately0 (Insert dollar amount or percentage of total utility plant) of Applicant's total utility plant was recovered through the sale of real estate lots or other contributions.	$\square$	

I am authorized by the Applicant to sign and file this application on the Applicant's behalf, have read and completed this application, and to the best of my knowledge all the information contained in this application and its attachments is true and correct.

Signed Officer of the Company/Authorized Representative Title mma 6 - 26 - 2012Date

COMMONWEALTH OF KENTUCKY

COUNTY OF GRAVES

Before me appeared <u>JOHNNY</u> <u>DOWDY</u>, who after being duly sworn, stated that he/she had read and completed this application, that he/she is authorized to sign and file this application on behalf of the Applicant, and that to the best of his/her knowledge all the information contained in this application and its attachments is true and correct.



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Notary Public My commission expires: <u>Jan 23</u> 2014

### LIST OF ATTACHMENTS (Indicate all documents submitted by checking box)

- Applicant's Articles of Incorporation, Articles of Organization, or Limited Partnership Agreement.
- All amendments to Applicant's Articles of Incorporation, Articles of Organization, or Limited Partnership Agreement.
- Customer Notice of Proposed Rate Adjustment A
- ✓ "Reasons for Application" Attachment B
- Current and Proposed Rates" Attachment No Attachment C
- $\checkmark$  "Statement of Adjusted Operations" Attachment  $\bigcirc$
- "Revenue Requirements Calculation" Attachment
- 🗹 "Billing Analysis" Attachment 🗜
- Depreciation Schedule G
- ✓ Outstanding Debt Instruments (i.e., Bond Resolutions, Mortgages, Promissory Notes, Amortization Schedules.) H
- State Tax Return
- Federal Tax Return

NOTICE

\$1,048,259, an increase of \$145,526 or approximately 16.1 percent over normalized revenues from water sales of \$902,733. The Phase II rate increase will produce annual operating revenues from water sales of \$1,118,142, an which is an increase of \$215,409, approximately 22.3 percent. Graves County Water District is proposing to phase in the requested increase in two phases. The initial phase will produce annual operating revenues from water sales of Graves County Water District is requesting the Phase I rates be effective upon Public Service Commission approval and Frankfort, Kentucky, for an adjustment of rates. Graves County proposes a total revenue requirement of \$1,180,954, increase of \$69,883 or approximately 6.67 percent over normalized revenues from the phase I increase of \$1,048,259. Notice is hereby given that the Graves County Water District seeks approval by the Public Service Commission, the Phrase II rates to become effective when payback of KIA loan for the AMI meter project starts.

%	2	Increase	9.70%	31.8%	43.6%	52.0%										
Current Rate		Consumers	\$12.01	\$20.86	\$35.61	\$244.81										
%	0	Increase	1.5%	18.7%	31.0%	30.6%										
Current Pate	Fancy	Farm	\$13.10	\$23.15	\$39.05	\$284.85										
20	%	Increase	1.5%	28.8%	60.1%	88.8%										
Current	Kale	Hardeman	\$13.10	\$21.35	\$31.95	\$197.15										
ò	%	Decrease				-32.8%	%		Increase	16.1%				1.7%		
Current Rate	South	Graves	\$14.25	\$34.86	\$67.96	\$553.96				\$2.17	Phase 1	Proposed		\$13.30		
Phase 1	Proposed	Rate	\$13.30	\$27.49	\$51.14	\$372.14				\$2.52	Phase 2	Proposed	Rate	\$13.53	\$29.37	\$55.77
	Customer Bill	Usage level	2.000 gallons	5 000 gallons	10.000 gallons	100,000 gallons		WHOLESALE	RATE	per 1,000 gallon		Customer Bill	Usage level	2,000 gallons	5,000 gallons	10,000 gallons

ATTACHMENT A

LE Increase 82.69 \$2.52 6.7%	The rates contained in this notice are the rates proposed by the Graves County Water District; however, the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice.	Notice is further given that any corporation, association, or person with a substantial interest in the matter may, by written request within thirty (30) days after the publication of this notice, request to intervene in the matter before the Public Service Commission. Intervention may be granted beyond the thirty (30) day period for good cause shown. The request should be submitted to the Public Service Commission at its address shown below. Any person who has been granted intervention by the Commission may obtain copies, free of charge, of the application and testimony by contacting Graves County Water District at the address below. Any person may examine the rate application and any other filings made by Graves County Water District at its offices or at the Public Service Commission at the rate application and any other filings	ty Water District Public Service Commission 211 Sower Boulevard 2212 Sower Boulevard P.O. Box 615 Frankfort, Kentucky 40602 Telephone: 502-564-3940	Persons may also view and download a copy of the rate application through the Public Service Commission's website at psc.ky.gov.
WHOLESALE RATE per 1,000 gallon	The rates Service Commis	Notice is written request Public Service ( request should granted interven Graves County made by Graves	Graves County Water District P. O. Box 329 Mayfield, KY 42066 Telephone: 270-247-4661	Persons may al psc.ky.gov.

10.0% %

\$372.14

100,000 gallons \$409.47

## "Reasons for Application"

Graves County Water District was created in 2008 by the merger of South Graves Water District, Fancy Farm Water District, Hardeman Water District, and Consumers Water District. The Kentucky Public Service Commission ("KPSC") approved the merger by Order dated May 21, 2008, in Case No. 2007-00496.<sup>1</sup> As noted in the KPSC's Order, the Commissioners of the Districts to be merged agreed that a unified rate design, to be charged to all customers of the merged district, would be created and summited to the KPSC for approval <sup>2</sup>

In this Application, Graves requests a two-phase adjustment to rates. Phase 1 rates are necessary to unify the rates of the four former districts and were designed on a cost basis, to recover current operating costs necessary to provide safe and reliable potable water service to all customers. The unified rate was developed by allocating the cost of service to a five-step declining block rate design to be charged to retail customers. The rate design has a customer charge with minimum usage that escalates for meters larger than 5/8-inch. Also, a single volumetric rate for Graves' single wholesale customer is requested.

The cost of service study includes the calculation of pro forma operating revenues and pro forma operating expenses (Attachment D), the calculation of the overall revenue requirement and required revenue increase (Attachment E), and the

<sup>&</sup>lt;sup>1</sup> In the Matter of Joint Application of Consumers Water District, Fancy Farm Water District, Hardeman Water District, and South Graves Water District for Approval of Merger and Formation of Graves County Water District.

<sup>&</sup>lt;sup>2</sup> See Commission's Order, Finding 26. g.

classification of each component of the revenue requirement as either customer cost, demand cost, or commodity cost (Attachment F).

Phase 1 rates will generate revenues from water sales totaling \$1,048,259, an increase of \$145,526, or 16.12 percent, over normalized test-year water sales As shown in the financial exhibits attached to the Application, this level of revenue is necessary to:

- pay annual principal and interest payment to the Kentucky Infrastructure Authority ("KIA") for the two loans currently outstanding;
- pay pro forma operation and maintenance expenses totaling \$837,466; and
- provide depreciation funds necessary to pay for recurring renewals and replacements of assets in the amount of \$201,857.

Phase 2 rates are to become effective on the date of closing of a third KIA loan that was approved by Order of the KPSC dated November 3, 2011, in Case No. 2011-00390.<sup>3</sup> This loan is to be in the original amount of \$1,000,000; however, KIA will forgive a portion of the loan so that the total principal repaid over the 20-year life of the loan is equal to \$780,000. The loan will be used to pay for the installation of an Automated Metering Infrastructure ("AMI") project in the area of Graves formerly served

<sup>&</sup>lt;sup>3</sup> In the Matter of Application of Graves County Water District for Authority to Enter into a Loan Agreement with the Kentucky Infrastructure Authority.

by South Graves Water District, Consumers Water District, and Fancy Farm Water District.<sup>4</sup>

Phase 2 rates are necessary to produce revenue sufficient to repay the third KIA loan and provide for recovery of depreciation on the portion of the AMI project in those three service areas. As shown in the financial exhibits attached to the Application, Phase 2 rates will produce additional revenues of \$69,883, or 6.67 percent, over and above the revenues produced by Phase 1 rates. Phase 2 rates were developed by increasing the Phase 1 rates "across-the-board" evenly by 6.7 percent.

<sup>&</sup>lt;sup>4</sup> Graves has already installed the AMI assets in its area that was formerly served by Hardeman Water District using KIA grant funds that remained in Graves' possession after the completion of a separate project. The effect on Graves' operating costs of this portion of the AMI project has been accounted for in Phase 1 rates.

## Adjusted Operations

As shown in Table D1, Graves made adjustments to test-year revenues and expenses to account for known and measurable changes that are applicable to Phase 1 operations. Adjustments to Phase 1 operations were then made that are applicable to Phase 2 operations. All adjustments are explained following the table.

			Phase	1		Phase	2
	Test Year December 31, 2010	Adjustments	Ref.	Pro forma	Adjustments	Ref.	Pro forma
Operating Revenue					·····		
Water Sales	\$ 894.270	\$ 8,463	А	\$ 902,733	\$ 145,526	Е	\$ 1.048.259
Olher Operaling Revenue	55.913	No. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		55,913			55,913
Total Water Sales	950,183	8,463		958,646	145,526		1,104,172
Operating Expenses							
Operation and Maintenance							
Salaries and Wages - Officers	15,750			15.750			15,750
Purchased Water	142.994	(8,851)	В	134.143			134,143
Purchased Power	65.813	(4,074)	В	61.739			61,739
Chemicals	65.880	(4,078)	В	61.802			61,802
Materials and Supplies	29.115			29,115			29,115
Contractual Services	486.994	(4,848)	С	482,146	(35.016)	F	447,130
Rental of Equipment	21,435			21,435			21.435
Insurance General Liability	11,056			11,056			11,056
Bad Debt	10,613			10,613			10,613
Miscellaneous Expense	9,667	**************************************		9,667			9,667
Total Operation and Maintenance	859,317	(21.851)		837.466	(35,016)		802,450
Depreciation Expense	244,839	(42,982)	D	201.857	55.909	G	257,765
Amortization	1,475			1,475			1,475
Total Operating Expenses	1,105,631	(64,833)		1,040,798	20,893		1,061,690
Net Operating Income	(155,448)	73.296		(82,152)	124,634		42,482
Interest and Dividend Income	6,899			6,899			6,899
Income Available to Service Debt	<u>\$ (148,549)</u>	<u>\$ 73,296</u>		<u>\$ (75,253)</u>	\$ 124,634		\$ 49,381

## Table D1 Pro forma Operating Statement

(A) <u>Water Sales</u>. Graves reported test-year water sales in the amount of \$894,270. Graves proposes to increase this amount by \$8,463 to match reported

revenues to the amount calculated using a billing analysis and to account for the addition of ten new residential customers.

A billing analysis was performed to verify the amount of water sales reported for the test year. To complete the billing analysis, each customer's bill was recalculated for each month of the test year by applying the rates in effect during the year to the monthly usages. The sum of these recalculations was compared to reported water sales. The billing analysis demonstrates that test-year water sales should have been reported at \$900,230. Accordingly, the test-year amount was increased by \$5,960.

Subsequent to the test year, Graves added 10 new residential customers to its distribution system. It is appropriate to add the revenue collected from these customers to test-year water sales when calculating pro forma operations. To account for the additional revenue, test-year water sales were increased by \$2,503, or .28 percent (\$2,503, new revenue / \$894,270, test-year sales). The amount was calculated by applying Graves' current residential rates to the average residential usage.

(B) <u>Purchased Water, Purchased Power, and Chemicals</u>. Kentucky Administrative Regulation 807 5:066 Section 6 (3) limits water loss to 15 percent. The regulation allows for an alternative level if it is found to be reasonable. In its 2010 annual report, Graves reported a 21.19 percent water loss, exceeding the allowable limit by 6.19 percent.

Graves will not request that the Commission approve a level alternative to the 15 percent stated in the regulation. Instead, it proposes to remove 6.19 percent of the direct variable costs to purchase, treat, and deliver the excess water loss. Accordingly,

test-year Purchased Water, Purchased Power, and Chemicals were decreased as shown below.

Purchased Water	142,994	-6.19%	(8,851)
Purchased Power	65,813	-6 19%	(4,074)
Chemicals	65,880	-6.19%	(4,078)

Graves recognizes that an adjustment could be made to these three expense accounts to correspond with the customer growth revenue adjustment; however, Graves did not propose an adjustment as it is not material to its operations.

(C) <u>Contractual Services</u>. Graves has no employees. It contracts with Mayfield Electric and Water Systems ("MEWS") to perform all duties necessary to complete its daily operations. The amount charged against revenues during the test year for these services totaled \$486,994.

By Order dated November 3, 2011, in Case No. 2011-00233<sup>3</sup> Graves received Commission approval to construct a \$1,330,491 Advance Metering Infrastructure ("AMI") project.<sup>4</sup> A portion of the project is to be funded with a \$1,000,000 loan from the Kentucky Infrastructure Authority ("KIA"). This financing was also approved by Order dated November 3, 2011, in Case No. 2011-00390.<sup>5</sup>

Prior to the issuance of the Order approving the construction and financing of the AMI project, Graves completed a construction project that was separate from the AMI

<sup>&</sup>lt;sup>3</sup> In the Matter of Application of Graves County Water District for Approval of Construction and Issuance of a Certificate of Convenience and Necessity for the Purchase and Installation of Automated Meter Reading Equipment.

<sup>&</sup>lt;sup>4</sup> Appendix A to the Order incorrectly stated the estimated project cost to be \$1,749,794. This amount included the portion of the AMI project for Graves and Hickory Water District. Graves' portion of the projected costs is \$1,330,491.

<sup>&</sup>lt;sup>5</sup> In the Matter of Application of Graves County Water District for Authority to Enter into a Loan Agreement with the Kentucky Infrastructure Authority.

project. This project was funded by a KIA grant. The amount of the KIA grant unexpectedly exceeded the final cost of the project. Graves received permission from KIA to use the excess funds to begin construction of its AMI project. With this funding, Graves completed the installation of AMI assets for its 385 customers residing in the territory formerly served by Hardeman Water District. In Phase 1 rates, Graves requests recovery of the cost of this portion of the AMI project through depreciation. These assets total \$212,319 and are included in the calculation of Phase 1 depreciation shown in Attachment G-2. Accordingly, Graves requests to adjust all other test-year expenses that will be affected by this portion of the AMI project to calculate Phase 1 rates.

As noted in the Order dated November 30, 2011, the AMI project will likely produce many savings; however, the only savings immediately identifiable are those related to meter reading. The meter reading savings were estimated to be \$1.05 per meter per month.<sup>6</sup> Graves reduced test-year contractual services by \$4,848 (\$1.05, savings per meter x 385 customers x 12 months) to account for these savings in Phase 1. Savings related to costs other than meter reading will only be identifiable after the AMI system has been in service for a reasonable length of time. Since AMI project had not been in place long enough to identify and quantified other savings at the time this application was being prepared, no other adjustments were made.

(D) <u>Depreciation Expense</u>. Graves reported test-year depreciation expense of
 \$244,839. This amount was calculated using the remaining-life method. The

<sup>&</sup>lt;sup>6</sup> Commission Order dated November 30, 2011, Finding 19, Finding 20, Footnote 13.

calculation is shown in Attachment G-1. As shown in Attachment G-2, Graves proposes to decrease the test-year amount by \$42,982 when calculating Phase 1 revenue requirements to account for:

- a change from the remaining-life depreciation method to the whole-life depreciation method;
- new whole-life depreciable lives assigned to each asset account group, and
- depreciation taken on assets placed into service subsequent to the test year.

<u>Change in Depreciation Methods</u>. When the water districts merged in 2008 to create Graves, Graves reported the assets of each district at net book value, original cost less accumulated depreciation, as of August 31, 2008. This represented a "write-down" of assets in excess of \$4.5 million, approximately 46 percent of the plant's *original cost*. The journal entry making this recording was submitted to the KPSC by letter dated September 8, 2008. After recording the assets at net book value, Graves adopt the remaining-life method to calculate annual depreciation expense. Prior to the merger, each of the former districts used the whole-life method.

After using the remaining life method for the two years subsequent to the merger, Graves is of the opinion that the whole-life method is more appropriate for calculating its annual depreciation expense. Graves requests that the KPSC allow it to restate its assets, and related accumulated depreciation, to their original balances at the time of merger, with adjustments made for additions subsequent to the merger, and begin calculating depreciation using the whole-life method. This method was used in Attachment G-2 to calculate pro forma depreciation expense for Phase 1 operations and Phase 2 operations. As discussed in complete detail later, the depreciable life applied to each account group in Attachment G-2 was selected using guidance from a study performed by the National Association of Regulatory Utility Commissioners ("NARUC").

In support of its request, Graves argues that Accounting Instruction 21 of the Uniform System of Accounts ("USoA") was violated when it first recorded its assets using net plant values. Instruction 21 requires the accounts for plant, accumulated depreciation, and donated capital reported by a merged utility be stated at the balances reported by the former utilities at the time of merger. This ensures that the requirements of Accounting Instruction 18 of the USoA are met. Instruction 18 requires that all assets be stated at their original cost when first devoted to public service. To adhere to the requirements of the USoA, Graves must restate its balances for plant and accumulated depreciation; otherwise, plant and accumulated depreciation will remain understated in future reporting periods by a material amount and the original cost principal will remain violated.

After restating its plant balances, it only seems fitting that Graves be allowed to begin applying the whole-life depreciation method as was used prior to the merger. The whole-life method is far less cumbersome to apply than the remaining-life method and, in Graves' opinion, is a superior method for a "small" utility with a less sophisticated fixed asset accounting system when compared to a "large" utility which often has an accounting department dedicated solely to asset management practices.

For these reasons, Graves requests approval to restate its assets to their original cost and to begin applying the whole-life method of depreciation as applied in Attachment G-2.

<u>Change to Depreciable Lives</u> Generally, the Commission requires a "large" utility to perform a depreciation study to determine the appropriate depreciable lives to be assigned to each plant account group. Detailed property records specific to historic plant additions, plant retirements, and salvage practices are required to complete a depreciation study. Generally, "small" water utilities, such as Graves, do not maintain property records with enough detail to properly complete a formal study. Furthermore, even if adequate records were maintained, "small" utilities do not have the financial resources to fund a formal study. Therefore, to evaluate the reasonableness of the depreciation practices of small utilities, the Commission has historically relied upon the report published in 1979 by NARUC entitled *Depreciation Practices for Small Water Utilities* ("NARUC Study").

Graves referenced to the NARUC study to determine the appropriate depreciable whole-life to be assigned to each asset group except for the AMI project. Graves selected lives for each group that are at, or near, the mid-point of the recommended ranges. The middle of the ranges is representative of the depreciation practices of an "average" small water utility. Graves requests that the KPSC approve the lives selected using the NARUC study.

The NARUC study is not applicable to the infrastructure used for the installation of the AMI project. The NARUC study was prepared long before this infrastructure was designed and developed. Relying on information obtain from the manufacturer of the AMI components, Graves requests that a 20-year depreciable live be assigned to these assets.

Post Test-Year Plant Additions. As shown on Attached G-2, subsequent to the end of the test year, Graves placed additional plant into service with a total cost of \$933,027. These assets consist of \$655,777 for an interconnection with the city of Mayfield, \$157,414 for the AMI project in the Hardeman area, and \$119,836 for locating and mapping transmission and distribution mains. Graves is requesting recovery of the cost of these assets through Phase 1 rates with adjustments to test-year depreciation expense as discussed below.

In 2011 Graves completed the construction of pumping and main facilities that were necessary to connect its transmission and distribution system to the water system of the city of Mayfield. This interconnection provides Graves with an alternative source of finished water and was paid for through KIA grant funds. Graves requests that depreciation on this asset be included in the calculation of Phase 1 revenue requirements.

As discussed at Reference Item C, Graves completed installation of the AMI project in the area formerly served by Hardeman Water District in 2011. The total cost of this portion of the AMI project was \$212,319, \$54,905 was capitalized in 2010 while the remaining \$157,414 was capitalized in 2011. Graves requests to recover this entire amount over a 20-year depreciable life.

Subsequent to the test year, in years 2011 and 2012, Graves incurred significant costs for mapping the location of its existing transmission and distribution mains As of

May 31, 2012, these costs totaled \$119,836. Graves capitalized and depreciated this amount over the 65-year depreciable life assigned to mains.

(E) <u>Water Sales</u>. As shown in Table E1 of Attachment E, Graves requested rates in Phase 1 that will produce additional annual revenues in the approximate amount of \$145,526 This additional revenue should be included in normalized revenues when calculating the required revenue increase for Phase 2.

(F) <u>Contractual Services</u>. The Phase 2 rates requested in this application are necessary after accounting for all known and measurable changes to operating costs that will result from completion of the AMI project As previously discussed in Reference Item C, in Phase 1 Contractual Services were reduced by \$4,848 to account for savings in meter reading expenses resulting from the installation of the AMI project in the Hardeman area. Following this principal, Contractual Services were reduced in Phase 2 by an additional \$35,016 (3,164 total customers – 385 Hardeman Customers = 2779 x \$1.05 x 12 months) to account for the meter reading savings that will result from completion of the remaining portion of the AMI project.

(G) <u>Depreciation</u>. In Phase 2, Graves is requesting recovery of annual depreciation expense in the amount of \$66,525 for the entire estimated cost of the AMI project, \$1,330,491. Through the AMI project Graves will replace all of its mechanical meters. As previously discussed, Graves was granted a certificate of public convenience and necessity to construct the AMI project by Commission Order dated November 30, 2011 in Case No 2011-00233. The manufacturer of the AMI meters estimates their life to be equal to 20 years. Based on this estimate, the AMI project has been depreciated over a 20-year period. As shown on Attachment G-2, the additional

depreciation adjustment required in Phase 2 is \$55,909. Depreciation in the amount of \$10,616 was included in the calculation of Phase 1 depreciation for the Hardeman area.

Graves notes that, in addition to depreciating the AMI project on Attachment G-2, it also continues to depreciate the cost of the old mechanical meters even though they will be removed from service. Although this action is in violation of Accounting Instruction 27 B. (2) of the USoA, it is reasonable. It does not have a material effect on depreciation in the years immediately following the removal of the assets and has no effect on depreciation taken in the long term.

The cost of the mechanical meters is reported in the same account group as their installation costs. The total combined cost of the group is \$501,283 (annual depreciation totals \$10,616). There is no way to accurately separate the meter's cost to record their retirement.

Although the cost of meters cannot be accurately identified and separated, the majority of the cost of the account group is attributable to installations. This is evidenced by comparing the cost of a mechanical meter to the cost of installing a meter. The majority of Graves' meters are 5/8-inch meters. The current average combined cost of a meter and meter installation is assumed to be equal to the current tap fee charged for a 5/8-inch connection, \$450. Of this amount, the cost of the mechanical meter is roughly \$35. The installation is then assumed to represent approximately \$415, or over 92 percent of the combined cost.

Since the installations represent such a significant amount of the combined costs and will remain in service even after the mechanical meters are removed, it is appropriate and necessary to continue depreciation on this component of the asset group. Given the relatively small amount of meter's cost in the asset group, their inclusion is of no material consequence to the annual depreciation expense.

Furthermore, this accounting treatment will result in the same amount charged to depreciation expense in the later years. If the cost of the meters could be separated and were accounted for in accordance with Accounting Instruction 27, a loss in the amount of the undepreciated balance of the meters would be reported. This loss would flow through the meter and meter installations accumulated depreciation account. This would increase the depreciable basis of the account group by an amount equal to the loss. This loss would ultimately flow through to the income statement as a component of depreciation expense in future periods.

As explained, no matter which of the two accounting treatments discussed herein is used, the "stranded costs" of the mechanical meters will be included in the calculation of future depreciation expense taken on the meter and meter installation account. The proposed method is of no material consequence in the immediate reporting periods and is of no consequence, whatsoever, in the long term. It is therefore reasonable.

Attachment E

### Calculation of Revenue Requirements

As shown in Table E1, Graves calculated the overall revenue requirement for Phase 1 to be \$1,111,071. The overall revenue requirement was determined by adding pro forma operating expenses to the three-year average principal and interest payments payable on KIA for Loan No B05-04 and KIA Loan No. B07-03. By reducing the overall revenue requirement by pro forma other revenues and interest income, the revenue required from rates was determined to be \$1,048,259. This represents an increase of \$145,526, or 16.12 percent, over normalized test-year water sales revenue of \$902,773.

All of the components of these calculations are shown and explained in Attachment D of the Application except for the payments to KIA. The calculation of the debt payments are shown Table E2 and are explained following the table. The rates shown in Attachment F (Page 13 and Page 17 – Page 19) are the unified rates that were designed to meet the Phase 1 revenue requirement.

Also shown in Table E1 is the calculation of the overall revenue requirement for Phase 2 in the amount of \$1,180,954. This amount was determined by adjusting the Phase 1 revenue requirement for known and measurable changes that will result from the installation of the Automated Metering Infrastructure ("AMI") project. This project could be completed as soon as December 31, 2013. The most critical adjustment for this project is for the future debt payments to KIA for the loan to be assumed to finance the project. The calculation of this adjustment is shown on Table E2. The remaining adjustments are shown and explained in Attachment D The first payment on the KIA loan will be due one year after the loan is closed. Therefore, Graves requests that the Phase 2 rates, as shown in Attachment F (Page 22 and Page 26 – Page 28), be made effective on the closing date of the loan This will allow Graves the opportunity to accumulate enough funds to make the first loan payment when it becomes due

## Table E1 Calculation of Overall Revenue Requirement and Required Revenue Increase

	Phase 1	Phase 2
Operating Expenses, Refer to Attachment D	\$1,040,798	\$ 1,061,690
Three-Year Average Debt Service Payments, See Table E2	70,274	<u>119,264</u>
Total Revenue Requirement	1,111,071	1,180,954
Less: Other Operating Revenue	(55,913)	(55,913)
Interest Income	(6,899)	(6,899)
Revenue Required from Rates	1,048,259	1,118,142
Less: Normalized Water Sales	(902,733)	(1,048,259)
Required Revenue Increase	<u>\$ 145,526</u>	\$ 69,883
Percentage Increase	<u>16.12%</u>	6.67%

The calculation of the three-year average debt service payments shown above

for Phase 1 and Phase 2 are shown in Table E2.

Table E2
Calculation of Three-Year Average Debt Payments

	Average D	ebt Payment
KIA Loan No.	Phase 1	Phase 2
B05-04, Calculation of Averages Shown Below B07-03 B11-02	\$   17,223 53,051	\$ 17,223 53,051 48,990
Total	\$ 70,274	\$ 119,264

Loan No. B05-04, See Amo. Sch. at Attachment H, Page 1.								
<u>Year</u>	Principal	Interest	<u>Servi</u>	cing Fee		Total		
2012 2013 2014	\$19,500 19,593 19,688	\$ 1,379 1,285 1,391	\$	574 535 496	\$	21,453 21,414 21,575		
	ear Average Allocated to V	Vater Division			\$	21,480 80.18%		
Three-Y	Three-Year Average Allocated to Water Division <u>\$ 17,223</u>							
Loa	n No. B07-03,	See Amo. Sch	at Att	achment H,	, Pag	le 2		
<u>Year</u>	Principal	Interest	<u>Servi</u>	cing Fee		<u>Total</u>		
2012 2013 2014	\$48,855 49,051 49,247	\$ 2,863 2,667 2,471	\$	1,431 1,334 1,235	\$	53,149 53,051 52,953		
Three-Y	ear Average					53,051		
Loa	n No. B11-02,	See Amo. Sch	. at Att	achment H	Pag	je 3.		
<u>Year</u>	Principal	Interest		cing Fee		Total		
1 2 3	\$32,070 32,715 33,372	\$15,440 14,796 14,138	\$	1,544 1,480 1,414	\$	49,055 48,990 48,925		
Three-Y	ear Average				_\$	48,990		

The debt service amount requested for Phase 1 is equal to the three-year average principal and interest payments due to KIA on Loan No. B05-04 and Loan No. B07-03.

Loan B05-04 originated from Fancy Farm's former service area where Fancy Farm provided water service and sewer service. Immediately prior to its merger into Graves, Fancy Farm had long-term bonds payable to the United States Department of Agriculture's Rural Development ("RD") in the total amount of \$690,896. The water division's portion was \$553,976 or 80.18 percent of the total The sewer division's portion was \$136,920 or 19 82 percent of the total (See Finding 12 Commission Order dated May 21, 2008, approving merger in Case No. 2007-00496). Immediately upon merger into Graves, Fancy Farm refinanced the entire amount of the debt using "20/20" grant funds and KIA Loan No. B05-04. The original KIA loan amount was \$596,776.<sup>1</sup> The grant funds and loan funds should be split between the water division and sewer division based on the percentage of the RD bonds outstanding at the time of refinancing. Therefore, the water division has been allocated 80.18 percent of the total debt service requirements for this loan.

Loan No. B07-03 was secured by Graves to refinance a KIA loan that had been originally awarded to South Graves Water District in 1994. This refinancing was approved by the Commission in Case No. 2008-00448.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> In Case No. 2007-00496 Graves stated that the Commission's approval to assume this loan was never sought by Fancy Farm or Graves.

<sup>&</sup>lt;sup>2</sup> In the Matter of the Application of Graves County Water District for Approval of Financing.

To calculate the debt service requirement for Phase 2, Graves added to the Phase 1 requirement, the anticipated three-year average principal and interest payments that will become due to KIA on Loan No. B11-02 This loan was approved by the KPSC in Case No. 2011-00390 for the purpose of financing a portion of the AMI project. The approved loan amount is \$1,000,000 with principal forgiveness from KIA of 20 percent. This loan has not yet been closed. It is expected to be closed on, or around, December 31, 2013, the anticipated completion date of the AMI project. The principal and interest payment included for this loan were taken from the loan amortization schedule provided by KIA on September 7, 2011.

It should be noted that there is no provision for a Debt Service Coverage ("DSC") in the calculations shown in Table E1. KIA only requires its borrowers to maintain a DSC when its loans are subordinate to long-term indebtedness owed by its borrows to other funding agencies. Since Graves has no other long-term indebtedness, the KIA loans are not subordinate and, therefore, require no DSC.

## Normalized Revenue:

As Graves County was created by a merger of 4 separate operating utilities to compute the normalized revenue each former utility's rate schedule has been used so as to assign revenues to the customers that formerly were served by these separate utilities. The normalized revenue is shown for the entire system in the table titled Current Rate Summary. Each individual system Billing Analysis with their current rates follows the summary table.

## Cost of Service Study:

expenses in manner that has been accepted by the Commission in the past. Graves County has completed a Cost of The Cost of Service Study has been utilized to unify the rates of the entire system and to allocate the pro forma Service Study for Phase I and Phase II that is being requested in this case.

from Rates for the Retail Customers. We calculated the adjustment to the Commodity costs and Demand costs by the percentage of these two components for what would have been allocated to the wholesale customer. The Retail rates The Wholesale Customer's rate was adjusted using a percentage across the board calculation, which has been accepted by the Commission in the past, and the increase in revenue has been used to reduce the Revenue Requirement have been adjusted to meet the revenue requirement for each phase and a Billing Analysis is provided for each phase. Attachment F

## Normalized Billing Analysis for: GRAVES COUNTY WATER DISTRICT Test Period From: DECEMBER 1 - JANUARY 31, 2010 CURRENT RATES SUMMARY

Meter Size	Bills	Gallons Sold	Revenue
Consumers 5/8 inch	20,536	95,634,700	\$418,964.44
1 inch	160	2,603,900	9,735.16
2 inch	53	1,360,800	4,984.52
Fancy Farm	5,222	26,025,400	122,473.65
Wholesale	12	8,259,300	17,922.68
Hardeman	4,620	22,102,700	94,356.86
South Graves	7,801	31,550,200	234,295.18
Totals	38,404	187,537,000	\$902,732.49

Attachment F

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CONSUMERS
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Meter Size: 5/8 inch

GALLONS         20         00         100         <				FIRST	NEXT	NEXT	NEXT	OVER	TOTAL
46,955       46,955         682,026       287,760       394,266         142,289       21,840       87,360       33,089         62,685       4,460       17,840       22,300       18,085         22,392       520       2,080       2,600       7,800       9,392         95,634,700       36,153,500       50,154,600       5,798,900       2,588,500       939,200       95,6	USAGE BILLS		GALLONS	20	αQ	201		200	AE OFF
682,026         287,760         394,266         394,266         31,089         1           142,289         21,840         87,360         33,089         1         1           62,685         4,460         17,840         22,300         18,085         1           22,392         520         2,080         2,600         7,800         9,392           95,634,700         36,153,500         50,154,600         5,798,900         2,588,500         939,200         95,6	4,807	7	46,955	46,955					t0,000
142,289         21,840         87,360         33,089         1           62,685         4,460         17,840         22,300         18,085           22,392         520         2,080         2,600         7,800         9,392           95,634,700         36,153,500         50,154,600         5,798,900         2,588,500         939,200         95,6	14,388	ß	682,026	287,760	394,266				682,026
62,685 4,460 17,840 22,300 18,085 22,392 520 2,080 2,600 7,800 9,392 95,634,700 36,153,500 50,154,600 5,798,900 2,588,500 939,200 95,6	1,092	N	142,289	21,840	87,360	33,089			142,289
22,392 520 2,080 2,600 7,800 9,392 95,634,700 36,153,500 50,154,600 5,798,900 2,588,500 939,200 95,6	223	e	62,685	4,460	17,840	22,300	18,085		62,685
95,634,700 36,153,500 50,154,600 5,798,900 2,588,500 939,200	76 26	(C	22.392	520	2,080	2,600	7,800		22,392
	20,536		95,634,700	36,153,500	50,154,600	5,798,900	2,588,500	939,200	95,634.700

CONSUMERS AREA OF GRAVES COUNTY W REVENUE BY RATE INCREMENT

REVENUE	\$246,637.36 147,956.07 15,831.00 6,548.91 1,991.10	\$418,964.44
RATE	\$12.01 2.95 2.73 2.53 2.12	
GALLONS	36,153,500 50,154,600 5,798,900 2,588,500 939,200	95,634,700
BILLS	20,536	20,536
	2,000 8,000 10,000 30,000	TOTAL
	FIRST NEXT NEXT NEXT NEXT	i )

Attachment F

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CONSUMERS AREA OF GRAVES COUNTY WD

Meter Size: 1 inch

ER 500 TOTAL	3,609	3,794	2,309	16,327	532,700 2,603,900	
OVER 500				5,327	532,700	
NEXT 300			606	6,600	369,400 750,900	
NEXT 100		794	200	2,200	369,400	
FIRST 100	3,609	3,000	700	2,200	950,900	
BILLS GALLONS	3,609	3,794	2,309	16.327	2,603,900	
BILLS	101	30	7	22	160	
ISAGE	100	100	300	500	TOTALS Gallons x 100	
	FIRST	NEXT	NEXT		TOTALS	

CONSUMERS AREA OF GRAVES COUNTY WD REVENUE BY RATE INCREMENT

	\$5,697.60 1,008.46 1,899.78 1,129.32 \$9,735.16
	\$35.61 2.73 2.53 2.12
GALLONS	950,900 369,400 750,900 532,700 2,603,900
BILLS	160
	10,000 10,000 30,000 50,000 TOTAL
	FIRST NEXT NEXT OVER

Attachment F

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CONSUMERS AREA OF GRAVES COUNTY WD

Meter Size: 2 inch

XT 500 TOTAL	2,149	6,885	4,574	1,360,800			
NEXT 500			2,074	207,400			
NEXT 300		3,285	1,500	478,500		REVENUE	\$3,334.23
FIRST 200	2,149	3,600	1,000	674,900	OUNTY WD IENT	RATE	\$62.91
GALLONS	2,149	6,885	4,574	1,360,800	CONSUMERS AREA OF GRAVES COUNTY WD REVENUE BY RATE INCREMENT	GALLONS	674,900
BILLS	30	18	5	53	SUMERS AR REVENUE	BILLS	53
USAGE	200	300	500	TOTALS Gallons x 100	CON		ST 20,000 <sup>-</sup>
	FIRST	NEXT	OVER	TOTALS			FIRST

REVENUE	\$3,334.23	1,210.61	439.69	\$4,984.52
KAIE	\$62.91			
GALLONS	674,900	478,500	207,400	1,360,800
BILLS	53			53
	•	30,000	50,000	TOTAL
	FIRST	NEXT	OVER	

Attachment F

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FANC Meter Size: Fancy Farm

TOTAL	10,610	77,821	94,332	44,299	33,192	26,025,400	
OVER 200					15,792	1,579,200	
NEXT 100				10,399	8,700	1,909,900	
NEXT 50			24,832	16,950	4,350	4,613,200	
NEXT 30		33,401	41,700	10,170	2,610	8,788,100	Ω
FIRST	10,610	44,420	27,800	6,780	1,740	9,135,000	S COUNTY W
	10,610 10,610	77,821	94,332	44,299	33.192	26,025,400	FANCY FARM AREA OF GRAVES COUNTY WD
	20 1,185	30 2,221	50 1,390	339	200 87	5,222	FARM AF
	USAGE BILLS 20 1,185	30	50	100	002	TOTALS Gallons x 100	FANCY
	FIRST -	NEXT	NEXT	NEXT		TOTALS	

FANCY FARM AREA OF GRAVES COUNTY WD REVENUE BY RATE INCREMENT

llon	REVENUE	\$68,408.20	29,440.14	14,669.98	5,691.50	4,263.84	\$122,473.65	17,922.68	\$140,396.33
per 1,000 gallon	RATE	\$13.10	3.35	3.18	2.98	2.70		2.17	
	GALLONS		8,788,100	4,613,200	1,909,900	1,579,200	26,025,400	8,259,300	34,284,700
	BILLS	5.222					5.222	12	5,234
		2,000	3 000	5 000	10,000	000 <sup>0</sup> 02	Total Retail	Wholesale	TOTAL
		FIRST	NEXT	NEXT	NEXT				

Attachment F

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HARDEMAN AREA OF GRAVES COUNTY WD

Meter Size: Hardeman

HARDEMAN AREA OF GRAVES COUNTY WD REVENUE BY RATE INCREMENT

	\$60,522.00 19,131.75 11,831.93 2,871.18 \$94,356.86
RATE	\$13.10 2.75 2.12 1.80
GALLONS	7,969,500 6,957,000 5,581,100 1,595,100 22,102,700
BILLS	4,620 4,620
	2,000 3,000 15,000 20,000 TOTAL
	FIRST NEXT NEXT OVER

Attachment F

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Size:	South Graves										
	USAGE	BILLS	BILLS GALLONS	FIRST 20	NEXT 30	NEXT 50	NEXT 100	NEXT 300	NEXT 500	Over 1000 TOTAL	TOTAL
FIRST -		2,487	23,267	23,267							23,267
NEXT	30	30 3,294	113,756	65,880	47,876						113,756
NEXT	50	1,649	112,074	32,980	49,470	29,624					112,074
NEXT	100	301	39,246	6,020	9,030	15,050	9,146				39,246
NEXT	300	65	16,327	1,300	1,950	3,250	6,500	3,327			16,327
NEXT	500	5 C	3,341	100	150	250	500	1,500	841		3,341
	1 000		3 7 491	60	06	150	300	006	1,500	4,491	7,491
TOTALS	TOTALS Gallons x 100 7,801 31,550,200	7,801	31,550,200	12,960,700	10,856,600	10,856,600 4,832,400	1,644,600	572,700	234,100	449,100	31,550,200

REVENUE BY RATE INCREMENT

REVENUE	\$111,164.25	74,584.84	31,990.49	10,492.55	3,373.20	1,149.43	1,540.41	\$234,295.18
RATE	\$14.25	6.87	6.62	6.38	5.89	4,91	3.43	
BILLS GALLONS	12,960,700	10,856,600	4,832,400	1,644,600	572,700	234,100	449,100	31,550,200
BILLS	7,801							7,801
	2,000	3,000	5,000	10,000	30,000	50,000	100,000	TOTAL
	FIRST	NEXT	NEXT	NEXT	NEXT	NEXT	OVER	

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Attachment F

Mete Size:

SOUTH GRAVES AREA OF GRAVES COUNTY WATER DISTRICT

COST OF SERVICE STUDY

# **GRAVES COUNTY WATER DISTIRICT**

ALLOCATION OF PLANT VALUE

PHASE 1

D CUSTOMER	125	015	582	047	000	274	7,172	471,321	O	515 \$471,321	3% 8.47%		0	0	133 12	348 \$471,333
DEMAND	\$188,425	25,015	146,582	915,047	1,400,000	2,414,274	7,1			\$5,096,515	91.53%					\$5,096,648
COMMODITY										\$0						\$0
TOTAL	\$188,425	25,015	146,582	915,047	1,400,000	2,414,274	7,172	471,321		\$5,567,836	100.00%				145	\$5,567,981
	Water Treatment Equipment	Land & Land Rights	Structures and Improvements	Pumping Equipment	Wells and Springs	Transmission & Distribution Mains	Power Operated Equipment	Meters & Meter Installations	Services	SUBTOTAL	PERCENT	General Plant (1)	Transportation Equipment	Office Furniture & Equipment	Other Plant and Misc. Equipment	TOTAL VALUE

(1) General Plant allocated based on overall weighted allocation of all other plant. Note: Figures used were derived from 2010 annual report

# **GRAVES COUNTY WATER DISTIRICT** ALLOCATION OF DEPRECIATION EXPENSE

PHASE 1

CUSTOMER	\$45,186 2 336	\$47,522	8.79%
DEMAND \$58,514 60,433 2,731 37,004	83,183	251,543 \$493,408	91.21%
COMMODITY		\$0.00	
<b>TOTAL</b> \$58,514 60,433 2,731	31,004 45,186 83,183	2,336 251,543 \$540 930	100.00%
Structures and Improvements Pumping Equipment Collecting and Impounding Reservoirs	Wells and Springs Meters & Meter Installations Water Treatment Equipment	Services Transmission & Distribution Mains	TOTAL DEPRECIATION PERCENT

Note: Figures used were derived from 2010 annual report

Attachment F
# ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	CUSTOMER	146,846			673 07	010,01	157,459		157,459	34 87%		5,492	514	7,475	9,357	5,021	10,153	3,855	3,371	202,698
	DEMAND						294,070		294,070	CE 120/	0/ 01.00	10,258	961	13,960	17,476	9,376	18,962	7,201	6,296	378,559
	COMMODITY		134,143	61,739	61,802		257,684													257,684
PHASE 1	TOTAL	294,070 146,846	134,143	61,739	61,802	10.613	709,213	-257,684	AE1 520	6701104	100.00%	16 760	10,10	01410	250 20	205 1 1	14,001	23'11) 74 DEG	0.667	838,941
		Contractual services - Labor	Contractual Services- Aum. ree		Purchased Power	Cherricals	Bad Debt Expense SURTOTAL		LESS CONNINIOULT	SUBTOTAL	PERCENT		Empioyee Salaries - Commissioners	Amortization Expense	Equipment Rental	Contractual Services- Eng.	Contractual Services - Materials	Materials & Supplies	Insurance General Liability	Miscellaneous Expense TOTAL

## GRAVES COUNTY WATER DISTIRICT SUMMARY OF ALLOCATIONS

CLISTOMER	8.47% \$5,949 8.79% 17,734	202,698 -6,899.00 -55,913.00	\$163,568.63
	DEWIAND 91.53% \$64,325 91.21% 184 123	62	\$257,684.00 \$627,007.37
	COMMODITY	\$257,684.00 257,684.00	
PHASE 1	<b>тотаL</b> 100.00% \$70,274 100.00%	1,1	\$1,048,260.00
	Plant Percentages	Debt Service Feynment Depreciation Percentages Total Depreciation & Maintenance Total Operation & Maintenance	Revenue Requirement from retail water sales

## CALCULATION OF WHOLESALE RATE

Revenue	\$20,813.44
Rate per 1,000	\$2.17 16.12% \$2.52
Wholesale Gallons Sold	8,259,300 Revenue Requirement Increase 8,259,300

# SUMMARY OF ALLOCATIONS FOR RETAIL CUSTOMERS

PHASE	~
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Dlant Percentages	<b>TOTAL</b> 100.00%	COMMODITY	ā	CUSTOMER 8.47%
	\$70,274 100.00%		\$64,325 91.21%	40,949 8.79%
Depreciation Percentages	201.857		184,123	17,734
1 otal Uepreciation	838.941	257,684	378,559	202,698
1 0(a) Uperation & Maintenatice	1.111.072	257,684	627,007	226,381
l otal Kevenue Kequirenieni I ass: Other Income	-6.899			-6,899
l ess. Other Operating Revenue	-55,913			-55,913
Local Dovenue from M/holesale Clistomer	-20.813	-6,063	-14,750	
Less, revenue num who and selection from retail water sales	\$1,027,447	\$251,621	\$251,621 \$612,257	\$163,569

NOTES: Wholesale Customer Revenues allocated based on percentage of the total of the Commodity and Demand components.

<b>'ES COUNTY WATER DISTIRICT</b>	CULATION OF RETAIL WATER RATES
GRAVE	CALCL

PHASE 1

	TOTAL	FIRST 2,000	NEXT 8,000	NEXT 10,000	NEXT 30,000	OVER 50,000
FROM BILLING ANALYSIS: COMMODITY PERCENTS RETAIL COMMODITY SALES	100.00% 179,277,700	37.14% 66,587,500	50.73% 90,943,200	6.59% 11,819,600	3.72% 6,661,700	1.82% 3,265,700
PEAK DEMAND WEIGHTED FACTOR PEAK DEMAND WEIGHTED SALES <b>DEMAND PERCENTS</b>	321,647,825 100.00%	2 133,175,000 41.40%	1.75 159,150,600 49.48%	1.5 17,729,400 5.51%	1.25 8,327,125 2.59%	1 3,265,700 1.02%
COMMODITY COSTS	\$251,621.05	\$93,457.34	\$127,641.21	\$16,589.12	\$9,349.87	\$4,583.50
DEMAND COSTS	\$612,256.89	\$253,498.72	\$302,943.29	\$33,747.93	\$15,850.69	\$6,216.26
CUSTOMER COSTS TOTAL COSTS	\$163,568.63 \$1,027,446.56	\$163,568.63 \$510,524.68	\$430,584.51	\$50,337.05	\$25,200.56	\$10,799.76
DIVIDE BY BILLS/GALLONS CALCULATED RATES		38,404 \$ <b>13.2935</b>	90,943,200 <b>\$4.7347</b>	11,819,600 <b>\$4.2588</b>	6,661,700 \$3.7829	3,265,700 <b>3.3070</b>
RECOMMENDED RATES		FIRST 2,000 \$13.30	NEXT 3,000 \$4.73	NEXT 5,000 \$4.26	NEXT 10,000 \$3.78	Over 20,000 \$3.30

Attachment F

#### Verification Billing Analysis for Unified Rates for: GRAVES COUNTY WATER DISTRICT Test Period From: January - December 2010 PHASE 1

Revenue	1,007,711.15	12,832.88	9,709.62	20,813.44	\$1,051,067.09
Gallons Sold	174,891,600	2,719,400	1,666,700	8,259,300	187,537,000
Bills	38,144	172	76	12	38,404
Direto- Circo	5/8 inch	1 inch	2 inch		vvnoiesaie Totals

TOTAL	93,407	1,217,246	260,328	118,679	59,256	174,891,600							
OVER 500					25,256	2,525,600							
NEXT 300				33,679	20,400	5,407,900							
NEXT 100			61,728	42,500	6,800	11,102,800							
NEXT 80		698,766	158,880	34,000	5,440	89,708,600		REVENUE	\$507,315.20 424.321.68	47,297.93	20,441.86	8,334.48	\$1,007,711.15
FIRST 20	93,407	518,480	39,720	8,500	1,360	66,146,700	REMENT	RATE	\$13.30 4 73	4.26	3.78	3.30	
GALLONS	93,407	1,217,246	260,328	118,679	59.256	174,891,600	BY RATE INCREMENT	GALLONS	66,146,700 80 708 600	11.102,800	5,407,900	2,525,600	174,891,600
BILLS	9741	25924	1986	425	68	38144	REVENUE	BILLS	38144				38144
USAGE	20	80	100	300	500	Gallons x 100			2,000	a,000 10 000	30,000	50,000	TOTAL -
	FIRST	NEXT	NEXT	NEXT	0//ED	TOTALS			FIRST	NEAL	NEXT	OVER	

	-		C   A	2,360	4,283	2,309	16,327	2,719,400								
	OVER	200 1 O I AL						532,700 2								
	NEXT	300				606	6,600	750,900								
	NEXT	100			883	200	2,200	378,300								
	NEXT	50		860	1,700	350	1,100	401,000		REVENUE	\$4,728.28	1,896.73	1,611.56	2,838.40	1,757.91	\$12,832.88
	FIRST	50	1,915	1,500	1,700	350	1,100	656,500	EMENT	RATE	\$27 49	4.73	4.26	3.78	3.30	
		GALLONS	1,915	2,360	4,283	2,309	16,327	2,719,400	REVENUE BY RATE INCREMENT	GALLONS	656,500	401,000	378,300	750,900	532,700	2,719,400
		BILLS	62	30	34	2	22	172	REVENUE B	BILLS	172					172
ich.		USAGE	50	50	100	300	500	Gallons x 100			5.000	5.000	10.000	30.000	50,000	TOTAL
Size: 1 inch			FIRST	NEXT	NEXT	NEXT	OVFR	TOTALS			FIRST	NEXT	NEXT	NEXT	UVER	Ĭ

Attachment F

Meter Size: 1 inc

Meter Size: 2 inch

R 500 TOTAL	4,304	7,729	4,574	207,400 1,666,700
OVER 500			2,074	207,400
NEXT 300		3,529	1,500	502,900
FIRST 200	4,364	4,200	1,000	956,400
GALLONS	4,364	7,729	4.574	1,666,700
BILLS	50	21	LC.	, 76
USAGE	200	300	EOO	Gallons x 100
	FIRST	NEXT		TOTALS

REVENUE BY RATE INCREMENT

REVENUE	\$7,124.24 1,900.96 684.42	\$9,709.62
RATE	\$93.74 3.78 3.30	
GALLONS	956,400 502,900 207,400	1,666,700
BILLS	76	76
	20,000 30,000	
	FIRST NEXT	

Attachment F

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	CUSTOMER	020		10,613		122,443		122,443	29.40%	4,630								160,579
	CIAND	294,070				294,070		294,070	70.60%	11.120	1,041	15,134	18,945	10,165	20,556	7,806	6,825	385,662
		COMMODILY	134,143	61,802		257,684												257,684
PHASE 2		<b>TOTAL</b> 294,070	111,830 134,143	61,739 61,802	c1 a'n1	674,197	257 684	446.543	100.00%		10',CI	1,4/0	21,430	26,833	14,381	29,110	11,000 7.85 0	803,925
ALLOCATION OF OF EIVATOR			Contractual services - Lauu Contractual Services- Adm. Fee Durchased Water	Purchased Power Chemicals	Bad Debt Expense	14767010	SUBLOIAL	LESS COMMODITY	SUBTOTAL		Employee Salaries - Commissioners	Amortization Expense	Edunment Rental	Contractual Services- Eng.	Contractual Services - Materials	Materials & Supplies	Insurance General Liability	Miscellaneous Expense TOTAL

Attachment F

### SUMMARY OF ALLOCATIONS

	PHASE 2	2		
Plant Percentages	<b>TOTAL</b> 100.00%	COMMODITY	DEMAND 91.53%	CUSTOMER 8.47%
Debt Service Payments Depreciation Percentages Total Depreciation Total Operation & Maintenance Total Revenue Requirement	\$119,264 100.00% 257,765 803,925 1,180,954.00	\$257,684.00 257,684.00	\$109,168 91.21% 235,120 385,662 729,949.60	\$10,090 8.79% 22,645 160,579 193,320.40 -6.899.00
Less: Other Income Less: Other Operating Revenue Revenue Requirement from retail water sales	\$1,118,142.00	\$257,684.00	\$729,949.60	-55,913.00 \$729,949.60 \$130,508.40

CALCULATION OF WHOLESALE RATE

	Revenue \$20,813.44 \$22,217.52
PHASE 2	Rate           per 1,000           0         \$2.52           6.67%           0         \$2.69
	Wholesale Gallons Sold 8,259,300 Revenue Requirement increase 8,259,300

# SUMMARY OF ALLOCATIONS FOR RETAIL CUSTOMERS

PHASE 2	SE 2			
	TOTAL	COMMODITY	DEMAND	CUSTOMER
			91.53%	8.47%
Plant Percentages	0/ 00.001 #440 264		\$109,168	\$10,096
Debt Service Payment			91.21%	8.79%
Depreciation Percentages	767 765		235,120	22,645
Total Depreciation	001 002	257,684	385,662	160,579
Total Operation & Maintenance	1 100 054	257,684	729,950	193,320
	1, 100, 304			-6,899
Less: Other Income	-0,033			-55,913
Less: Other Operating Revenue	-00,910	-6.472	-6.472 -15,746	
Less: Revenue from Wholesale Customer	6	\$251.212	\$251.212 \$714,204	\$130,508
Revenue Requirement from retail water sales				

**NOTES:** Wholesale Customer Revenues allocated based on percentage of the total of the Commodity and Demand components.

PHASE 2

	TOTAL	FIRST 2,000	NEXT 8,000	NEXT 10,000	NEXT 30,000	OVER 50,000
FROM BILLING ANALYSIS: COMMODITY PERCENTS RETAIL COMMODITY SALES	100.00% 179,277,700	37.14% 66,587,500	50.73% 90,943,200	6.59% 11,819,600	3.72% 6,661,700	1.82% 3,265,700
PEAK DEMAND WEIGHTED FACTOR PEAK DEMAND WEIGHTED SALES <b>DEMAND PERCENTS</b>	321,647,825 100.00%	2 133,175,000 41.40%	1.75 159,150,600 49.48%	1.5 17,729,400 5.51%	1.25 8,327,125 2.59%	1 3,265,700 1.02%
COMMODITY COSTS	\$251,212.04	\$93,305.42	\$127,433.73	\$16,562.16	\$9,334.68	\$4,576.05
DEMAND COSTS	\$714,204.04	\$295,708.90	\$353,386.51	\$39,367.31	\$18,489.99	\$7,251.34
CUSTOMER COSTS TOTAL COSTS	\$130,508.40 \$1,095,924.48	\$130,508.40 \$519,522.72	\$480,820.24	\$55,929.47	\$27,824.67	\$11,827.38
DIVIDE BY BILLS/GALLONS CALCULATED RATES		38,404 \$13.5278	90,943,200 \$ <b>5,2870</b>	11,819,600 <b>\$4.7319</b>	6,661,700 <b>\$4.1768</b>	3,265,700 <b>3.6217</b>
RECOMMENDED RATES		FIRST 2,000 \$13.53	NEXT 3,000 \$5.28	NEXT 5,000 \$4.73	NEXT 10,000 \$4.18	Over 20,000 \$3.62

Verification Billing Analysis for: GRAVES CO. WD Test Period From: January - December 2010

	Revenue	1,0,4,013.07	14,025.42	10,686.23	22,217.52 \$1,120,942.83
PHASE 2	Gallons Sold	174,891,600	2,719,400	1,666,700	8,259,300 187,537,000
	Bills	38,144	172	76	12 38,404
	Mator Siza	5/8 inch	1 inch	2 inch	Wholesale Totals

	TOTAL	93,407	1,217,246	260,328	118,679	59,256 174,891,600				
	NEXT 500 T					25,256 2,525,600				
	NEXT 300				33,679	20,400 5,407,900				
	NEXT 100			61,728	42,500	6,800 11,102,800				
	NEXT 80		698,766	158,880	34,000	5,440 89.708.600		REVENUE	\$516,088.32 473,661.41 52,516.24 22,605.02 9,142.67	\$1,074,013.67
	FIRST 20	93,407	518,480	39,720	8,500	1,360 66 146 700	REMENT	RATE	\$13.53 5.28 4.73 4.18 3.62	
		93,407	1,217,246	260,328	118,679	59,256 174 801 600	E BY RATE INCREMENT	GALLONS	66,146,700 89,708,600 11,102,800 5,407,900 2,525,600	174,891,600
		9741	25924	1986	425	68 20111	REVENUE	BILLS	38144	38144
		20	80	100	300	200	2		2,000 8,000 10,000 30,000	
5/8 inch		USAGE					Gallons x 100			TOTAL
: Size:		FIRST	NEXT	NEXT	NEXT	OVER	IOIALS		FIRST NEXT NEXT NEXT NEXT	

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Attachment F

GRAVES COUNTY WATER DISTRICT Meter Size: 5/8 inch

1 inch	
Meter Size:	

R 500 TOTAL	C   A   J	2,360	4,283	2,309	16,327	C'118'400
OVER 500					5,327	00/'22G
NEXT 300				606	6,600	750,900
NEXT 100			883	700	2,200	378,300
NEXT 50		860	1,700	350	1,100	401,000
FIRST 50	1,915	1,500	1,700	350	1,100	656,500
GALLONS	1,915	2,360	4,283	2,309	16,327	2,719,400
BILLS	62	30	34	2	22	172
10AGF	50	50	100	300	500	TOTALS Gallons x 100
	FIRST	NEXT	NEXT	NEXT	OVER	TOTALS

### REVENUE BY RATE INCREMENT

REVENUE	\$5,051.64 2,117.28 1,789.36 3,138.76 1,928.37	\$14,025.42
RATE	\$29.37 5.28 4.73 4.18 3.62	
GALLONS	656,500 401,000 378,300 750,900 532,700	2,719,400
BILLS	172	172
	5,000 5,000 10,000 30,000 50.000	TOTAL
	FIRST NEXT NEXT NEXT NEXT	

Attachment F

Meter Size: 2 inch

R 500 TOTAL	4,364	7,729	4,574	1,666,700
OVER 500			2,074	207,400
NEXT 300		3,529	1,500	502,900
FIRST 200	4,364	4,200	1,000	956,400
BILLS GALLONS	4,364	7,729	4,574	1,666,700
BILLS	50	21	ų	76
USAGE	200	300	500	 
l	FIRST	NEXT		

### REVENUE BY RATE INCREMENT

REVENUE	\$7,833.32 2,102.12 750.79	\$10,686.23
RATE	\$103.07 4.18 3.62	
GALLONS	956,400 502,900 207,400	1,666,700
BILLS	76	76
	20,000 30,000 50,000	TOTAL
	FIRST NEXT OVER	

Attachment F

#### Attachment G-1 1/2

		and the second second	County Wate Capital Artet FYE 12/31/20	a far the second s				
	Year of Acquisition.		emalalag/ 11 -	i les de la	- TEANING STA	Accumulated	2010 Current	Accumulated
Description		Cost	Life	Adjusted Basis	Depreciation :	2009		2010.5-1
Structures & Improvements Collecting	2008 2008	862.854.00 54.620.00	35 20	852.341.00 54.620.00	24,352.60 2,731.00	32.473 56 4 233 92	24352.60	56 826 16 6,964 92
Water Treatment Equipment	2008	247 162.00	15	247 162.00	16,477 47	21.969 96	16,477 47	38,447.43
Transmission & Distribution Mains Meters	2008 2008	1 691 921 00 232 563 00	30 15	1.691.921 00 232.363 00	56,397,37 15,504,20	75 196 49 21 418 45	56,397 37 15:504 20	131.593 86 36,922.65
Hydranu	2008	45.333 83	10	45.333.03	4,533.30	6.044 40	4.533.30	10.577 70
Tools & Small Equipment Transmission & Distribution Mains	2008 2008	799.00 167.966.00	10 20	799.00 167.966.00	79 90 8,398,30	106.53 16,796.60	79.90 8 398 30	186.43 15 194.90
Meters	2009	6,415.63	20	6,415.63	320 7B	320 78	320.78	641 56
1/2 Generator Transmission & Distribution Mains	2009 2009	3,263,07 35 170,31	10 30	3,285.67 35 170.31	328.57 1-172.34	328.57 1 172.34	328 57 1.172 34	657 14 2.344 68
Water Treatment Equipment	2009	16,423.00	15	16,425 00	1 095.00	1.095.00	1.095.00	2.190.00
Transmission & Distribution Mains	2010 2008	306,379 00	30 5	306.379 00 4.291 00	10.2[2.63 2.078.20	1.241.20	10.212.63 858 20	10,212.63 2,099 40
Structures & Improvements Wells	2008	10,191 00 1.289 00	5	1 289 00	257 80	466.32	257.80	724 12
Distribution	2008	6.579.00	5 7	6,579.00	1315.80	1.470 80	1 315 80	2.786.60
Transmission Mains Services	2008 2008	3,556.00 3,498.00	5	3.556.00 3.498.00	508.00 699.60	633.00 856.60	508.00 699.60	1.141.00 1.556.20
Metern	2008	12.453.00	5	12.453 00	2,490.60	2.944 60	2.490.60	5.435.20
Hydrants Furniture & Equipment	2008	570.00 795.00	5 5	570 00 795 00	114 00 159.00	128.00 199.00	114 00	242 00 358.00
Other Tangible Plant	2008	4.000.00	5	4.000.00	800 00	1.067.00	800.00	1,867.00
Tank Improvements	2009	4,681 70	10 20	4,681 70 54 904 70	468 17 2.745 24	468.17	468 17 2.745 24	936.34 2.745.24
ANI Meters Transmission Lines	2010 2010	54,904,70 23,595 30	30	25 595 30	853 18	•	853 18	853 18
Meiers	2008	189.67	8	189.67	23 00	30 67	23.0D	53 67
Cop Exp Services	2008 2008	962.67 278.33	17	962.67 278.33	56,00 34,00	74 67 45 33	56.00 34.00	130.67 79.33
Master Meter	2008	1.458.33	13	1.458.33	112.88	145.51	112 18	257 69
Master Meter Meters	2008 2008	973 67 920.33	25 19	973 67 920 33	38.00 46.00	50.67 61.33	38 00 46 00	88 67 107 33
Meters	2008	4,375.00	13	4,375.00	336.54	436.54	336.54	773,08
Cap. Exp.	2008	592.00	16 11	592.00 248.00	36 00	48,00	36.00 21.00	84.00 49.00
Meicra Meicra	2000 2008	248.00 341.67	13	341.67	21.00 26.00	28.00 34.67	26 DD	60 67
Meiers	2008	132.33	13	132.33	10.00	13.33	10.00	23 33
Meters Meters	2008	980 00 401.00	14 15	980.00 401.00	69.00 27.00	92.00 36.00	69 00 27 00	161 00 63.00
Maters	2008	255.33	16	255 33	16.00	21.33	16.00	37.33
Mater	2008 2008	229 <i>3</i> 3 75533	17	229.33 755 33	13 00 46 00	17.33 61.33	11.00 46.00	30,33 107,33
Neters Meters	2008	t 600.00	21	1.688.00	72.00	96.00	72.00	168.00
Services	2008	1 951 00	15	1.951.00	123 00	164.00	121.00	287.00
Services Cap. Exp.	2008 2008	237 33 3.751 33	14 14	237.33 3.751.33	16.00 247.00	21 33 329 33	10.00 247.00	37.33 576.33
Cap Exp	2008	3.471.33	13	3 471.33	238.00	317 33	238 00	555 33
Boring Boring	2008	367 67 5 023 67	13 13	367 67 5.023 67	65.00 344.00	86.67 458.67	65.00 344.00	151 G7 802 G7
Gate Valves & Boxes	2008	792.33	(3	792.33	55.00	73.33	55 00	128.33
Stone & Aspirali	2008 2008	615.00 2,254.67	13 13	615.00 2.254.67	42 00 155 00	56.00 20 <i>6.67</i>	42.00	98 0h 361.67
Services Services	2008	(2 597.00	13	12.597.00	864.00	1.152.00	864.00	2,016.00
Flush flydrants	2008	\$37.00	35	537.00	1534	20,34	15.34 630 00	35.68
Yoka Maina	2008 2008	3 150.00 2.866 67	5 35	3,150.00 2.866.67	630.00 81.90	810 OD 108 57	81.90	1.440.00
Maina	2008	2.218.33	34	2.218.33	65.25	BG 5B	65 25	151 83
Mains Relocate Main	2008 2008	1.126.33 2.496.67	33 33	l 126.33 2.496.67	34.00 74.00	45 JJ 98.67	34 00 74 00	79 JJ 172.67
Relocate Main	2008	381.33	38	381 33	16 00	21.33	16 00	37 33
Boriag	2008	3,206,33	40 30	3.206.33	79 00	105 33 18.67	70 NO 14.00	184 33 32.67
Meters Mains	2008 2008	418.67 1.541 67	30	418.67 1.541.67	14.00 51.39	68.06	51.39	119.45
Mains	2008	775 33	30	775 33	25 84	32.17	25.84	58-01
hieters Meters	2008 2008	829.00 1.539.67	01. 01:	829.00 1.539.67	27.00 50.00	16 00 66.67	27.00 50.00	63 00 116 67
Meters	2008	(13.33	30	113.33	4.00	5 33	4.00	9.33
Recondition Pump	2008 2008	1 083.33 70,789.33	10 36	l 083 33 70,789 23	1/IB.33 1.975 00	141 66 2.633 33	108.33	249 99 4 608 33
System Imp Meters	2008	157.67	4	157.67	35.00	46.67	35 00	BI .67
Meters	2008	6.472.33	27	6,472.33	232 00 124.00	309.33 165.33	232.00 124.00	541.33 287.33
Boring Matars	2008 2008	3.051.33 949.00	24 19	3 051,33 949.00	56.00	88 00	66,00	154 00
Meters	2008	209 00	17	209 00	12.00	16.00	12.00	28 00
Meters	2008	240.67 465 33	16 15	240.67 465.33	14.00 31.00	18.67 41 33	4,00 31 00	32,67 72,33
Meters Meters	2008	94.00	IĂ	94 00	6.00	8 00	6 00	14 00
Meters	2008	604.33	13	604.33	46,00 75 00	61 33 100.00	46 00 75 00	107.33
Melerx Melers	2008 2008	770.00 340.67	10 8	770.00 340.67	41 00	54.67	41.00	175.00 95.67
Meters	2008	121.33	6	121 33	19 00	25 33	19 00	44.33
Noters Booster	2008	227 GD 301 G7	5 3	227.00 30[.67	45 00 80 00	60.00 105.67	45.00 80.00	105.00 186.67
Pump	2008	2 075.00	3	2.075 00	555.00	740.00	555,00	1 295 00
Cliemital pump	2008	236.33	3	236.33 2.380.00	64.00 476.00	85.33 612.00	64.00 476.00	149.33 1 088 00
Cap. Exp. Pump	2008 2008	2.380 GO 3 G47.00	7	2.380.00	465 90	620 00	465.00	1.085 00
Pump	2008	1 532.00	8	1.532.00	174.00	232.00	174.00	406 00
Tank Engineer Fees and const. Well	2008 2008	71 977.67 67 793 00	3G 38	71.977.67 67 793.00	1 928.00 1 746 00	2.578 G7 2 328.00	1.928.00	4,498.67 4.074.00
Cap Exp	2008	1.271.00	1	1 271.00	528 00	176.00	528 00	704.00
Cap Exp.	2008 2008	181 00 473 67	2 20	181.00 473.67	91 00 205 00	30.32 274.67	91.00 206.00	121 32 480.67
Storage Bldg	~440B	473 07	247	413.07	200.00		A114.44	740,41

· WITCHENGTON

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Relocate Main	2008	13.443.33	30	13.443.33	403.00	537 33	403 00	940.33
Mains	2008	1 315 67	31	1.315.67	41.00	54.67	41 00	95 67
Relocate Main	2008	3.519 33	30	3.519.33	106.00	141 33	106 00	247.33
Flush Hydranis	2008	1.562.00	20	1.562.00	78 10	103 10	78 10	181 20
Linca	2008	249.00	20	249.00	12.00	16,00	12.00	28 00
Lines	2008	84G 33	14	846.33	58.00	77.33	5B.00	135.33
Cap. Exp.	2008	2.479.67	28	2,479.67	86,00	114.67	B6 00	200 67
Project	2008	8.672.67	28	8,672.67	302 00	402.67	302 00	704 67
Flush Hydranu	2008	1 161.33	27	( 161.33	43.00	57,33	43 00	100.33
Boring	2068	899 33	26	899.33	34.00	45 33	34 00	79.33
Lines	2008	7,564.33	25	7.564.33	298 00	397.33	29E 00	695 33
Boring	2008	470.00	29	470.00	21.00	28 00	21.00	49.00
Cap Exp	2008	533.33	16	533,33	3100	41.33	31 00	72.33
Cap Exp.	200B	1 559.67	14	1.559.67	107.00	142.67	107.00	249 67
Cap. Exp.	2008	16.041.67	13	16,041-67	1.100.00	1.466.67	1 100.00	2 566 67
Casing	200B	1.965.00	13	1.965 00	135 00	180.00	135.00	315 00
Mains	2008	76,010.33	13	76,010,33	8,185.00	10.654.42	8 185.00	18,839 42
Project	2008	89 867.33	23	89 B67.33	2,407 00	3 209.33	2,407,00	5,616 33
Tank Cont	2008	9,486,33	7	9,486.33	1.210.00	1,613.33	1210.00	2,823 33
Mechanical Tank	2008	24,109.00	7	24,109.00	3,078.00	4.104.00	3.078.00	7.182.00
Tank Const.	2008	247.833.67	37	247.853 67	6,638.00	8.850.67	6,638.00	15.488.67
Tank Const.	2008	25,439.67	7	25,439 67	3.212.00	4.282.67	3 212.00	7,494.67
Boring	2008	4.924.33	32	4,924 33	157 00	209.33	157.00	366 33
pump	2008	4.636.33	32	4 636 33	148 00	197 33	148.00	345 33
Cap Exp.	2008	9.883 33	32	9,883 23	316 00	421 33	316.00	737 33
Non Depreciable Land	200B	10,020 00	0	10,020 00		-		
	2008	17.409.39	13	17.409.39	901 58	1 201 20	901 58	2.102 78
Pumps Con Fr	2008	11.268.33	16	11.268.33	704 27	941 60	704 27	1.645.87
Cap Ex.	2008	14,000.00	32	14,000 00	437.50	\$82.50	137 50	1.020.00
Cap Ex	2008	28,324 67	33	28.324 67	858.32	1.141.99	85B 32	2,000 31
Cap Ex.	2008	6,620 00	31	6,620 80	194 71	257 74	194 74	452.48
Cap. Ex.		206 67	26	205.67	7.95	10.62	795	18.57
Pump	2008 2008	267 00	26	267.00	66 75	85 75	6G 75	152.50
Compressor		267 00	26	133 67	5 14	6 6 7 5 6 8 1	5 14	11 95
Engineer	2008		16	133 07	73 25	140.25	73.25	213 50
Equipment	2008	1.172.00				163 04	123 37	
Fecs	2008	3 577 67	29	3.577.67	123.37			286 41
Hydrants	2008	1.588 33	6	1.588.33	264 72	328.05	264 72	592 77
Hydrania	2008	4,419 00	37		119 43	170.43	119 43	289 86
Hydrania	2008	87 33	17	87 33	5 14	6 47	5 14	11 61
Hydrania	2008	497 33	16	497 33	31.08	40.41	31.08	71 49
Fiydraata	2008	737 00	8	737 00	92 13	117 13	92.13	209 26
Liner	2008	495.00	26	495.00	19.04	25 04	19.04	44 08
Lines	2008	9,412.00	36	9.412.00	261 44	378 44	261 44	639 88
Lincs	2008	8,086.33	35	8,086.33	231.04	306.37	231.04	537 41
Mains	2008	235,197 83	19	235 197.83	12.378 83	120.20	12.378.83	12,499 03
Maina	2008	1.697.33	19	1.697.33	89.33	116.66	89.33	205 99
Mains	200B	1.717 33	13	1.71733	132 10	170 43	132.10	102.51
Mains	2008	1 369.67	8	1.369.67	171.21	213 88	171.21	385 09
Mains	200B	38 281 33	6	38,281.33	6,380,22	B,469.55	6,380 22	14,849 77
Mains	200B	471.67	32	471.67	14 74	32.41	14 74	47 15
Mains	2008	1.313.67	26	1.313.67	50.53	66.20	50.53	116.73
Mains	200B	862.67	25	862.67	34.51	45 18	34 51	79.69
Maina	200B	2 895 00	10	2,895.00	289.50	368.50	289.50	658.00
Mains	2008	583.67	21	583.67	27 79	36.46	27 79	64 25
Meters	200B	960.00	5	960.00	192.00	252.00	192.00	444 00
Meiera	2008	121.00	4	121.00	30 25	38 25	30.25	68.50
Metera	200B	79.67	32	79.67	2.49	5 16	2.49	7 65
Meters	2008	730 00	29	730.00	25 17	33 17	25 17	5B 34
Meters	2008	21,403 33	28	21,403,33	764 40	1 167 73	764 40	1.932.13
Meter	200B	1.252.00	27 27	1.252.00	45.37	61.37	46.37	107 74
Meterr	2008	225.00	3	225.00	45.00	45 00	45.00	90.00
Meter-milbum	2008	265.33	4	265 33	66 33	84 66	66 33	150.99
Land	2008	14,995 00	•	14,995.00			-	•
Pipe	2008	32,732.67	39	32.732.67	839 30	1.110.97	839,30	1.950.27
Pipe	2008	8,841.33	37	8,841.33	238 95	38) 28	238 95	620.23
Pump	2008	7 996.00	27	7.996.00	296 15	392.15	296 15	6B8 30
	2008	1 029 33	27	1.029.33	38 12	50.85	38 12	B8 97
Pump	2008	1.933.00	26	1 933 00	74 35	98 35	74.35	172 70
Pump	2008	362.00	4	362,00	90.50	115 50	90.50	206 00
Tank	2008	540.67	26	540.67	20.80	270 47	20 80	291 27
Tower			20		4,256.78	5 335 78	4,256.78	9.592.56
Tower	2008 2008	38,311.00 254.632.50	20	38,311.00 254,632.50	12.731.63	18,893 \$6	12 731.63	31,625 19
Tower						1 124 77	834 10	1.958 87
Well	2008	5.838.67 721.33	7 2	\$,838.67 221.33	834 10 110.67	221.33	434 10	221 33
Well				221 33		679 05	514.38	
Well	2008	10.287.67	20		514.38			1,193.43
Transmission & Distribution	2008	23.028 98	20	23,028 98	1.151 45	1.727 18	1 151,45	2.878.63
Transmission & Distribution	2009	G4.485.00	20	64,485.00	3,224.25	3 224 25	3-224.25	6.448 50
30 FT pole	2009	145.00	5	145.00	29.00	29.00	29.00	59.00
Well	2010	16,755.00	20	16,755.00	837.75		837.75	837.75
		\$ 5,567,981,00		5.551.368.00	\$ 246,166.42	\$ 296,091.00	\$ 244,835.09	\$ 540,926.09
					-			
	and have an descention for							
2010 Additions To Plan	a den de la compañía							
Transmission & Distribution Mains	2010	306,379 00	30	306,379.00	10,212.63		10.212.63	10.212.63
AMI Meters	2010	54.904 70	20	\$4,904 70	2.745 24	,	2.745 24	2 745 24
	2010	25.595.30	30	25.595.30	853 18		853 18	853 18 🖬
Transmission Lines					837.75	-	837.75	837.75
Well	2010	16,755.00	20	16,755.00	14,648.80		14.648.80	14,648.80
		403,634.00		VD.FCJ.CJF	11,045.00		New Color Color	tomorrow and the second s

8

Traced to General Ledger and Invoices

SQI: Prior Years Merger, Current year Additions and General Ledger Purpose: To determine if Capital Assets and Deprecision appear reasonable Conclusion: Deprecation appears reasonable

	Net Plant	Sewer Plant Totals	Cools, Shop and Generate Lynnings	Office Furniture and Equipment Transportation Equipment Stores Equipment	Hydranis Other Plant and Miscellaneous Equipment	AMI project, Former Hardeman District	Moters and Meter Installations	Vale: Francisco Arrows and Standpipes	Pumping Equipment	Vells and Springs Power Generation Equipment	Structures and Impounding Reservoirs	Urganization Franchises Land and Land Rights			Graves County Water District Depreciation Schedule Test Year Ended 12/31/2010
			4,000 1,564,569 1,042,9 <u>04</u>	10,750 1,080 2,158 1,359	-	44,770 41,606	214,456 170,607 494,867 265,577	<b></b>		314,737 252,369 17,141 17,141 420,6200 118,030		 	Service Depressions	ind.	1
Phase 2 Depreciation Adjustment Total Estimated Cost of AMI Project, See Page 8 of 92 of Application filed in Case No. 2011-00233 Less: AMI Project Installed as of December 31, 2011 Phase 2 Depreciable Basis Divide by: Depreciable Life		\$ 125,927 \$ 403,634 \$ 655,777 \$ 157,414 \$ 119,836		3,431			6,416 54.905 157,414	99,655 331,974 652,708 119,836	16,425		s 16.755	S 659		Interconnection 2010 with Mayfield AMI Meters Mapping	Plant Additions Subsequent to Merger
. 8 of 92 of	Decrease	\$ 9,514,535		5,589 4,000	10,750	17,090	212,319	5,025,000 214,456	939,102	133,030 477.111	331,492	1,468,459 54,620	S 66,736 7,921	Basis Phase 1	Pro torma Water Depreciable
en	S	6	°	15 30	20	30	20 50	40	45 65	20 30	30	40 65	50 S	Life Assigned Exp	Phase 1 preciation
1,330,491 (21 <u>2.319)</u> 1,118,172 20	(42,982)	(244,839)	201 A57	373 133	538	570	10,616 895	5,361 12,532	20,869 77,320	6,652 15,904	11,050	36,711 840	1,335 158	Expense	ustment

Increase Phase 2 Depreciable Basis Divide by: Depreciable Life

\$ 55,909

Attachment G.2

Due of the second secon	:						222,110,10	4506 776 35	
Store         Store <th< th=""><th></th><th></th><th>1</th><th>610'6¢</th><th>\$619,547.06</th><th></th><th></th><th></th><th>02/10/20</th></th<>			1	610'6¢	\$619,547.06				02/10/20
Stockson				FO E73			524.3:	\$10,414.21	CZNDRL
State         State <th< td=""><td></td><td></td><td></td><td>\$1U.</td><td>\$10,439.20</td><td></td><td>\$49.9</td><td>510,389.27</td><td>DEVOTION</td></th<>				\$1U.	\$10,439.20		\$49.9	510,389.27	DEVOTION
Principal         Interest         Principal         Find part         Find part <th< td=""><td>(\$</td><td></td><td></td><td>\$20.</td><td>\$10.439.20</td><td></td><td>\$74.80</td><td>Sin 364.40</td><td>12/01/24</td></th<>	(\$			\$20.	\$10.439.20		\$74.80	Sin 364.40	12/01/24
Approximate         Storage	510,41			531,	\$10,439,20		29,665	610 339.5B	06/01/24
Approximate         Structure         Structure <thstructure< th=""> <thstructure< th=""> <t< td=""><td>220,00</td><td>\$10,470,37</td><td></td><td>341</td><td>510,439,20</td><td></td><td>\$124.31</td><td>S10.314.83</td><td>1211123</td></t<></thstructure<></thstructure<>	220,00	\$10,470,37		341	510,439,20		\$124.31	S10.314.83	1211123
Har District         Stords 20         Fainelpail         Franciscope	21,10	\$10,480,71		1. I CA	\$10,439.20		\$149.07	\$10,290.13	Up/Up/
App. District         Stor. Ass. 2         Stor. 2		\$10,491.02			\$16,439,20	D 104	Q110.11	<b>\$10,265.49</b>	
Har District         St0.459.20         FAI Concutation         FAI Concutation         FAI Concutation           Philopal         Due         Rate         A Interest         FAI Concutation         Fail         F		\$10,501.31			\$10,439.20	n 48%		\$10,240.91	
Har District         Str. AS2, 20         P Al Canculatory         Total         Participal         Total         Participal         Total         Participal         Total         Participal         Total         Participal         Final		\$10,517.20	_	5.643	\$10,439,20	0.48%	4109 DA	\$10,216,40	1201122
Mar District         StorAs2, D         PAL         Principal         Interest         Principal         From         Dial         Parment         Bailt           Duo         Duo         Strate         Strate<	SR2.11	570,521.04	•	582.6	510,439,20	0.48%	<>>>2 SO SO	510,191.90	12/01/21
Har District         StorAss. 20         P Al Concuratory I.         Total         Banc         Find           My Down         Due         Interest         Find	\$72.37			\$92.6	3 [U]HUUN	0.48%	5247.27		06/01/21
Har District         St0,459.20         P & Carculation         Fine for	\$82,61			0'EOI\$		0.48%	\$271,67		12/01/20
Internet         Stor, 459, 20         P & E. (accutation)         Francis         Fran	\$92,835	E C C C C C C C C C C C C C C C C C C C		\$113.1	<10 439 20	0.45%	\$296.01		06/01/20
Internet         Stor.Asp. pr P. L         Stor.Asp. pr P. L         Stor.Asp. pr         Stor.Asp. pr         Principal         Interest         Principal         Interest         Principal         Due         Stor.Asp. pr         Principal         Interest         Principal         Principal<	\$103,027	\$10,552,40	-	5123.3	S10-439.20	0.4070	05.0265	s10 118.50	FLANCE
Andron District         Stot. Asp. 20         P & Contentiation         Stot. Asp. 20	2113,184	\$10,562.54			\$10,439,20		2344.14	\$10.094.68	
Internet         StotAss.20         P // Clanuatori         StotAss.20         StotAss.20 </td <td>3120,00</td> <td>\$10,572,66</td> <td></td> <td></td> <td>510,439.20</td> <td>o dash</td> <td></td> <td>\$10,070.51</td> <td></td>	3120,00	\$10,572,66			510,439.20	o dash		\$10,070.51	
International Principal         Interest Interest         Frincipal Francis         Servicing Francis         Gravit Free         Free Principal         Creative Free         Free Free         Free Principal         Creative Free Free Free Free Free Free Free Fr	2472 277	c1700'nt\$		S143.5	510,439.40	0,48%	6368 64	210,040,40	12101138
Mar District         Str./459.20         P.R./ Calculation         Constitution         Fine part	\$ 133,456			5 153 62		0.48%	\$392.80		05/01/18
Har District         St0.459.20         FIL         St0.459.20         FIL         St0.459.20         St1.42.20         St1.42.21         File         St0.459.20         St1.42.21         File         File         St0.459.20         St1.42.21         File         File         St1.42.22         St1.22         St1	\$143,551.	CHA 502 A2		\$163.84	10 430 20	0.40%	\$416.88	PC CGU U14	12/01/17
Har District         St0,459,20         P // Inclinal         Circlina         Fine         Fine           Principal         Interest         Principal         Interest         Principal         Circlina         Principal         Fine         Principal         Principal         Fine	5153,621.	\$10,602.67		\$113.00	\$10,439,20	0.4070	\$440.85	sq (198,35	111030
Har District         St0,459,20         P & I Ganculation         Total         Paine           y Down         Due         Due         Rate         Fine(pai         Servicing         Due         Paine         Fine(pai         Fine         Due         Fine(pai         Fine         Due         Fine(pai         Fine         Due         Fine(pai         Fine         Due         Fine(pai	3153,000	S10,612.89			\$10,439.20	0.1010	1404.73	59,974,41	
Har District         St0,459.20         P & I Garculation         Total         Paincipal         Credit         Foo         Due         Paincipal         End         St0,459.20         P & I Garculation         Foo         Due         Paincipal         End         Foo         Due         Foo         Foo         Foo	1 1 1,000	\$10,622.89			\$10,439.20	n 4#94		<b>5</b> 9,950,53	
Mar District         Stb./SB/2014         Stb./SB/2014         Stb./SB/2014         Stb./SB/2014         Free         Due         Free         Due         Free         Due         Free         Due         Free         Due         Stb./SB/2014         Stb./SB/	103 621 3 1000 1010	\$10,632.85			\$10,439,20	0.48%	444A 57	\$9,926,70	
Mar District         St0,432.0         St0,432.0         Fee         Due         Front Interest         Front Interest         Fee         Due         Payment         Bai           y Down         Due         Interest         Interest         Front Interest         <	1089 564 3	\$10,642.62		\$203 61	\$10,439,20	0.48%	05 6123	467206'6\$	12/01/15
Inter District         St0,498.20         P // Inclina         St0,498.20         P // Inclina         St10,221.01         Total         P // P /	C103 663.	\$10,652.74	\$0,00	\$213.54	\$10,439,20	0.48%	538.26	\$9,879,23	16/01/15
Inter District         \$10,439.20         P (100)         Canculation         Principal         Interest         Principal         Canculation         Principal         Principal         Canculation         Principal         Canculation         Principal         Principal         Principal         Canculation         Principal	5202 B14.	510,002.04	\$0.00	\$223.44	570,439.20	0.48%	76.6555	10.000	12/01/14
Inter District         \$10,459.20         P.E. Canculation         Total         Principal         Total         Principal         Interest         Principal         Canculation         Principal         Interest         Principal         Canculation         Principal         Principal         Canculation         Principal         Principal         Canculation         Principal         Principal         Principal         Canculation         Principal         Principal         Principal         Principal         Principal         Principal         Principal         Principal         Sincalis	\$713.540.	\$10,012.0F	\$0.00	\$233.32	arothura	0.40%	\$583.63	16'1 CQ 65	06/01/14
Inter District         \$10,459.20         \$21,459.20         \$16,701         Total         Principal         Interest         Principal         Carculation         Principal         Principal         Carculation         Principal         Carculation         Principal         Carculation         Principal         Principal         Carculation         Principal         Pr	\$223,443.8	210,007 C	\$0.00	\$243.18	2 (E,303,50	0.48%	\$607.23		12/01/13
Inter District         \$10,439,20         \$10,439,20         \$10,439,20         \$10,232,62         \$1,322,63         \$1,664,80         \$569,243         \$0,00         \$16,243,22         \$15,664,80         \$569,243         \$0,00         \$16,243,22         \$15,664,80         \$569,243         \$0,00         \$16,243,22         \$16,243,22         \$15,664,80         \$569,243         \$0,00         \$16,244,52         \$16	\$233,322.8		50,00	\$253.01		0.48%	\$630,77		05/01/13
Inter District         \$10,439.20         P. [ Canculation]         From Principal         Interest         Principal         Servicing         Canculation         Principal         Total         Bai           Principal         Interest         Principal         Interest         Principal         Servicing         Careult         Total         Bai           Due         Due         S14,232.62         S14,232.62         O.48%         \$15,664.89         See0.78         St.0.00         \$16,281.65         St.329.54         St.0.01         \$16,247.42         St.329.55         St.329.55         St.329.55         St.329.55         St.329.55         St.329.55         St.329.55	\$243,170.4	ein 692 21	20.00	\$262.82	410 430 20	0.1079	\$654.25	co 784 95	12)01/12
Inter District         \$10,439,20         P & Carculation         For         Due         For         Due         For         Due         For         Due         \$14,232.52         \$1,432.26         0.48%         \$15,664.88         \$596.78         \$0.00         \$16,233.16         Bail	\$253,010.4	\$10,702,02	20.00	\$272.00	\$10,439,20	1,40,6	\$677.68	\$9 761.52	2010/90
Inter District         \$10,439,20         P & I Canculation         From Principal         Interest         Principal         Interest         Principal         Servicing         Canculation         Principal         Total         Bai           Due         Due         Due         Rate         & Interest         Principal         Servicing         Due         Principal         Fee         Due         Fee         Due         Fee         Due         Fee         Due         Fee         Due         Fee         Fee         Due         Fee         Fee         Due         Fee         Fee         Fee         Fee         Fee         Fee         F	5252,510,0	\$10,711.80		10.202	\$10,439.20		50.107	\$9,730.15	
Inter District         \$10,439,20         P & Carculation         Total         Payment         Principal         Interest         Principal         Circulation         Principal         Credit         Total         Payment         Principal         Credit         Ford         Principal         Ford         Principal         Ford         Ford         Principal         Ford         Ford         Principal         Ford         Ford         Ford         Principal         Ford	22/2,000.0	<b>\$10,</b> 721,57	50.00	262676	\$10,439.20	n Aan		\$9,714,84	
Inter District         \$10,439,20         P & Canculation         For         Due         For         Due         For         Due         For         Due         Standard	0 COL 2020	\$10,731.30	50 03	10 1000	\$10,439,20	ARX.		8 <u>9,691.58</u>	
Inter District         \$10,439,20         P & I Canculation         Francipal         Interest         Principal         Interest         Principal         Energi Total         Payment         Principal         Interest         Principal         Energi Total         Payment         Principal         Interest         Principal         Energi Total         Payment         Principal         Energi Total         Payment	2.330 4934	\$10,741.02	\$0.00	100 MOC	\$10,439.20	0.48%		\$9,668,37	10/11/10
Inter District         \$10,439.20         P & I Canculation         File           y Down         Principal         Interest         Principal         Enedit         Total         Ba           Due         Due         Rate         & Interest         Principal         Cnedit         Total         Ba           514,205.76         \$1,432.26         0.48%         \$15,664.88         \$596.78         \$0.00         \$16,261.55         \$16,247.42         \$16,247.42         \$15,644.88         \$553.93         \$0.00         \$16,247.42         \$16,248.43         \$1	IP UUS CUUS	\$10,750.71	50.00	A214 51	\$10,439.20	0.48%		77.Ct916\$	06/01/10
Inter District         \$10,439,20         P & I Canculation         File	con1 818.35	S10,700.30	\$0,00	5321.18	\$10,439.20	0.48%		CI 779.65	12/01/09
Inter District         \$10,439.20         P & I Calculation         File           y Down         Principal         Interest         Interest         Principal         Circuit         Total         Principal         Servicing         Circuit         Total         Principal         Servicing         Circuit         Total         Principal         Interest         Principal         Servicing         Circuit         Total         Principal         Servicing         Circuit         Payment         Bit           514,265.78         \$14,265.78         \$1,432.26         0.48%         \$15,664.88         \$568.28         \$0.00         \$16,204.52         \$16,203.16         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52         \$16,204.52	5111 509.90	\$10,770.04	50.00	\$330.82	10,040.10	0.48%		\$770,421.00	60/12/80
Inter District         \$10,439.20         P & I Calculation         File           y Down         Principal         Interest         Interest         Principal         Circuit         Total         Bit           Due         Due         Rate         & Interest         Principal         Servicing         Due         Payment         Bit           \$14,205.76         \$1,432.26         0.48%         \$15,664.88         \$599.78         \$0.00         \$16,261.65         \$16,247.42           \$14,265.78         \$1,325.84         0.48%         \$15,664.88         \$569.54         \$0.00         \$16,247.42         \$16,247.42           \$14,365.74         \$1,225.44         0.48%         \$15,664.88         \$569.54         \$0.00         \$16,217.42           \$14,369.74         \$1,225.44         0.48%         \$15,664.88         \$569.54         \$0.00         \$16,217.42           \$14,369.74         \$1,225.44         0.48%         \$15,664.88         \$5539.64         \$0.00         \$16,204.52           \$14,369.74         \$1,225.45         0.48%         \$15,664.88         \$5539.64         \$0.00         \$16,204.52           \$16,204.55         \$14,865         \$5539.64         \$0.00         \$16,204.52         \$16,190.15	5371 178.23	\$7, 104.01	\$0.00	5510.87	21 CL2H 01 LS	0,00%		\$14,4V1.4V	60/10/90
Inter District         \$10,439.20         P & I Canculation         For         Circuit         Total         Principal         Interest         Principal         Servicing         Circuit         Total         Principal         Circuit         Total         Principal         Payment         Principal         Servicing         Due         Payment         Principal         Servicing         Due         Payment         Principal         Servicing         Servicing         Servicing         Servicing         Servicing         Principal         Payment         Principal         Servicing         Servicing         Payment         Paymet         Paymet         Paymet <td>5130,623,49</td> <td>\$170,421.00</td> <td>\$0.00</td> <td>\$0.00</td> <td>40.440.614</td> <td>0.48%</td> <td></td> <td>214,303,44</td> <td>12/01/08</td>	5130,623,49	\$170,421.00	\$0.00	\$0.00	40.440.614	0.48%		214,303,44	12/01/08
Inter District         \$10,439.20         P.4. Canculation         From         Gradit         Total         Principal         Interest         Principal         Servicing         Gradit         Total         Principal         Servicing         Gue         Payment         Principal         Servicing         Gue         Payment         Principal         Servicing         Gue         Payment         Principal         Servicing         Gue         Payment         Principal         Servicing         Servicing         Gue         Payment         Principal         Servicing	1340 A45.6	410, 190, 1v	\$0.00	\$525.27		0.48%		474,000.04	06/01/08
Inter District         \$10,439.20         P & I Canculation         Principal         Gredit         Total         Principal         Bit Canculation         Principal         Gredit         Total         Principal         Servicing         Principal         Bit         Servicing         Servicing <th< td=""><td>5510,868,63</td><td>20,400,000</td><td>\$0.00</td><td>\$539.64</td><td>212,004,00</td><td>0.48%</td><td>-</td><td>314,001.04</td><td>12/01/07</td></th<>	5510,868,63	20,400,000	\$0.00	\$539.64	212,004,00	0.48%	-	314,001.04	12/01/07
Atter District         \$10,439.20         P & I Canculation         Frincipal         Total         Frincipal         Frincipal         Circuit         Total         Frincipal         Frincipal         Servicing         Due         Payment         Bit           Due         Due         Due         Rate         & Interest         Francipal         Servicing         Due         Payment         Bit           S14,232.62         \$1,432.26         0.48%         \$15,664.80         \$569.78         \$0.00         \$16,261.66         \$16,233.16 <t< td=""><td>\$525,270.85</td><td>6 - C   h - C + C + C + C + C + C + C + C + C + C</td><td>\$0.0U</td><td>\$553.98</td><td></td><td>0.48%</td><td>-</td><td></td><td>06/01/07</td></t<>	\$525,270.85	6 - C   h - C + C + C + C + C + C + C + C + C + C	\$0.0U	\$553.98		0.48%	-		06/01/07
Iter District     \$10,439.20     P & Calculation     File       y Down     Principal     Interest     Principal     Servicing     Credit     Total     Principal       Principal     Interest     Interest     Principal     Servicing     Credit     Total     Principal       Due     Due     Rate     & Interest     Fee     Due     Payment     B       Contract     Due     State     \$15,664.88     \$569.78     \$0.00     \$16,261.65       Contract     Contract     State     \$15,664.88     \$569.54     \$0.00     \$16,247.42	\$539,640.59		\$0.00	<b>5568.28</b>		9,487		41130000 TB	12/01/06
ster District \$10,439,20 P & Catculation J y Down Principal Interest Principal Servicing Credit Total Pr Principal Interest Interest Fee Due Payment B Due Due Rate & Interest Fee Stee Stee Stee Stee Stee Stee Stee	\$553,975,93	C16 213 16	50.00	\$582.54	C15 684 80	).40%	-	<14 932.62	
ster District [ \$10,439.20 P & Calculator) ] y Down Principal interest interest Principal Servicing Credit Total Pr Principal interest interest Fee Due Payment B Due Due Rate & Interest Fee Due Sta 261.66	\$568,276.95		\$0.00	\$596.78	415 664.8B				Uate
y Dowry y Dowry Principal Interest Interest Principal Servicing Credit Total Principal Servicing Due Payment B	\$582,543.73					Nale		Due	Payment
y Down y Down Servicing Credit Total	\$596,776.35	armon	Due	Fee		Terest			
ater District \$10,439,20 P & Calculation 1	alanco	totat	Credit						I - Alter Pay Down
ster Interfrict \$10,439.20	Incipal					Г		•	cy Fann Water Liver
		t and the second se		alculation	\$10,438.20 F &I -	-			

KENTUCKY INFRASTRUCTURE AUTHORITY REPAYMENT SCHEDULE

AUG-27-2009 07:04AM

Attachnent H T-718 P 002/002 F-987 V3

Reserve = 5% of original loan \$ 29,838.81

Graves County Water District ESTIMATE	District			0.40% Rate \$25,858.85 P & I	Rate P & I Celculation					
Payment	Principal	Interest	Interest	Principal	Servicino	Cnadlf	Totai	Drinologi	1 6 0	+
Date	Oue	Due	Rate	& Interest	Fee	Dua	Payment	Balance	Reserve	Reserve
17/01/04	100 FC	2	-					\$849,154.00		
06/01/10	324,100.34 \$24,208 86	51,098,31	0,40%	\$25,858.85	\$849.15	<b>SO.00</b>	\$26,708.01		,	th.
12/01/10	\$24,257,28	51 601 57	0.4070	421,424,624	\$824.99	\$0,90	526,683.85	-	,	÷
06/01/11	S24.305 AD	01,001,07	0,40.70	423,030.63	2200-18	\$0.00	\$26,659.64			th
12/01/11	S24.354.41	61 503 44	0.40%	423,438,63	\$776.53	\$0.00	\$26,835.38			60
06/01/12	S24,403,12	CT 454 73	0.40%	00.000,020	77.7014	00.00	10.110,025	1	•	6
12/01/12	S24.451 02		0.40.20	20-000°24	3/2/.5/	20.00	526,586.72		•	67
06/04/13	404 500 00	\$1,400.93	0.40%	425,858,85	\$703.46	\$0.00	\$26,662.32	\$679,012.06 \$	•	<del>th</del>
12/04/13		20.856,14	0.40%	\$25,858,85	\$679.01	\$0,00	\$26,537,86	\$654,611.23 \$	•	67
05/04/14	324,349,63	\$1,309.02	0.40%	\$25,858,85	\$654.51	\$0.00	\$26,513.36	\$629,961,39 \$	•	<del>67</del>
12/01/14	574 545 45 574 545 45	ZA'SEZ'I¢	0,40%	\$25,858.85	\$629.96	\$0.00	\$26,488.81		•	-67
art-rea	VE-1,010.10	21.01210	0.40%	\$25,856,85	5605,36	50.00	\$26,464,21	\$580,714.33 \$	•	6 <b>7</b>
13/01/10	524,697,42	\$1,161.43	0.40%	\$25,858.85	\$580.71	\$0.00	\$26,439.57		•	εn
1291415	\$24,746,82	\$1,112.03	0.40%	\$25,858.85	\$556.02	\$0,00	\$26,414.87	-	-	64
OL IL IND	\$24,796.31	\$1,062.54	0.40%	\$25,858,85	\$531,27	\$0,00	\$26,390,12			<b>LA</b> 1
12/01/16	\$24,845,90	\$1,012.95	0,40%	\$25,858,85	\$506,47	\$0.00	\$26,365.33			64
71/10/80	\$24,895,59	\$963,26	0.40%	\$25,858.85	\$481.63	\$0.00	S26,340,48	\$455,732.28 \$		69 1
12/01/17	\$24,945.39	\$913.45	0.40%	\$25,858,85	\$456,73	\$0.00	\$26,315,68	•	,	64 4
06/01/18	\$24,995,28	\$863,57	0.40%	\$25,858,85	\$431.79	00,00	\$26,290,64		1	69
12/01/18	\$25,045.27	\$813.58	0.40%	\$25,858,85	\$406.79	\$0,00	\$26,265,64	•	•	(n ·
81/10/00	\$25,095,36	\$763.49	0.40%	\$26,858,85	\$381,75	\$0,00	\$26,240.60		,	trð 1
51/LUZI	\$25,145.65	\$713.30	0.40%	\$25,858.85	\$356,65	\$0.00	\$26,215.50	•••		5
02/1/1/20	\$25,185,84	\$663.01	0.40%	\$25,858,85	\$331,51	00,03	\$26,190.36	-	•	57
02110120	\$25,246.23	\$612.62	0.40%	\$25,858.85	\$306.31	\$0,00	\$26,165,16	\$281,063.35 \$	•	÷
10/01/21	\$25,296,72	\$562,13	0.40%	\$25,858,85	\$281.06	\$0,00	\$26,139.92		,	57
120121	\$25,347,32	\$511.53	0.40%	\$25,858,85	\$255,77	\$0.00	\$26,114.62	-	,	671
05/11/22	\$25,398.01	\$460.84	0.40%	\$25,858,85	\$230,42	\$0.00	\$26,089.27	\$205,021.29 \$		5
12/01/22	\$25,44 <b>8</b> ,81	\$410.04	0.40%	\$25,85B,85	\$205.02	\$0.00	\$26,063.67			67 H
62/10/90	\$25,499,71	\$359.14	0.40%	\$25,858,85	\$178.57	\$0,00	\$26,038,42		,	57
12/01/23	\$25,550,70	\$308.15	0.40%	\$25,858,85	\$154,07	\$0.00	\$26.012.92	-4	•	in (
06/01/24	\$25,601,81	\$257.04	0.40%	\$25,858,85	\$128.52	\$0.00	S25.987.37	•		vn v
12/01/24	\$25,653.01	\$205.84	0.40%	\$25,858,85	\$102.92	\$0.00	\$25,961.77		•	vn v
06/01/25	525,704.32	\$154,53	0.40%	\$25,858,85	\$77.27	50.00	S25.936.12			
12/01/25	\$25,755.72	\$103.13	0.40%	\$25,858,85	S51.56	50.00	S25.910.41		,	מי י
	\$25,807,20	\$51,61	0,40%	\$25,858.85	\$25.81	\$0.00	\$25,884.66	(\$0.00) \$	,	5
0211 0100										

+1270 247 7749

T-706 P 002/002 F-957 H 2/3

LOAN #A B11-02	-02		7	t Jak					
GRAVES COL	GRAVES COUNTY WATER DISTRICT	ICT		2.00% Rate					
			r						
Payment Date	Principal Due	Interest Due	Interest Rate	Principal & Interest	Servicing	Total Pavment	Principal Balance	R & M Resorve	Total
06/01/12	S15.955.37	\$7 800.00	2.00%	523 755 37	57AG 00	224 535 37	S780,000,00 S764 044 63	ຽກ ກົກ	20 001
12/01/12	\$15,114,92	57 640.45	2.00%	\$23,755,37	\$764.04	S24,519,41	\$747,929,71	\$2,500.00	\$2,500.00
06/01/13	\$16,276.07	S7,479.30	2.00%	\$23,755.37	\$747.93	\$24,503.30	\$731,653,64	30.00	S2,500.00
12/01/13	\$16,438,83	S7,316.54	2.00%	\$23,755.37	\$731.65	\$24,487.02	\$715,214,81	\$2,500.00	55,000.00
06/01/14	S16,603,22	S7,152.15	2.00%	\$23,755.37	\$715.21	S24,470,58	\$698,611.60	\$0.00	\$5,000.00
12/01/14	\$16,769.25	55,985,12	2.00%	\$23,755,37	S698,61	\$24,453,9B	\$581,842.35	\$2,500.00	\$7,500.00
12/01/15	515,915,94	20,010,42	2,00%	523,133.31	2587,84	\$24,437,21	S664,905,40	50.00	57,500,00
05/01/16	S17.777.38	56.477.99	2,003%	523,755,77 573,755,77	5647 AU	524,420,27	2647,744,09	24,500,00	\$10,000,00 \$10,000,00
12/01/16	S17,450,15	S6,305,22	2.00%	S23,755,37	S630.52	S24.385.89	S613.071.57	SZ 500.00	\$12,500.00
05/01/17	S17,624.65	\$6,130.72	2.00%	\$23,755,37	\$513.07	\$24,368.44	\$595,446,91	\$0.00	\$12,500.00
12/01/17	\$17,800,90	S5,954.47	2.00%	\$23,755,37	\$595,45	S24.350,81	\$577,646,02	S2,500.00	\$15,000.00
06/01/18	S17,978,91	S5,776,46	2.00%	\$23,755.37	\$577,65	S24,333,01	\$559,667.11	SD.00	\$15,000.00
06/01/19	S18,340,28	35,415,08	2.00%	523,755,37	5541.51	524,296,87	334 ),300.42 SS73 168 13	00.02 00.02	S17.500.00
12/01/19	\$18,523,69	\$5,231,68	2.00%	\$23,755.37	\$523.17	SZ4,278.53	\$504,644,45	\$2,500.00	\$20,000.00
06/01/20	\$18,708,92	S5,046.44	2.00%	\$23,755,37	S504,64	\$24,260.01	\$485,935,53	\$0,00	\$20,000.00
12/01/20	S18,896.01	S4.859.36	2,00%	\$23,755,37	\$485.\$4	SZ4,241.30	\$467,039,52	S2,500.00	\$22,500.00
12/01/21	519,275,82	54,479,55	2 00%	523.755.37	2407 QS	57 2110 765	5447,354,34 5438,678,79	50 SOU DO	575 NNN NN
05/01/22	\$19,468.58	\$4,286,79	2.00%	\$23,755,37	\$428,68	524.184.05	\$409.210.14	50.00	\$25,000,00
12/01/22	\$19,663,26	\$4,092.10	2.00%	\$23,755.37	S409.21	S24,164.58	\$389,545,88	S0.00	\$25,000.00
06/01/23	S19,859,90	\$3,895,47	2.00%	\$23,755,37	\$389,55	\$24,144.91	\$369,686,98	\$0.00	\$25,000,00
12/01/23	S20,058,50	\$3,696,87	2.00%	\$23,755,37	\$369,69	S24,125.05	S349,628,48	50.00	\$25,000.00
12/01/24	520,233,00	53,793,69 52,900,52	2.00%	323,133,31	5176.37	524.104.99 524.104.99	5329,369,40 5308 007 73	<0 PD	00,000 2CS
06/01/25	S20,666.29	S3,089.08	2.00%	\$23,755.37	\$308,91	\$24,064,27	S288,241.44	50.00	S25,000.00
12/01/25	S20,872.95	SZ.882.41	2.00%	\$23,755.37	S288,24	S24.043.61	S267,368.49	\$0.0D	\$25,000.00
06/01/26	S21,081,68	\$2,673,68	2.00%	\$23,755,37	\$267.37	S24,022,73	\$246,286,81	50.00	\$25,000.00
12/01/26	\$21,292.50	S2,462.87	2.00%	523,755.37	S246.29	\$24,001.65	\$224,994.31	50,00	\$25,000,00
12/10/40	521,505,42	\$2,249.94	2.00%	523,755.37	5224,99	S23,980,36	\$203,488,89	50.00	\$25,000.00
05/01/28	S21.937.68	51.817.68	2.00%	523 755 37	32U3.43	217 170 202 00.000,020	2101,700,41 \$150 R30 73	<0.00	525,000,00
40/04/00	\$22,157.06	\$1,598.31	2.00%	\$23,755,37	\$159.83	\$23,915.20	\$137,673,67	\$0.00	\$25,000.00
87.11 A.F.1	\$22,378.63	\$1,376,74	2.00%	\$23,755,37	\$137.67	\$23,893,04	\$115,295.04	\$0.00	\$25,000.00
06/01/29	\$22,602.42	\$1,152.95	2.00%	\$23,755,37	\$115.30	\$23,870,66	\$92,692.62	\$0.00	\$25,000.00
12/01/29 12/01/29	\$22,828.44	\$926,93	2.00%	\$23,755.37	S92.59	\$23,848,06	\$69,864.18	\$0.00	\$25,000.00
12/01/28 15/01/29 12/01/29 06/01/30	\$23,055.72	5598.64	2.00%	523,755,37	\$69,86	\$23,825.23	\$46,807.46	\$0.00	SZ5.000.00
12/01/28 06/01/29 12/01/29 06/01/30 12/01/30		S468.07	2.00%	\$23,755.37	S46.81	\$23,802,17	\$23,520,15	\$0,00	\$25,000.00
06/01/29 12/01/29 12/01/29 06/01/30 12/01/30 06/01/31	\$23,287.29	SZ35,20	2,00%	\$23,755.37	\$23.52	\$23,778.89	S0.00	\$0.00	S25,000.00
12/01/29 12/01/29 06/01/30 06/01/30 12/01/30 06/01/31 12/01/31	\$23,287.29 \$23.520.16								

KENTUCKY INFRASTRUCTURE AUTHORITY REPAYMENT SCHEDULE

Attachment H 3/3

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From Less 2011-390