COMMONWEALTH OF KENTUCKY

BEFORE THE

PUBLIC SERVICE COMMISSION OF KENTUCKY

RECEIVED

FEB 20 2012

PUBLIC SERVICE
COMMISSION

IN THE MATTER OF

APPLICATION OF KENTUCKY POWER COMPANY )
FOR APPROVAL OF ITS ENVIRONMENTAL )
SURCHARGE PLAN, APPROVAL OF ITS AMENDED)
ENVIRONMENTAL COST RECOVERY ) CASE NO. 2011-00401
SURCHARGE TARIFFS, AND FOR THE GRANT OF )
CERTIFICATES OF PUBLIC CONVENIENCE AND )
NECESSITY FOR THE CONSTRUCTION AND )
ACQUISTION OF RELATED FACILITIES )

RESPONSES OF KENTUCKY POWER COMPANY TO
COMMISSION STAFF'S SECOND SET OF DATA REQUESTS

February 20, 2012

**VERIFICATION**

The undersigned, KARL R. BLETZACKER, being duly sworn, deposes and says he is Director, Fundamental Analysis for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief.

Karl R Bletzacker

KARL R. BLETZACKER

STATE OF OHIO )
) CASE NO. 2011-00401
COUNTY OF FRANKLIN )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Karl R. Bletzacker, this the 17th day of February 2012.

Peggy Wright

Notary Public

NOTARY PUBLIC STATE OF OHIO

Peggy Wright
Notary Public-State of Ohio
My Commission Expires
July 6, 2015

My Commission Expires: 7.6.15

## VERIFICATION

The undersigned, John M. McManus, being duly sworn, deposes and says he is Vice President Environmental Services for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief

John M. McManus

John M. McManus

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|---|---|
| STATE OF OHIO | ) |
| | ) CASE NO. 2011-00401 |
| COUNTY OF FRANKLIN | ) |

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John M. McManus, this the 10 day of February 2012.

Janet White

Notary Public

JANET L. WHITE
Notary Public, State of Ohio
My Commission Expires 06-08-2013

My Commission Expires: ____________________

**VERIFICATION**

The undersigned, Lila P. Munsey, being duly sworn, deposes and says she is the Manager, Regulatory Services for Kentucky Power, that she has personal knowledge of the matters set forth in the forgoing responses for which she is the identified witness and that the information contained therein is true and correct to the best of her information, knowledge, and belief

Lila P. Munsey

Lila P. Munsey

COMMONWEALTH OF KENTUCKY )
) CASE NO. 2011-00401
COUNTY OF FRANKLIN )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Lila P. Munsey, this 17th day of February 2012.

Judy K Rosquist

Notary Public

My Commission Expires: January 23, 2013

## VERIFICATION

The undersigned, ROBERT L. WALTON being duly sworn, deposes and says he is Managing Director Projects and Controls for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief

Robert L Walton

ROBERT L. WALTON

STATE OF OHIO )
) CASE NO. 2011-00401
COUNTY OF FRANKLIN )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Robert L. Walton, this the 15 day of February 2012.

Notary Public

My Commission Expires: 5-29-2012

**VERIFICATION**

The undersigned, SCOTT C. WEAVER, being duly sworn, deposes and says he is Managing Director Resource Planning and Operation Analysis for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief

SCOTT C. WEAVER

STATE OF OHIO )
) CASE NO. 2011-00401
COUNTY OF FRANKLIN )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Scott C. Weaver, this the 16th day of February 2012.

Notary Public

NOTARIAL SEAL STATE OF OHIO

Cheryl L. Strawser
Notary Public, State of Ohio
My Commission Expires 10-01-2016

My Commission Expires: October 1, 2016

## VERIFICATION

The undersigned, Ranie K. Wohnhas, being duly sworn, deposes and says he is the Managing Director Regulatory and Finance for Kentucky Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief

Ranie K. Wohnhas

Ranie K. Wohnhas

COMMONWEALTH OF KENTUCKY )
) CASE NO. 2011-00401
COUNTY OF FRANKLIN )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the 17th day of February 2012.

Judy K Rosquist

Notary Public

My Commission Expires: January 23, 2013

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's Response to Commission Staffs First Request for Information ("Staffs First Request"), Item 1.

a. Explain the basis of the decision reflected in Kentucky Power's December 17, 2010 notice to terminate the East Pool Agreement effective January 1, 2014 without knowing the financial impacts to Kentucky Power or its ratepayers as of the effective date of the notice.

b. Provide all studies and/or analyses relied upon and used to support Kentucky Power's decision to terminate the East Pool Agreement effective January 1, 2014.

c. Provide a list of all agreements that would be affected by the termination of the East Pool Agreement among American Electric Power's ("AEP") east subsidiaries, with an explanation by agreement of the financial impact to Kentucky Power and its ratepayers.

d. If the present East Pool Agreement had been effectively terminated on January 1, 2011, provide the monthly change in revenue requirement for the environmental surcharge reports during the 12 expense months of 2011. Show the monthly amount from ES FORM 1.00 LINE 1 CRR from ES FORM 3.00 less the monthly costs applicable to the surplus companies' plants.

e. Explain how the Commission can make an informed decision as to Kentucky Power's application ("Application") for the approval of its 2011 Environmental Compliance Plan and Certificate of Public Convenience and Necessity to construct a dry flue gas desulfurization ("DFGD"), without knowing the complete financial impact to Kentucky Power and its ratepayers, if the current East Pool Agreement is effectively terminated on January 1, 2014.

f. Explain whether the deregulation of electric generation in Ohio had any influence on the decision to terminate the East Pool Agreement effective January 1, 2014 and why terminating the agreement is beneficial to Kentucky Power and its ratepayers.

**RESPONSE**

a. Please see KPSC 2-1 Attachments 1 and 2 for the East Pool Operating Committee minutes and the pool termination proposal from December 17, 2010.

Additionally, please refer to the accompanying CD for KPSC 2-1 Attachment 3 for the Company's FERC 205 filing related to the proposed new Power Cost Sharing Agreement (PCSA) and pages 2 through 7 specifically for additional information.

b. Please see the accompanying CD for KPSC 2-1 Attachment 4 for an analysis pertaining to pool termination that was completed prior to December 17, 2010.

c. Please see the Company's response to KPSC 1-1 part b. See the accompanying CD for KPSC 2-1 Attachment 4 for financial impacts related to terminating the IAA during the applicable period.

d. Please see KPSC 2-1 Attachment 5 for the requested information for the twelve months of 2011. This analysis removes from the environmental surcharge all environmental costs related to surplus companies' plants. This should not necessarily be construed as representative of what the actual results may be when the current pool agreement expires and the new Power Cost Sharing Agreement (PCSA) begins. What environmental costs, if any, that the Company may ask to flow through the environmental surcharge from the PSCA has yet to be determined.

e. On February 10, 2012, Kentucky Power filed notice with the Federal Energy Regulatory Commission of its intent to terminate the Pool Agreement effective the first quarter of 2013. The Company recognizes that its existing Environmental Compliance Plan, as well as the proposed Environmental Compliance Plan that is the subject of this proceeding, involve certain environmental compliance costs that are allocated to Kentucky Power. To the extent that these Pool-related costs are no longer allocated to Kentucky Power following the termination of the Pool Agreement they will no longer be flowed through to Kentucky Power's ratepayers through the environmental surcharge. The proposed PCSA as filed with the FERC contains no provisions related to environmental compliance costs. However, to the extent that resolution of the new arrangements that are now pending before the FERC result in the allocation of qualifying environmental compliance costs to Kentucky Power, the Company has not determined whether to seek to recover those allocated costs through the environmental surcharge. Under existing authority any such amendment of the Company's environmental compliance plan must be presented to the Commission for approval under KRS 278.183.

f. Please see the Company's response to part a.

WITNESS: Ranie K Wohnhas

**Minutes of the December 17, 2010 Meeting of the AEP Interconnection Agreement Operating Committee**

Present: Committee Representatives
Richard Munczinski – Pool Manager
Charles Patton – Appalachian Power Company
Joseph Hamrock – Columbus Southern Power Company and Ohio Power Company
Paul Chodak III – Indiana Michigan Power Company
Gregory Pauley – Kentucky Power Company

Counsel/Secretary
John Crespo, Esq.

The meeting was called to order at approximately 11:00 a.m. (EST) with Mr. Munczinski presiding. Mr. Munczinski identified one agenda item for Operating Committee ("Committee") action that was previously distributed to the Committee Members:

1) Termination of the AEP Interconnection Agreement (Attachment I)

The Committee reviewed a proposal to terminate the current AEP Interconnection Agreement ("Agreement").

The Committee Representatives discussed the benefit of the termination notice in that it would provide a reasonable and defined timeframe for the Member companies and stakeholders to accomplish the task of developing an updated agreement among willing Members and/or to allow any or all Members the option of operating in a "stand alone" fashion.

Mr. Patton and Mr. Hamrock noted that the Resource Planning process would necessarily be of prime importance in addressing each Member's energy and capacity position in the period following termination of the Agreement and began Committee discussion on how Member Companies that were significantly capacity-surplus or capacity-deficit could mitigate any resulting exposure. The Committee then discussed how the stakeholder process could provide a useful and effective forum for discussions between individual Members to identify possible bi-lateral or multi-party contracts that were mutually beneficial and would alleviate such concerns, especially if a replacement agreement was not reached, or in case an agreement was reached but did not adequately mitigate these concerns.

Committee Members then identified and discussed the potential that transitional approaches could also have if necessary to give one or more Members adequate time to implement their individual Member resource plans. All Member Representative then committed to investigating such transitional approaches as needed.

Mr. Chodak proposed a change to the proposal in section 2.a. to better reflect the current relationship between the PJM Settlement process and the Agreement settlement process. Following Committee discussion, the modification was agreed to by all of the Representatives.

Representatives also reviewed the form of the letter that would be signed and forwarded by each Member Representative for the required notification.

This was followed by general discussion regarding the process and timeframe that would be used to work with stakeholders, including state commissions and customers, to develop a post-Agreement plan for each Member. All Member representatives committed their support to this process.

Once all discussion had concluded, Mr. Munczinski called for a vote of the Operating Committee on the proposal, as amended. All Representatives approved the recommendation by voice vote. Subsequently, each Member noted their intent to sign and forward their respective individual notifications to terminate the Agreement.

Mr. Munczinski asked if there was any other business before the Committee at this time. Hearing none, the meeting was adjourned at approximately 12:00 p.m.

# AEP Interconnection Agreement (East Pool)
# Proposal to the Operating Committee

**Date: December 17, 2010**

**Subject: Termination of the AEP Interconnection Agreement**

## Description

The AEP Interconnection Agreement ("Agreement") is a generation pooling agreement that was initially entered into on July 6, 1951. The Agreement has undergone various modifications, with the last one occurring November 1, 1980. Current parties to the Agreement include Appalachian Power Company ("APCO"), Kentucky Power Company ("KPCO"), Ohio Power Company ("OPCO"), Columbus Southern Power Company ("CSP") and Indiana Michigan Power Company ("I&M"), each of which is referred to as a "Member" (and collectively as the "Members") of the Agreement. The American Electric Power Service Corporation ("Agent") is also a party to the Agreement, acting as the agent on the behalf of the Members.

The Agreement has served the Members for almost sixty years, allowing the Members to share their generation resources to obtain the net requirements for each Member's internal load, share in off-system sales revenues, and provide risk mitigation for impacts due to such items as unplanned outages.

However, the Agreement is showing its age, and given its current provisions, minor modifications are not likely to improve the Agreement to a state in which it would continue to be effective in the long term.

In addition, the Interim Allowance Agreement ("IAA"), which acts as a corollary agreement between the same Members and Agent for treatment of items related to sulfur dioxide ($SO_2$) emissions and emission allowances, has also become out-of-date by the development of other emission allowance programs and requirements since it was last modified in 1996.

As a result, this proposal is to terminate the current Agreement and the IAA as specified below.

## Recommendation

It is recommended that the Members terminate the Agreement. Such termination is to be performed by each Member individually providing the notification required by the Agreement.

Consequently, it is recommended that each of the Members notify each of the other Members and the Agent in the fourth quarter of 2010, such that the Agreement terminates among all the Members as of January 1, 2014 or such other date that cancellation of the Agreement is approved by the Federal Energy Regulatory Commission ("FERC") and becomes effective. It is also recommended that the Members terminate the IAA, to be effective concurrently with the termination of the Agreement.

## AEP Interconnection Agreement (East Pool)
## Proposal to the Operating Committee

### Support for Recommendation

1. Any Member or Members of the Agreement may terminate their participation in the Agreement by providing the notice specified in Section 13.2 of the Agreement:

   "13.2 *Any Member upon at least three years' prior written notice to the other Members and Agent may terminate this agreement at the expiration of said initial period or at the expiration of any successive period of one year.*"

   Consequently, upon approval of this recommendation, each Member will provide the aforementioned written notice to the other Members and the Agent to initiate the three-year notice period. The proposed notification is provided as an attachment to this proposal.

   While any Member may terminate its participation in the Agreement without the consent of the Operating Committee, this proposal has been brought to the Operating Committee in order to reach consensus among the Members to terminate their participation in the current Agreement. Consensus is desirable because many of the reasons described below in support of termination of the Agreement are applicable to all Members. Termination of the entire Agreement will enable a "fresh start" for each Member to determine a path that is in the best interest of itself, its individual customers and AEP moving forward. If all Members provide notice the Agreement will effectively be terminated as of the expiration of the notice period, subject to FERC approval.

2. Specific reasons for termination of the pool include the following:

   a. AEP joined the PJM Interconnection L.L.C. ("PJM") Regional Transmission Organization ("RTO") in October 2004. Over the last six years, PJM has proven capable of fulfilling the role of economically dispatching the generating units of the Members to satisfy the capacity and energy requirements of their loads, a role historically performed by the Agent under the Agreement.[1] As such, the Agreement, at least in its current form, is less essential.

   b. The state of Ohio has enacted legislation that requires the eventual corporate separation of CSP's and OPCO's generation. However, under the current Agreement that "deregulated" generation is pooled with the generation of the other Members whose generation is "regulated." This termination prepares for this eventual separation.

   c. Changes in utility regulation and the energy markets have either occurred or are anticipated that were not contemplated by the Agreement or IAA that limit the effectiveness of comprehensive, system-wide system planning and dispatch. For example, renewable portfolio standards or goals have been established in several states that have resulted in the addition of wind and solar resources. Under these and emerging renewable portfolio standards, further additions of capacity for Members that are already in a surplus capacity position may be required, which is inconsistent with the

[1]The Agent may still need to perform some limited functions for each of the individual Members under a subsequent agreement, such as managing and maintaining the interconnection points among the Members in a manner that supports system-wide reliability and participating in joint off-system sales activities that are not directly assignable to any Member.

**AEP Interconnection Agreement (East Pool)**
**Proposal to the Operating Committee**

original intent of the Agreement. Environmental regulation of electric generation has also expanded in a manner that was not contemplated in the IAA, such as the implementation of an allowance program associated with the emission of nitrogen oxides ($NO_X$). Many new environmental regulations are also currently being considered that were also not contemplated and are likely to require more unit-specific rather than system-wide solutions.

d. Pool termination promotes the long-term strategic objective of AEP to further decentralize utility operations by affording each Member more autonomy. For example, working with its customer representatives and other stakeholders, each Member will be able to make more independent decisions regarding how it plans for its own generation needs (e.g., "build or buy").

**Implementation**

During the three year notice period, the representatives of each of the Members will meet with interested stakeholders who will be impacted by the termination to attempt to reach a consensus on the best course of action for the Member regarding management and planning of its generation and load obligations following the termination.

These discussions will also allow any of the Members, if so desired by each of them, to enter into subsequent agreements. It is assumed that any such agreements would be mutually beneficial to all of the parties involved and AEP as a whole will be unharmed. If no such agreements are reached, each Member will operate independently in PJM (i.e. "stand alone"). The three-year period will allow each Member to confer with affected stakeholders, plan a just and reasonable course of action and begin implementation.

STEPTOE & JOHNSON LLP

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February 10, 2012

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Appalachian Power Company
Docket No. ER12- -000
AEP Generation Resources Inc.
Docket No. ER12- -000
Indiana Michigan Power Company
Docket No. ER12- -000
Kentucky Power Company
Docket No. ER12- -000
Ohio Power Company
Docket No. ER12- -000

Dear Secretary Bose:

On behalf of Appalachian Power Company ("APCo"), Indiana Michigan Power Company ("I&M"), Kentucky Power Company ("KPCo"), Ohio Power Company ("Ohio Power"), and AEP Generation Resources Inc. ("AEP Generation Resources"), American Electric Power Service Corporation ("AEPSC") hereby submits for filing: (i) the "Power Cost Sharing Agreement among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, and American Electric Power Service Corporation," ("Power Cost Sharing Agreement") and (ii) the "Bridge Agreement among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, AEP Generation Resources Inc. and American Electric Power Service Corporation" ("Bridge Agreement"). In conjunction with these new rate schedules, AEPSC also provides notice of the Companies' termination of (i) the Interconnection Agreement ("Pool Agreement") and (ii) the AEP System Interim Allowance Agreement ("IAA"). **AEPSC respectfully requests that the Commission establish March 12, 2012, as the comment date for this filing.**

This filing includes the following documents in addition to the relevant Tariff Records[1]:

1. Attachment A - Clean Tariff Attachments for the Power Cost Sharing Agreement (APCo Rate Schedule No. 200; I&M Rate Schedule No. 200; and KPCo Rate Schedule No. 200);
2. Attachment B - Clean Tariff Attachments for the Bridge Agreement (APCo Rate Schedule No. 201; I&M Rate Schedule No. 201; KPCo Rate Schedule No. 201; Ohio Power Rate Schedule No. 200; and AEP Generation Resources Rate Schedule No. 2); and
3. Attachment C - Certificates of Concurrence signed on behalf of I&M, KPCo, Ohio Power, and AEP Generation Resources.

## I. BACKGROUND

APCo, I&M, KPCo, Ohio Power[2], and AEPSC are wholly-owned subsidiaries of American Electric Power Company, Inc. ("AEP"). Together with their affiliates Kingsport Power Company ("Kingsport") and Wheeling Power Company ("Wheeling"), APCo, I&M, KPCo, and Ohio Power make up the AEP East utilities. The AEP East utilities are members of and operate within the footprint of PJM Interconnection, L.L.C. ("PJM"). AEPSC is a service company that provides various services to the AEP East utilities and their affiliate utilities that operate within the footprints of the Southwest Power Pool ("SPP") and the Electric Reliability Council of Texas ("ERCOT"). The AEP utilities in SPP and ERCOT are not part of and are not affected by this filing.

The AEP East utilities have for decades operated as part of an integrated public utility holding company system under the now-repealed Public Utility Holding Company Act of 1935. As part of that arrangement, those companies that owned electric generating resources (APCo, CSP, I&M, KPCo, and Ohio Power) coordinated the planning and operations of their respective generating resources pursuant to their Interconnection Agreement ("Pool Agreement").[3] (The parties to the Pool Agreement are referred to herein as the "Pool Members," which includes CSP prior to January 1, 2012.) Kingsport and Wheeling are not parties to the Pool Agreement, as they do not own generation; they purchase their power requirements from APCo and Ohio Power, respectively. The Pool Members also are parties to the IAA, pursuant to which they have

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[1] The same filing is being submitted in three Tariff IDs, so the relevant Tariff Records will vary with each of the three filings. Each of the three filings will include Attachments A through C.

[2] On December 31, 2011, Columbus Southern Power Company ("CSP") was merged into and became part of Ohio Power.

[3] The Pool Agreement, which has been amended several times, is on file with the Commission as APCo's Rate Schedule No. 20, CSP's Rate Schedule No. 30, I&M's Rate Schedule No. 17, KPCo's Rate Schedule No. 11, and Ohio Power's Rate Schedule No. 23.

coordinated and integrated their compliance with certain environmental rules and regulations; Kingsport and Wheeling are not parties to the IAA.

For the reasons discussed below, each Pool Member provided notice to the other Pool Members (and to AEPSC) that it will terminate its participation under the Pool Agreement in accordance with the termination provision in the agreement. Three of the current Pool Members—APCo, I&M, and KPCo—together with AEPSC, have agreed to proceed under a new arrangement that is the subject of this filing; *i.e.,* the Power Cost Sharing Agreement.[4] In addition, the Pool Members have agreed to terminate the IAA.

Before discussing the new Power Cost Sharing Agreement and the Bridge Agreement, set out below is an overview of the current Pool Agreement and the reasons that the Pool Members provided notice to terminate that agreement. Also discussed below are the reasons that the Pool Members agreed to terminate the IAA as well.

A. <u>The Pool Agreement</u>

As the Commission previously has recognized, under the Pool Agreement, generation is planned and operated on a single-system basis in order to meet the needs of the customers of all the members of the agreement. *AEP Generating Company and Kentucky Power Company*, 38 FERC ¶ 61,243 at 61,812 (1987). Each Pool Member's generating capacity obligation is determined based on its Member Load Ratio ("MLR"). MLRs are calculated monthly on the basis of each member's non-coincident peak ("NCP") demand in relation to the sum of the NCP demands of Pool Members during the preceding twelve months. Over the years, the Pool Members jointly satisfied the Pool's combined need for capacity and energy, even though if viewed individually, some Pool Members from time to time had surplus generating capacity and others were capacity deficit.

Members make or receive capacity payments based upon the extent to which they are deficit or surplus, and the generation costs of the surplus members. The total capacity surplus in any given month for surplus members always equals the total capacity deficiency for the deficit members, producing a zero surplus/deficit balance for the Pool Members. The Pool Agreement also has an energy component. Energy transactions occur between the Pool Members such that each member has sufficient energy to meet its share of the system's total sales made in that month. A Pool Member that produces more energy than needed to meet its requirements sells the excess to members that need additional energy to meet their total energy requirement. The sale is made at the seller's average variable production cost for the month. The Pool Agreement also provides for the allocation among the Pool Members of the revenues and/or costs associated with power sales to, or purchases from, third parties. Each member receives its MLR share of the off-system sales margins associated with any such sales.

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[4] In a related proposed transaction for which Commission approval is being sought under FPA Section 203, Wheeling will merge into APCo and APCo will serve the former Wheeling load. Kingsport will continue to be served under its wholesale purchase agreement with APCo.

The Pool Agreement designates AEPSC as the members' agent. The agent is responsible for, among other things, the coordination of the members' respective generating resources, the arrangement of capacity and/or energy transactions with third parties, and the accounting for and preparation of the settlements for internal pool transactions among the members.

B. Termination of the Pool Agreement

Section 13.2 of the Pool Agreement provides:

> Any Member upon at least three years' prior written notice to the other Members and Agent may terminate this agreement at the expiration of said initial period [December 31, 1971] or at the expiration of any successive period of one year.

On December 17, 2010, in accordance with Section 13.2 of the Pool Agreement, each of the then five members of the pool provided notice to the other members (and to AEPSC) to terminate the Pool Agreement on January 1, 2014, or such other date as may be accepted by this Commission. Although the Pool Agreement has served the Pool Members and the other AEP East utilities and their customers well over the past six decades, cumulative changes in the structure of the electric industry led the Pool Members to determine that it was necessary to consider alternatives to the current structure, including having no agreement among any of the AEP East utilities that own generation. These changes include evolving environmental regulations, the introduction of open access to transmission facilities, the advent of regional transmission organizations, movement toward industry deregulation, an increased emphasis on demand side management, and expanding competition.[5] In addition, Ohio Power recently has begun to experience a substantial number of retail customers switching to competitive retail service providers.

These changes have raised questions as to the continuing viability of the Pool Agreement. In July 2010, for example, the Virginia State Corporation Commission ("Virginia Commission") issued an order in an APCo rate proceeding that directed APCo and AEP to submit a report regarding "the steps that can be taken to ameliorate the negative effects of high capacity charges on APCo and its customers." APCo filed its report with the Virginia Commission, detailing, among other things, the history of the Pool Agreement, the changes over the years to the make-up of the members' respective generating resource portfolios, and trends in the capacity equalization rates and energy rates. As APCo's report noted,

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[5] For example, five of the seven states in which the AEP East utilities operate currently have alternative/renewable energy portfolio requirements or goals, and the resources that qualify and the applicable standards vary significantly over time; some renewable standards include the use of energy efficiency programs while others include specific energy efficiency requirements or goals. In addition, demand response programs are addressed differently in different states; some permit customers to enroll in PJM demand response programs (either directly or through a third party aggregator), while others require enrollment with the utility. Each of these programs requires an accommodation of state- and operating-company specific requirements that were not contemplated under the Pool Agreement.

> While it is undeniable that the [Pool Agreement] has provided tremendous benefits to each of the operating companies and their customers through its near 60 year existence, it has become increasingly difficult for AEP planners to confront the realities of today's electric utility industry with an allocation methodology from a far simpler era. This is evidenced by the fact that regulatory commissions, including the [Virginia Commission] and others have started to question . . . the Pool's viability in the current power supply environment.[6]

In addition to the concerns raised by the Virginia Commission, over the past several years the Public Utilities Commission of Ohio ("Ohio Commission") has issued a series of orders implementing legislation providing for the restructuring of the electric industry in Ohio. In accordance with the legislative initiatives, the Ohio Commission recently issued orders designed to enhance retail competition in Ohio Power's service territory. The most recent set of Ohio Commission orders provides for all of the retail load in Ohio Power's service territory to be fully subject to an auction process by June 1, 2015.[7] In addition, the Ohio Commission-approved restructuring plan calls for Ohio Power to separate its generation resources and related facilities from its transmission and distribution facilities, with a new generation-owning affiliate (AEP Generation Resources) created to own and operate the generation facilities. This corporate restructuring transaction is the subject of a proceeding under Section 203 of the Federal Power Act that is pending before the Commission as a result of an application filed contemporaneously with this filing. Once the corporate separation transaction is implemented (which is expected to occur by the end of the first quarter of 2013), Ohio Power will be a transmission and distribution company, and AEP Generation Resources will own and operate generating units previously owned by Ohio Power (including the generation formerly owned by CSP).[8]

The schedule approved by the Ohio Commission calls for Ohio Power to institute a competitive bidding process for its retail load for delivery beginning on June 1, 2015. The auction for the first tranches of retail load will be conducted in September 2013. The schedule further provides for Ohio Power to complete corporate separation prior to that auction. Accordingly, Ohio Power's target is to obtain all regulatory approvals necessary to enable the corporate separation and related transactions to be consummated by the end of the first quarter of 2013. Once corporate separation occurs and Ohio Power's auction process is underway, Ohio Power's further participation under the Pool Agreement will be impractical, as Ohio Power will no longer have traditional franchised retail customers and, once the corporate separation

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[6] "Report of Capacity Matters" submitted by Appalachian Power Company in Virginia Commission Case No. PUE-2009-00030 (January 4, 2011).

[7] *See, e.g.*, http://dis.puc.state.oh.us/TiffToPDf/A1001001A11L14B41654E58708.pdf, and http://dis.puc.state.oh.us/TiffToPDf/A1001001A12A23B41324B48337.pdf.

[8] In a separate but related Section 203 application submitted contemporaneously with this filing, Ohio Power and AEP Generation Resources are seeking Commission approval to transfer ownership interests in two of Ohio Power's generating stations to APCo and KPCo.

transaction is consummated, Ohio Power, like Kingsport and Wheeling, will not own or operate generating units that would be available to the other Pool Members.[9]

For the foregoing reasons, the Pool Members agreed to terminate the existing Pool Agreement.[10] The remaining Pool Members (*i.e.,* APCo, I&M, and KPCo) have agreed to move forward with a new arrangement that is discussed in detail in Section II below. As noted above, the Pool Members' respective December 17, 2010 notices of termination provided for termination of the Pool Agreement to be effective on January 1, 2014, or such other date accepted by the Commission. In order to align the termination of the current agreement with retail restructuring in Ohio, the Pool Members unanimously agreed to waive the full three-year notice provision and request that the Commission accept termination at a date at or near the end of the first quarter of 2013 that will coincide with those related transactions. AEPSC will provide notice to the Commission shortly after the consummation of these transactions, including termination of the Pool Agreement.

The Pool Members have carefully coordinated termination of the Pool Agreement with other arrangements in order to lessen any adverse impact on the Pool Members. For example, the Power Cost Sharing Agreement discussed below provides a vehicle for the remaining Pool Members to share the benefits of each other's surplus energy with costs lower than the PJM market clearing price. That agreement also provides opportunities for internal capacity transactions. Similarly, the simultaneous timing of the termination of the IAA, discussed immediately below, allows for the benefits and burdens from terminating that agreement to be somewhat counterbalanced by the benefits and burdens of terminating the Pool Agreement. In addition, the simultaneous transfer of certain Ohio Power baseload generation to APCo and KPCo (discussed above in footnote 8) was designed to address the fact that APCo and KPCo, which are capacity deficit, will no longer be able to access capacity from Pool Members that have surplus capacity. Finally, the Bridge Agreement discussed below in Section III provides for a fair allocation of the cost of meeting pre-existing Fixed Resource Requirement ("FRR") obligations and settling pre-existing marketing and trading positions that will survive termination of the Pool Agreement.

The Commission has had occasion to review issues concerning the proposed withdrawal of one or more members from an integrated holding company's pool arrangements in *Entergy Services, Inc.*, 129 FERC ¶ 61,143 (2009); *order denying reh'g*, 134 FERC ¶ 61,075 (2011). In that case, the Commission ruled that there are three specific questions concerning the proposed

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[9] Under the Ohio Commission-approved structure, AEP Generation Resources will be required, through May 31, 2015, to provide Ohio Power with the capacity and energy associated with the load of those retail customers that do not select alternative retail electric suppliers (referred to in Ohio as the Standard Service Obligation, or "SSO"). The basic rate structure of the SSO service has been approved by the Ohio Commission, and in a separate Section 205 application being filed contemporaneously with this filing, Ohio Power and AEP Generation Resources are seeking Commission approval of the SSO Contract.

[10] The Pool Agreement has not been submitted through eTariff and thus may be cancelled by means of a Transmittal Letter.

withdrawal: whether the members are permitted to leave the arrangement; whether they are required to compensate any remaining members; and whether they have any "continuing obligations" to the remaining members. 129 FERC ¶ 61,143 at P 58. As confirmed by review of Section 13.2, the Pool Agreement permits each Pool Member to terminate its agreement (the equivalent of withdrawing from the agreement), and neither requires a terminating Pool Member to compensate the other Pool Members nor imposes upon a terminating Pool Member any continuing obligation to the other Pool Members. Section 13.2 is refreshingly straightforward: a terminating Pool Member must simply provide the other Pool Members with three years' prior written notice of its proposed termination.

In *Entergy*, the Commission further ruled that acceptance of the members' proposal to withdraw from the agreement does not turn on the justness and reasonableness of the potential successor arrangements; that determination is made when such arrangements are submitted for Commission review. 134 FERC ¶ 61,075 at P 24. As noted, APCo, I&M, and KPCo have agreed to a new set of arrangements, *i.e.*, the Power Cost Sharing Agreement. That agreement is discussed below, and any issues surrounding the justness and reasonableness of that agreement may be resolved in this docket.

C. Termination of the IAA

The IAA originally was submitted for filing on September 30, 1994, in Docket No. ER94-1670, and was accepted for filing by Letter Order issued in that docket on December 30, 1994, and made a supplement to each member's Pool Agreement rate schedule designation, as shown below. On June 21, 1996, AEPSC, on behalf of the Pool Members, filed Modification 1 to the IAA in Docket No. ER96-2213. This modification was accepted for filing by Letter Order issued in that docket on August 30, 1996. The current version of the IAA has been in effect since September 1, 1996, and has been given the following rate schedule designations[11]:

| | |
|---|---|
| Appalachian Power Company | Supplement No. 9 to Rate Schedule No. 20 |
| Columbus Southern Power Company | Supplement No. 3 to Rate Schedule No. 30 |
| Indiana Michigan Power Company | Supplement No. 10 to Rate Schedule No. 17 |
| Kentucky Power Company | Supplement No. 6 to Rate Schedule No. 11 |
| Ohio Power Company | Supplement No. 9 to Rate Schedule No. 23 |

The IAA was developed and entered into in connection with the Pool Members' efforts to comply with the 1990 amendments to the Clean Air Act, and in particular Title IV thereto.[12] As implemented by the United States Environmental Protection Agency, the 1990 Amendments provided for, among other things, a sulfur dioxide ($SO_2$) emission allowances regime that eventually would affect over seventy of the Pool Members' electric generating units, with one allowance being equal to the right to emit one ton of $SO_2$. Consistent with the coordinated

[11] Because the IAA was designated as a Supplement to the rate schedule that was the Pool Agreement, terminating the Pool Agreement rate schedule would result in termination of the IAA, absent the IAA being removed from the relevant rate schedule.

[12] 104 Stat. 2584, 42 U.S.C.A. § 7561, *et seq.* ("1990 Amendments").

system operations under the Pool Agreement, the IAA was intended to provide for coordinated and integrated compliance with the 1990 Amendments through an equitable methodology to allocate emission allowances to the Pool Members and to allocate either the cost of acquiring, or the proceeds associated with the sale of, allowances to or from non-affiliated third parties. For administrative ease, each member would own its load ratio share of allowances at the end of each year. The internal transfer price for the allowances was established as the System Cost of Compliance ($115.43/ton in 1995, escalated annually at a fixed rate of 10.56%). For 2011, the System Cost of Compliance was $575.29.

Since the IAA was put into place in 1994 and subsequently modified in 1996, there have been significant changes in environmental rules and the markets associated with Title IV $SO_2$ emissions allowances that make the IAA obsolete. These developments include most notably: (1) additional environmental compliance obligations added since 1994 whose stringency on power plant emissions has or will eclipse obligations under Title IV for $SO_2$, (2) the continuing uncertainty surrounding the environmental compliance regulations, (3) the extension of AEP's environmental controls program to plants beyond the Gavin Plant, which has resulted in the addition of scrubbers to twelve additional AEP East generating units, (4) elimination, in part as a result of the foregoing two factors, of any shortage of the Pool Members for Title IV $SO_2$ allowances, and (5) the emergence of a robust secondary market for Title IV $SO_2$ allowances and their current and projected availability at low cost from that market. For all these reasons, the Pool Members agree that the IAA should terminate when the Pool Agreement terminates.

## II. THE POWER COST SHARING AGREEMENT

The Power Cost Sharing Agreement is designed to provide APCo, I&M, and KPCo with the opportunity to arrange internal energy transactions among themselves and to enter into capacity sales and purchases with each other. AEP Generation Resources will be a standalone generating company that will not have a franchised service territory and will not have the traditional utility obligation to serve retail customers (other than the discrete SSO obligations during the short time period before all Ohio Power retail load will be subject to state-supervised auctions). Therefore, AEP Generation Resources will not be a party to the new Power Cost Sharing Agreement. The key difference between the Power Cost Sharing Agreement and the current Pool Agreement is that under the new arrangement, generation will not be planned on a single-system basis; APCo, I&M, and KPCo individually will be required to own sufficient generation to meet their load and reserve obligations.[13] Likewise, the Power Cost Sharing Agreement does not impose capacity equalization charges on deficit members.

The Power Cost Sharing Agreement generally provides for APCO, I&M, and KPCo (referred to in the agreement as an "Operating Company" or collectively as the "Operating

[13] To reflect the fact that the Pool Agreement enabled deficit members (APCo and KPCo) to access the capacity and energy of those members with surplus generation (such as Ohio Power), certain of Ohio Power's generating resources that will be obtained by AEP Generation Resources will immediately be transferred to APCo and KPCo to enable them to meet their load and reserves obligations. *See* note 8, *infra*.

Companies") to conduct internal energy transactions amongst themselves, arrange for internal capacity transactions, and coordinate their participation in organized regional power markets. As with the current Pool Agreement, AEPSC will continue to act as the agent with responsibility for assisting each Operating Company in its evaluation of power supply resources to meet load requirements; assisting in the coordination and operation of each Operating Company's power supply resources (including arranging internal energy transactions); conducting off-system purchases and sales on behalf of the Operating Companies; and coordinating the procurement of fuel, consumables, emission allowances, and transportation services. *See* Article V. Governance under the Power Cost Sharing Agreement will be accomplished through an Operating Committee consisting of representatives of each Operating Company and AEPSC as the agent. The Operating Committee's primary duties will be to review procedures for cost allocation under the agreement and to coordinate efforts to implement measures necessary for the reliable and economic use of the Operating Companies' respective power supply resources. *See* Article VI.

The key provisions of the Power Cost Sharing Agreement are set out in Article VII ("Operating Company Planning and Operations") and the related Service Schedule A ("Collective Participation in the Applicable Regional Transmission Organization Capacity Market") and Service Schedule B ("Surplus Energy Sales"). Section 7.1 provides that each of the Operating Companies will be individually responsible for planning to meet its capacity obligations. However, the Agent (AEPSC) will provide annual resource adequacy assessments (from the individual company and pool-wide perspectives) and make recommendations to each Operating Company as to the need to add power supply resources and the extent to which such resources may be available from one or both of the other Operating Companies. The Agent also will make recommendations as to the extent to which an Operating Company has temporary surplus power supply resources that could be made available to one or both of the other Operating Companies or to third parties. Service Schedule A, which is discussed below, sets out the terms for any capacity sales and purchases among the Operating Companies. Article VII also provides for the Agent to coordinate the scheduling of planned generation outages (Section 7.2), and to coordinate the dispatch of the Operating Companies' generating resources subject to the direction of the applicable regional transmission organization ("RTO") (Section 7.3).

Section 7.5 sets out the terms for capacity transactions with third parties. Such transactions generally will be directly assigned to a specific Operating Company. Capacity purchases that are not directly allocated generally will be allocated to the Operating Company or Companies with the lowest capacity reserve margin(s) over the duration of the transaction. Sales transactions that are not allocated to a specific Operating Company generally will be allocated to the Operating Company or Companies with the highest capacity reserve margin(s) over the duration of the transaction. Capacity purchases and sales that occur under an RTO auction process will be directly assigned to an Operating Company based on the auction results; the implementation details are specified in Service Schedule A. That schedule discusses the Agent's evaluation of the feasibility of capacity transactions between the Operating Companies and the internal transfer price (the auction clearing price) (A3); the treatment of auction revenues (A4); and the settlement procedures (A5).

Section 7.6 of the Power Cost Sharing Agreement addresses energy purchases and sales with third parties. Purchases and/or sales initiated at the direction of a specific Operating

Company generally will be directly assigned to that company. Purchases not directly assigned will be allocated among the Operating Companies based on the level of each company's "Internal Load" (retail and wholesale requirements customers). Sales not directly assigned will be allocated based upon each Operating Company's hourly energy surplus (measured by the sum of the hourly output of the company's resources and purchases, less the company's internal load and "Surplus Energy" sales). Section 7.7 specifies that Surplus Energy is the energy available from an Operating Company's generating resources.

Service Schedule B specifies more details concerning Surplus Energy sales. Item B2 of the schedule specifies the conditions under which intra-company sales may take place; namely, that the seller must have Surplus Energy available (as described above), and that Surplus Energy will be sold to another Operating Company only if the "Surplus Energy Price" is less than the purchasing company's "Avoided Cost." The Power Cost Sharing Agreement defines Avoided Cost as the purchaser's "costs that otherwise would have been paid for Spot Market energy" in RTO organized markets. Item B3 defines the Surplus Energy Price as a standard split-the-savings calculation based on the purchaser's Avoided Cost and the "Seller's Incremental Cost," which includes, among other things, the seller's cost of fuel, reactive power, operation and maintenance and start-up costs, emission allowances, and transmission and ancillary service charges. Finally, Item B4 provides that no Surplus Energy transactions will occur if the Surplus Energy Price equals or exceeds the purchaser's Avoided Cost, and that transactions involving two Operating Companies will be allocated to those companies based on their respective Surplus Energy (for sellers) or their Internal Load deficits (for purchases).

## III. BRIDGE AGREEMENT

In conjunction with the termination of the Pool Agreement, APCo, I&M, KPCo, Ohio Power, AEP Generation Resources, and AEPSC (as agent) will operate under the Bridge Agreement. As its name implies, the Bridge Agreement is intended to be an interim arrangement that will be in place only for a short time. As discussed in more detail below, the Bridge Agreement addresses: (a) the treatment of those purchases and sales made by the agent on behalf of the Pool Members that extend beyond termination of the Pool Agreement, and (b) how APCo, I&M, KPCo, and Ohio Power will fulfill their existing FRR obligations under the PJM Reliability Assurance Agreement ("RAA") through the PJM planning year 2014/2015 (ending May 31, 2015). APCo, I&M, KPCo, and Ohio Power are referred to in the Bridge Agreement as "Operating Companies."

Article II of the Bridge Agreement provides that the term commences upon the effective date of the separation of Ohio Power's generation and power marketing business from its transmission and distribution business pursuant to Ohio restructuring (as discussed above), and terminates upon the later of the settlement of the contracts in the legacy marketing and trading portfolio or the end of Ohio Power's FRR obligation. Article III provides for AEPSC to serve as agent and to prepare summary reports of activities under the Bridge Agreement. Article IV provides for the creation of an Operating Committee composed of a representative of each of the parties, with AEPSC's representative serving as the chair of the Operating Committee. Certain functions under the Bridge Agreement may be delegated to one or more subcommittees. The two key articles of the Bridge Agreement are Article V ("FRR Obligation") and Article VI ("Legacy Contracts").

The FRR provisions were added to the RAA in connection with PJM's Reliability Pricing Model ("RPM"), which was designed to ensure the availability of necessary generation resources that can be called upon and delivered to maintain the overall reliability of the PJM markets. In conjunction with the development of the RPM rules, PJM also developed the FRR alternative, under which a load-serving entity (designated as an "FRR Entity") has the option to submit an "FRR Capacity Plan" and meet a fixed capacity resource requirement rather than participate through the RPM capacity auction. In addition to meeting its own load obligations, an FRR Entity is required to reflect in its FRR Capacity Plan any retail load that switches to an alternative retail load-serving entity that opts not to submit its own FRR Capacity Plan. The AEP East utilities have been operating under the FRR alternative since the implementation of the RPM. As such, the AEP East generating resources, including those of Ohio Power, have been dedicated to meeting the AEP East utilities' FRR obligations.

The FRR provisions of the RAA place the obligation to maintain sufficient capacity on the load-serving entity, which includes Ohio Power. The transfer of Ohio Power's generation to AEP Generation Resources and the termination of the Pool Agreement required the Pool Members to adopt new arrangements to meet the AEP East FRR capacity obligations. Those arrangements are set out in Article V of the Bridge Agreement, which, among other things, commits AEP Generation Resources to make its generation available to meet the Operating Companies' FRR capacity obligations through the PJM Planning Year that ends on May 31, 2015. After that, Ohio Power will terminate its role as an FRR Entity and will participate in the RPM auctions to meet its residual capacity requirements.

Section 5.1 provides for the Agent to analyze the Operating Companies' FRR obligations in light of projected changes to their capacity resources or their capacity requirements, and to recommend a capacity resource plan to meet those obligations. The plan for the Operating Companies will be reviewed and must be unanimously approved by the Operating Companies; likewise, AEP Generation Resources must separately approve the portion of the plan that impacts its capacity resource plan. AEP Generation Resources will not have access to information relating to the Operating Companies' resources. If the Agent's plan is not approved, the Agent will revise and resubmit the plan until it is accepted by the Operating Companies and by AEP Generation Resources. Section 5.2 provides for the Agent to collect information during a PJM Planning Year and, based on that information, to alter the combination of capacity resources so as to meet the FRR capacity obligation in a way that minimizes compliance charges to the extent reasonably practicable. Section 5.3 provides that allocations of charges and credits associated with (i) capacity resource purchases and sales and (ii) FRR charges and credits will be based on an average of the Pool Members' MLRs for each of the last twelve months preceding termination of the Pool Agreement ("Final MLR"). Finally, Section 5.4 provides that the fulfillment of the Operating Companies' FRR capacity obligations, including the allocation of charges and credits, is governed by the Bridge Agreement and not by the Power Cost Sharing Agreement discussed above.

Article VI addresses the treatment of the "Legacy Contracts Portfolio," which includes "Legacy Trading Contracts" (power purchases and sales made pursuant to the Pool Agreement) and "Legacy Hedge Contracts" (physical and financial transactions that hedge the Pool Members' generation resources) that are in effect at the time that the Pool Agreement is terminated. Section 6.1.1 of the Bridge Agreement provides for the Agent to settle the Legacy Trading Contracts and Legacy Hedge Contracts in accordance with their contractual terms. Gains and losses from settlement and liquidation of the Legacy Trading Contracts will be allocated among the parties based on the Final MLR. That section further provides that the Agent may, from time to time, enter into new transactions on behalf of the Operating Companies to reduce the tenor and risk of the portfolio (such new arrangements will then be treated as Legacy Trading Contracts), but such new arrangements cannot extend beyond the final delivery month of the agreements in the portfolio of Legacy Trading Contracts.

Section 6.1.2 provides for the Agent to allocate gains and losses from the settlement and liquidation of the Legacy Hedge Contracts to APCo, I&M, KPCo (collectively) and to AEP Generation Resources (as successor to Ohio Power's obligations) in a ratable manner based on the respective forecasted spot market energy sales of APCo, I&M, KPCo (collectively) and AEP Generation Resources determined as of the effective date of the Bridge Agreement. The forecasted spot market energy sales are derived from the forecasted output of generation minus forecasted internal load. The allocation of gains and losses among APCo, I&M, and KPCo will be based on their forecasted spot market energy sales. If the forecasted internal load of either APCo, I&M, KPCo (collectively) or AEP Generation Resources exceeds the forecasted output of their respective owned or controlled generation for a given month, then APCo, I&M, KPCo or AEP Generation Resources, as applicable, will not receive any allocation of gains or losses for that month, unless both are in that position, in which case gains or losses will be allocated ratably among APCo, I&M, KPCo, and AEP Generation Resources in proportion to the forecasted output of their owned or contracted generation.

The remaining articles address standard commercial matters, such as billing (Article VII), force majeure (Article VIII), general miscellaneous terms (Article IX), and regulatory approvals (Article X).

## IV. TIMELINE FOR FURTHER PROCEEDINGS

A September 7, 2011, stipulation entered into by CSP, Ohio Power, the Staff of the Ohio Commission, and nearly twenty other parties to various Ohio Commission retail proceedings involving CSP and Ohio Power set out an agreed-upon timeline for the Section 205 proceeding relating to the termination of the Pool Agreement and any new or modified agreement. The Stipulation provides for the AEP companies to "diligently pursue" approval of the Section 205 filings (and a related Section 203 application to implement Ohio restructuring) in accordance with the timeline, although the stipulation makes clear that the final schedule will be the one approved by this Commission.

The AEP companies that are the subject of this filing believe that this filing raises no material issues of fact that require resolution though hearing procedures. AEP therefore urges the Commission to accept the filing, as provided for above, without condition or modification, and without initiating any further proceedings. Appendix B to the Ohio Commission stipulation provides, however, that if certain parties believe that this Section 205 filing necessitates hearing procedures and the Commission agreed, that AEP would request that the Commission first initiate a 60-day Settlement Judge procedure, during which the parties would attempt to resolve any open issues. At the end of that process, AEP may submit an offer of settlement on some or all of the issues. If the offer is contested, parties may contest approval of the settlement under the Commission's standard Rule 602 procedures. Unresolved issues will then be the subject of a four-month "paper hearing" process, after which the matter will be before the Commission for final resolution.

## V. EFFECTIVE DATES

The termination of the current Pool Agreement (and the IAA) and the effectiveness of the proposed new Power Cost Sharing Agreement and the new Bridge Agreement are intended to take place at the time that Ohio Power and AEP Generation Resources implement the Ohio corporate separation transaction. That currently is anticipated to occur by the end of the first quarter of 2013. That schedule will permit the first auction for Ohio Power's retail load to occur in September 2013, and Ohio Power's generation to be transferred to AEP Generation Resources so that it may participate in the auction. At that point, it will be appropriate for the current Pool Agreement to terminate, and for (i) APCo, I&M, and KPCo to start transacting under the new Power Cost Sharing Agreement, and (ii) APCo, I&M, KPCo, Ohio Power, and AEP Generation Resources to implement the Bridge Agreement. The Tariff Records are thus being submitted with a 12/31/9998 proposed effective date. As discussed above, although the Pool Members originally provided each other with notices of termination that contemplated an effective date of December 31, 2013, they since have waived the full notice provision of Section 13.2 to enable termination of the Pool Agreement to coincide with implementation of Ohio restructuring.

## VI. GENERAL FILING INFORMATION

In compliance with the requirements of 18 C.F.R. § 35.13, AEP states as follows:

### A. General Information – 18.C.F.R. § 35.13(b)

The documents provided with this filing include this Transmittal Letter and the materials listed above. The persons upon whom this filing has been served are set out below in Section VII. A description of and the reasons for the rate changes proposed are discussed in this Transmittal Letter. AEPSC further states that there are no costs included in the agreements that have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.

### B. Cost of Service Information

AEPSC requests waiver of those provisions in Section 35.13 that would require AEPSC to submit cost-of-service and revenue data. The Power Cost Sharing Agreement and the Bridge Agreement are entirely new arrangements and, therefore, no meaningful comparison may be made of revenues that were collected under prior arrangements. The Power Cost Sharing

Agreement provides for voluntarily capacity and/or internal energy transactions, the cost of which depend upon the PJM capacity auction prices or the PJM spot market prices, which, of course, fluctuate. The Bridge Agreement does not provide for new transactions among the parties, but rather for the generating companies to make their capacity available to meet the pre-existing FRR obligations (at the FRR prices set out under the RAA), and for the unwinding of current marketing and trading positions, which will turn on prevailing market prices.

## VII. CORRESPONDENCE AND SERVICE

AEPSC requests that any correspondence or communications with respect to this filing be sent to the following:

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A copy of this filing will be served on the Indiana Utility Regulatory Commission, the Kentucky Public Service Commission, the Michigan Public Service Commission, the Public Utilities Commission of Ohio, the Tennessee Regulatory Authority, the Virginia State Corporation Commission, and the Public Service Commission of West Virginia. In addition, a copy of this filing will be posted on AEP's website at: http://www.aep.com/investors/currentRegulatoryactivity/regulatory/ferc.

## VIII. CONCLUSION

For the foregoing reasons, AEPSC respectfully requests that the Commission accept for filing, without condition or modification, the Power Cost Sharing Agreement and the Bridge Agreement. If you have any questions concerning this filing, please do not hesitate to contact the undersigned.

Respectfully submitted,

AMERICAN ELECTRIC POWER
SERVICE CORPORATION

By:_____/s/____________
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Attachments

# Attachment A

Power Cost Sharing Agreement Among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company and American Electric Power Service Corporation as Agent

1. Tariff Record, APCo – FERC Rate Schedule No. 200
2. Tariff Record, KPCo – FERC Rate Schedule No. 200
3. Tariff Record, I&M – FERC Rate Schedule No. 200

# RATE SCHEDULE No. 200

## POWER COST SHARING AGREEMENT

among

APPALACHIAN POWER COMPANY,
INDIANA MICHIGAN POWER COMPANY,
KENTUCKY POWER COMPANY

and

AMERICAN ELECTRIC POWER SERVICE CORPORATION

as Agent

# POWER COST SHARING AGREEMENT

**THIS AGREEMENT** is made and entered into as of this __ day of __________, 2013, by and among Appalachian Power Company ("APC"), Indiana Michigan Power Company ("I&M"), Kentucky Power Company ("KPC") and American Electric Power Service Corporation (as defined below, "AEPSC") as agent to the other parties (as defined below, "Agent").

WHEREAS, APC, I&M and KPC (collectively the "Operating Companies") own and operate electric generation, transmission and distribution facilities with which they are engaged in the business of generating, transmitting and selling electric power and energy to the general public and to other electric utilities;

WHEREAS, the Operating Companies electric facilities are now and have been for many years interconnected through their respective transmission facilities and transmission facilities of third parties at a number of points (hereby designated and hereinafter called "Interconnection Points");

WHEREAS, APC, I&M and KPC provide power to serve retail customers in Indiana, Kentucky, Michigan, Tennessee, Virginia and West Virginia;

WHEREAS, APC, I&M and KPC believe that they can continue to achieve efficiencies and economic benefits through the coordinated operation of their respective power supply resources;

WHEREAS, the Operating Companies, in order to recognize that APC, I&M and KPC will (a) participate in the organized power markets of a regional transmission organization; (b) provide each other with internal economic energy transfers under conditions described in this Agreement; I receive allocations of off-system sales and purchases with non-affiliates on bases that fairly assign or allocate the costs and benefits of these sales and purchases; and (d) allow for capacity transactions as needed and available between the Operating Companies;

WHEREAS, the achievement of the foregoing will be facilitated by the performance of certain services by an Agent;

WHEREAS, AEPSC is the service company affiliate of APC, I&M and KPC and as such performs a variety of services on their behalf in accordance with applicable rules and regulations of the Federal Energy Regulatory Commission ("FERC"); and

WHEREAS, AEPSC is willing to serve as Agent to APC, I&M and KPC under this Agreement with respect to generation-related activities.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein set forth, the Parties mutually agree as follows:

## ARTICLE I

## DEFINITIONS

**1.1** **AEPSC** means American Electric Power Service Corporation, a wholly-owned subsidiary of American Electric Power Company, Inc. and a service company affiliate of APC, I&M and KPC.

**1.2** **Agent** means the Operating Companies' designated representative for the purposes specified in Article V and elsewhere in this Agreement. The Agent will be AEPSC.

1.3 **Agreement** means this Power Cost Sharing Agreement among APC, I&M, KPC and AEPSC, including all Service Schedules and attachments hereto, as it may be amended from time to time.

1.4 **APC** means Appalachian Power Company.

1.5 **Avoided Cost** means the costs avoided by an Operating Company by reason of its purchase of an incremental amount of energy from another Operating Company. Such costs shall be defined as the costs that otherwise would have been paid for Spot Market energy in the relevant market(s) operated by the applicable regional transmission organization.

1.6 **FERC** means the Federal Energy Regulatory Commission or any successor agency having jurisdiction over this Agreement.

1.7 **I&M** means Indiana Michigan Power Company.

1.8 **Industry Standards** means all applicable national and regional electric reliability council and regional transmission organization principles, guides, criteria, standards and practices.

1.9 **Interconnection Points** shall have the meaning set forth in the third clause of this Agreement.

1.10 **Internal Load** means all sales of energy by an Operating Company to its Retail Customers and Wholesale Requirements Customers, including losses. Internal Load is principally characterized by the Operating Company assuming the load obligation as its own power commitment, as opposed to Off-System Sales.

1.11 **KPC** means Kentucky Power Company.

**1.12 Off-System Sales** means all power sales by an Operating Company other than sales to the Retail Customers and Wholesale Requirements Customers that comprise the Operating Company's Internal Load.

**1.13 Off-System Purchases** means power purchases by an Operating Company for any of the following reasons: (a) to reduce power supply costs, (b) to serve load requirements, c) to provide reliability of supply, (d) to satisfy state specific requirements or goals or (e) to engage in Off-System Sales.

**1.14 Operating Committee** means the administrative body established pursuant to Article VI for the purposes therein specified.

**1.15 Operating Companies** means APC, I&M and KPC collectively.

**1.16 Operating Company** means APC, I&M or KPC individually.

**1.17 Party** or **Parties** means one or more of the following, individually or collectively, as the context warrants: APC, I&M, KPC and Agent.

**1.18 Retail Customer** for purposes of this Agreement means a retail power customer on whose behalf an Operating Company has undertaken an obligation to obtain power supply resources so as to supply electricity to reliably meet the electric needs of such customer.

**1.19 Service Schedules** means the Service Schedules attached to this Agreement and those that later may be agreed to by the Parties and accepted for filing by FERC, as they may be amended from time to time.

**1.20 Spot Market(s)** means the day ahead, real time (balancing) or similar short-term energy market(s) operated by the applicable regional transmission organization(s), typically characterized by energy that is selected and delivered on an hourly, or more frequent, basis in that same day or the next calendar day.

1.21 **Surplus Energy** means energy supplied by one Operating Company to another, for the purchasing Operating Company to meet its Internal Load requirement at less than the purchasing Operating Company's Avoided Cost.

1.22 **Surplus Energy Incremental Cost** means any costs incurred by an Operating Company by reason of its provision of an incremental amount of energy to another Operating Company for its Internal Load. Such costs may include, but are not limited to, costs for fuel, reactive power, operation, maintenance, start-up, fuel handling, chemicals, consumables, emission allowances and taxes; transmission and ancillary service charges, including congestion, transmission losses, and any other incremental costs as allocated from an applicable regional transmission organization; charges for any power and energy purchased that is reasonably assigned or allocated by the Agent to such supply; and other incremental expenses incurred in providing energy from one Operating Company to another Operating Company. Such costs will normally exclude costs associated with resources dispatched for non-economic reasons, for minimum operating requirements and those dedicated to the selling Operating Company's Internal Load.

1.23 **System Emergency** means a condition which, if not promptly corrected, threatens to cause imminent harm to persons or property, including the equipment of a Party or a Third Party, or threatens the reliability of electric service provided by an Operating Company to Retail Customers or Wholesale Requirements Customers.

1.24 **Third Party or Third Parties** means an entity or entities that are not a Party or Parties as defined in this Agreement.

1.25 **Wholesale Requirements Customer** means a wholesale customer whose loads are served by an Operating Company that has undertaken, by contract, an obligation to serve such customer's partial or full requirements load and to acquire power supply resources and other resources necessary to meet such requirements.

## ARTICLE II

## TERM OF AGREEMENT

### 2.1 Term and Withdrawal

Subject to FERC approval or acceptance for filing, this Agreement shall take effect on the date permitted by FERC, and shall continue in full force and effect until terminated: (a) by mutual agreement or (b) upon no less than twelve (12) months' written notice by one Party to each of the other Parties, after which time the notifying Party will be withdrawn from the Agreement and the Agreement will continue in full force and effect for the remaining Parties except for such modifications necessary to remove the withdrawn Party.

## ARTICLE III

## OBJECTIVES

### 3.1 Purpose

The purpose of this Agreement is to provide a contractual basis for coordinating the operation and maintenance of the power supply resources of the Operating Companies to achieve economies and efficiencies consistent with the provision of reliable electric service and an equitable sharing of the benefits and costs of such coordinated arrangements. This Agreement is based on the premise that each Operating Company will maintain sufficient long-term power supply resources to meet its Internal Load requirements.

## ARTICLE IV

## SCOPE AND RELATIONSHIP TO OTHER AGREEMENTS AND SERVICES

### 4.1 Scope

The transactions governed by this Agreement are subject to, and may be limited from time to time by applicable state and federal laws, and the regulations, rules, and orders of applicable regulatory agencies regarding the purchase and sale of energy and/or capacity among affiliates. This Agreement is not intended to preclude the Parties from entering into other arrangements between or among themselves or with Third Parties. This Agreement is intended to operate in addition to, not in lieu of, power market transactions and settlements that occur between each Operating Company or the Operating Companies collectively and any applicable regional transmission organizations.

### 4.2 Transmission

This Agreement is intended to apply to the coordination of the power supply resources of, and loads served by, the Operating Companies. It is not intended to apply to the coordination of transmission facilities owned or operated by the Operating Companies.

## ARTICLE V

## AGENT

### 5.1 Agent's Functions

Subject to the direction of the Operating Committee, Agent agrees to:

(a) assist in evaluations concerning power supply resource additions to be installed or acquired by one or more Operating Companies to meet load requirements;

(b) assist in the coordination of the operation and maintenance of the Operating Companies' respective power supply resources;

(c) administer the participation and financial settlement of the Operating Companies in the power markets of the applicable regional transmission organization;

(d) conduct Off-System Purchases and Off-System Sales on behalf of one or more Operating Companies;

(e) prepare and deliver to the Parties a monthly settlement statement and make available as requested supporting details for any Party to inspect for a period time not to exceed three (3) years from the date expenses were incurred or revenues received;

(f) acquire and coordinate transmission and ancillary services from affiliated and non-affiliated transmission providers for use with respect to transactions between or among Operating Companies under this Agreement, Off-System Purchases and Off-System Sales;

(g) assist in the coordination of the Operating Companies' procurement of, but not necessarily limited to, fuel, consumables, emission allowances and transportation services; and

(h) perform such other activities and duties as may be requested from time to time by a Party or Parties.

5.2 **Appointment and Acceptance of Authority; Delegation of Duties**

**5.2 (a) Appointment of Agent**

As of the effective date of this Agreement as specified in Section 2.0, the Operating Companies delegate to AEPSC as the Agent and AEPSC, as the Agent, hereby accepts responsibility and authority for the duties listed in Section 5.1 and elsewhere in this Agreement and shall perform each of those duties under the direction of the Parties.

5.2 (b) **Delegation of Duties**

With the prior written consent of the other Parties, AEPSC may assign all or a part of its responsibilities under this Agreement to another entity.

## ARTICLE VI

## COMPOSITION AND DUTIES OF THE OPERATING COMMITTEE

### 6.1 Operating Committee

The Operating Committee is the administrative body created to administer this Agreement and shall consist of four (4) members. One member shall be a representative of APC, one member shall be a representative of I&M, one member shall be a representative of KPC, and the fourth member shall be a representative of the Agent. The Agent's representative shall act as the chairman of the Operating Committee and shall be known as the "PCS Manager". With respect to all duties and decisions, the Operating Committee will take such action as reasonably necessary to permit each of the Operating Companies to fulfill its reliability obligations.

### 6.2 Meeting Dates

The Operating Committee shall hold meetings at such times, means, and places as the members shall determine from time to time. Minutes of each Operating Committee meeting shall be prepared and maintained.

### 6.3 Decisions

All decisions of the Operating Committee shall be by a simple majority vote of the members, including proxies.

**6.4 <u>Duties</u>**

The Operating Committee shall have the duties listed below, unless such duties are otherwise assigned by a vote of the Operating Committee to the Agent, in which case the Agent shall perform such duties:

(a) reviewing and providing direction concerning the equitable sharing of costs and benefits under this Agreement among the Operating Companies;

(b) administering and interpreting this Agreement and making any amendments hereto, subject to any necessary regulatory approvals, including such amendments that are proposed in response to a change in regulatory requirements applicable to one or more of the Operating Companies or changes concerning an applicable regional transmission organization;

(c) reviewing and, if necessary, amending the duties and responsibilities of the Agent; and

(d) ensuring coordination for other matters not specifically provided for herein that the Operating Committee considers necessary to the reliable and economic use of each Operating Company's power supply resources.

In the event that an action of the Operating Committee results in a change to the settlement process(es) among the Operating Companies, such modified settlement will normally occur on a prospective basis only, which may include past billing periods back to the beginning of the first full billing month preceding the date of action of the Operating Committee. Such modifications will be subject to the terms of Article IX as applicable.

# ARTICLE VII

## OPERATING COMPANY PLANNING AND OPERATIONS

### 7.1 Operating Company and System Planning

Each Operating Company, with support from the Agent, will be individually responsible for its own capacity planning. Each Operating Company will be responsible for maintaining an adequate level of generation resources to meet its own Internal Load requirements for capacity and energy, including any required reserve margins, and shall bear all of the resulting costs.

The Agent shall assess the adequacy of the power supply resources of the Operating Companies from the perspective of each Operating Company and the Operating Companies collectively, taking into account reserve requirements, capacity status in the applicable regional transmission organization, state-integrated resource plans as applicable, each Operating Company's load forecast, changing regulatory structures and requirements and all other criteria applicable by law or regulation to each Operating Company. The Agent will subsequently make recommendations to each Operating Company regarding the need for additional power supply resources. In making this evaluation, the Agent, in conjunction with each Operating Company, will assess whether economies and efficiencies may be achieved by selecting common power supply resources for more than one Operating Company, subject to regulatory, transmission, economic, and operational constraints and approvals.

Similarly, the Agent, under the direction of the Operating Committee, will assess and make recommendations to each Operating Company as to whether that Operating Company has power supply resources in excess of its needs (short-term or long-term) that could be made available to the other Operating Companies or Third Parties.

Transactions among the Operating Companies for sales and purchases of capacity under this Agreement shall be made as described under Service Schedule A. Notwithstanding any of the foregoing, the actual addition or disposition of power supply resources will be conditioned on compliance with all applicable state and other regulatory requirements and requirements of any applicable regional transmission organization.

7.2 **Generation Resource Outage Planning**

The Agent, on behalf of the Operating Companies, will coordinate the scheduling of planned generation resource outages in order to support reliability and manage costs.

7.3 **Generation Resource Dispatch**

The generation resources of each of the Operating Companies will be dispatched by the Agent under the direction of the applicable regional transmission organization.

7.4 **Regional Transmission Organization Transactions**

Each Operating Company shall be individually responsible for charges it incurs and credits it receives due to its participation in the power markets of a regional transmission organization. Such costs and revenues will be assigned or allocated directly by the regional transmission organization or its agent where practical. The Operating Companies may collectively participate from time to time in specific markets of the regional transmission organization or to meet certain regional transmission or reliability organization requirements, in which case the allocation of resulting revenues and/or costs, if any, will be allocated as specified herein or as otherwise approved by the Operating Committee.

Notwithstanding the foregoing, in the event that two or more Operating Companies collectively participate in the capacity market of an applicable regional transmission organization, meaning that such Operating Companies' resources and load obligations are combined and administered collectively to participate in and satisfy the reliability requirements of the applicable regional transmission organization's capacity market, such participation will be administered and financially settled as described under Schedule A.

7.5 **Capacity Purchases and Sales with Third Parties**

Capacity purchases and capacity sales initiated at the direction of an Operating Company will be directly assigned to that Operating Company whenever reasonably possible.

Any purchases of capacity from a Third Party not directly assigned to an Operating Company will normally be allocated to the Operating Company or Operating Companies with the lowest capacity reserve margin(s) over the applicable period at the time of the transaction.

Any sales of capacity to a Third Party not directly assigned to an Operating Company will normally be allocated among the Operating Companies based upon the Megawatts (MW) of capacity resources each Operating Company has in excess of its capacity obligations and commitments over the applicable period at the time of the transaction.

Notwithstanding the foregoing, capacity purchases and sales that occur under the auction processes of the applicable regional transmission organization will be directly assigned to a specific Operating Company based on the results of such auctions or, if two or more Operating Companies are collectively participating in the regional transmission organization's capacity market, capacity purchases and sales will be allocated to such Operating Companies as specified under Schedule A.

7.6 **Energy Purchases and Sales with Third Parties**

Any energy purchased from, or sold to, a Third Party that is specifically associated with and resulting from capacity allocated in Section 7.5 will be assigned to the purchaser of the capacity.

Energy purchases and sales initiated at the direction of an Operating Company will be directly assigned to that Operating Company whenever reasonably possible.

Any energy purchases from a Third Party not directly assigned to an Operating Company will be allocated among the Operating Companies based on each Operating Company's Internal Load.

Any energy sales to a Third Party not directly assigned to an Operating Company will be allocated among the Operating Companies based upon each Operating Company's hourly energy surplus, as measured by taking the actual hourly output of each Operating Company's resources, including purchases other than Spot Market purchases, and subtracting the Operating Company's Surplus Energy sales and Internal Load, but in no event shall be less than zero (0).

### 7.7 **Surplus Energy Sales between Operating Companies**

An Operating Company will make Surplus Energy available from its power supply resources to another Operating Company for the purposes and to the extent provided by this Agreement as further described under Schedule B.

### 7.8 **Emergency Response**

In the event of a System Emergency, no adverse distinction shall be made between the customers of any of the Operating Companies. Each Operating Company shall, under the direction of the regional transmission organization, make its power supply resources available in response to a System Emergency. Notwithstanding the foregoing, it is understood that transmission constraints or other factors may limit the ability of an Operating Company to respond to a System Emergency.

# ARTICLE VIII

# ASSIGNMENT OF COSTS AND BENEFITS OF COORDINATED OPERATIONS

## 8.1 Service Schedules

The costs and revenues associated with coordinated operations as described in Article VII shall be distributed among the Operating Companies in the manner provided in the Service Schedules utilizing the billing procedures described in Article IX. It is understood and agreed that all such Service Schedules are intended to establish an equitable sharing of costs and/or benefits among the Operating Companies, and that circumstances may, from time to time, require a reassessment of the relative costs and benefits of this Agreement, or of the methods used to apportion costs and benefits of the Service Schedules. Upon an action of the Operating Committee, any of the Service Schedules may be amended as of any date agreed to by the Operating Committee by majority vote, subject to the receipt of any necessary regulatory authorizations.

# ARTICLE IX

# BILLING PROCEDURES

## 9.1 Records

The Agent shall maintain such records as may be necessary to determine the assignment of costs and revenues of coordinated operations pursuant to this Agreement. Such records shall be made available to the Parties upon request for a period not to exceed three (3) years.

9.2 Monthly Statements

As promptly as practicable after the end of each calendar month, the Agent shall prepare a statement setting forth the monthly summary of costs and revenues allocated or assigned to the Operating Companies in sufficient detail as may be needed for settlements under the provisions of this Agreement. As required, the Agent may provide such statements on an estimated basis and then adjust those statements for actual results.

9.3 Billings and Payments

The Agent shall be responsible for all billing between the Operating Companies and other entities with which they engage in Off-System Purchases and Off-System Sales pursuant to this Agreement. Payments among the Operating Companies shall be made by remittance of the net amount billed or by making appropriate accounting entries on the books of the Parties. The entire amount shall be paid when due.

9.4 Taxes

Should any federal, state, or local tax, surcharge or similar assessment, in addition to those that may now exist, be levied upon the electric capacity, energy, or services to be provided in connection with this Agreement, or upon the provider of service as measured by the electric capacity, energy, or services, or the revenue therefrom, such additional amount shall be included in the net billing described in Section 9.3.

9.5 Billing Errors

If the Agent discovers a billing error pertaining to a prior billing for reasons including, but not limited to, missing or erroneous data or calculations, including those caused by meter, computer or human error, a correction adjustment will be calculated. Except as the Operating Committee may authorize in the exercise of reasonable discretion, the correction adjustment shall not be applied to any period earlier than the beginning of the first full billing month preceding the discovery of the error, nor will interest accrue on such adjustment. The correction adjustment will be applied as soon as practicable to the next subsequent regular monthly bill. Any overpaid amount attributed to such billing errors shall be returned by the owing Party upon determination of the correct amount with no interest.

**9.6 Billing Omissions**

If a Party's records reveal that a bill was not delivered, then the Agent may deliver to the appropriate Party a bill within one (1) year from the date on which the bill should have been delivered. Any amounts collected or reimbursed due to such omissions shall exclude interest. The right to payment is waived with respect to any amounts not billed within such a one (1) year period.

**9.7 Billing Disputes**

The Parties shall have the right to dispute the accuracy of any bill or payment for a period not to exceed one month from the date on which the bill was initially delivered. Following this one-month period, the right to dispute a bill is permanently waived for any and all reasons including but not limited to, (a) errors, (b) omissions, (c) Agent's actions, and (d) the Operating Committee's decisions, Agreement interpretations and direction in the administration of the Agreement. Any amounts collected or reimbursed due to such disputes shall exclude interest.

## ARTICLE X

## FORCE MAJEURE

**10.1 Events Excusing Performance**

No Party shall be liable to another Party for or on account of any loss, damage, injury, or expense resulting from or arising out of a delay or failure to perform, either in whole or in part, any of the agreements, covenants, or obligations made by or imposed upon the Parties by this Agreement, by reason of or through strike, work stoppage of labor, failure of contractors or suppliers of materials (including fuel, consumables or other goods and services), failure of equipment, environmental restrictions, riot, fire, flood, ice, invasion, civil war, commotion, insurrection, military or usurped power, order of any court or regulatory agency granted in any *bona fide* legal proceedings or action, or of any civil or military authority either *de facto* or *de jure*, explosion, Act of God or the public enemies, or any other cause reasonably beyond its control and not attributable to its neglect. A Party experiencing such a delay or failure to perform shall use due diligence to remove the cause or causes thereof; however, no Party shall be required to add to, modify or upgrade any facilities, or to settle a strike or labor dispute except when, according to its own best judgment, such action is advisable.

## ARTICLE XI

## DELIVERY POINTS

### 11.1 Delivery Points

All electric energy delivered under this Agreement shall be of the character commonly known as three-phase sixty-cycle energy, and shall be delivered at the various Interconnection Points where the transmission systems of the Operating Companies are interconnected, either directly or through transmission facilities of third parties, at the nominal unregulated voltage designated for such points, and at such other points and voltages as may be determined and agreed upon by the Operating Companies.

# ARTICLE XII

# GENERAL

## 12.1 Adherence to Industry Standards

The Parties agree to make their best efforts to conform to Industry Standards as they affect the implementation of and conduct pertaining to this Agreement.

## 12.2 No Third Party Beneficiaries

This Agreement does not create rights of any character whatsoever in favor of any person, corporation, association, entity or power supplier, other than the Parties, and the obligations herein assumed by the Parties are solely for the use and benefit of the Parties. Nothing in this Agreement shall be construed as permitting or vesting, or attempting to permit or vest, in any person, corporation, association, entity or power supplier, other than the Parties, any rights hereunder or in any of the resources or facilities owned or controlled by the Parties or the use thereof.

## 12.3 Waivers

Any waiver at any time by a Party of its rights with respect to a default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or matter. Any delay, short of the statutory period of limitation, in asserting or enforcing any right under this Agreement, shall not be deemed a waiver of such right.

## 12.4 Successors and Assigns

This Agreement shall inure to the benefit of and be binding upon the Parties only, and their respective successors and assigns, and shall not be assignable by any Party without the written consent of the other Parties except to a successor in the operation of its properties by reason of a reorganization to comply with state or federal restructuring requirements, or a merger, consolidation, sale or foreclosure whereby substantially all such properties are acquired by or merged with those of such a successor.

**12.5 Liability and Indemnification**

SUBJECT TO ANY APPLICABLE STATE OR FEDERAL LAW THAT MAY SPECIFICALLY RESTRICT LIMITATIONS ON LIABILITY, EACH PARTY SHALL RELEASE, INDEMNIFY, AND HOLD HARMLESS THE OTHER PARTIES, THEIR DIRECTORS, OFFICERS AND EMPLOYEES FROM AND AGAINST ANY AND ALL LIABILITY FOR LOSS, DAMAGE OR EXPENSE ALLEGED TO ARISE FROM, OR BE INCIDENTAL TO, INJURY TO PERSONS AND/OR DAMAGE TO PROPERTY IN CONNECTION WITH ITS FACILITIES OR THE PRODUCTION OF TRANSMISSION OF ELECTRIC ENERGY BY OR THROUGH SUCH FACILITIES, OR RELATED TO PERFORMANCE OR NON-PERFORMANCE OF THIS AGREEMENT, INCLUDING ANY NEGLIGENCE ARISING HEREUNDER. IN NO EVENT SHALL ANY PARTY BE LIABLE TO ANOTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WITH RESPECT TO ANY CLAIM ARISING OUT OF THIS AGREEMENT.

**12.6 Headings**

The descriptive headings of the Articles, Sections and Service Schedules of this Agreement are used for convenience only, and shall not modify or restrict any of the terms and provisions thereof.

**12.7 Notice**

Any notice or demand for performance required or permitted under any of the provisions of this Agreement shall be deemed to have been given on the date such notice, in writing, is deposited in the U.S. mail, postage prepaid, certified or registered mail, addressed to the Parties at the addresses specified below:

Appalachian Power Company
1 Riverside Plaza
Columbus, Ohio 43215

Indiana Michigan Power Company
1 Riverside Plaza
Columbus, Ohio 43215

Kentucky Power Company
1 Riverside Plaza
Columbus, Ohio 43215

AEP Service Corporation
1 Riverside Plaza
Columbus, Ohio 43215

or in such other form or to such other address as the Parties may stipulate.

## ARTICLE XIII

## REGULATORY APPROVAL

### 13.1 Regulatory Authorization

This Agreement is subject to and conditioned upon its approval or acceptance for filing without material condition or modification by the FERC. In the event that this Agreement is not so approved or accepted for filing in its entirety or without conditions or modifications unacceptable to any Party, or the FERC subsequently modifies this Agreement upon complaint or upon its own initiative (as provided for in Section 13.2), any Party may, irrespective of the notice provisions in Section 2.1, withdraw from this Agreement by giving thirty (30) days' advance written notice to the other Parties.

### 13.2 Changes

It is contemplated by the Parties that it may be appropriate from time to time to change, amend, modify, or supplement this Agreement, including the Service Schedules and any other attachments that may be made a part of this Agreement, to reflect changes in operating practices or costs of operations or for other reasons. Any such changes to this Agreement shall be in writing executed by the Parties and subject to approval or acceptance for filing by the FERC.

It is the intent of the Parties that, to the maximum extent permitted by law, the provisions of this Agreement shall not be subject to change under Sections 205 and 206 absent the written agreement of the Parties, and that the standard of review for changes unilaterally proposed by a Party, a Third Party, or the Commission, acting sua sponte or at the request of a Third Party, shall be the public interest standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956), *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County*, 128 S.Ct. 2733 (2008), and *NRG Power Marketing, LLC v. Maine Public Utilities Commission*, 130 S.Ct. 693 (2010).

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed and attested by their duly authorized officers on the day and year first above written.

APPALACHIAN POWER COMPANY

By: ______________________________

Title: ______________________________

INDIANA MICHIGAN POWER COMPANY

By: ______________________________

Title: ______________________________

KENTUCKY POWER COMPANY

By: ______________________________

Title: ______________________________

AMERICAN ELECTRIC POWER SERVICE CORPORATION

By: ______________________________

Title: ______________________________

## SERVICE SCHEDULE A

## COLLECTIVE PARTICIPATION IN THE APPLICABLE REGIONAL TRANSMISSION ORGANIZATION CAPACITY MARKET

### A1– Duration

This Service Schedule A shall become effective and binding when the Agreement of which it is a part becomes effective, and shall continue in full force and effect throughout the duration of the Agreement unless terminated or suspended.

### A2 – Availability of Service

This Service Schedule A governs the administration and settlement of capacity during such times that multiple Operating Companies are participating, on a collective basis, in the capacity market of the applicable regional transmission organization as specified under Section 7.4.

### A3 – Capacity Sales between Operating Companies

When an Operating Company is expected to have surplus capacity and another Operating Company has capacity that is expected to be insufficient or marginal in terms of meeting its capacity obligations during one or more future regional transmission organization planning years, the Agent shall evaluate the feasibility of a capacity transaction between the Operating Companies. Such evaluations shall take into account the rules, requirements and financial implications of the applicable regional transmission organization.

If such a transaction is recommended by the Agent and approved by the affected Operating Companies, the transaction will be for one or more specific future regional transmission organization planning years.

The Capacity Transfer Price for any such transaction shall be the prevailing market price, defined as the applicable regional transmission organization's most recent capacity auction clearing price for the delivery year or delivery years for which such an auction has already occurred.

If, for a given delivery year, such an auction has not yet occurred, the Capacity Transfer Price shall be the clearing price that results from the first such auction for the applicable delivery year(s). Such transactions do not provide the purchaser with any entitlements to energy associated with this capacity.

All other capacity transactions between the Operating Companies will be made under such terms and at a Capacity Transfer Price that is mutually agreeable to the Operating Companies and subject to any necessary regulatory approvals.

**A4 – Auction Sales Revenues**

Any revenues resulting from capacity sold into the applicable regional transmission organization's planning year(s) capacity auction will be allocated among the Operating Companies based upon the Megawatts (MWs) of capacity resources each Operating Company has in excess of its capacity obligations and commitments over such planning year(s) at the time the auction occurs. Such allocation will occur regardless of which actual units of the Operating Companies are cleared and/or designated to fulfill the auction commitment.

**A5 – Delivery Year and Post-Delivery Year Settlement**

During a given regional transmission organization planning year, i.e., the delivery year, the Agent will manage the capacity resources needed to meet the combined Operating Companies' capacity obligations and commitments to the regional transmission organization.

If capacity resource performance charges are assessed by the regional transmission organization for a given delivery year, the total net charge will be allocated among the Operating Companies based upon each Operating Company's contribution to the total charge.

Each Operating Company's contribution to the total charge will be determined by computing a total MW position for each Operating Company by subtracting its total capacity obligation in MWs from its total capacity resources in MWs. This result will be further adjusted by adding or subtracting as applicable the net total MWs of actual under-performance or over-performance of each Operating Company's capacity resources during the delivery year as computed by the regional transmission organization.

Any Operating Company with a resulting net short MW position, meaning that their capacity obligation MWs are greater than their capacity resource MWs including any MWs of over-performance or under-performance, will be allocated a share of the total net performance charge from the regional transmission organization based on the Operating Company's net short MW position.

If the total net charge assessed by the regional transmission organization is greater than zero, such calculations and the corresponding allocation will be made following the end of the applicable delivery year.

If a total net charge is assessed by the regional transmission organization is greater than zero, even though each Operating Company has a computed contribution of zero (0) as described above, the total net charge will be allocated utilizing each Operating Company's delivery year capacity obligation MWs.

# SERVICE SCHEDULE B
# SURPLUS ENERGY SALES

**B1 – Duration**

This Service Schedule B shall become effective and binding when the Agreement of which it is a part becomes effective, and shall continue in full force and effect throughout the duration of the Agreement unless terminated or suspended.

**B2 – Availability of Service**

This Service Schedule B governs sales of energy made pursuant to Section 7.7 of the Agreement, which are sales of energy not associated with sales of capacity. Surplus Energy sales shall be as defined in Section 1.21. Such sales will be made only in hours in which the Internal Load of an Operating Company ("Purchaser") exceeds the actual output of its generation resources, including any assigned purchases and the Purchaser's allocation of system purchases, as described in Section 7.6, but excluding Spot Market purchases.

If such a condition exists, the available Surplus Energy is the hourly amount in MegaWatt-hours ("MWhs") that an Operating Company's ("Seller's") generation resources, including any assigned purchases and Seller's allocation of off system purchases, excluding any Spot Market purchases, exceeds the sum of the Seller's Internal Load requirements and assigned Off System Sales.

To the extent that such Surplus Energy is available, the Surplus Energy Transfer Price will be computed, and the Surplus Energy Sale will then occur if the Surplus Energy Transfer Price as described in Section B3 is less than the Avoided Cost of the Purchaser. The hourly sales of Surplus Energy MWhs will be limited to the lesser of (a) the amount of Surplus Energy available from the Seller(s) or (b) the amount required to fulfill the Internal Load deficit of the Purchaser(s).

**B3 – Surplus Energy Price**

For any sale that occurs in accordance with Section B2, the Purchaser shall pay the Seller the Surplus Energy Price ("SEP"), defined as the following:

SEP = One-half the sum of (a) the Seller's Surplus Energy Incremental Cost Rate and (b) the Purchaser's Avoided Cost Rate

Where:

(a) the Seller's Surplus Energy Incremental Cost Rate is the Seller's Surplus Energy Incremental Costs associated with all of the Seller's hourly available Surplus Energy, expressed in total dollars divided by the MWhs of all such available Surplus Energy; and

(b) the Purchaser's Avoided Cost Rate is the hourly Avoided Cost expressed in dollars per MWh.

The resulting SEP, expressed in dollars per MWh, is multiplied by the total Surplus Energy MWhs sold to determine the amount of Surplus Energy purchased.

**B4 – General**

No Surplus Energy transaction will occur in an hour if the SEP equals or exceeds the Purchaser's Avoided Cost Rate. Surplus Energy sales that occur in hours between multiple Purchasers and/or multiple Sellers shall be allocated based on the respective available Surplus Energy MWhs of the Sellers and the respective Internal Load deficit MWhs of the Purchasers.

# KENTUCKY POWER COMPANY

## RATE SCHEDULE NO. 200

**Joint Tariff Common Name**: "Power Cost Sharing Agreement among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company and American Electric Power Service Corporation"

**Designated Filing Company**: Appalachian Power Company (APCo)

**Designated Filing Company Tariff Title**: APCo Rate Schedules and Service Agreements Tariffs

**Designated Filing Company Tariff Program**: FPA (Cost Based)

**Designated Filing Company Tariff Record Adopted by Reference (Record Content Description/Tariff Record Title):** Rate Schedule No. 200, Power Cost Sharing Agreement.

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, and American Electric Power Service Corporation (in an agency role) arrange internal energy and capacity transactions.

# INDIANA MICHIGAN POWER COMPANY

## RATE SCHEDULE NO. 200

**Joint Tariff Common Name**: "Power Cost Sharing Agreement among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company and American Electric Power Service Corporation"

**Designated Filing Company**: Appalachian Power Company (APCo)

**Designated Filing Company Tariff Title**: APCo Rate Schedules and Service Agreements Tariffs

**Designated Filing Company Tariff Program**: FPA (Cost Based)

**Designated Filing Company Tariff Record Adopted by Reference (Record Content Description/Tariff Record Title):** Rate Schedule No. 200, Power Cost Sharing Agreement.

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, and American Electric Power Service Corporation (in an agency role) arrange internal energy and capacity transactions.

## Attachment B

Bridge Agreement Among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, AEP Generation Resources Inc. and American Electric Power Service Corporation as Agent

1. Tariff Record, APCo – FERC Rate Schedule No. 201
2. Tariff Record, KPCo – FERC Rate Schedule No. 201
3. Tariff Record, I&M – FERC Rate Schedule No. 201
4. Tariff Record, AEP Generation Resources Inc. – FERC Rate Schedule No. 2
5. Tariff Record, OPCo – FERC Rate Schedule No. 200

# RATE SCHEDULE No. 201

## BRIDGE AGREEMENT

among

APPALACHIAN POWER COMPANY,

INDIANA MICHIGAN POWER COMPANY,

KENTUCKY POWER COMPANY,

OHIO POWER COMPANY,

AEP GENERATION RESOURCES INC.

and

AMERCIAN ELECTRIC POWER SERVICE CORPORATION

as Agent

# BRIDGE AGREEMENT

**THIS AGREEMENT** is made and entered into as of this __ day of __________, 2013, by and among Appalachian Power Company ("APCo"), Indiana Michigan Power Company ("I&M"), Kentucky Power Company ("KPCo"), Ohio Power Company ("OPCo" and, collectively with APCo, I&M and KPCo, the "Operating Companies"), AEP Generation Resources Inc. ("AEP Generation Resources") and American Electric Power Service Corporation ("Agent" and, collectively with APCo, I&M, KPCo, OPCo and AEP Generation Resources, the "Parties").

## RECITALS:

**WHEREAS**, the Operating Companies are each wholly-owned subsidiaries of American Electric Power Company, Inc. ("AEP") and members of the Interconnection Agreement ("Pool Agreement"), which has been in effect since 1951;

**WHEREAS**, each member of the Pool Agreement has provided notice to the other members (and to the Agent) that it will terminate its participation in the Pool Agreement in accordance with the termination provisions thereof;

**WHEREAS**, pursuant to the Pool Agreement, the Operating Companies have made joint wholesale purchases and sales of physical power (at market based rates), and of financial power, for the purpose of hedging the output of the Operating Companies' generation assets, some of which will not expire until after the Pool Agreement terminates ("Legacy Hedge Contracts");

**WHEREAS**, in addition to the Legacy Hedge Contracts, the Operating Companies have made other joint wholesale purchases and sales of physical power (at market based rates), and of financial power and related commodities, pursuant to the Pool Agreement under joint purchase and sale contracts, some of which will also not expire until after the Pool Agreement terminates (collectively the "Legacy Trading Contracts");

**WHEREAS**, the Operating Companies desire to jointly share in the gains and losses resulting from the settlement and liquidation in the market of the Legacy Hedge Contracts and Legacy Trading Contracts (collectively, the "Legacy Off-System Sales Portfolio");

**WHEREAS**, the Operating Companies have previously elected to fulfill their capacity obligations to PJM pursuant to the Fixed Resource Requirement ("FRR") alternative under the

PJM Reliability Assurance Agreement through and including Planning Year 2014/2015 (the "Operating Companies' FRR Obligation") and desire to continue to fulfill those obligations;

**WHEREAS,** the Public Utilities Commission of Ohio has authorized OPCo to conduct an internal corporate reorganization under which its generation and power marketing businesses will be separated from its transmission and distribution businesses consistent with Ohio restructuring law and OPCo's structural corporate separation plan;

**WHEREAS**, for the benefit of the Operating Companies, this Agreement commits the capacity resources of AEP Generation Resources, which it acquired from OPCo as a result of corporate separation and pursuant to the Asset Contribution Agreement, to fulfilling the Operating Companies' FRR Obligation through and including Planning Year 2014/2015; and

**WHEREAS**, pursuant OPCo's corporate separation plan and the terms of the Asset Contribution Agreement between OPCo and AEP Generation Resources, AEP Generation Resources will succeed to all of OPCo's right, title and interest in and to its generation and power marketing business (excepting the limited generation assets specifically retained by OPCo) and to all associated liabilities, including all of OPCo's allocations of (1) gains and losses from the Legacy Off-System Sales Portfolio (2) the Operating Companies' FRR Obligations and (3) FRR Charges and Credits and (4) all costs and liabilities associated with the foregoing, from which it will indemnify, defend and hold harmless OPCo pursuant to the terms of the Asset Contribution Agreement.

**NOW, THEREFORE**, in consideration of the premises and the mutual covenants and agreements herein set forth, the Parties mutually agree as follows:

## ARTICLE I
## DEFINITIONS

1.1 **Capacity Resources** means, in respect of any Planning Year, the megawatts of net capacity from the Operating Companies and AEP Generation Resources eligible to satisfy the Operating Companies' FRR Obligation.

1.2 **Capacity Requirement** means, in respect of any Planning Year, the megawatts of net capacity from the Operating Companies and AEP Generation Resources required to satisfy the Operating Companies' FRR Obligation.

1.3 **Commission** means the Federal Energy Regulatory Commission.

1.4 **Final MLR** means, for each member of the Pool Agreement, the arithmetic average of the member's MLR for each of the twelve full calendar months preceding the termination of the Pool Agreement.

1.5 **Member Demand** means Member Load Obligation determined on a clock-hour integrated kilowatt basis, as set forth in Section 5.4 of the Pool Agreement.

1.6 **Member Load Obligation** means an Operating Company's internal load plus any firm power sales to un-affiliated and affiliated companies other than the Operating Companies, principally characterized by the Operating Company assuming the load obligation as its own firm power commitment and by the Operating Company retaining advantages accruing from meeting the load, as set forth in Section 5.2 of the Pool Agreement.

1.7 **Member Load Ratio** or **MLR** means the ratio of a particular Operating Company's Member Maximum Demand in effect for a calendar month to the sum of all of the Operating Companies' Member Maximum Demands in effect for such month, as set forth in Section 5.6 of the Pool Agreement.

1.8 **Member Maximum Demand** means the Member Maximum Demand in effect for a calendar month for a particular Operating Company, which shall be equal to the maximum Member Demand experienced by said Operating Company during the twelve consecutive calendar months next preceding such calendar month, as set forth in Section 5.5 of the Pool Agreement.

1.9 **Operating Committee** means the administrative body established pursuant to Article IV for the purposes therein specified.

1.10 **PJM** means PJM Interconnection, LLC, a regional transmission organization approved by the Commission.

1.11 **Planning Year** means each period of June 1 through May 31 of the following year during the term of this Agreement, in whole or in part, which period constitutes a planning year as defined by PJM.

1.12 **FRR Charges and Credits** means all PJM charges and credits arising from or relating to the Operating Companies' FRR Obligation, including but not limited to RPM auction revenues and cost of compliance with the Operating Companies' FRR Obligations under the PJM Reliability Assurance Agreement.

## ARTICLE II

## TERM OF AGREEMENT

2.1 Term. Subject to Commission approval or acceptance for filing, this Agreement shall take effect upon the effective date of the corporate separation of OPCo's generation and power marketing businesses from its transmission and distribution businesses and shall continue in full force and effect until the later of the settlement of the Legacy Off-System Sales Portfolio or the end of the Operating Companies' FRR Obligation under this Agreement, provided, however, that the Parties' obligations under Article V will only apply to the period starting on the effective date of this Agreement and ending May 31, 2015. The Agent will provide notice to the Operating Companies and AEP Generation Resources of the end of the term of this Agreement.

## ARTICLE III

## AGENT

3.1 Delegation and Acceptance of Authority. The Operating Companies and AEP Generation Resources hereby delegate to the Agent and the Agent hereby accepts responsibility and authority for the duties specified in this Agreement. Except as herein expressly established otherwise, the Agent shall perform each of those duties in consultation with the Operating Committee.

3.2 Reporting. The Agent shall provide periodic summary reports of its activities under this Agreement to the Parties and shall keep the Parties and the Operating Committee informed of situations or problems that may materially affect the outcome of these activities. Furthermore, the Agent agrees to report to the Parties and to the Operating Committee in such additional detail as is requested regarding specific issues or projects under its supervision as Agent. The Agent will carry out its responsibilities under this paragraph in accordance with the regulations of the Commission.

## ARTICLE IV

## OPERATING COMMITTEE

4.1 Operating Committee. By written notice to the other Parties, each Party shall name one representative ("Representative") and one alternate to act for it in matters pertaining to this Agreement and its implementation. A Party may change its Operating Representative or alternate at any time by written notice to the other Parties. The Operating Representatives of the respective Parties, or their alternates, shall comprise the Operating Committee. The Agent's representative shall act as the chairman of the Operating Committee ("Chairman"). All decisions of the Operating Committee shall be by a simple majority vote of the Operating Representatives or their alternates, except that the Chairman shall vote only if the votes of the other Operating Representatives are equally divided.

4.2 **Subcommittees**. The Chairman, or any other Operating Representative, subject to a majority of the Operating Committee concurring, may create a subcommittee or working group of the Operating Committee ("Subcommittee"). Membership in a Subcommittee will be determined by the Operating Committee. Subcommittees shall perform the duties assigned to them and shall report to the Operating Committee on all matters referred to them. Actions of a Subcommittee shall be reported in the form of proposals or recommendations to the Operating Committee and shall have no force or binding effect except by action of the Operating Committee.

4.3 **Meeting Dates**. The Operating Committee and each Subcommittee thereof shall hold meetings at such times, means, and places as the members shall determine from time to time. Minutes of each Operating Committee and Subcommittee meeting shall be prepared and maintained.

4.4 **Information for Use of the Agent**. The Parties shall cooperate in providing to the Agent the information it reasonably requests and shall supplement or correct any such information on a timely basis.

## ARTICLE V
## FRR OBLIGATION

5.1 **Annual Capacity Resource Planning.** Prior to each Planning Year, the Agent will analyze the impacts on the Operating Companies' FRR Obligation of projected and realized changes to Capacity Resources and Capacity Requirements and prepare a recommended Capacity Resource plan for the Operating Companies' FRR Obligation. The plan will describe whether additional Capacity Resources should be made available to the market and whether additional Capacity Resources should be procured for the applicable Planning Year. The portion of the Capacity Resource plan that applies to the Capacity Resources of the Operating Companies is subject to their unanimous written approval in consultation with the Agent. The portion of the Capacity Resource plan that applies to the Capacity Resources of AEP Generation Resources is subject to its written approval in consultation with the Agent The Agent will have no duty to provide to AEP Generation Resources any portion of the Capacity Resource plan that applies to the Capacity Resources of the Operating Companies. If a Capacity Resource plan submitted by the Agent is rejected by the Operating Companies or by AEP Generation Resources, then the Agent will revise and resubmit the plan in accordance with the foregoing procedures until the plan is accepted by both the Operating Companies and AEP Generation Resources.

5.2 **Capacity Resource Plan Implementation**. During each Planning Year, the Agent will collect Capacity Resource information from the Operating Companies and AEP Generation Resources and may alter the combination of Capacity Resources in the plan based on that information to maintain the Operating Companies' compliance with the PJM Reliability Assurance Agreement and to minimize compliance charges to the extent reasonably practicable. The Agent will implement the Capacity Resource plan for the Operating Companies' FRR Obligation, and any plan adjustments, with PJM. During each Planning Year, the Operating Companies and AEP Generation Resources will each perform testing of their Capacity Resources in accordance with the PJM Reliability Assurance Agreement and in consultation with the Agent.

5.3 **Allocation of Capacity-Related Charges and Credits**. The Agent will allocate PJM charges and credits associated with (1) Capacity Resource purchases and sales (excepting only those purchases and sales related to the generation assets specifically retained by OPCo) and (2) FRR Charges and Credits, among APCo, KPCo, I&M and AEP Generation Resources, as successor to the FRR obligations of OPCo, based on the Final MLR.

5.4 **Other Agreements**. The fulfillment of the Operating Companies' FRR Obligation, including the allocation of any associated charges and credits, for the Planning Years covered by this Article V, shall be governed by this Agreement and not by the Power Cost Sharing Agreement among APCo, KPCo, I&M and the Agent.

## ARTICLE VI

## LEGACY CONTRACTS

6.1 **Legacy Trading Portfolio**. The Agent will settle and liquidate the Legacy Trading Portfolio in the market in accordance with the terms of the Legacy Trading Contracts and Legacy Hedge Contracts.

6.1.1 **Legacy Trading Contracts**. The Agent shall allocate gains and losses arising from the settlement and liquidation of the Legacy Trading Contracts in the market among APCo, KPCo, I&M and AEP Generation Resources, as successor to the generation-related obligations of OPCo, based on the Final MLR. The Agent may, from time to time, enter into new transactions on behalf of the Operating Companies that are dedicated to the portfolio of Legacy Trading Contracts with the intent of reducing the tenor and risk of that portfolio, and those additional transactions will also be deemed Legacy Trading Contracts, provided that the Agent will not enter into any such transaction whose term extends beyond the final delivery month of the portfolio of Legacy Trading Contracts on the effective date of this Agreement.

**6.1.2** **Legacy Hedge Contracts**. The Agent shall allocate gains and losses arising from the settlement and liquidation of the Legacy Hedge Contracts in the market to (1) APCo, KPCo and I&M collectively (the "Integrated AEP-East Utilities") and (2) AEP Generation Resources, as successor to the generation-related obligations of OPCo, in a ratable manner based on the respective forecasted spot market energy sales of the Integrated AEP-East Utilities, collectively, and AEP Generation Resources, determined as of the effective date of this Agreement. The forecasted spot market energy sales for the Integrated AEP-East Utilities, collectively, and AEP Generation Resources will be calculated in monthly increments based on the forecasted output of their owned or contracted generation minus forecasted internal load. The forecasted internal load for the Integrated AEP-East Utilities is defined as the forecasted amount of megawatt-hours associated with their retail and firm wholesale loads in the aggregate, using the most recent forecast available as of the effective date of this Agreement. The forecasted internal load for AEP Generation Resources is defined as the forecasted amount of megawatt-hours to be provided by AEP Generation Resources to OPCo, under the Standard Service Offer Supply Agreement between those Parties, and to any non-Parties, under other firm wholesale contracts, if any, determined as of the effective date of this Agreement. The monthly forecasts will be calculated through and including the final delivery month of the portfolio of Legacy Hedge Contracts. Any allocation of gains and losses to the Integrated AEP-East Utilities will be shared among APCo, KPCo and I&M in a ratable manner based on their forecasted spot market energy sales. If the forecasted internal load of either the Integrated AEP-East Utilities or AEP Generation Resources exceeds the forecasted output of their respective owned or controlled generation for a given month, then the Integrated AEP-East Utilities or AEP Generation Resources, as applicable, will not receive any allocation of gains or losses for that month, unless both are in this position in which case gains or losses will be allocated ratably among APCo, KPCo, I&M and AEP Generation Resources in proportion to the forecasted output of their owned or contracted generation.

6.2 **Legacy Trading Contracts Administration**. The Agent will administer the scheduling, billing, settlement and liquidation in the market of the Legacy Off-System Sales Portfolio, and will provide such information, reports and position data to each Party as is requested regarding the Party's allocation of the Legacy Off-System Sales Portfolio. Any gains and losses arising from the liquidation of the Legacy Off-System Sales Portfolio shall be governed and allocated by this Agreement and not by the Power Cost Sharing Agreement among APCo, KPCo, I&M and the Agent.

## ARTICLE VII
## BILLING PROCEDURES

7.1 **Records**. The Agent will maintain the records necessary to determine the allocation of all gains, losses, charges and credits under this Agreement. Such records shall be made available to the Operating Companies and to AEP Generation Resources upon request for a period not to exceed three (3) years.

7.2 **Monthly Statements**. As promptly as practicable after the end of each calendar month, the Agent shall prepare a statement setting forth the monthly summary of all gains, losses, charges and credits allocated or assigned to the Parties in sufficient detail as may be needed for settlements under the provisions of this Agreement. As required, the Agent may provide such statements on an estimated basis and then adjust those statements for actual results.

7.3 **Billings and Payments**. The Agent shall handle all billing between the Parties and non-Parties regarding the Legacy Contract Portfolio and the Operating Companies' FRR Obligation. Payments by the Operating Companies and AEP Generation Resources shall be made by remittance of the net amount billed to the applicable Party or by making appropriate accounting entries on the books of the Parties. The entire amount shall be paid when due.

7.4 **Taxes**. Should any federal, state, or local tax, surcharge or similar assessment, in addition to those that may now exist, be levied upon the services to be provided in connection with this Agreement, or upon the provider of service as measured by the services or the revenue therefrom, such additional amount shall be included in the billing described in this Article VII.

7.5 **Billing Errors**. If the Agent or any other Party discovers a billing error pertaining to a prior billing for reasons including, but not limited to, billing omissions or missing or erroneous data or calculations (including those caused by meter, computer or human error), a corrective adjustment will be calculated by the Agent. Except as the Operating Committee may authorize in the exercise of reasonable discretion, the correction adjustment shall not be applied to any period earlier than the beginning of the first full billing month preceding the discovery of the error, nor will interest accrue on such adjustment. The corrective adjustment will be applied as soon as practicable to the next subsequent regular monthly bill. Any overpaid amount attributed to such billing errors shall be returned by the owing Party upon determination of the correct amount with no interest.

7.6 **Billing Disputes**. The Parties shall have the right to dispute the accuracy of any bill or payment for a period not to exceed one month from the date on which the bill was initially delivered. Following this one month period, the right to dispute a bill is permanently waived for any and all reasons including but not limited to, (a) errors, (b) omissions, (c) Agent's actions, and (d) the Operating Committee's decisions, Agreement interpretations and direction in the administration of the Agreement. Any amounts collected or reimbursed due to such disputes shall exclude interest.

## ARTICLE VIII
## FORCE MAJEURE

8.1 **Events Excusing Performance**. No Party shall be liable to another Party for or on account of any loss, damage, injury, or expense resulting from or arising out of a delay or failure to perform, either in whole or in part, any of the agreements, covenants, or obligations made by or imposed upon the Parties by this Agreement, by reason of or through strike, work stoppage of labor, failure of contractors or suppliers of materials (including fuel, consumables or other goods and services), failure of equipment, environmental restrictions, riot, fire, flood, ice, invasion, civil war, commotion, insurrection, military or usurped power, order of any court or regulatory agency granted in any *bona fide* legal proceedings or action, or of any civil or military authority either *de facto* or *de jure*, explosion, Act of God or the public enemies, or any other cause reasonably beyond its control and not attributable to its neglect. A Party experiencing such a delay or failure to perform shall use due diligence to remove the cause or causes thereof; however, no Party shall be required to add to, modify or upgrade any facilities, or to settle a strike or labor dispute except when, according to its own best judgment, such action is advisable.

## ARTICLE IX

## GENERAL

9.1 **No Third Party Beneficiaries**. This Agreement does not create rights of any character whatsoever in favor of any person, corporation, association, entity or customer, other than the Parties, and the obligations herein assumed by the Parties are solely for the use and benefit of the Parties. Nothing in this Agreement shall be construed as permitting or vesting, or attempting to permit or vest, in any person, corporation, association, entity or customer, other than the Parties, any rights hereunder or in any of the resources or facilities owned or controlled by the Parties or the use thereof.

9.2 **Waivers**. Any waiver at any time by a Party of its rights with respect to a default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or matter. Any delay, short of the statutory period of limitation, in asserting or enforcing any right under this Agreement, shall not be deemed a waiver of such right, except as otherwise set forth herein.

9.3 **Successors and Assigns**. This Agreement shall inure to the benefit of and be binding upon the Parties only, and their respective successors and assigns, and shall not be assignable by any Party without the written consent of the other Parties except to a successor in the operation of its properties by reason of a reorganization, to comply with state or federal restructuring requirements, or a merger, consolidation, sale or foreclosure whereby substantially all such properties are acquired by or merged with those of such a successor.

9.4 **Liability and Indemnification**. SUBJECT TO ANY APPLICABLE STATE OR FEDERAL LAW THAT MAY SPECIFICALLY RESTRICT LIMITATIONS ON LIABILITY, EACH PARTY SHALL RELEASE, INDEMNIFY, AND HOLD HARMLESS THE OTHER PARTIES, THEIR DIRECTORS, OFFICERS AND EMPLOYEES FROM AND AGAINST ANY AND ALL LIABILITY FOR LOSS, DAMAGE OR EXPENSE ALLEGED TO ARISE FROM, OR BE INCIDENTAL TO, INJURY TO PERSONS AND/OR DAMAGE TO PROPERTY IN CONNECTION WITH ITS FACILITIES OR THE PRODUCTION OR TRANSMISSION OF ELECTRIC ENERGY BY OR THROUGH SUCH FACILITIES, OR

RELATED TO PERFORMANCE OR NON-PERFORMANCE OF THIS AGREEMENT, INCLUDING ANY NEGLIGENCE ARISING HEREUNDER. IN NO EVENT SHALL ANY PARTY BE LIABLE TO ANOTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WITH RESPECT TO ANY CLAIM ARISING OUT OF THIS AGREEMENT.

**9.5** **Notice**. Any notice or demand for performance required or permitted under any of the provisions of this Agreement shall be deemed to have been given on the date such notice, in writing, is delivered by hand or deposited in the U.S. mail, postage prepaid, addressed to the Parties at their principal place of business at 1 Riverside Plaza, Columbus, Ohio 43215, or in such other form or to such other address as the Parties may stipulate.

**9.6** **Interpretation**. In this Agreement: (a) unless otherwise specified, references to any Article or Section are references to such Article or Section of this Agreement; (b) the singular includes the plural and the plural includes the singular; (c) unless otherwise specified, each reference to requirement of any governmental entity or regional transmission organization includes all provisions amending, modifying, supplementing or replacing such governmental entity or regional transmission organization from time to time; (d) the words "including," "includes" and "include" shall be deemed to be followed by the words "without limitation"; (e) unless otherwise specified, each reference to any agreement includes all amendments, modifications, supplements, and restatements made to such agreement from time to time which are not prohibited by this Agreement; (f) the descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict the terms and provisions thereof; and (g) "herein," "hereof," "hereto" and "hereunder" and similar terms refer to this Agreement as a whole.

## ARTICLE X

## REGULATORY APPROVAL

**10.1** **Regulatory Authorization**. This Agreement is subject to and conditioned upon its approval or acceptance for filing without material condition or modification by the Commission. In the event that this Agreement is not so approved or accepted for filing in its entirety without modification, or the Commission subsequently modifies this Agreement upon complaint or upon its own initiative, any Party may, irrespective of the notice provisions in

Section 2.1, withdraw from this Agreement by giving thirty (30) days' advance written notice to the other Parties.

**10.2** **Changes**. It is contemplated by the Parties that it may be appropriate from time to time to change, amend, modify, or supplement this Agreement to reflect changes in operating practices, PJM procedures or for other reasons. Any such changes to this Agreement shall be in writing executed by the Parties and subject to approval or acceptance for filing by the Commission. It is the intent of the Parties that, to the maximum extent permitted by law, the provisions of this Agreement shall not be subject to change under Sections 205 and 206 absent the written agreement of the Parties, and that the standard of review for changes unilaterally proposed by a Party, a non-Party or the Commission, acting sua sponte or at the request of a non-Party, shall be the public interest standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956), *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County*, 128 S.Ct. 2733 (2008), and *NRG Power Marketing, LLC v. Maine Public Utilities Commission*, 130 S.Ct. 693 (2010).

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed and attested by their duly authorized officers on the day and year first above written.

APPALACHIAN POWER COMPANY

By: ______________________________

Title: ______________________________

INDIANA MICHIGAN POWER COMPANY

By: ______________________________

Title: ______________________________

KENTUCKY POWER COMPANY

By: ______________________________

Title: ______________________________

OHIO POWER COMPANY

By: ______________________________

Title: ______________________________

AEP GENERATION RESOURCES INC.

By: ______________________________

Title: ______________________________

AMERICAN ELECTRIC POWER SERVICE CORPORATION

By: ______________________________

Title: ______________________________

# KENTUCKY POWER COMPANY

## RATE SCHEDULE NO. 201

**Joint Tariff Common Name:** "Bridge Agreement"

**Designated Filing Company:** Appalachian Power Company (APCo)

**Designated Filing Company Tariff Title:** APCo Rate Schedules and Service Agreements Tariffs

**Designated Filing Company Tariff Program:** FPA (Cost Based)

**Designated Filing Company Tariff Record Adopted by Reference (Record Content Description/Tariff Record Title):** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

# INDIANA MICHIGAN POWER COMPANY

## RATE SCHEDULE NO. 201

**Joint Tariff Common Name:** "Bridge Agreement"

**Designated Filing Company:** Appalachian Power Company (APCo)

**Designated Filing Company Tariff Title:** APCo Rate Schedules and Service Agreements Tariffs

**Designated Filing Company Tariff Program:** FPA (Cost Based)

**Designated Filing Company Tariff Record Adopted by Reference (Record Content Description/Tariff Record Title):** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

# AEP GENERATION RESOURCES INC.

## RATE SCHEDULE NO. 2

**Joint Tariff Common Name:** "Bridge Agreement"

**Designated Filing Company:** Appalachian Power Company (APCo)

**Designated Filing Company Tariff Title:** APCo Rate Schedules and Service Agreements Tariffs

**Designated Filing Company Tariff Program:** FPA (Cost Based)

**Designated Filing Company Tariff Record Adopted by Reference (Record Content Description/Tariff Record Title):** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

# OHIO POWER COMPANY

## RATE SCHEDULE NO. 200

**Joint Tariff Common Name:** "Bridge Agreement"

**Designated Filing Company:** Appalachian Power Company (APCo)

**Designated Filing Company Tariff Title:** APCo Rate Schedules and Service Agreements Tariffs

**Designated Filing Company Tariff Program:** FPA (Cost Based)

**Designated Filing Company Tariff Record Adopted by Reference (Record Content Description/Tariff Record Title):** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

## Attachment C

1. Certificate of Concurrence – Indiana Michigan Power Company regarding the Power Cost Sharing Agreement and Bridge Agreement

2. Certificate of Concurrence – Kentucky Power Company regarding the Power Cost Sharing Agreement and Bridge Agreement

3. Certificate of Concurrence – Ohio Power Company regarding the Bridge Agreement

4. Certificate of Concurrence – AEP Generation Resources Inc. regarding the Bridge Agreement

# CERTIFICATE OF CONCURRENCE

This is to certify that Indiana Michigan Power Company (I&M), a Indiana corporation, assents to and concurs in the FERC FPA Electric Tariff described below, which Appalachian Power Company (APCo), the designated filing company, has filed in its "APCo Rate Schedules and Service Agreements Tariffs" database.

1. **Name of Tariff Adopted by Reference:** "Power Cost Sharing Agreement among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company and American Electric Power Service Corporation"

**APCO Tariff Record Adopted by Reference:** Rate Schedule No. 200, Power Cost Sharing Agreement

**Description of Tariff:** Rate Schedule under which APCo, I&M, Kentucky Power Company and American Electric Power Service Corporation (in an agency role) arrange internal energy and capacity transactions with each other.

2. **Name of Tariff Adopted by Reference:** "Bridge Agreement"

**APCO Tariff Record Adopted by Reference:** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, I&M, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

By: /John C. Crespo/
John C. Crespo,
Deputy General Counsel – Regulatory Services
Dated: February 8, 2012.

# CERTIFICATE OF CONCURRENCE

This is to certify that Kentucky Power Company (KPCo), a Kentucky corporation, assents to and concurs in the FERC FPA Electric Tariffs described below, which Appalachian Power Company (APCo), the designated filing company, has filed in its "APCo Rate Schedules and Service Agreements Tariffs" database.

1. **Name of Tariff Adopted by Reference:** "Power Cost Sharing Agreement among Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company and American Electric Power Service Corporation"

**APCO Tariff Record Adopted by Reference:** Rate Schedule No. 200, Power Cost Sharing Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, KPCo and American Electric Power Service Corporation (in an agency role) arrange internal energy and capacity transactions with each other.

2. **Name of Tariff Adopted by Reference:** "Bridge Agreement"

**APCO Tariff Record Adopted by Reference:** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, KPCo, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

By: /John C. Crespo/
John C. Crespo,
Deputy General Counsel – Regulatory Services
Dated: February 8, 2012.

# CERTIFICATE OF CONCURRENCE

This is to certify that Ohio Power Company (OPCo), a Ohio corporation, assents to and concurs in the FERC FPA Electric Tariff described below, which Appalachian Power Company (APCo), the designated filing company, has filed in its "APCo Rate Schedules and Service Agreements Tariffs" database.

.**Name of Tariff Adopted by Reference:** "Bridge Agreement"

**APCO Tariff Record Adopted by Reference:** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

By: /John C. Crespo/
John C. Crespo,
Deputy General Counsel – Regulatory Services
Dated: February 8, 2012.

# CERTIFICATE OF CONCURRENCE

This is to certify that AEP Generation Resources Inc. (AEP Gen), a Delaware corporation, assents to and concurs in the FERC FPA Electric Tariff described below, which Appalachian Power Company (APCo), the designated filing company, has filed in its "APCo Rate Schedules and Service Agreements Tariffs" database.

**Name of Tariff Adopted by Reference:** "Bridge Agreement"

**APCo Tariff Record Adopted by Reference:** Rate Schedule No. 201, Bridge Agreement

**Description of Tariff:** Rate Schedule under which APCo, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company and AEP Generation Resources Inc. will for an interim time period manage the transactions of the parties beyond termination of the Pool Agreement and manage obligations to fulfill their Fixed Resource Requirement under PJM's Reliability Assurance Agreement.

By: /John C. Crespo/
John C. Crespo,
Deputy General Counsel – Regulatory Services
Dated: February 8, 2012.

STATE OF INDIANA

BEFORE THE INDIANA UTILITY REGULATORY COMMISSION

| | | |
|---|---|---|
| PETITION OF INDIANA MICHIGAN POWER COMPANY, AN INDIANA CORPORATION, FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC UTILITY SERVICE; FOR APPROVAL OF NEW SCHEDULES OF RATES, RULES AND REGULATIONS; AND FOR AUTHORITY TO ESTABLISH AND IMPLEMENT RATE ADJUSTMENT MECHANISMS TO TRACK CERTAIN MATTERS RELATING TO RELIABILITY ENHANCEMENT, DEMAND-SIDE MANAGEMENT! ENERGY EFFICIENCY PROGRAMS, OFF-SYSTEM SALES MARGINS, PJM, ENVIRONMENTAL COMPLIANCE, AND CAPACITY EQUALIZATION SETTLEMENT. | ) | CAUSE NO: 43306 |

# Study Report of

# American Electric Power

# Interconnection Agreement

# Submitted by Indiana Michigan Power Company

December 11, 2009

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## 1. INTRODUCTION

The Commission in its order dated March 4, 2009 in Cause No. 43306 directed Indiana Michigan Power Company ("Company" or "I&M") to file a report regarding the American Electric Power ("AEP") Interconnection Agreement ("IA" or "Pool"). The Company was instructed to solicit input from interested parties to address the effectiveness, relative costs, customer benefits, and other aspects of the IA and whether it is redundant now that the Company is a member of PJM Interconnection, LLC ("PJM"), a Regional Transmission Organization ("RTO").

## 2. DESCRIPTION OF STAKEHOLDER PROCESS AND CASES TO BE STUDIED

On April 1, 2009 the Office of Utility Consumer Counselor ("OUCC") sent I&M a letter that contained scoping questions regarding the Study. On April 17, 2009 I&M submitted in Cause No. 43306 a proposed stakeholder process leading up to I&M's filing of a Study Report by December 13, 2009. Specifically, the process, representing a consensus proposal of the parties, was to: (1) present an overview of the IA and its operation within PJM to the interested parties, (2) invite the parties to submit written comments and suggestions regarding the nature of the Study, (3) meet to discuss the parties' comments and describe I&M's framework for the Study, (4) meet to discuss the preliminary results of the Study, (5) invite the parties to submit comments regarding the preliminary results of the Study, and (6) meet to discuss the parties' comments and finalize the input of the parties. On May 22, 2009 I&M met with the parties and conducted a detailed interactive discussion regarding the IA and PJM, facilitated by a 31-slide presentation (completing Step 1). After I&M invited additional written comments, the Commission Staff and OUCC provided detailed written comments on June 8 and June 16, 2009, respectively (completing Step 2). On July 31, 2009 I&M met with the parties, conducted a detailed interactive discussion regarding the parties' comments and described I&M's framework for the Study, facilitated by a 19-slide presentation (completing Step 3). After I&M invited additional written comments, the parties jointly provided additional written comments on August 19, 2009 regarding the proposed Study framework. On October 30, 2009 I&M met with the parties and conducted a detailed interactive discussion regarding the preliminary results of the Study, facilitated by a 31-slide presentation (completing Step 4). I&M invited the parties to submit additional written comments regarding the preliminary results of the Study and the parties indicated that they had no additional comments, thereby prompting all parties to agree that the final meeting to discuss such comments was not needed (completing Steps 5 and 6). Each of I&M's above-referenced presentations are included in the workpaper materials being filed in conjunction with the Study Report.

The following table sets out the IA scenarios and studies that were agreed to by the parties as part of the above-described stakeholder process and those parameters have been used to develop the scenarios and economic impact studies contained in this Study Report.

| | YEARS | | | |
|---|---|---|---|---|
| **NET ENERGY COST** | 2010 | 2011 | 2017 | 2018 * |
| AEP Pool Within PJM - Low Market | X | X | X | X |
| Stand Alone Operating Companies Within PJM - Low Market | X | X | X | X |
| AEP Pool Within PJM - High Market | X | X | X | X |
| Stand Alone Operating Companies Within PJM - High Market | X | X | X | X |
| **PRIMARY ENERGY DELIVERES PRICED INCREMENTALLY COMPARED TO AVERAGE** | X | X | | |
| **COOK OUTAGE CASES** | | | | |
| AEP Pool Within PJM | X | X | | |
| Stand Alone Operating Companies Within PJM | X | X | | |
| **CAPACITY EQUALIZATION** | | | | |
| 5CP versus MLR | X | | | |
| **RETIREMENT IMPACTS** | | | | |
| (% of Pool Capacity) | | | | X |

* Assumes base load capacity additions in 2018 (Cook Uprate - 418MW, APCo IGCC - 635MW)

## 3. SUMMARY OF CONCLUSIONS AND RECOMMENDATION

The IA was formulated in 1951 and is a FERC-approved wholesale power pooling agreement. Although each operating company owns specific generating facilities, the AEP System–East Zone is designed, built and operated on an integrated system basis. The IA defines the rights and obligations of the five East Zone operating companies (each called a member) and sets out the methodology for allocating the responsibilities among the members.

AEP integrated its east zone facilities into PJM in October 2004. Joining PJM has brought changes to the manner in which AEP operates. Essentially, AEP is performing the same or similar functions as it did prior to joining an RTO, however, with the requirements of integrating with PJM, some additional responsibilities have been added, while others have been eliminated or modified. In completing the Study, AEP did not identify any activities that were redundant; rather we found the activities to be complimentary and beneficial to customers. Since joining, the AEP Pool member companies have participated on an integrated basis within PJM. Simply put, the AEP Pool companies effectively operate as one large company, utilizing the strengths of diversity to offset inherent risks associated with operating as smaller individual companies in PJM. This means that each member's customers receive low embedded cost capacity and energy regardless of their individual generation supplies while also receiving the benefit of sharing the margins of off-system sales and the opportunity to purchase economic energy to offset more expensive market energy.

Under the IA, Pool member companies collectively participate to supply capacity. Due to AEP's election to participate in the Fixed Resource Requirement (FRR) option and as a result of the Pool construct and FRR participation, the cost to purchase capacity from other Pool Members is based on the embedded cost of installed capacity. From a cost of energy perspective, the Pool member companies sell or buy surplus energy to/from other members at a cost-based primary energy rate in addition to purchasing economic energy from the market at the Locational Marginal Price (LMP). By contrast, an AEP company operating without the IA on a stand-alone basis would have more restrictive requirements and more limited opportunities. The capacity factor for AEP's coal units has been increasing since the time AEP joined PJM in 2004. If the operating companies were to operate on a stand-alone basis, fulfilling the reserve requirement would depend on each company's position of capacity length. From a cost of energy perspective, the Pool member companies sell or buy surplus energy to/from other members at a cost-based primary energy rate in addition to purchasing from or selling to the market at the LMP. A stand-alone company lacking energy needed to meet its hourly load requirement would purchase from or sell to the PJM market at the LMP, without the cost-based option the Pool provide to its members.

While more detail and explanation is contained in the body of the Report, the overall results of the three major study scenarios are presented here (negative numbers represent a reduction in Production cost):

| TOTAL OF NET PRODUCTION, POOL CAPACITY AND IAA ($000) | | | |
|---|---|---|---|
| | $Millions | | |
| | Average for Years Modeled | | |
| | Scenario A LOW MARKET | Scenario B HIGH MARKET | Scenario C COOK OUTAGE |
| APCO | $ (241) | $ (19) | $ (168) |
| CSP | $ 96 | $ 220 | $ 78 |
| I&M | $ 28 | $ (113) | $ 191 |
| KPCO | $ (62) | $ (37) | $ (62) |
| OPCO | $ 188 | $ (42) | $ (30) |
| | Percent Of 2008 Retail/Wholesale Revenue | | |
| | LOW MARKET | HIGH MARKET | COOK OUTAGE |
| APCO | -11.3% | -0.9% | -7.9% |
| CSP | 5.4% | 12.4% | 4.4% |
| I&M | 2.0% | -8.1% | 13.7% |
| KPCO | -13.0% | -7.6% | -12.8% |
| OPCO | 10.5% | -2.4% | -1.7% |

Negative Number Represents Decrease in Cost of Service

As can be seen, whether a particular operating company and its customers benefit under one of the Standalone or Pool cases depends on the variables presented in the scenarios. The results of the Study do not yield definitive conclusions that suggest a change in present course. Consequently, I&M does not believe any further action is needed at this time and makes no further recommendations.

## 4. OVERVIEW OF AEP INTERCONNECTION AGREEMENT

I&M, Appalachian Power Company (APCo), Columbus Southern Power Company (CSP), Kentucky Power Company (KPCo) and Ohio Power Company (OPCo) are the five AEP East System operating companies (hereafter AEP System–East Zone) which are members of the AEP Power Pool established pursuant to the IA. The IA was formulated in 1951 and is a FERC-approved wholesale power pooling agreement. Although each operating company owns specific generating facilities, the AEP System–East Zone is designed, built and operated on an integrated system basis. The IA defines the rights and obligations of the five East Zone operating companies (each called a member) and sets out the methodology for allocating the responsibilities among the members. Significant provisions of the IA operate as follows:

- Requires each member to provide adequate generating facilities (or resources) to meet its firm load requirement.

- Allocates capacity costs on the basis of each member's highest non-coincident peak (NCP) in the preceding twelve months. Member Load Ratio (MLR) is the ratio of a member's highest NCP in relationship to the total of all members' highest NCP demand.

- Provides a capacity settlement that equalizes responsibility for installed capacity.

The capacity settlement equalizes reserve margins by assigning responsibility to each member for its MLR share of System capacity. To the extent that a member's capacity is less than its System responsibility, such deficit company is required to make up its shortfall by paying a capacity charge to the surplus companies, based on the embedded cost of capacity of the surplus companies.

- Provides for sales and purchases of energy among the member companies at cost through primary and economy transactions.

- Each member makes its transmission facilities available to all members for the delivery and receipt of power; as members of PJM, each AEP East operating company takes transmission service under the FERC-approved OATT (Open Access Transmission Tariff).

- American Electric Power Service Corporation, as agent for the operating companies, buys and sells into the wholesale market for reliability and economic purposes [off-system purchases and off-system sales (OSS)].

- Provides for sharing of OSS margins among members based on MLR.

Also, there are other agreements among the members of the East operating companies, most notably the Interim Allowance Agreement (IAA) that operates in conjunction with the IA.

## 5. OVERVIEW OF PJM RTO

AEP (and I&M) integrated its operation with PJM in October 2004. The following is a summary of the PJM RTO with excerpts taken from PJM's website (http://www.pjm.com.)

PJM is an RTO that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

- Acting as a neutral, independent party, PJM operates a competitive wholesale electricity market and manages the high-voltage electricity grid to ensure reliability for more than 51 million people.

- PJM's long-term regional planning process provides a broad, interstate perspective that identifies the most effective and cost-efficient improvements to the grid to ensure reliability and economic benefits on a system wide basis.

- An independent Board oversees PJM's activities and provides governance and a collaborative stakeholder process.

PJM's Operations

PJM's staff monitors the high-voltage transmission grid 24 hours a day, seven days a week. PJM keeps the electricity supply and demand in balance by telling power producers how much energy should be generated and by adjusting import and export transactions.

- In managing the grid, PJM dispatches about 163,500 megawatts (MW) of generating capacity over 56,350 miles of transmission lines.

- PJM exercises a broader reliability role than that of a local electric utility. PJM system operators conduct dispatch operations and monitor the status of the grid over a wide area, using telemetered data from nearly 74,000 points on the grid. This gives PJM a big-picture view of regional conditions and reliability issues, including those in neighboring systems.

PJM's Market

PJM coordinates the continuous buying, selling and delivery of wholesale electricity through robust, open and competitive spot markets. In operating the markets, PJM balances the needs of suppliers, wholesale customers and other market participants and continuously monitors market behavior.

- PJM's wholesale electricity market is similar to a stock exchange. It establishes a market price for electricity by matching supply with demand. Online eTools make trading easy for members/customers by enabling them to submit bids and offers and providing them with continuous real-time data.

- Market participants can follow market fluctuations as they happen and make informed decisions rapidly, responding to high prices and bringing supply resources to the region that were previously determined to be uneconomic, when demand is high.

## 6. MAJOR REASONS FOR AEP TO JOIN AN RTO

In Order No. 2000, FERC established a goal of having all transmission-owning entities in the nation place their transmission facilities under the control of appropriate RTOs in a timely manner. In that order and various ensuing orders, FERC employed a number of directives and incentives for accomplishing its goal of universal RTO participation. In fact, FERC had begun employing such directives and incentives even before issuance of Order No. 2000, which merely codified an already-existing policy of strongly encouraging RTO formation. In 1998 AEP and the former Central and South West System (CSW) filed with the FERC an application seeking approval of a proposed merger between the two systems. It was clear at the time of the filing that FERC would condition any such approval on the applicants' agreement to join one or more RTOs in order to mitigate what FERC called "transmission market power". During the proceeding, AEP stipulated that it would join RTOs, and as expected, in its order approving the merger issued in 2000, FERC required, as a condition of its approval, AEP to join, and cede functional control of all of its transmission facilities to, one or more RTOs. AEP has complied with this order by ceding functional control of its east zone (*i.e.*, historic AEP) transmission facilities to PJM and its west zone (*i.e.*, former CSW) facilities to the Southwest Power Pool (SPP) and the Electric Reliability Council of Texas (ERCOT).

Many states also required or encouraged RTO participation. For example, Ohio enacted S.B.3 in 1999, which required all transmission-owning utilities in the state to transfer control of their facilities to "qualifying transmission entities" approved by FERC and having the characteristics of RTOs. Similar legislation was enacted in Virginia and Michigan. In 2003, the IURC reviewed and approved, with conditions, I&M's decision to join PJM. *See* September 10, 2003 Order in Cause Nos. 42350 and 42352.

As a practical matter, AEP had very little, if any, choice regarding joining an RTO. The federal policies in favor of increased regionalization of grid management and electricity markets that led to the Companies' participation are still in place and unlikely to change anytime soon. Regionalization greatly broadens the base of stakeholders interested in any utility's participation far beyond the utility's retail service area. Federal jurisdiction over RTOs is both a reality and in some respects, a practical necessity. Finally, even if the structure of the Company's participation in regional institutions were to change, it is unlikely that many of the core elements of such participation including independent regional grid operation and tariff administration, nonpancaked transmission rates, and regional transmission planning would be undone.

AEP integrated its east zone facilities into PJM in October 2004. Specifically, AEP joined PJM, an established RTO with known costs and geographically aligned with the AEP system, for a number of reasons. PJM provided what other RTO/ISO's either could not or were still in the nascent stages of developing, including (1) enhanced reliability of the AEP transmission system through the ability to participate in the regional transmission planning process, (2) a market model that matched the FERC standard Market Design, (3) a fully functioning energy and ancillary service markets consistent with states with customer choice, and (4) approved procedures for congestion management, reserve margins, market mitigation, and market monitoring.

### a. Changes to AEP Operations as a Member of PJM

Joining PJM has brought changes to the manner in which AEP operates. Essentially, AEP is performing similar functions (although some to a lesser degree) as it did prior to joining an RTO. However, with the requirements of integrating with PJM, some additional responsibilities have been added, while others have been eliminated or modified.

For example, from a Transmission perspective, compliance with FERC and NERC reliability standards would be required whether AEP joined PJM or not. More compliance monitoring and reporting is now in existence by RTOs and transmission providers to ensure reliability problems are avoided. PJM has assumed some of the compliance responsibilities that would otherwise be assigned to AEP – in some cases, PJM has delegated some of those compliance responsibilities back to AEP.

In addition, PJM plans all transmission expansion activities involving the AEP footprint at or above 138 kV. PJM works with AEP to ensure that the AEP transmission system meets all applicable NERC Reliability Standards, PJM planning criteria, and AEP planning criteria. Although the end result is a more efficient and comprehensive transmission plan, the process is more complex and with less control being exercised by AEP. Likewise, Transmission operation and maintenance activities must be coordinated through PJM which improves the overall reliability of the interconnected systems, but at the same time complicates the scheduling of the AEP resources required to effectively perform those transmission maintenance activities.

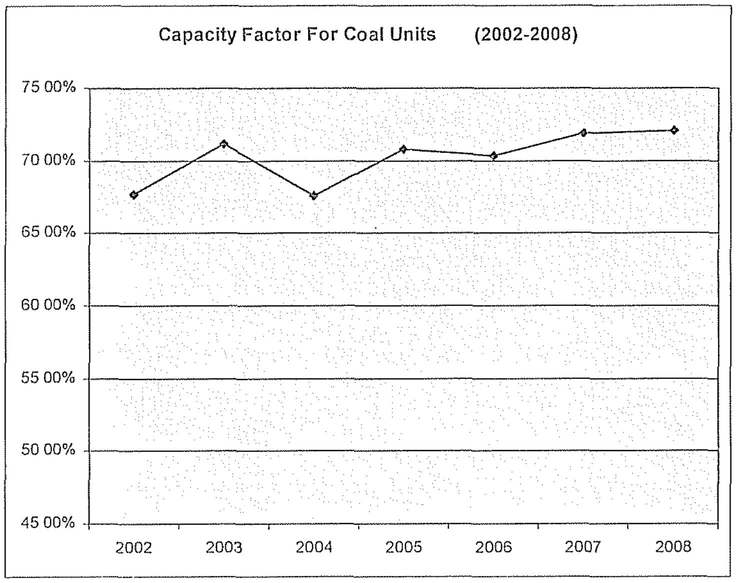
Finally, FERC Order 890, passed in 2007, requires that transmission providers make their transmission planning processes transparent to all transmission customers and stakeholders through the posting of study models, assumptions, and results, including the vetting with stakeholders of all projects that comprise the regional and local transmission expansion plans. PJM provides the vehicle for AEP to comply with the requirements of this Order.

AEP no longer has primary responsibility for the Balancing Area functions and reliability coordinator role, which has been transferred to PJM. AEP must now interact extensively with PJM with regards to our generating unit operation, load responsibilities and the financial impacts of decisions made on a daily basis and those related to longer-term market design issues.

In addition, AEP must now provide new analytical resources to effectively participate and manage its load and resources in the PJM market. It was necessary for AEP to develop congestion management models and tools to manage the Financial Transmission Right (FTR) allocation and trading impacts that evolved from the more limited Transmission Loading Relief mechanism previously employed prior to joining PJM.

AEP now performs extensive financial analysis to understand the impact of decisions within PJM including PJM dispatch decisions, analysis of PJM market design changes and the PJM invoice. AEP needed to add resources and systems in conjunction with accounting settlement functions to review, analyze and process the invoices from PJM. IT systems were also required to be added and/or enhanced to incorporate RTO market protocols, PJM charges/credits, to track load and generation-related data and to communicate with PJM systems.

Due to the daily requirement to bid/offer our load and generation resources into PJM, a group was formed to have primary responsibility to fulfill this requirement. AEP must bid its load and offer energy and ancillary services. The group provides the generating unit limits and current status of each generating unit which requires extensive coordination with PJM to ensure these values are correct to optimize the dispatch of AEP's resources. This team not only oversees our daily bid/offers to PJM, but also coordinates the development of systems to assist in the bid process and cost tracking. The following table shows that the capacity factor for AEP's coal units has been increasing since the time it joined PJM in 2004.



Based on a 2010 forecast filed in Cause No. 43774 (PJM Cost Rider Adjustment filed September 2, 2009), it is estimated that AEP, on behalf of the east operating companies, will pay PJM approximately $34.1 million in administrative fees in 2010 for the services provided to AEP for its internal load customers. Indiana's retail jurisdictional share of those fees is $6.2 million. The following table compares the major services provided by PJM with how these services were provided before joining PJM.

Operating Pre-PJM vs. PJM

| | Pre-PJM | PJM |
|---|---|---|
| Transmission Planning | Plan entire transmission system | PJM in coordination with AEP plans transmission for 138 kV and above while AEP plans for below 138 kV. |
| Transmission Operations | Operate entire transmission grid | PJM in coordination with AEP operates AEP's transmission system |
| OASIS and Transmission Access | Contracted with SPP | Provided by PJM |
| Economic Dispatch | Security constrained economic dispatch of system based on monthly variable production costs | PJM performs Security constrained economic dispatch based on bids supplied by AEP and other generators |
| Ancillary Services | Self-supply regardless of economics | Optimize between self-supply and market supply |
| OSS Billing | Bill counterparties for monthly transaction | Still bill counterparty for direct transaction<br>Develop and run a shadow settlement system to validate PJM invoice |
| Market Monitor | Contracted with Charles River Associates | Provided by PJM |

b. **PJM and AEP Power Pool Similarities and Distinctions**

Even with participation in PJM, AEP's cost and revenue allocation principles remain the same. Energy settlements among the Member Companies are still performed the same as "pre-PJM". Since the inception of the AEP East IA, the following processes have remained the same even after joining PJM:

- Energy Costing & Reporting (ECR) is used to determine the allocation of energy and costs to OSS and internal load
- Member companies generation and power purchases are assigned after the fact with highest cost resources being assigned to OSS
- Member companies with resources greater than their internal load provide primary energy to energy deficit companies
- OSS Margins (which now includes PJM Spot Market Energy) are allocated based on MLR.

There are similarities and distinct differences in the potential cost of services and how those costs are determined – depending on whether the member companies are part of the AEP East Pool or are operating as stand-alone members of PJM. Since joining, the AEP Pool member companies have participated on an integrated basis within PJM. This effectively means, in simplest terms, that the AEP Pool companies operate as one large company, utilizing the strengths of diversity to offset inherent risks associated with operating as smaller individual companies in PJM. Some examples are discussed below.

With regard to a company meeting its capacity requirement, PJM has implemented a capacity auction (Reliability Pricing Model or RPM) along with the option of a FRR. The FRR option allows a company to meet its reserve margin requirement by self-supplying its own capacity resources, while the RPM provides a company the ability to purchase its capacity from a central market at market rates. PJM plans it capacity resources to meet the needs of the footprint as opposed to a single company or smaller region. The capacity market provides market participants with forward price signals and allows FRR members the ability to self-supply their capacity needs if the option has greater benefit than purchasing from a market solution. As each member's situation is different, PJM rules allow for flexibility in meeting its capacity and reserve requirement.

AEP has selected the FRR option for fulfilling its capacity reserve requirement. AEP is able to utilize the length in the AEP Pool to mitigate financial penalties associated with any deteriorating generating unit performance during peak periods, referred to as EFORp performance. This penalty results in a charge to the resource owner for a unit not performing during the approximate 500 hour peak period as well as it did in the five previous planning years.

In addition, AEP is able to utilize length in the AEP Pool to mitigate financial penalties or avoid replacement costs for major outages (*e.g.*, the D.C. Cook Plant) referred to as EFORd performance. Based on a unit's performance in the current year, its capacity value can be lowered in the following planning year.

For example, in the current situation of the unplanned outage at the Cook plant, I&M would be penalized (EFORp charge received) for the current planning year and it would not be able to claim the capacity value of the unit in its FRR plan for the following year (EFORd penalty). Effectively, there is a current and lag penalty associated with the sub-performance of a unit.

As stated earlier, in the current capacity construct within PJM, the AEP Pool member companies collectively participate in the FRR option to supply capacity. This allows AEP to fulfill is reserve margin requirement with capacity resources from East Pool operating companies. Some of the benefits of FRR include (1) the reserve margin requirement is known in advance and has, for the entire history of RPM, been lower than the cleared reserve requirement, (2) the FRR approach aligns closely with the traditional approach to capacity planning as it relates to Integrated Resource Planning, and (3) FRR avoids exposure to the volatility of a structured capacity market.

From an operating company stand-alone basis, the approach for fulfilling the reserve requirement would depend on the position of capacity length. Certain long operating companies would be in a position to select either FRR or participation in the RPM market, however short operating companies would be required to participate in the RPM auction to satisfy their reserve margin requirement. In the RPM auction, the cost of capacity is determined by an administratively-defined demand curve and the corresponding cost of supply. The results of the capacity auction have swung widely in the three most recent auctions for the AEP control area. The impacts of a forced outage were highlighted previously and are exacerbated for a company participating on a stand-alone basis.

Due to AEP's election to participate in FRR and as a result of the pool construct, the cost to purchase capacity from other Pool members is based on the embedded cost of installed capacity. From a cost of energy perspective, the Pool member companies sell or buy surplus energy to/from other members at a cost-based primary energy rate in addition to purchasing from the market at the Locational Marginal Price (LMP). Based on the IA, the lowest cost resource (generation or purchase) is assigned to the native load, while higher cost resources are assigned to OSS. As a stand-alone entity, a company in need of energy would purchase from the PJM market at the LMP. During periods of high LMPs, a stand-alone energy-long company could sell into the market and receive a potentially higher payment than it would have received from other Pool members. However, a company short of energy during these periods would be subject to paying those higher market prices.

With respect to the congestion costs and marginal loss components of the LMP, the primary difference between an AEP Pool member company and a stand-alone company is the costs would be assigned on an MLR basis or billed directly by PJM, respectively. This treatment would also be consistent with FTR revenues and marginal loss credits. Depending on the location of the company in PJM and the accompanying energy flows, these costs/credits could go up or down. PJM has provided FTRs as a mechanism to hedge congestion costs. Historically, the revenue from the FTRs has been in excess of the cost of congestion but at a decreasing rate. Transmission enhancements would continue to drive this difference lower.

Currently, ancillary service costs are assigned to each of the AEP Pool member companies based on the MLR. The cost of supplying this service, in addition to any fuel-related cost, is embedded in the company's cost. This would be similar for a stand-alone company that has the capability of providing those services. Excluding the costs of reactive and black start services which are not determined by market offers, but administratively by FERC, AEP currently offers into the market enough ancillary services to cover its load. If the market provides a less expensive alternative, AEP benefits from that lower price. A stand-alone company could use a similar approach, providing it has the capability to supply these services. Similar to the outcome of FTR revenue and marginal loss credits, dependent on the situation of the specific company, the total cost of these services could go up or down. The diversity of the AEP Pool acts as buffer, allowing AEP to fulfill its requirements from a range of sources (including the market). This has a limiting effect on risk for any operational situations encountered.

The PJM market provides both challenges and opportunities which are described above. The AEP Pool has a stabilizing effect, one that is able to straddle the market environment while maintaining more traditional cost allocations. If AEP were to withdraw from PJM it would need to perform control area responsibilities and would be required to employ independent third parties to administer its OATT, to perform market monitor functions related to AEP's wholesale activities and to serve as its reliability coordinator. In addition, AEP would be required to contact numerous counterparties in its search to sell and purchase power as opposed to utilizing PJM to make spot sales and purchases. PJM provides the market benefits of a day-ahead and real-time energy market and ancillary services market that cannot be effectively duplicated with bilateral arrangements and phone calls to other market participants, especially now, with so many potential counterparties rendered unavailable or uninterested since they too are participating in these same RTO markets. The benefits of these markets, which provide AEP with the lowest purchase price and cost for ancillary services, are optimized in an RTO environment.

## 7. THE PRIMARY STUDY - I&M AS MEMBER OF AEP POOL VERSUS I&M OPERATING AS A STAND-ALONE ENTITY IN PJM

To address the issues raised by the Commission's Order, the Company, with the input of the parties, has included a cost analysis of the Pool members on a Standalone basis operating in the PJM RTO. The cost of operating on a Standalone basis in PJM is compared to the cost of the member companies operating under the Pool agreement. This cost comparison was done for three scenarios. Two of the scenarios use different market prices, a high market price and a low market price. Another scenario was done using the high market prices with both Cook nuclear units out of service for the years 2010 and 2011.

For the Standalone cases, the IAA was also considered to be terminated. That is, the Pool member companies operate independently in managing sulfur dioxide ("$SO_2$") emission allowances.

### a. Study Methodology/General Assumptions

Period of Study

For the market price scenarios, the Study looks at two distinct periods: A near term view using 2010 and 2011, and a longer term view using 2017 and 2018. To summarize the data an average has been calculated for the four year study period. The individual years are also presented. For the Cook outage scenario only 2010 and 2011 were modeled.

Dispatch and IRP Assumptions

For purposes of the Study, the dispatch of AEP's and I&M's generating units are the same for the Standalone and Pool cost comparisons. This assumption reflects the fact that AEP bids its units into PJM and PJM determines, based on all the generation bids it receives, which units are dispatched. Whether or not a unit is still in the AEP Pool would not be expected to alter the dispatch. If different groups within AEP became responsible for bidding the units into PJM as a result of code of conduct concerns, there may be some affect on unit dispatch, but it would not be possible to model this in any meaningful way.

Also, for purposes of the Study, the Integrated Resource Plan (IRP) is considered the same under the Standalone and Pool comparisons. AEP establishes its IRP on an integrated AEP basis. In the long term, the Standalone approach, may result in an IRP for an individual operating company that differs from an IRP developed for that company as a member of the Pool. Based on input of the parties to this case, certain assumptions differ from the Company's current IRP. One significant difference between the Study and the IRP filed with the Indiana Commission on October 30, 2009 is that this Study includes an Integrated Gasification Combined Cycle (IGCC) power plant in place of four combustion turbine gas units that are included in the IRP. The Company included the IGCC in the Study as requested by the parties to this proceeding.

Other General Assumptions

For the Standalone model, energy is purchased or sold in the PJM market on hourly basis, based on the needs of the individual operating company. Capacity has been bought and sold in the PJM RPM market. Long-term contracts, or bilateral deals have not been reflected. The operating companies are modeled as price takers in the market. As previously mentioned, in the Standalone model, the IAA and therefore, affiliate transactions for $SO_2$ emission allowances, have been eliminated and the operating companies are interacting directly with the $SO_2$ allowance markets. No costs for AEP structural and operational changes that may be required to achieve a Standalone operation have been included. For example, commercial operations might need to be reorganized to comply with codes of conduct if the AEP power pool is terminated.

Presented in the tables below are other significant assumptions common to all three scenarios.

Cook Capacity Up-Rates

Cook Unit 1 up-grade 237-MW in Service by 1/2018
Cook Unit 2 up-grade 195-MW in Service by 1/2018

Fossil Fuel Plant Additions

| Units | Company | Winter/Summer | In-Service Date |
|---|---|---|---|
| Dresden | APCo | 625MW / 540MW | 4/2013 |
| Muskingum 1 (Stoker) | OPCo | 130MW / 121MW | 1/2018 |
| IGCC I | APCo | 637MW / 624MW | 1/2018 |

Wind Additions

| | | MW | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Facility | Year | APCo | CSP | I&M | KPCo | OPCo | Total | Cumulative |
| Camp Grove | 2009 | 75 | | | | | 75 | 75 |
| Fowler Ridge I | 2009 | 100 | | 100 | | | 200 | 275 |
| Fowler Ridge II | 2009 | | 50 | 50 | | 50 | 150 | 425 |
| Grand Ridge | 2009 | 100 | | | | | 100 | 525 |
| Beech Ridge | 2010 | 100 | | | | | 100 | 625 |
| Generic | 2010 | 175 | 100 | 150 | 50 | 125 | 600 | 1,225 |
| Generic | 2011 | 200 | 125 | 100 | 50 | 225 | 700 | 1,925 |
| Generic | 2012 | 100 | 150 | 100 | | 150 | 500 | 2,425 |
| Generic | 2015 | | 40 | 60 | | | 100 | 2,525 |

Unit Retirements

The following table shows units assumed to retire in the study period. Actual retirement dates may depend on the unit's physical conditions, overall cost of operation and compliance with environmental regulations.

| Unit | Owner | Winter Capacity MW | Assumed Retirement Year |
|---|---|---|---|
| Sporn 5 | OPCo | 450 | 2010 |
| Conesville 3 | CSP | 165 | 2012 |
| Muskingum 1-4 | OPCo | 840 | 2015 |
| Glen Lyn 5 & 6 | APCo | 335 | 2015 |
| Picway 5 | CSP | 100 | 2015 |
| Kammer 1-3 | OPCo | 630 | 2017 |
| Sporn 1 & 3 | APCo | 300 | 2018 |
| Sporn 2 & 4 | OPCo | 300 | 2018 |

More detailed assumptions, detailed work papers, and data used in the Study are being provided separately to the Parties as electronic files.

The Scenarios Modeled

Three scenarios were performed. Each of the scenarios compares production costs for the five operating companies on a Standalone basis to membership in the Pool. The Study period for scenarios 1 and 2 is the years 2010, 2011, 2017 and 2018. Two of the scenarios are intended to show the effects of different market price assumptions on the Standalone to Pool comparison. The market prices used can be characterized as a low market price scenario and a high market price scenario. The third scenario presents the comparison between the Standalone and Pool analysis for 2010 and 2011 assuming that both Cook nuclear units are out of service. It uses the high market price data. The scenarios described above are the primary ones for this Report, however, certain other studies were performed as described later in this Report.

**b. The Results of the Study**

Comparison of the Three Scenarios

The following table presents the results of the three scenarios in summary fashion. In the table below, total 2008 retail and requirement sales (RQ) wholesale revenue are used to gauge the relative change among Companies under Standalone and Pool cases and among the various scenarios. The percent shown is the ratio of the change in production cost over the 2008 revenues. The change in production cost is the Pool production cost less the Standalone production cost, therefore a credit or negative number is favorable to the Company and its customers. The production cost presented in this study excludes the capital costs, such as depreciation and cost of capital, associated with serving the company's own firm customers (*i.e.*, retail and RQ). It deals only with the surplus or deficit energy (affiliate transactions) which is accounted for in the Pool.

| TOTAL OF NET PRODUCTION, POOL CAPACITY AND IAA ($000) | | | |
|---|---|---|---|
| | $Millions | | |
| | Average for Years Modeled | | |
| | Scenario A LOW MARKET | Scenario B HIGH MARKET | Scenario C COOK OUTAGE |
| APCO | $ (241) | $ (19) | $ (168) |
| CSP | $ 96 | $ 220 | $ 78 |
| I&M | $ 28 | $ (113) | $ 191 |
| KPCO | $ (62) | $ (37) | $ (62) |
| OPCO | $ 188 | $ (42) | $ (30) |
| | Percent Of 2008 Retail/Wholesale Revenue | | |
| | LOW MARKET | HIGH MARKET | COOK OUTAGE |
| APCO | -11.3% | -0.9% | -7.9% |
| CSP | 5.4% | 12.4% | 4.4% |
| I&M | 2.0% | -8.1% | 13.7% |
| KPCO | -13.0% | -7.6% | -12.8% |
| OPCO | 10.5% | -2.4% | -1.7% |

Negative Number Represents Decrease in Cost of Service

Study Documents

Provided as part of this Report are tables supporting the summary results presented above for each of the three scenarios by year. The tables show production costs per the Pool, the production costs on a Standalone basis and the difference in those production costs.

Major Components

For purposes of the Study and to aid in understanding of the results, Standalone to Pool comparisons are presented for net production costs (energy), capacity and environmental ($SO_2$) and total.

- **NET PRODUCTION COSTS:** In the Standalone cases, energy transactions reflect the buying or selling of kWh in PJM at market prices, with no energy transactions among the members of the Pool. In the Pool case, energy is exchanged among member companies and traditional sales and purchases in PJM are modeled in accordance with the IA. In both the Standalone and Pool cases any opportunity sales are credited against costs to calculate Net Production Cost. Net Production Cost is used to gauge whether a Company is better off in the Standalone or Pool case from an energy perspective. Lower Net Production Cost represents a benefit to the Company and customer.

- **CAPACITY:** In the Standalone case, capacity is bought and sold into the PJM RPM market at an assumed capacity price with each individual member. In the Pool cases, capacity payments and sales to affiliates are based on the IA and any excess Pool capacity is sold into PJM at the assumed capacity price and assigned to the members by MLR. In the scenario in which the Cook nuclear units are out of service and when the AEP system is short of capacity, capacity purchases are likewise assigned to the Pool members based on MLR.

- **ENVIRONMENTAL – IAA:** In the Standalone cases the IAA and the resulting affiliate allowance transactions have been eliminated and replaced by individual operating company transactions in the $SO_2$ market. In the Pool cases the IAA governs the treatment of $SO_2$ allowances among the Pool members. Any purchases or sales in the $SO_2$ market are assigned by MLR.

### c. <u>Scenario A – Low Market Price</u>

<u>Summary of Scenario A</u>

The following table presents a summary of the results for Scenario A which is based on low market prices prevailing during the study period. PJM market prices utilized are those at the lower portion of the market price range that might be expected during the four-year study period. The production cost numbers presented below are the nominal average for the four-year study period. The summary table shows the difference between the Pool and the PJM Standalone cases for Net Production Cost, Capacity and the IAA. Decreases indicate that the Standalone case is more favorable for a particular Pool member.

**Summary Table – Scenario A (Average for Study Period)**

| $Millions | Net Production | Capacity | IAA Elimination | Total |
|---|---|---|---|---|
| APCO | $ 123 | $ (364) | $ 1 | $ (241) |
| CSP | $ 100 | $ 2 | $ (5) | $ 96 |
| I&M | $ (150) | $ 161 | $ 17 | $ 28 |
| KPCO | $ 11 | $ (74) | $ 1 | $ (62) |
| OPCO | $ (84) | $ 275 | $ (4) | $ 188 |

Additional Specific Assumptions For Scenario A

- Pool affiliate transactions are eliminated in the Standalone view
- All short or excess energy is bought and sold in the PJM spot market – no bilateral contracts- in the Standalone view
- PJM Capacity is priced at $50 MW-Day for 2010 and 2011, and $160 for 2017 and 2018
- AEP is able to sell a relatively small amount of its available excess energy in the market because of the low market prices used in the scenario

Additional Detail For Scenario A

The following tables present more detailed data for Scenario A.

Table 1 shows the Net Production cost for the Pool and Standalone cases for each year of the study.

**Table 1 – Scenario A**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| NET PRODUCTION COST ($000) | | | | | |
| **Pool in Place** | | | | | |
| APCO | $ 1,083,654 | $ 1,217,371 | $ 1,745,147 | $ 1,703,629 | $ 1,437,450 |
| CSP | $ 567,919 | $ 671,748 | $ 1,041,385 | $ 1,038,930 | $ 829,996 |
| I&M | $ 625,510 | $ 661,591 | $ 922,642 | $ 902,661 | $ 778,101 |
| KPCO | $ 216,684 | $ 242,132 | $ 380,643 | $ 375,915 | $ 303,843 |
| OPCO | $ 981,182 | $ 1,120,020 | $ 1,616,341 | $ 1,688,846 | $ 1,351,597 |
| Total | $ 3,474,950 | $ 3,912,862 | $ 5,706,158 | $ 5,709,981 | $ 4,700,987 |
| **PJM Standalone** | | | | | |
| APCO | $ 1,113,490 | $ 1,242,414 | $ 1,978,318 | $ 1,905,920 | $ 1,560,036 |
| CSP | $ 582,812 | $ 674,005 | $ 1,195,943 | $ 1,266,301 | $ 929,765 |
| I&M | $ 580,085 | $ 631,959 | $ 721,284 | $ 580,644 | $ 628,493 |
| KPCO | $ 213,844 | $ 239,610 | $ 394,084 | $ 412,227 | $ 314,941 |
| OPCO | $ 984,785 | $ 1,124,776 | $ 1,416,473 | $ 1,544,787 | $ 1,267,705 |
| Total | $ 3,475,016 | $ 3,912,764 | $ 5,706,102 | $ 5,709,879 | $ 4,700,940 |
| **Change** | | | | | |
| APCO | $ 29,836 | $ 25,043 | $ 233,170 | $ 202,292 | $ 122,585 |
| CSP | $ 14,893 | $ 2,257 | $ 154,558 | $ 227,370 | $ 99,770 |
| I&M | $ (45,425) | $ (29,632) | $ (201,358) | $ (322,017) | $ (149,608) |
| KPCO | $ (2,840) | $ (2,522) | $ 13,441 | $ 36,312 | $ 11,098 |
| OPCO | $ 3,603 | $ 4,756 | $ (199,868) | $ (144,059) | $ (83,892) |
| Total | $ 66 | $ (98) | $ (56) | $ (102) | $ (47) |

Table 2 shows the Capacity Cost for the Pool and Standalone cases for each year of the study.

**Table 2 – Scenario A**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| CAPACITY ($000) | | | | | |
| Pool in Place (Pool Capacity Payments/Receipts + PJM Capacity Surplus Sale) | | | | | |
| APCO | $ 373,166 | $ 391,440 | $ 420,958 | $ 361,423 | $ 386,747 |
| CSP | $ 9,672 | $ (13,790) | $ 24,776 | $ 57,757 | $ 19,604 |
| I&M | $ (71,554) | $ (88,928) | $ (233,827) | $ (342,519) | $ (184,207) |
| KPCO | $ 67,155 | $ 61,411 | $ 81,761 | $ 99,957 | $ 77,571 |
| OPCO | $ (369,680) | $ (364,203) | $ (333,263) | $ (242,785) | $ (327,483) |
| Total | $ 8,760 | $ (14,071) | $ (39,595) | $ (66,167) | $ (27,768) |
| PJM Standalone(Capacity Based on PJM Market) | | | | | |
| APCO | $ 20,659 | $ 18,049 | $ 34,222 | $ 18,396 | $ 22,832 |
| CSP | $ 10,877 | $ 9,764 | $ 31,711 | $ 33,989 | $ 21,585 |
| I&M | $ 11,224 | $ (6,661) | $ (39,946) | $ (58,342) | $ (23,431) |
| KPCO | $ 4,271 | $ 1,971 | $ 2,978 | $ 3,738 | $ 3,239 |
| OPCO | $ (38,270) | $ (37,194) | $ (68,562) | $ (63,948) | $ (51,993) |
| Total | $ 8,760 | $ (14,071) | $ (39,595) | $ (66,167) | $ (27,768) |
| Change | | | | | |
| APCO | $ (352,507) | $ (373,391) | $ (386,736) | $ (343,027) | $ (363,915) |
| CSP | $ 1,205 | $ 23,554 | $ 6,935 | $ (23,768) | $ 1,981 |
| I&M | $ 82,777 | $ 82,267 | $ 193,881 | $ 284,178 | $ 160,776 |
| KPCO | $ (62,885) | $ (59,440) | $ (78,782) | $ (96,220) | $ (74,332) |
| OPCO | $ 331,410 | $ 327,010 | $ 264,702 | $ 178,837 | $ 275,490 |
| Total | $ - | $ - | $ - | $ - | $ - |

Table 3 shows the SO2 Cost for the Pool and Standalone cases for each year of the study.

**Table 3 – Scenario A**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| ELIMINATION OF IAA - Net SO2 Cost ($000) | | | | | |
| Pool in Place | | | | | |
| APCO | $ (20,187) | $ (9,680) | $ (21,065) | $ (4,860) | $ (13,948) |
| CSP | $ (3,722) | $ (5,627) | $ (5,681) | $ (2,869) | $ (4,475) |
| I&M | $ 5,258 | $ 4,611 | $ 23,905 | $ 22,167 | $ 13,985 |
| KPCO | $ 4,694 | $ 6,996 | $ (1,653) | $ (1,798) | $ 2,060 |
| OPCO | $ 13,470 | $ 26,002 | $ 7,632 | $ (17,659) | $ 7,361 |
| Total | $ (487) | $ 22,302 | $ 3,139 | $ (5,019) | $ 4,984 |
| PJM Standalone | | | | | |
| APCO | $ 2,370 | $ 3,699 | $ (39,129) | $ (20,540) | $ (13,400) |
| CSP | $ 4,218 | $ 3,626 | $ (17,953) | $ (29,067) | $ (9,794) |
| I&M | $ 4,567 | $ 4,380 | $ 60,476 | $ 53,000 | $ 30,606 |
| KPCO | $ 4,690 | $ 3,346 | $ 3,346 | $ 358 | $ 2,935 |
| OPCO | $ 5,793 | $ 5,592 | $ 1,684 | $ 164 | $ 3,308 |
| Total | $ 21,638 | $ 20,643 | $ 8,424 | $ 3,916 | $ 13,655 |
| Change | | | | | |
| APCO | $ 22,557 | $ 13,379 | $ (18,064) | $ (15,679) | $ 548 |
| CSP | $ 7,939 | $ 9,253 | $ (12,272) | $ (26,198) | $ (5,320) |
| I&M | $ (691) | $ (231) | $ 36,571 | $ 30,833 | $ 16,621 |
| KPCO | $ (4) | $ (3,650) | $ 5,000 | $ 2,156 | $ 875 |
| OPCO | $ (7,677) | $ (20,410) | $ (5,949) | $ 17,823 | $ (4,053) |
| Total | $ 22,125 | $ (1,659) | $ 5,285 | $ 8,935 | $ 8,671 |

Table 4 shows the summary of the Net Production component, the Capacity component and IAA component for the Pool and Standalone cases for each year of the study.

**Table 4 – Scenario A**

| TOTAL OF NET PRODUCTION, POOL CAPACITY AND IAA ($000) | | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2017 | 2018 | Average |
| | | | **Pool in Place** | | |
| APCO | $ 1,436,632 | $ 1,599,131 | $ 2,145,040 | $ 2,060,191 | $ 1,810,249 |
| CSP | $ 573,870 | $ 652,331 | $ 1,060,480 | $ 1,093,819 | $ 845,125 |
| I&M | $ 559,215 | $ 577,274 | $ 712,720 | $ 582,309 | $ 607,879 |
| KPCO | $ 288,533 | $ 310,540 | $ 460,750 | $ 474,074 | $ 383,474 |
| OPCO | $ 624,972 | $ 781,818 | $ 1,290,710 | $ 1,428,402 | $ 1,031,476 |
| Total | $ 3,483,223 | $ 3,921,093 | $ 5,669,701 | $ 5,638,794 | $ 4,678,203 |
| | | | **PJM Standalone** | | |
| APCO | $ 1,136,519 | $ 1,264,162 | $ 1,973,411 | $ 1,903,777 | $ 1,569,467 |
| CSP | $ 597,906 | $ 687,395 | $ 1,209,701 | $ 1,271,223 | $ 941,556 |
| I&M | $ 595,876 | $ 629,678 | $ 741,814 | $ 575,303 | $ 635,668 |
| KPCO | $ 222,805 | $ 244,927 | $ 400,409 | $ 416,322 | $ 321,116 |
| OPCO | $ 952,308 | $ 1,093,175 | $ 1,349,595 | $ 1,481,003 | $ 1,219,020 |
| Total | $ 3,505,414 | $ 3,919,336 | $ 5,674,931 | $ 5,647,627 | $ 4,686,827 |
| | | | **Change** | | |
| APCO | $ (300,114) | $ (334,969) | $ (171,629) | $ (156,415) | $ (240,782) |
| CSP | $ 24,036 | $ 35,064 | $ 149,221 | $ 177,404 | $ 96,431 |
| I&M | $ 36,661 | $ 52,404 | $ 29,094 | $ (7,006) | $ 27,788 |
| KPCO | $ (65,729) | $ (65,613) | $ (60,342) | $ (57,752) | $ (62,359) |
| OPCO | $ 327,335 | $ 311,356 | $ 58,885 | $ 52,602 | $ 187,545 |
| Total | $ 22,191 | $ (1,757) | $ 5,230 | $ 8,833 | $ 8,624 |

**d. Scenario B – High Market Price**

Summary of Scenario B

The following table presents a summary of the results for Scenario B which is based on a high view of market prices. PJM market prices utilized are those at the top of the market price range that might be expected during the four-year study period. The production cost numbers presented below are the average for the four-year study period. The summary table shows the difference between the Pool and the PJM Standalone case for Net Production Cost, Capacity and the IAA. Decreases indicate that the Standalone case is more favorable for a particular pool member.

**Summary Table – Scenario B (Average for Study Period)**

| $Millions | Net Production | | Capacity | | IAA Elimination | | Total | |
|---|---|---|---|---|---|---|---|---|
| APCO | $ | 295 | $ | (314) | $ | (0) | $ | (19) |
| CSP | $ | 183 | $ | 41 | $ | (3) | $ | 220 |
| I&M | $ | (266) | $ | 139 | $ | 14 | $ | (113) |
| KPCO | $ | 29 | $ | (66) | $ | 1 | $ | (37) |
| OPCO | $ | (240) | $ | 201 | $ | (3) | $ | (42) |

Additional Specific Assumptions For Scenario B

- Pool affiliate transactions are eliminated in the Standalone view
- All short or excess energy is bought and sold in the PJM spot market – no bilateral contracts- in the Standalone view
- PJM Capacity is priced at $160 MW-Day for 2010 and 2011, and $360 MW-Day for 2017 and 2018
- AEP is able to sell a relatively high amount of its available excess energy in the market

Additional Detail For Scenario B

The following tables present more detailed data for Scenario B, using high market prices.

Table 1 shows the Net Production cost for the Pool and Standalone cases for each year of the study.

**Table 1 – Scenario B**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| NET PRODUCTION COST ($000) | | | | | |
| | | Pool in Place | | | |
| APCO | $ 1,085,570 | $ 1,349,487 | $ 2,211,114 | $ 2,230,699 | $ 1,719,218 |
| CSP | $ 599,752 | $ 757,667 | $ 1,260,440 | $ 1,247,303 | $ 966,290 |
| I&M | $ 617,706 | $ 708,757 | $ 1,058,200 | $ 1,045,302 | $ 857,491 |
| KPCO | $ 232,095 | $ 287,648 | $ 499,265 | $ 498,250 | $ 379,314 |
| OPCO | $ 1,000,534 | $ 1,294,400 | $ 2,189,168 | $ 2,227,102 | $ 1,677,801 |
| Total | $ 3,535,657 | $ 4,397,958 | $ 7,218,188 | $ 7,248,655 | $ 5,600,115 |
| | | PJM Standalone | | | |
| APCO | $ 1,400,917 | $ 1,604,007 | $ 2,523,020 | $ 2,528,932 | $ 2,014,219 |
| CSP | $ 753,606 | $ 913,273 | $ 1,420,014 | $ 1,508,269 | $ 1,148,790 |
| I&M | $ 393,006 | $ 488,005 | $ 839,872 | $ 643,570 | $ 591,113 |
| KPCO | $ 246,275 | $ 301,151 | $ 526,997 | $ 556,883 | $ 407,826 |
| OPCO | $ 741,772 | $ 1,091,531 | $ 1,908,081 | $ 2,010,868 | $ 1,438,063 |
| Total | $ 3,535,577 | $ 4,397,967 | $ 7,217,984 | $ 7,248,521 | $ 5,600,012 |
| | | Change | | | |
| APCO | $ 315,347 | $ 254,520 | $ 311,906 | $ 298,232 | $ 295,001 |
| CSP | $ 153,854 | $ 155,606 | $ 159,574 | $ 260,966 | $ 182,500 |
| I&M | $ (224,699) | $ (220,752) | $ (218,328) | $ (401,732) | $ (266,378) |
| KPCO | $ 14,180 | $ 13,503 | $ 27,732 | $ 58,634 | $ 28,512 |
| OPCO | $ (258,762) | $ (202,869) | $ (281,088) | $ (216,234) | $ (239,738) |
| Total | $ (80) | $ 9 | $ (204) | $ (134) | $ (102) |

Table 2 shows the Capacity Cost for the Pool and Standalone cases for each year of the study.

**Table 2 – Scenario B**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| CAPACITY ($000) | | | | | |
| Pool in Place (Pool Capacity Payments/Receipts + PJM Capacity Surplus Sale) | | | | | |
| APCO | $ 379,445 | $ 381,246 | $ 404,563 | $ 334,038 | $ 374,823 |
| CSP | $ 13,180 | $ (19,580) | $ 15,365 | $ 41,992 | $ 12,739 |
| I&M | $ (67,804) | $ (94,722) | $ (243,071) | $ (357,987) | $ (190,896) |
| KPCO | $ 68,534 | $ 59,275 | $ 78,345 | $ 94,253 | $ 75,102 |
| OPCO | $ (365,322) | $ (371,246) | $ (344,291) | $ (261,172) | $ (335,508) |
| Total | $ 28,032 | $ (45,026) | $ (89,089) | $ (148,876) | $ (63,740) |
| PJM Standalone(Capacity Based on PJM Market) | | | | | |
| APCO | $ 66,109 | $ 57,758 | $ 77,000 | $ 41,391 | $ 60,564 |
| CSP | $ 34,806 | $ 31,244 | $ 71,350 | $ 76,475 | $ 53,469 |
| I&M | $ 35,916 | $ (21,316) | $ (89,878) | $ (131,269) | $ (51,637) |
| KPCO | $ 13,666 | $ 6,307 | $ 6,701 | $ 8,410 | $ 8,771 |
| OPCO | $ (122,465) | $ (119,019) | $ (154,264) | $ (143,883) | $ (134,908) |
| Total | $ 28,032 | $ (45,026) | $ (89,089) | $ (148,876) | $ (63,740) |
| Change | | | | | |
| APCO | $ (313,336) | $ (323,489) | $ (327,563) | $ (292,647) | $ (314,259) |
| CSP | $ 21,627 | $ 50,824 | $ 55,986 | $ 34,483 | $ 40,730 |
| I&M | $ 103,720 | $ 73,406 | $ 153,193 | $ 226,718 | $ 139,259 |
| KPCO | $ (54,868) | $ (52,968) | $ (71,644) | $ (85,843) | $ (66,331) |
| OPCO | $ 242,857 | $ 252,227 | $ 190,027 | $ 117,289 | $ 200,600 |
| Total | $ - | $ (0) | $ - | $ - | $ (0) |

Table 3 shows the SO2 Cost for the Pool and Standalone cases for each year of the study.

**Table 3 – Scenario B**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| ELIMINATION OF IAA - Net SO2 Cost ($000) | | | | | |
| Pool in Place | | | | | |
| APCO | $ (17,765) | $ (4,313) | $ (20,435) | $ (4,816) | $ (11,832) |
| CSP | $ (5,416) | $ (7,359) | $ (5,770) | $ (1,908) | $ (5,113) |
| I&M | $ 6,121 | $ 8,736 | $ 21,254 | $ 19,680 | $ 13,948 |
| KPCO | $ 4,540 | $ 7,579 | $ (1,517) | $ (1,808) | $ 2,199 |
| OPCO | $ 11,969 | $ 20,551 | $ 8,416 | $ (15,613) | $ 6,331 |
| Total | $ (552) | $ 25,194 | $ 1,948 | $ (4,464) | $ 5,532 |
| PJM Standalone | | | | | |
| APCO | $ 2,599 | $ 4,080 | $ (36,207) | $ (18,632) | $ (12,040) |
| CSP | $ 3,904 | $ 2,275 | $ (15,142) | $ (24,414) | $ (8,344) |
| I&M | $ 5,227 | $ 4,750 | $ 54,967 | $ 46,284 | $ 27,807 |
| KPCO | $ 5,130 | $ 4,670 | $ 3,365 | $ 378 | $ 3,386 |
| OPCO | $ 5,497 | $ 5,094 | $ 1,701 | $ 156 | $ 3,112 |
| Total | $ 22,357 | $ 20,869 | $ 8,683 | $ 3,772 | $ 13,920 |
| Change | | | | | |
| APCO | $ 20,364 | $ 8,393 | $ (15,772) | $ (13,816) | $ (208) |
| CSP | $ 9,320 | $ 9,634 | $ (9,372) | $ (22,506) | $ (3,231) |
| I&M | $ (894) | $ (3,986) | $ 33,712 | $ 26,604 | $ 13,859 |
| KPCO | $ 590 | $ (2,909) | $ 4,882 | $ 2,185 | $ 1,187 |
| OPCO | $ (6,472) | $ (15,457) | $ (6,715) | $ 15,769 | $ (3,219) |
| Total | $ 22,909 | $ (4,325) | $ 6,735 | $ 8,236 | $ 8,389 |

Table 4 is the sum of the Net Production component, the Capacity component and IAA component for the Pool and Standalone cases for each year of the study.

**Table 4 – Scenario B**

| TOTAL OF NET PRODUCTION, POOL CAPACITY AND IAA ($000) | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| **Pool in Place** | | | | | |
| APCO | $ 1,447,250 | $ 1,726,420 | $ 2,595,242 | $ 2,559,922 | $ 2,082,208 |
| CSP | $ 607,515 | $ 730,728 | $ 1,270,035 | $ 1,287,387 | $ 973,916 |
| I&M | $ 556,022 | $ 622,771 | $ 836,384 | $ 706,995 | $ 680,543 |
| KPCO | $ 305,169 | $ 354,502 | $ 576,093 | $ 590,695 | $ 456,615 |
| OPCO | $ 647,181 | $ 943,705 | $ 1,853,293 | $ 1,950,317 | $ 1,348,624 |
| Total | $ 3,563,137 | $ 4,378,126 | $ 7,131,047 | $ 7,095,315 | $ 5,541,906 |
| **PJM Standalone** | | | | | |
| APCO | $ 1,469,625 | $ 1,665,844 | $ 2,563,813 | $ 2,551,691 | $ 2,062,743 |
| CSP | $ 792,317 | $ 946,792 | $ 1,476,222 | $ 1,560,330 | $ 1,193,915 |
| I&M | $ 434,149 | $ 471,439 | $ 804,961 | $ 558,585 | $ 567,284 |
| KPCO | $ 265,071 | $ 312,128 | $ 537,063 | $ 565,670 | $ 419,983 |
| OPCO | $ 624,804 | $ 977,606 | $ 1,755,518 | $ 1,867,141 | $ 1,306,267 |
| Total | $ 3,585,966 | $ 4,373,809 | $ 7,137,578 | $ 7,103,417 | $ 5,550,192 |
| **Change** | | | | | |
| APCO | $ 22,375 | $ (60,575) | $ (31,429) | $ (8,231) | $ (19,465) |
| CSP | $ 184,801 | $ 216,064 | $ 206,187 | $ 272,942 | $ 219,999 |
| I&M | $ (121,873) | $ (151,332) | $ (31,422) | $ (148,410) | $ (113,259) |
| KPCO | $ (40,098) | $ (42,374) | $ (39,030) | $ (25,024) | $ (36,632) |
| OPCO | $ (22,377) | $ 33,901 | $ (97,775) | $ (83,176) | $ (42,357) |
| Total | $ 22,829 | $ (4,317) | $ 6,531 | $ 8,102 | $ 8,286 |

### e. Scenario C –Cook Units Outage

Summary of Scenario C

The following table presents the summary results for Scenario C, which simulates the impact on production costs based on an extended outage for both Cook nuclear units. This scenario uses the same market prices as Scenario B (*i.e.*, high market prices). The production cost numbers presented below are the average for the 2010 and 2011. The summary table shows the difference between the Pool and the PJM Standalone cases for Net Production Cost, Capacity and the IAA. Decreases indicate that the Standalone case is more favorable for a particular pool member.

**Summary Table – Scenario C (Average for 2010 and 2011)**

| $Millions | Net Production | Capacity | IAA Elimination | Total |
|---|---|---|---|---|
| APCO | $ 152 | $ (332) | $ 12 | $ (168) |
| CSP | $ 40 | $ 28 | $ 10 | $ 78 |
| I&M | $ 71 | $ 123 | $ (3) | $ 191 |
| KPCO | $ (3) | $ (57) | $ (2) | $ (62) |
| OPCO | $ (261) | $ 238 | $ (8) | $ (30) |

Additional Specific Assumptions For Scenario C

- Both Cook units are out of service throughout 2010 and 2011
- Pool affiliate transactions are eliminated in the Standalone view
- All short or excess energy is bought and sold in the PJM spot market – no bilateral contracts- in the Standalone view
- PJM Capacity is priced at $160 MW-Day for 2010 and 2011

Additional Detail For Scenario C

The following tables present more detailed data for Scenario C.

Table 1 shows the Net Production cost for the Pool and Standalone cases for each year of the study.

**Table 1 – Scenario C**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| NET PRODUCTION COST ($000) | | | | | |
| | | Pool in Place | | | |
| APCO | $ 1,250,877 | $ 1,599,828 | | | $ 1,425,353 |
| CSP | $ 690,001 | $ 880,205 | | | $ 785,103 |
| I&M | $ 877,822 | $ 1,045,066 | | | $ 961,444 |
| KPCO | $ 275,358 | $ 345,777 | | | $ 310,567 |
| OPCO | $ 1,153,863 | $ 1,426,606 | | | $ 1,290,235 |
| Total | $ 4,247,920 | $ 5,297,482 | | | $ 4,772,701 |
| | | PJM Standalone | | | |
| APCO | $ 1,451,800 | $ 1,702,930 | | | $ 1,577,365 |
| CSP | $ 740,812 | $ 908,567 | | | $ 824,690 |
| I&M | $ 956,466 | $ 1,109,320 | | | $ 1,032,893 |
| KPCO | $ 273,692 | $ 342,016 | | | $ 307,854 |
| OPCO | $ 825,072 | $ 1,234,327 | | | $ 1,029,700 |
| Total | $ 4,247,842 | $ 5,297,161 | | | $ 4,772,501 |
| | | Change | | | |
| APCO | $ 200,923 | $ 103,102 | | | $ 152,013 |
| CSP | $ 50,811 | $ 28,363 | | | $ 39,587 |
| I&M | $ 78,644 | $ 64,253 | | | $ 71,449 |
| KPCO | $ (1,665) | $ (3,760) | | | $ (2,713) |
| OPCO | $ (328,791) | $ (192,279) | | | $ (260,535) |
| Total | $ (78) | $ (321) | | | $ (200) |

Table 2 shows the Capacity Cost for the Pool and Standalone cases for each year of the study.

**Table 2 – Scenario C**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| CAPACITY ($000) | | | | | |
| Pool in Place (Pool Capacity Payments/Receipts + PJM Capacity Surplus Sale) | | | | | |
| APCO | $ 379,445 | $ 410,574 | | | $ 395,009 |
| CSP | $ 13,180 | $ (2,923) | | | $ 5,128 |
| I&M | $ (67,804) | $ (78,053) | | | $ (72,928) |
| KPCO | $ 68,534 | $ 65,421 | | | $ 66,977 |
| OPCO | $ (365,322) | $ (350,985) | | | $ (358,153) |
| Total | $ 28,032 | $ 44,034 | | | $ 36,033 |
| PJM Standalone(Capacity Based on PJM Market) | | | | | |
| APCO | $ 66,109 | $ 59,334 | | | $ 62,722 |
| CSP | $ 34,806 | $ 32,062 | | | $ 33,434 |
| I&M | $ 35,916 | $ 64,006 | | | $ 49,961 |
| KPCO | $ 13,666 | $ 6,599 | | | $ 10,132 |
| OPCO | $ (122,465) | $ (117,968) | | | $ (120,216) |
| Total | $ 28,032 | $ 44,034 | | | $ 36,033 |
| Change | | | | | |
| APCO | $ (313,336) | $ (351,239) | | | $ (332,288) |
| CSP | $ 21,627 | $ 34,985 | | | $ 28,306 |
| I&M | $ 103,720 | $ 142,060 | | | $ 122,890 |
| KPCO | $ (54,868) | $ (58,822) | | | $ (56,845) |
| OPCO | $ 242,857 | $ 233,017 | | | $ 237,937 |
| Total | $ - | $ - | | | $ - |

Table 3 shows the SO2 Cost for the Pool and Standalone cases for each year of the study.

**Table 3 – Scenario C**

| | 2010 | 2011 | 2017 | 2018 | Average |
|---|---|---|---|---|---|
| ELIMINATION OF IAA - Net SO2 Cost ($000) | | | | | |
| Pool in Place | | | | | |
| APCO | $ (14,904) | $ (3,190) | | | $ (9,047) |
| CSP | $ (6,079) | $ (7,669) | | | $ (6,874) |
| I&M | $ 6,010 | $ 9,937 | | | $ 7,974 |
| KPCO | $ 5,443 | $ 9,051 | | | $ 7,247 |
| OPCO | $ 10,200 | $ 15,514 | | | $ 12,857 |
| Total | $ 671 | $ 23,643 | | | $ 12,157 |
| PJM Standalone | | | | | |
| APCO | $ 2,714 | $ 4,153 | | | $ 3,434 |
| CSP | $ 3,725 | $ 2,223 | | | $ 2,974 |
| I&M | $ 5,386 | $ 4,814 | | | $ 5,100 |
| KPCO | $ 5,132 | $ 4,800 | | | $ 4,966 |
| OPCO | $ 5,317 | $ 5,000 | | | $ 5,159 |
| Total | $ 22,273 | $ 20,991 | | | $ 21,632 |
| Change | | | | | |
| APCO | $ 17,617 | $ 7,343 | | | $ 12,480 |
| CSP | $ 9,803 | $ 9,893 | | | $ 9,848 |
| I&M | $ (625) | $ (5,123) | | | $ (2,874) |
| KPCO | $ (311) | $ (4,251) | | | $ (2,281) |
| OPCO | $ (4,883) | $ (10,514) | | | $ (7,699) |
| Total | $ 21,602 | $ (2,652) | | | $ 9,475 |

Table 4 shows the summary of the Net Production component, the Capacity component and IAA component for the Pool and Standalone cases for each year of the study.

**Table 4 – Scenario C**

| TOTAL OF NET PRODUCTION, POOL CAPACITY AND IAA ($000) | | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2017 | 2018 | Average |
| **Pool in Place** | | | | | |
| APCO | $ 1,615,418 | $ 2,007,212 | | | $ 1,811,315 |
| CSP | $ 697,102 | $ 869,612 | | | $ 783,357 |
| I&M | $ 816,028 | $ 976,950 | | | $ 896,489 |
| KPCO | $ 349,334 | $ 420,248 | | | $ 384,791 |
| OPCO | $ 798,741 | $ 1,091,136 | | | $ 944,938 |
| Total | $ 4,276,623 | $ 5,365,158 | | | $ 4,820,890 |
| **PJM Standalone** | | | | | |
| APCO | $ 1,520,622 | $ 1,766,418 | | | $ 1,643,520 |
| CSP | $ 779,343 | $ 942,852 | | | $ 861,098 |
| I&M | $ 997,767 | $ 1,178,140 | | | $ 1,087,954 |
| KPCO | $ 292,490 | $ 353,415 | | | $ 322,953 |
| OPCO | $ 707,924 | $ 1,121,359 | | | $ 914,642 |
| Total | $ 4,298,147 | $ 5,362,185 | | | $ 4,830,166 |
| **Change** | | | | | |
| APCO | $ (94,796) | $ (240,794) | | | $ (167,795) |
| CSP | $ 82,241 | $ 73,240 | | | $ 77,741 |
| I&M | $ 181,739 | $ 201,190 | | | $ 191,465 |
| KPCO | $ (56,844) | $ (66,833) | | | $ (61,839) |
| OPCO | $ (90,816) | $ 30,223 | | | $ (30,297) |
| Total | $ 21,524 | $ (2,973) | | | $ 9,276 |

## 8. OTHER ANALYSES

### a. Primary Energy Deliveries Priced Incrementally

At the request of stakeholders, the Company performed an analysis to show the effect on the operating companies if primary energy deliveries to other Pool members are priced at incremental cost of production rather than the average cost of production as is prescribed by the IA.

| | 2010 | 2011 | Average |
|---|---|---|---|
| **NET PRODUCTION COST ($000)** | | | |
| **Pool in Place - Avg.** | | | |
| APCO | $ 1,085,570 | $ 1,349,487 | $ 1,217,529 |
| CSP | $ 599,752 | $ 757,667 | $ 678,709 |
| I&M | $ 617,706 | $ 708,757 | $ 663,231 |
| KPCO | $ 232,095 | $ 287,648 | $ 259,871 |
| OPCO | $ 1,000,534 | $ 1,294,400 | $ 1,147,467 |
| Total | $ 3,535,657 | $ 4,397,958 | $ 3,966,808 |
| **Pool in Place - Incremental** | | | |
| APCO | $ 1,085,761 | $ 1,346,314 | $ 1,216,038 |
| CSP | $ 599,371 | $ 755,400 | $ 677,386 |
| I&M | $ 610,753 | $ 703,962 | $ 657,358 |
| KPCO | $ 232,458 | $ 287,519 | $ 259,988 |
| OPCO | $ 1,007,314 | $ 1,304,763 | $ 1,156,038 |
| Total | $ 3,535,657 | $ 4,397,958 | $ 3,966,808 |
| **Change** | | | |
| APCO | $ 191 | $ (3,173) | $ (1,491) |
| CSP | $ (381) | $ (2,266) | $ (1,324) |
| I&M | $ (6,952) | $ (4,795) | $ (5,873) |
| KPCO | $ 363 | $ (129) | $ 117 |
| OPCO | $ 6,780 | $ 10,362 | $ 8,571 |
| Total | $ 0 | $ 0 | $ 0 |

b. <u>Modification of the MLR</u>

As described earlier, the IA defines MLR as the ratio of a member's highest NCP in relationship to the total of all members' highest NCP demand for the preceding twelve months. At the request of the parties, an analysis was performed to determine the effects on I&M's Pool components if the FERC approved a change in the definition of the MLR to utilize to a Peak Load Contribution (PLC) method based on the PJM tariff. The PLC method uses the coincident peak for each member company at the time of the PJM system's five highest daily peaks. For PJM the five highest peaks occur in the summer. The year 2010 was evaluated assuming high market prices.

The table below compares the MLR ratios for 2010 to the PLC ratios.

| Allocation Methods | | | |
|---|---|---|---|
| Operating Company | Average MLR | Average PLC | Delta |
| | (1) | (2) | (3)=(2)-(1) |
| APCO | 0.32755 | 0.29748 | (0.03007) |
| CSP | 0.18587 | 0.20271 | 0.01684 |
| I&M | 0.19023 | 0.19669 | 0.00646 |
| KPCO | 0.07083 | 0.05806 | (0.01277) |
| OPCO | 0.22552 | 0.24506 | 0.01954 |
| Total | 1.00000 | 1.00000 | 0.00000 |

Applying PLC instead of MLR to the most significant of the items that are affected by the MLR produces the following results for the Pool members.

| 2010 Treatment of Pool Payments under Member Load Ratio (MLR) and Peak Load Contribution (PLC) *All Amounts in $000* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Member Load Ratio | | | Peak Load Contribution | | | Deltas | | |
| Operating Company | Pool Capacity | OSS Margins | Total | Pool Capacity | OSS Margins | Total | Pool Capacity | OSS Margins | Total |
| | (4) | (5) | (6) = (4)+(5) | (7) | (8) | (9) = (7)+(8) | (10) | (11) | (12) = (10)+(11) |
| APCO | $370,803 | ($20,041) | $350,762 | $240,165 | ($18,125) | $222,039 | ($130,638) | $1,916 | ($128,722) |
| CSP | $8,035 | ($11,534) | ($3,499) | $80,603 | ($12,423) | $68,180 | $72,568 | ($889) | $71,679 |
| I&M | ($73,794) | ($11,780) | ($85,573) | ($44,905) | ($12,427) | ($57,332) | $28,889 | ($648) | $28,242 |
| KPCO | $66,617 | ($4,379) | $62,238 | $11,065 | ($3,616) | $7,449 | ($55,552) | $763 | ($54,789) |
| OPCO | ($371,661) | ($13,886) | ($385,546) | ($286,928) | ($15,028) | ($301,956) | $84,733 | ($1,142) | $83,590 |
| Total | $0 | ($61,619) | ($61,619) | $0 | ($61,619) | ($61,619) | $0 | $0 | $0 |

Negative represents a decrease in cost of service.

Note: Peak Load Contribution based on average of individual Operating Company peaks at the times of the 5 daily PJM peaks during the 12 months ended October 2008 (applicable to PJM Planning Year 09/10 for Jan - May 2010) and the 12 months ended October 2009 (applicable to PJM Planning Year 10/11 for Jun - Dec 2010).

### c. Plant Retirement Analysis

At the request of the other parties to this proceeding the Company prepared an analysis summarized in the table below which shows how planned retirements affect the relative capacity positions in the AEP Pool between 2010 and 2018. Also shown are the MLRs for these years.

## CAPACITY SUMMARY: 2010 AND 2018

| | Dec. 2010 Capacity MW | Dec. 2010 Percent of Capacity | Retirements Through 2018 | Rerates and Additions Through 2018 | Dec. 2018 Capacity MW | Dec. 2018 Percent of Capacity |
|---|---|---|---|---|---|---|
| APCO | 6,449 | 24% | (635) | 1,281 | 7,095 | 27% |
| CSP | 4,892 | 19% | (265) | 112 | 4,739 | 18% |
| I&M | 5,511 | 21% | 0 | 519 | 6,030 | 23% |
| KPCO | 1,481 | 6% | 0 | (48) | 1,433 | 5% |
| OPCO | 8,068 | 31% | (2,220) | 713 | 6,561 | 25% |
| Total | 26,401 | | (3,120) | 2,578 | 25,858 | |

## Member Load Ratio (MLR): 2010 AND 2018

| | Dec. 2010 MLR | Dec. 2018 MLR |
|---|---|---|
| APCO | 32.6% | 33.2% |
| CSP | 18.2% | 18.9% |
| I&M | 19.5% | 18.7% |
| KPCO | 7.2% | 6.9% |
| OPCO | 22.6% | 22.3% |
| Total | 100.0% | 100.0% |

## CERTIFICATE OF SERVICE

The undersigned certifies that on December 11, 2009 a copy of the foregoing was served by email transmission upon the following:

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INDS01 1168240v1

KPSC Case No. 2011-00401
Commission Staff's Second Set of Data Requests
Order Dated February 8, 2012
Item No 1, Attachment 5
Page 1 of 1

KENTUCKY POWER COMPANY
ENVIRONMENTAL SURCHARGE REPORT
CALCULATION OF E(m) and SURCHARGE FACTOR

**As Originally Filed**

| | CALCULATION OF E(m)<br>E(m) = CRR - BRR | January 2011 | February 2011 | March 2011 | April 2011 | May 2011 | June 2011 | July 2011 | August 2011 | September 2011 | October 2011 | November 2011 | December 2011 | Total Impact of Pool Dissolution |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LINE 1 | CRR from ES FORM 3.00 | $4,880,732 | $6,169,875 | $5,748,092 | $5,830,053 | $5,705,345 | $5,508,388 | $4,372,798 | $4,236,648 | $4,019,669 | $3,806,605 | $3,632,110 | $4,788,967 | |
| LINE 2 | Brr from ES FORM 1.10 | $3,991,163 | $3,590,810 | $3,651,374 | $3,647,040 | $3,922,590 | $3,627,274 | $3,805,325 | $4,088,830 | $3,740,010 | $3,260,302 | $2,786,040 | $4,074,321 | |
| LINE 3 | E(m) (LINE 1 - LINE 2) | $889,569 | $2,579,065 | $2,096,718 | $2,183,013 | $1,782,755 | $1,881,114 | $567,473 | $147,818 | $279,659 | $546,303 | $846,070 | $714,646 | |
| LINE 4 | Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1 | 84.7% | 85.1% | 79.3% | 78.7% | 77.6% | 72.7% | 68.3% | 76.2% | 79.7% | 78.0% | 83.3% | 83.0% | |
| LINE 5A | KY Retail E(m) (LINE 3 * LINE 4) | $753,465 | $2,194,764 | $1,662,697 | $1,718,031 | $1,383,418 | $1,367,570 | $387,584 | $112,638 | $222,889 | $426,116 | $704,776 | $593,156 | |
| LINE 5B | Environmental Surcharge Clause Adjustment Case No. 2009-00038, dated May 14, 2008 | ($49,885) | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | | | |
| LINE 6 | (Over)/Under Recovery Adjustment from ES FORM 3.30 | ($877,185) | ($167,756) | ($174,939) | $759,603 | $179,377 | $7,110 | ($235,309) | ($197,884) | $5,290 | ($27,561) | $15,676 | ($122,928) | |
| LINE 7 | Net KY Retail E(m) (LINE 5 + LINE 6) | ($173,605) | $2,027,028 | $1,487,758 | $2,477,634 | $1,562,795 | $1,374,680 | $152,275 | ($85,246) | $228,179 | $398,555 | $720,452 | $470,228 | |
| | SURCHARGE FACTOR | | | | | | | | | | | | | |
| LINE 8 | Net KY Retail E(m) (Line 7) | ($173,605) | $2,027,028 | $1,487,758 | $2,477,634 | $1,562,795 | $1,374,680 | $152,275 | ($85,246) | $228,179 | $398,555 | $720,452 | $470,228 | |
| LINE 9 | KY Retail R(m) from ES FORM 3.30 | $65,952,346 | $58,755,458 | $44,307,469 | $42,540,201 | $40,424,987 | $46,953,714 | $46,534,433 | $47,519,210 | $44,097,032 | $38,287,502 | $42,852,396 | $50,620,415 | |
| LINE 10 | Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9) | -0.2632% | 3.4499% | 3.3578% | 5.8242% | 3.8659% | 2.9277% | 0.3272% | -0.1794% | 0.5174% | 1.0410% | 1.6812% | 0.9289% | |

**As Revised**

| | CALCULATION OF E(m)<br>E(m) = CRR - BRR | January 2011 | February 2011 | March 2011 | April 2011 | May 2011 | June 2011 | July 2011 | August 2011 | September 2011 | October 2011 | November 2011 | December 2011 | Total Impact of Pool Dissolution |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LINE 11 | CRR from ES FORM 3.00 | $2,714,644 | $4,089,573 | $3,628,792 | $3,734,149 | $3,699,134 | $3,361,797 | $2,187,218 | $2,058,862 | $1,857,476 | $2,263,585 | $2,101,854 | $3,215,311 | |
| LINE 12 | Brr from ES FORM 1.10 | $3,991,163 | $3,590,810 | $3,651,374 | $3,647,040 | $3,922,590 | $3,627,274 | $3,805,325 | $4,088,830 | $3,740,010 | $3,260,302 | $2,786,040 | $4,074,321 | |
| LINE 13 | E(m) (LINE 11 - LINE 12) | ($1,276,519) | $498,763 | ($22,582) | $87,109 | ($223,456) | ($265,477) | ($1,618,107) | ($2,029,968) | ($1,882,534) | ($996,717) | ($684,186) | ($859,010) | |
| LINE 14 | Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1 | 84.7% | 85.1% | 79.3% | 78.7% | 77.6% | 72.7% | 68.3% | 76.2% | 79.7% | 78.0% | 83.3% | 83.0% | |
| LINE 15 | KY Retail E(m) (LINE 13 * LINE 14) | ($1,081,212) | $424,447 | ($17,908) | $68,555 | ($173,402) | ($193,002) | ($1,105,167) | ($1,546,835) | ($1,500,379) | ($777,439) | ($569,927) | ($712,978) | |
| LINE 15B | Environmental Surcharge Clause Adjustment Case No. 2009-00038, dated May 14, 2008 | ($49,885) | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | |
| LINE 16 | (Over)/Under Recovery Adjustment from ES FORM 3.30 | ($877,185) | ($167,756) | ($174,939) | $759,603 | $179,377 | $7,110 | ($235,309) | ($197,884) | $5,290 | ($27,561) | $15,676 | ($122,928) | |
| LINE 17 | Net KY Retail E(m) (LINE 15 + LINE 16) | ($2,008,282) | $256,691 | ($192,847) | $828,158 | $5,975 | ($185,892) | ($1,340,476) | ($1,744,719) | ($1,495,089) | ($805,000) | ($554,251) | ($835,906) | |
| | SURCHARGE FACTOR | | | | | | | | | | | | | |
| LINE 18 | Net KY Retail E(m) (Line 17) | ($2,008,282) | $256,691 | ($192,847) | $828,158 | $5,975 | ($185,892) | ($1,340,476) | ($1,744,719) | ($1,495,089) | ($805,000) | ($554,251) | ($835,906) | |
| LINE 19 | KY Retail R(m) from ES FORM 3.30 | $65,952,346 | $58,755,458 | $44,307,469 | $42,540,201 | $40,424,987 | $46,953,714 | $46,534,433 | $47,519,210 | $44,097,032 | $38,287,502 | $42,852,396 | $50,620,415 | |
| LINE 20 | Environmental Surcharge Factor for Expense Month (Line 18 / LINE 19) | -3.0451% | 0.4369% | -0.4352% | 1.9468% | 0.0148% | -0.3959% | -2.8806% | -3.6716% | -3.3905% | -2.1025% | -1.2934% | -1.6513% | |
| LINE 21 | Difference (Line 18 - Line 8) | $ (1,834,677.00) | $ (1,770,337.00) | $ (1,680,605.00) | $ (1,649,476.00) | $ (1,556,820.00) | $ (1,560,572.00) | $ (1,492,751.00) | $ (1,659,473.00) | $ (1,723,268.00) | $ (1,203,555.00) | $ (1,274,703.00) | $ (1,306,134.00) | $ (16,131,534.00) |
| | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | $ (16,131,534.00) |

## Kentucky Power Company

### REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 1. Article 8 of the AEP System Interim Allowance Agreement states, "[t]his Agreement shall continue in effect from the effective date until the effective date of any subsequent agreement." Have either Kentucky Power or AEP contemplated a subsequent Interim Allowance Agreement and, if so, what form will it take.

### RESPONSE

Neither Kentucky Power nor AEP are presently contemplating any subsequent allowance agreement and no such agreement has been filed with FERC given the provisions of the proposed Power Cost Sharing Agreement.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staffs First Request, Item 4, which states that "[t]he overall scope and cost of the [Big Sandy Unit 1] environmental retrofit was deemed uneconomic due to the high cost and small capacity of the unit." Provide the type of environmental retrofit technology that Kentucky Power considered for Big Sandy Unit 1 and the estimated cost of that environmental retrofit on a total basis and on a per kW basis.

## RESPONSE

Kentucky Power considered Dry FGD NID technology coupled with an SCR. The estimated cost was $198,531,800 or approximately $720 per kW. The retrofitted unit would have required 1.7 lb SO2/MMbtu coal.

WITNESS: Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 7. Explain how Kentucky Power's 2011 Environmental Compliance Plan would differ if Kentucky Power had begun the installation of a scrubber at Big Sandy Unit 2 in 2004 or 2005 and whether the scrubber technology at that time would have allowed Kentucky Power to meet the then newly established Clean Air Interstate Rule and/or Clean Air Mercury Rule requirements.

## RESPONSE

Had the Company begun the installation of a scrubber at Big Sandy Unit 2 in 2004 or 2005, a wet flue gas desulfurization (WFGD) system would have been installed. The WFGD would have required a waste water treatment (WWT) facility for a chloride purge stream, an extensive dewatering system, and a dry sorbent injection (DSI) system to mitigate SO3. These systems are not required for the currently proposed dry flue gas desulfurization (DFGD) system.

To the Company's knowledge, the WFGD and its associated technologies would have allowed Kentucky Power to meet the then newly established Clean Air Interstate Rule and the Clean Air Mercury Rule requirements.

**WITNESS:** John M McManus and Robert Walton

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 15. Provide the estimated annual cost of the four environmental projects at other AEP facilities that are expected to be incorporated into Kentucky Power's environmental compliance recovery mechanism along with the Capital Improvement Requisitions ("CI") approved by the respective AEP Subcompany Board for each of the four environmental projects.

## RESPONSE

The estimated annual cost of the four environmental projects at other AEP facilities that are expected to be incorporated into KPCo's environmental compliance recovery mechanism is estimated to be $306,612, which includes an amount for the capacity investment as well as operations expenses and 50% of maintenance expenses, per the pool agreement. Please see Attachment 1 of the Company's response to KPSC 2-23 for support.

The Capital Improvement Requisitions approved by the respective AEP Subcompany Board for each of the four environmental projects that are already in service are attached as pages 2 through 21 to this response.

**WITNESS:** Lila P Munsey

# CAPITAL PROJECT APPROVAL REQUISITION

**Company:** Ohio Power **Project Number:** AMP001153

Authorization Type: Capital Improvement Version Number: 4

**Business Line:** Generation

**Location:** Amos Plant Unit-3 Ash Pond

**Project Title:** Amos-3 Ash Disposal Project

**Business Reason:** Environmental Regulations

**Brief Description:** The approval of this requisition will enable completion of engineering, material acquisition, construction, and commissioning activities for the project to provide adequate fly ash disposal means for Amos Unit-3. A conversion to a totally dry ash handing system is being installed to allow for the closure of the AM-3 fly ash pond outlet -001 by the end of 2010. The total estimated cost of this project is $75.3M.

**Regulatory Cost Recovery:** OPCo is permitted to seek a return on incremental environmental expenses through 2011 under the 2009 Ohio ESP order.

| Project Dates: | Start: | Completion: | In-Service: |
|---|---|---|---|
| | 8/1/2007 | 3/31/2011 | 12/31/2010 |

| Expenditure to be Authorized (fully loaded) | Capital ($) | Removal ($) | Total ($) |
|---|---|---|---|
| Previously Approved Amount | 25,911,334 | 0 | 25,911,334 |
| This Submission | 24,452,054 | 0 | 24,452,054 |
| **Total ($)** | **50,363,388** | **0** | **50,363,388** |

**Required Signatures**

| Authorization Limits | Title | Approver | Signature | Date |
|---|---|---|---|---|
| amt < $ 10m | Senior Vice President or Operating Company President | McCullough, M. | | |
| $ 10m ≤ amt < $ 20m | President AEP Transmission or President AEP Utilities/COO/EVP | Akins, N. | | |
| amt ≥ $ 20m | Chairman, President & CEO | Morris, M. | | |
| CP&B Review | Senior Vice President | Dieck, L. | | |

**2010 Direct Cost Budget Availability for this Authorization:** $34.78M In Budget $ ______ Offset

If offset, indicate source and amount:

**Requested future year amounts are included in or offset within the Strategic Plan Capital Forecast.**

# CAPITAL PROJECT APPROVAL REQUISITION

## Cash Flow (fully loaded)

| Year | Prior Years | 2010 | 2011 | 2012 | Future Years | Total ($) |
|---|---|---|---|---|---|---|
| Capital | 18,852,680 | 29,951,190 | 1,559,518 | 0 | 0 | **50,363,388** |
| Removal | | | | | | **0** |
| Total to be Authorized | 18,852,680 | 29,951,190 | 1,559,518 | 0 | 0 | **50,363,388** |
| Assoc. O & M | 639,071 | 0 | 0 | | | 639,071 |

*Note: Associated O & M is not approved with this requisition. Operating & Maintenance dollars are assumed to be in budget or offset in the year spent.*

## Financial Analysis Summary

This option for ash disposal was determined to be the lowest capital cost among the 11 options considered based on economic analysis and risk impact evaluation.

## Reason for Revision

Approximately 90% of the engineering and material procurement activities are complete, while more than 70% of the construction is still required to be finished for the project. This CI revision is required to secure funds to complete material procurement and construction activities for the new dry fly ash system. Additional construction resources could not be secured under the currently approved CI funding which was primarily for engineering and long lead time equipment only. It is anticipated that the project can be completed for this amount and no additional CI revision request will be required.

## Project Justification

1) Fly Ash disposal for Amos 3 will reach the fly ash pond design life capacity by 2012.
2) The current environmental concern involves the 8.6 MGD discharge to Little Scary Creek (outlet -001) meeting the selenium and whole effluent toxicity levels as set by the West Virginia Department of Environmental Protection (WVDEP). Treatment for this volume of effluent has been estimated as high as $197M.
3) Conversion to a totally dry ash handling system eliminates risks associated with additional capital investment to continue with use of the existing fly ash pond system for ash disposal.
4) These improvements were determined by a multi-discipline team to be the least total cost compared to all other alternatives, including consideration of risks and opportunity.

## Other Alternatives Considered

A study was conducted from April to July, 2007 to evaluate all options available for the transport and disposal of Amos-3 fly ash. A multi-discipline and multi-organizational team originally recommended a semi-dry pumping system as a replacement for the existing dilute-solution sluicing system. The semi-dry system would utilize the existing fly ash pond for ash disposal and allow for the elimination of outlet -001 and hence allow conformance with environmental NPDES limitations at outlet -001.

The semi-dry project was presented to the PMRG on January 20, 2009 to seek approval to begin detailed engineering/design. Recalling the failure of the ash impoundment dam at the TVA Kingston facility in

December 2008, the PMRG requested that the team further explore the dry disposal option. On February 19, 2009 the dry alternative was recommended to the PMRG and approved.

## Conclusion

The recommended dry fly ash alternative is the least capital cost option, as compared to the other alternatives. Construction began in March 2009 and the ash storage silo installation work is complete. These funds are required to complete construction of the new dry ash handling system, construction of the fly ash pond reclaim water system and closure of the -001 outfall.

## Associated / Future Projects

Future projects to be funded under separate Capital Improvement requests or other funding means include: 1) Completion of a new haul road to the existing FGD landfill for ash disposal; 2) Permanent closure of the fly ash pond.

## Project Contacts

| Contact | Name | Telephone |
|---|---|---|
| Project Manager | Karl Adams | 200-2084 |
| Requisition Detail Provider | Karl Adams | 200-2084 |

# CAPITAL PROGRAM APPROVAL REQUISITION

**Company:** **AEP System** **Program Number:** **WWT4HGRED**

Authorization Type: Capital Program Version Number: 2 Rev 2d

**Business Line:** Generation

**Location:** Various Generating Plant Locations

**Project Title:** Mercury Reduction in the FGD Chloride Purge Stream – Phase 2

**Business Reason:** Regulatory and Other Compliance

**Brief Description:** This Program Improvement Requisition requests funding for Phase 2 (final) of the project which includes the engineering, design, procurement and installation of WWT CPS mercury reduction systems at the Cardinal, Conesville, Amos and Mountaineer plants.
Funding for permanent in-pond mercury reduction systems at the Mitchell, Amos and Mountaineer plants is also requested as the pilot testing at Mitchell was successful in further reducing mercury concentrations.
Permit In-service dates::
Mitchell – 5/4/2010
Cardinal – 12/1/2010
Conesville – 12/13/2010
Amos – 3/9/2011
Mountaineer – 7/10/2011

**Regulatory Cost Recovery:** *See the Regulatory Cost Recovery Section.*

| **Project Dates:** | **Start:** | **Completion:** | **In-Service:** |
|---|---|---|---|
| | 8/1/2009 | Various (See Above) | Various (See Above) |

| **Expenditure to be Authorized** (fully loaded) | | | |
|---|---|---|---|
| | **Capital ($)** | **Removal ($)** | **Total ($)** |
| Previously Approved Amount | 4,939,039 | 0 | 4,939,039 |
| This Submission | 12,971,484 | 0 | 12,971,484 |
| **Total ($)** | **17,910,523** | **0** | **17,910,523** |

**Required Signatures**

| Authorization Limits | Title | Approver | Signature | Date |
|---|---|---|---|---|
| amt < $ 10m | Senior Vice President or Operating Company President | McCullough, M. | | |
| $ 10m ≤ amt < $ 20m | President AEP Transmission or President AEP Utilities/COO/EVP | Akins, N. | | |
| amt ≥ $ 20m | Chairman, President & CEO | Morris, M. | | |
| CP&B Review | Director | Martin, J. | | |

**2010 Direct Cost Budget Availability for this Authorization:** $9.1 In Budget $2.6 Offset

If offset, indicate source and amount: MT LBR Vertical Expansion

**Requested future year amounts are included in or offset within the Strategic Plan Capital Forecast.**

# AEP CAPITAL PROGRAM APPROVAL REQUISITION

## Cash Flow (fully loaded)

| Year | Prior Years | 2010 | 2011 | Future Years | Total ($) |
|---|---|---|---|---|---|
| Capital | $323,757 | $11,802,440 | $5,784,326 | 0 | $17,910,523 |
| Removal | 0 | 0 | 0 | 0 | 0 |
| Total to be Authorized | $323,757 | $11,802,440 | $5,784,326 | 0 | $17,910,523 |
| Assoc. O & M | 0 | 0 | 0 | 0 | 0 |

*Note: Associated O & M is not approved with this requisition. Operating & Maintenance dollars are assumed to be in budget or offset in the year spent.*

## Financial Analysis Summary

| Parameter | IRR | NPV | Payback Period | Discount Rate Used |
|---|---|---|---|---|
| Result | NA | NA | NA | NA |

*Note: These results must match all background information.*

## Program CI's

| CI Number | Operating Company | Previously Approved Amount ($) | | This Submission ($) | | Subtotal ($) | | Total ($) |
|---|---|---|---|---|---|---|---|---|
| | | Capital | Removal | Capital | Removal | Capital | Removal | |
| 000016400 | OPCo | 4,003,000 | 0 | (1,832,520) | 0 | 2,170,480 | 0 | 2,170,480 |
| 000016401 | Cardinal Oper Co | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 000016402 | OPCo | 90,825 | 0 | 754,905 | 0 | 845,730 | 0 | 845,730 |
| 000016403 | BPCo | 181,676 | 0 | 1,486,004 | 0 | 1,667,680 | 0 | 1,667,680 |
| 000016404 | APCo | 190,750 | 0 | 1,735,296 | 0 | 1,926,046 | 0 | 1,926,046 |
| 000016405 | OPCo | 81,750 | 0 | 480,948 | 0 | 562,698 | 0 | 562,698 |
| 000016406 | APCo | 272,500 | 0 | 2,219,531 | 0 | 2,492,031 | 0 | 2,492,031 |
| 000018350 | CPSCo | 118,538 | 0 | 987,433 | 0 | 1,105,971 | 0 | 1,105,971 |
| 000019861 | OPCo | 0 | 0 | 1,718,121 | 0 | 1,718,121 | 0 | 1,718,121 |
| 000019682 | APCo | 0 | 0 | 2,706,753 | 0 | 2,706,753 | 0 | 2,706,753 |
| 000019683 | APCo | 0 | 0 | 2,100,270 | 0 | 2,100,270 | 0 | 2,100,270 |
| 000019684 | OPCo | 0 | 0 | 614,743 | 0 | 614,743 | 0 | 614,743 |
| **Subtotal ($)** | | **4,939,039** | **0** | **12,971,484** | **0** | **17,910,523** | **0** | **17,910,523** |
| **Total AEP Portion ($)*** | | **4,757,363** | **0** | **11,485,480** | **0** | **16,242,843** | **0** | **16,242,843** |

* Excludes the Buckeye Power portion of Cardinal Plant

# CAPITAL PROGRAM APPROVAL REQUISITION

## Version 2

## Project Justification

The current NPDES permits for Mitchell, Mountaineer, Amos, Cardinal, and Conesville Plants contain water quality effluent limitations for mercury that are required to be met during 2010 to 2011. At these facilities, the mercury limits have been established at or below 12 ppt at their outfalls.

Pilot testing of mercury reduction technologies was conducted at Mountaineer Plant from July 2008 to December 2008. The most significant finding of the pilot test was that the mercury being discharged from the Chloride Purge Stream (CPS) in the Waste Water Treatment Plant (WWTP) could be significantly decreased (~80-90% reduction) by injecting an organo-sulfide chemical with an optimized coagulant feed upstream of the WWTP primary clarifiers. The increased mercury removal rate is primarily due to the capture and settling of mercury bound to fine suspended solid particles in the CPS effluent. Using Mitchell Plant as an example, the existing CPS WWTP discharge contains mercury concentrations in the range of 1000 - 2000 ppt. With the chemical optimization in the CPS WWTP, it has been demonstrated that mercury concentration in the effluent stream can be reduced to < 200 ppt, but could not achieve the required <12 ppt.

As noted above, mercury reduction at the CPS WWTP alone was not sufficient to comply with NPDES limits at pond outfalls. Mitchell, Mountaineer, and Amos will require mercury reduction in the other streams that enter the pond system. The removal mechanism for mercury for in-pond treatment is similar to the organo-sulfide and coagulant injection at the CPS WWTP where fine particles containing mercury will settle out in the ponds and are retained in the sludge rather than being discharged to the permitted outfall. In-pond treatment requires chemical injection systems, a recirculation system for coagulant dilution, and potential modification of the ponds to improve chemical distribution and increase effective retention to enhance settling of solids. A temporary in-pond treatment pilot test at the Mitchell Plant has demonstrated reduction in mercury to the 12 ppt level. Based on these results, permanent in-pond treatment systems at Mitchell, Mountaineer and Amos will be installed prior to the permit deadlines.

In-pond treatment at the Cardinal and Conesville Plants is not practical due to differences in the plant configuration. Due to the location of the outfalls, effluent is diluted and at this time it is expected permit requirements will be met. If additional mercury reduction is required it will be addressed using different technology or modifications.

Installation of the organo-sulfide and coagulant injection systems in the CPS WWTP and bottom ash pond is in progress at the Mitchell Plant with a compliance operational date of 5/4/2010. The compliance operational dates are 3/9/2011 for Amos Units 1-3, 12/1/2010 for Cardinal Units 1-3, 12/13/2010 for Conesville U4, and 7/10/2011 for Mountaineer.

Program funding is being requested for the second phase of this program:

Phase II: $13.0M

a. Complete engineering, design, procurement and installation of organo-sulfide and coagulant chemical treatment of the CPS in the WWTP at the Mountaineer, Amos, Conesville, and Cardinal Plants.
b. Complete engineering, design, procurement and installation of organo-sulfide and coagulant chemical injection systems for in-pond treatment at the Mitchell, Mountaineer, and Amos Plants. This includes potential pond configuration changes to enhance chemical distribution and solids sedimentation.

# CAPITAL PROGRAM APPROVAL REQUISITION

## Other Alternatives Considered

### Alternatives to Organo-Sulfide Chemical Treatment in CPS WWTP:

Pilot testing of mercury reduction technologies conducted at Mountaineer during 2008 included evaluation of the following technologies: ultrafiltration; mercury selective ion-exchange resin; and bioreactors. The direct equipment costs of these technologies range from $1.2 million to $5.45 million for a 350gpm system. Installation costs, balance of plant upgrades and overheads would greatly increase these costs. Additionally, each technology would require more footprint space than is currently available in the existing CPS WWTP buildings. The success of these technologies to reliably reduce mercury in the CPS WWTP to levels below 12 ppt was not demonstrated during the Mountaineer Pilot test. The ultrafiltration units employed by two of the vendors would not remain in service for extended time periods. The test units failed within two weeks of operation. While ion-exchange resin and bioreactor technologies showed promise of being able to produce an effluent mercury concentration of less than 12 ppt, each technology requires a fully operational ultrafiltration unit to remove suspended and colloidal mercury. Further pilot testing is required to find a filtration technology that may provide reliable service in addition to removing suspended and colloidal mercury from the effluent stream. The recommendation to install organo-sulfide chemical treatment of the CPS WWTP is based upon observations that an 80-90% reduction of mercury is reliably achieved with the application of this technology.

The primary O&M costs associated with the chemical treatment in the CPS WWTP are the organo-sulfide and coagulant chemical costs. Annual costs are expected to range from $50,000 to $100,000 at each site.

### Alternatives to In-Pond Treatment:

Alternative technologies to in-pond treatment that were considered are identical to those listed for the CPS WWTP. The most significant difference is that individual treatment of mercury containing streams entering the pond complexes have combined flow rates in excess of 6 million gallons per day. This is a flow rate approximately 12 times higher than the flow rate used for the cost basis of the alternative technologies considered for the CPS WWTP. A large volume flow rate would require a new treatment facility with a footprint much larger than any plant currently has available. In-pond chemical treatment has shown significant promise in laboratory testing and given the space constraints of the alternatives it may be the only viable option for Mitchell, Mountaineer and Amos Plants. The in-pond pilot test at Mitchell confirmed laboratory testing and appears to be a cost effective means of further reducing mercury concentrations at Mitchell, Mountaineer, and Amos pond outfalls.

Similarly, the primary O&M costs with the in-pond treatment at Mitchell, Amos and Mountaineer will be the organo-sulfide and coagulant chemical costs. Costs will be dependant on the pond inflows, which can range between 3 to 9 millions gallons per day. An average annual cost of $600,000 is expected at each site.

### No Action Option:

The option of taking no action was considered. Taking no action would result in violations of effluent limitations and other provisions of the facility's National Pollutant Discharge Elimination System (NPDES) permit. These violations are subject to enforcement action by the state permitting agency or U.S. EPA which can include civil penalties allowed under the Clean Water Act of up to $32,500 per day per violation. More significant penalties exist for knowing violations of the permit.

## Conclusion

To meet the NPDES permit requirements, the aforementioned mercury reduction technologies must be installed.

## Associated / Future Projects

# CAPITAL PROGRAM APPROVAL REQUISITION

The latest Mountaineer NPDES permit identifies three primary issues regarding effluent to the river – mercury, selenium, and storm water metals concentration. The selenium issue is being addressed via the installation of a bio-reactor technology. Storm water concerns continue to be evaluated but the source and treatment of metal concentrations has not been fully identified. The development of a storm water solution may potentially interact with the mercury and selenium reduction approaches.

## Regulatory Cost Recovery:

Fleet Wide Mercury Reduction Program - $17.9M (in-service 5/4/10 through 7/10/11 depending on plant site)

- $4.15M (45%) APCo VA Base Case, TYE TBD; effective TBD. Recovery of deferred costs under Environmental Rate Adjustment Clause (E-RAC), if filed.
- $3.97M (43%) APCo WV Base Case, TYE TBD; effective TBD
- $0.55M (6%) KgPCo Purchased Power Pass-Through from APCo under three year settlement agreement phase-in of generation rates.
- $0.55M (6%) FERC Annual Formula Rate Update, TYE 12/31/11; effective 6/1/12
- $5.91M (100%) OPCo is permitted to seek a return on incremental environmental expenses through 2011 under the 2009 Ohio ESP order. Pursuant to this provision of the ESP, cost incurred through 12/31/10 will be included in an Environmental Investment Carry Cost Rider (EICCR) filing in early 2011. Recovery of these costs will commence on 7/1/11 if approved by the PUCO.
- $1.11M (100%) CSP is permitted to seek a return on incremental environmental expenses through 2011 under the 2009 Ohio ESP order. Pursuant to this provision of the ESP, cost incurred through 12/31/10 will be included in an Environmental Investment Carry Cost Rider (EICCR) filing in early 2011. Recovery of these costs will commence on 7/1/11 if approved by the PUCO.
- $1.67M (5%) Buckeye - Costs recovered per Buckeye rates

## Project Contacts

| Contact | Name | Telephone |
|---|---|---|
| Project Manager | Edward V. Gilabert | 200-1765 |
| Requisition Detail Provider | Ron Jacobs | 200-3675 |

# CAPITAL PROGRAM APPROVAL REQUISITION

**Company:** AEP System **Program Number:** ACICAMR00

Authorization Type: Capital Program Version Number: 4

**Business Line:** Generation

**Location:** Multiple Generating Plant Locations

**Project Title:** Activated Carbon Injection Program

**Business Reason:** Environmental, Safety and Health

**Brief Description:** Complete the Activated Carbon Injection System (ACIS) Program for reduction of mercury emissions at Rockport generation plant only. After the CAMR was vacated by the DC Appeals Court on Feb. 8, 2008, the installation of ACIS islands at the following seven plants have been suspended, pending new legislation: Northeastern, Sporn, Clinch River, Kammer, Tanners Creek, Pirkey and Oklaunion.

**Regulatory Cost Recovery:** See Page 3

| **Project Dates:** | **Start:** | **Completion:** | **In-Service:** |
|---|---|---|---|
| | 12/01/2006 | 01/01/2010 | 01/01/2010 |

| **Expenditure to be Authorized** (fully loaded) | **Capital ($)** | **Removal ($)** | **Total ($)** |
|---|---|---|---|
| Previously Approved Amount | 170,000,000 | 0 | 170,000,000 |
| This Submission | -134,667,408 | 0 | -134,667,408 |
| **Total ($)** | **$35,332,592** | **$0** | **$35,323,592** |

**Required Signatures**

| Authorization Limits | Title | Approver | Signature | Date |
|---|---|---|---|---|
| amt < $ 10m | Senior Vice President or Operating Company President | McCullough, M. | | |
| $ 10m ≤ amt < $ 20m | President AEP Transmission or President AEP Utilities/COO/EVP | Akins, N. | | |
| amt ≥ $ 20m | Chairman, President & CEO | Morris, M. | | |
| CP&B Review | Senior Vice President | Dieck, L. | | |

**2009 Direct Cost Budget Availability for this Authorization:** $16.2M In Forecast $ N/A Offset

If offset, indicate source and amount:

**Requested future year amounts are included in or offset within the Strategic Plan Capital Forecast.**

# CAPITAL PROGRAM APPROVAL REQUISITION

## Cash Flow (fully loaded)

| Year | Prior Years | 2009 | 2010 | 2011 | Future Years | Total ($) |
|---|---|---|---|---|---|---|
| Capital | 21,881,911 | 13,450,681 | 0 | | | 35,332,592 |
| Removal | | | | | | |
| Total to be Authorized | 21,881,912 | 13,450,681 | 0 | | | 35,332,592 |
| Assoc. O & M | | | | | | |

*Note: Associated O & M is not approved with this requisition. Operating & Maintenance dollars are assumed to be in budget or offset in the year spent.*

## Financial Analysis Summary

The decision to install this technology was made in the context of an AEP system wide environmental compliance analysis which identified that this project was a critical element in achieving the least cost compliance plan to meet current and future emission regulations. The analysis was conducted using the multi-emissions compliance optimization model (MECO), a unique mixed integer programming model which solves for the least cost environmental compliance plan. The model considers power and emission allowance markets, load demand forecast, emission allowance balances, emission control retrofit costs, new unit costs, unit emission rates, and unit operating costs. This proprietary model is a sophisticated analytic tool that allows the company to systematically weigh costs and risks of a wide variety of options and allows simultaneous optimization across multi-emissions (SO2, NOx, mercury and CO2).

## Program CIs

| CI Number | Operating Company/Plant | Previously Approved Amount ($) | | This Submission ($) | | Subtotal ($) | | Total Cost ($) |
|---|---|---|---|---|---|---|---|---|
| | | Capital | Rem | Capital | Rem | Capital | Rem | |
| RK001ACIA | AEG – Rockport | 12,297,644 | 0 | 1,446,146 | 0 | 13,743,790 | 0 | **13,743,790** |
| RK001ACI0 | I&M – Rockport | 12,297,644 | 0 | 1,446,146 | 0 | 13,743,790 | 0 | **13,743,790** |
| TC001ACI0 | I&M -Tanners Crk | 35,392,076 | 0 | -35,235,489 | 0 | 156,587 | 0 | **156,587** |
| SP001ACIA | APCO -Sporn 1,3 | 9,491,227 | 0 | -9,330,363 | 0 | 160,864 | 0 | **160,864** |
| SP001ACI0 | OPCO - Sporn 2,4 | 9,491,227 | 0 | -9,330,363 | 0 | 160,864 | 0 | **160,864** |
| CR001ACI0 | APCO - Clinch River | 19,054,784 | 0 | -19,019,440 | 0 | 35,344 | 0 | **35,344** |
| PRK01ACI0 | SWEPCO - Pirkey | 17,005,445 | 0 | -12,299,438 | 0 | 4,706,007 | 0 | **4,706,007** |
| NE003ACI0 | PSO - Northeastern | 18,924,694 | 0 | -16,377,911 | 0 | 2,546,783 | 0 | **2,546,783** |
| OKL01ACI0 | PSO - Oklaunion | 3,750,178 | 0 | -3,745,404 | 0 | 4,774 | 0 | **4,774** |
| OKN01ACI0 | TNC - Oklaunion | 13,296,085 | 0 | -13,279,159 | 0 | 16,926 | 0 | **16,926** |
| KM001ACI0 | OPCO - Kammer | 18,998,996 | 0 | -18,942,133 | 0 | 56,863 | 0 | **56,863** |
| *Total Cost($)* | | **170,000,000** | **$0** | **-134,667,408** | **$0** | **35,332,592** | **$0** | **35,332,592** |

## Version 4: Project Justification

Approval of Version 4 of CI ACICAMR00 will authorize the **reduction** of $134,667,408 from the ACIS Program funding. On Feb. 8, 2008, the District of Columbia Circuit Court of Appeals issued a decision which vacated the EPA's Clean Air Mercury Rule (CAMR). The CAMR required that coal-fired power plants regulate mercury emissions. The 2010 CAMR compliance deadline no longer applies. A new deadline under the previous Maximum Achievable Control Technology (MACT) standard now requires new rulemaking. AEP Management has decided to suspend and no longer fund the ACIS Program activities at Pirkey, Sporn, Clinch River, Tanners Creek, Kammer, Northeastern, and Oklaunion. The Program is continuing at Rockport. Activated carbon injection for mercury control is widely accepted in the industry as a viable technology and it is likely to be a part of our future fleet compliance plan. Continuing with this ACIESP project will demonstrate the capability of this technology on a long-term basis and will result in data that will be of value both to AEP's future compliance planning effort and to AEP as we work with EPA when new mercury rulemakinq begins. Once new mercury regulations have been approved, a determination will be made of the costs spent to date on the suspended projects and they will either be completed or expensed.

Version 3 authorized the total required funding of $170,000,000 for implementation of the ACIS Program consistent with the AEP Environmental Compliance Plan to meet Phase I of the Clean Air Mercury Rule (CAMR) requirements.

Versions 1 and 2 of this requisition authorized the Phase I feasibility studies and the Phase IIA conceptual engineering/design phase of this project, respectively.

## Other Alternatives Considered

The MECO model was used to evaluate alternatives, such as the addition of a pulse-jet baghouses, SCR/WFGD combinations, and ACI ESP for mercury capture. With the large capital investment required for baghouse or SCR/WFGD installations, ACI ESP was selected as the least-cost option for mercury removal at these plants. The program team continues to investigate the least cost implementation of the overall ACIS Program. The areas of investigation that are considered by the team to have a potential to impact the total program scope include coal washing and/or possible coal/boiler additives at selected units. Further program adjustments may also result from comparing actual Hg monitoring data to baseline data to optimize the ACI program selection

## Conclusion

The 2010 CAMR compliance deadline no longer applies. A new deadline under the previous Maximum Achievable Control Technology (MACT) standard now requires new rulemaking. AEP Management has decided to suspend and no longer fund the ACIS Program with the exception of Rockport plant. This project is an integral part of AEP's Mercury Compliance Strategy and will be required to attain the expected fleet-wide compliance targets In March 2005, the US EPA issued the Clean Air Mercury Rule (CAMR) to Cap and Reduce mercury emissions from coal-fired power plants. These nine units have been considered for mercury control as a part of AEP's mercury compliance strategy. Significant mercury co-benefit reductions are expected through the fleet-wide addition of SCR and FGD equipment prior to 2010. However, additional mercury reductions will be required on non-FGD/SCR plants to meet the fleet target.

## Regulatory Cost Recovery

Costs incurred due to the installation of ACI at the Rockport plant will be recovered as defined by the outcome of I&M's planned application for a Certificate of Public Convenience and Necessity (CPCN). The petition for the CPCN is expected to be filed in early 2009, with a decision from the Indiana Commission likely to follow approximately six months later. Because ACI will reduce mercury at the Rockport plant it qualifies as Clean Coal Technology under Indiana code. Capital and O&M for Clean Coal Technology projects are eligible for financial incentives and timely cost recovery as determined by the Commission through CPCN hearings.

The work orders for the remaining projects will be suspended in accordance with the AEP Property Accounting procedure that will halt accumulation of AFUDC until the project is resumed. For work order charges <$50K (Oklaunion-PSO, Oklaunion-TNC, & Clinch River), work orders will need to be reviewed to determine proper accounting (e.g. take no action, expense, close existing charges); work order charges >$50K will remain in construction work in progress (CWIP) or need to be reclassified depending upon the amount and projected time of suspension. Carrying charges on CWIP at Sporn U1&3 and

# CAPITAL PROGRAM APPROVAL REQUISITION

Clinch River will be sought in the VA E&R proceeding. Other CWIP or reclassified amounts will be recovered through base rate proceedings in the applicable jurisdiction if the projects are completed.

## Project Contacts

| Contact | Name | Telephone |
|---|---|---|
| Project Manager | Jennifer Watters | 200-1277 |
| Requisition Detail Provider | Jennifer Watters | 200-1277 |

# Capital Program Approval Requisition

**Company:** AEP System **Version 3**

**Project:** **AEPSNCR00 Revision - Selective Non-Catalytic Reduction East Installation and Feasibility Study**
Multiple Locations

**Description:** AEP's New Source Review (NSR) consent decree settlement required AEP to install Selective Non-Catalytic Reduction (SNCR) at Clinch River Units 1-3 by 12/31/2009. Version 1 requested funding for the Clinch River SNCR by 12/31/2008 to support AEP compliance with the fleet 2009 NOx cap. The version also requested funding for Sporn Units 3 and 4 to convert existing temporary SNCR installations to permanent operational SNCR systems by 12/31/2008 and technical feasibility studies for Tanners Creek, Big Sandy and Kanawha River SNCR.

Version 2 of the SNCR Program was approved in 2008 with funding to complete the SNCR and $SO_3$ Systems at Clinch River, complete the conversion from temporary to permanent for the Sporn 3 & 4 SNCR, and design and install an SNCR System for Tanners Creek 1-3. Version 2 also included the design and installation of SNCR Systems for Big Sandy 1 and Conesville 5 & 6 and feasibility studies for Tanners Creek 4, Kammer 1-3, and Muskingum River 1-4.

**Reason for Revision:** The SNCR program is now complete, but requires a revision to close the program due to the scope change within the program. The scope and strategy of the SNCR Program was modified to eliminate SNCR installations at Conesville 5 & 6 and Big Sandy 1 as well as feasibility studies for Tanners Creek 4, Kanawha River 1-2, Kammer 1-3, and Muskingum River 1-4. The funds allotted for these eliminated projects were used within the program to help mitigate accelerated in service dates, extended start-up periods and additional scope not addressed in the previous version.

**Authorization Amount:**

| Company | Previously Approved Amount | This Submission | Total Amount to be Authorized |
|---|---|---|---|
| APCo | 24,214,270 | 13,644,282 | 37,858,552 |
| I&M | 11,529,186 | 2,623,058 | 14,152,244 |
| KYPCo | 5,543,667 | (5,543,667) | - |
| OPCo | 12,068,067 | (9,728,917) | 2,339,150 |
| **Total** | **$ 53,355,190** | **$ 994,756** | **$ 54,349,946** |

**Cash Flow:**

| | Prior Years | 2012 | 2013 | Future Years | Total |
|---|---|---|---|---|---|
| **Capital** | $ 54,225,989 | $ - | $ - | $ - | $ 54,225,989 |
| **Removal** | $ 123,957 | $ - | $ - | $ - | $ 123,957 |
| **Total to be Authorized** | $ 54,349,946 | $ - | $ - | $ - | $ 54,349,946 |
| **Associated O&M** | $ - | $ - | $ - | $ - | $ - |

**Start Date:** 5/1/2005 **Completion Date:** Various **In Service Date:** Various through 12/9/10

# Capital Program Approval Requisition

**Company:** **AEP System** **Version 3**

**Project:** **AEPSNCR00 Revision - Selective Non-Catalytic Reduction East Installation and Feasibility Study**
*Multiple Locations*

**Continuation from prior page**

**Regulatory Cost Recovery:**

Appalachian Power Company -- Generation - $37.86M (70.0%)

- $17.79M (47%) APCo VA base rate case filing, TYE 12/31/10, with cost projections through 11/30/12, effective date 1/31/12; or through deferral of expenditures for recovery under the Environmental Rate Adjustment Clause (E-RAC) TYE 12/31/10, effective 1/31/12
- $16.28M (43%) APCo WV base rate case filing, TYE 12/31/09 with 12-month post-TY adjustment for major projects, effective 3/31/11
- $2.27M (6%) KgPCo purchased power pass-through from APCo under three-year settlement agreement phase-in of generation rates through 12/31/11
- $1.54M (4%) FERC Annual Formula Rate Update, TYE 12/31/10, effective 6/1/11

Indiana Michigan Power Company – Generation - $14.15M (26%)

- $9.20M (65%) I&M-IN Clean Coal Technology Rider, biannual filings Test Year End (TYE) Dec/June, effective July/Jan until included in base rate filing, TYE 3/31/11, effective 9/1/12
- $2.12M (15%) I&M MI base rate case filing, TYE 12/31/10 with projections through 12/31/12, effective 1/1/12
- $2.83M (20%) FERC Annual Formula Rate Update, TYE 12/31/10, effective 6/1/11

Ohio Power Company – Generation - $2.34M (4.0%)

- $2.18M (93%) OPCo is permitted to seek a return on incremental environmental expenses through 2011 under the 2009 Ohio ESP order. Pursuant to this provision of the ESP, cost incurred through 12/31/10 was included in an Environmental Investment Carry Cost Rider (EICCR) filing in February 2011. Recovery of these costs commenced on 7/1/11 as approved by the PUCO. Post-2011, costs will be recovered under Ohio Generation rates established by the ESP Order of December 2011.
- $0.16M (7%) Allocated to WPCo and recovered in current demand charge effective 1/1/10

**Funding:** **2012 Control Budget** *(included in IRC Presentation)* N/A **Offset Source** N/A

*Requested future year funds are included in the last official Forecast.*

**Approved By:** S. Burge/C. Patton/P. Chodak/J. Hamrock/ M. McCullough/N. Akins **Approved On:**

# Capital Program Approval Requisition

**Expenditure to be Authorized (fully loaded)**

| | Capital | Removal | Total |
|---|---|---|---|
| Previously Approved Amount | 52,730,190 | 625,000 | 53,355,190 |
| This Submission | 1,495,799 | (501,043) | 994,756 |
| **Total** | **$ 54,225,989** | **$ 123,957** | **$ 54,349,946** |

| **2012 Direct Cost Budget Funding** | | **Budget Offset Source and Amount** |
|---|---|---|
| In Budget | N/A | *(If budget offset, provide Opco, BU, Project ID, $'s)* |
| Budget Offset | $ - | |

**Required Signatures**

| Authorization Limits | Title | Approver | Signature | Date |
|---|---|---|---|---|
| amt ≤ $ 10m | SVP, Business Unit | Burge, S. | See electronic approval attached | 11/21/2011 |
| amt ≤ $ 10m | Opco President | Patton, C.<br>Hamrock, J.<br>Pauley, G.<br>Chodak, P. | See electronic approval attached | 12/5/11<br>11/28/11<br>12/2/11<br>11/28/11 |
| amt ≥ $ 10m | EVP - Generation | McCullough, M. | | |
| amt ≥ $ 20m | President & CEO | Akins, N | | |
| CP&B Review | Senior Vice President | Dieck, L. | | |

**Project Contacts**

| Contact | Name | Telephone |
|---|---|---|
| Project Manager | Jill Sustar / Alan Varney | 200-1835 / 200-2766 |
| Requisition Detail Provider | Steve Decker | 200-3714 |

# Capital Program Approval Requisition

## Component CI's

| CI Number | Description of Work | Previously Approved | | This Submission | | Total Authorized | | |
|---|---|---|---|---|---|---|---|---|
| | | Capital | Removal | Capital | Removal | Capital | Removal | Total |
| CLRVRSNCR | CR U1-3 SNCR INSTALL | 21,109,818 | 625,000 | 13,395,516 | (501,043) | 34,505,334 | 123,957 | 34,629,291 |
| SPP3C0063 | SP 3 SNCR INSTALL | 2,334,180 | | 895,081 | - | 3,229,261 | - | 3,229,261 |
| KR001SNCR | KR1 SNCR STUDY | 145,272 | | (145,272) | - | - | - | - |
| | APCo Total | 23,589,270 | 625,000 | 14,145,325 | (501,043) | 37,734,595 | 123,957 | 37,858,552 |
| | | | | | | - | - | - |
| TC004SNCR | TC U1-3 SNCR INSTALL | 11,529,186 | | 2,623,058 | - | 14,152,244 | - | 14,152,244 |
| | I&M Total | 11,529,186 | - | 2,623,058 | - | 14,152,244 | - | 14,152,244 |
| | | | | | | | | |
| BS001SNCR | BS1 SNCR INSTALL | 5,543,667 | | (5,543,667) | - | - | - | - |
| | KyPCo Total | 5,543,667 | - | (5,543,667) | - | - | - | - |
| | | | | | | | | |
| CV056SNCR | CV U56 SNCR INSTALL | 10,481,183 | | (10,481,183) | - | - | - | - |
| SPP4C0064 | SP 4 SNCR INSTALL | 1,536,100 | | 803,050 | - | 2,339,150 | - | 2,339,150 |
| KM123SNCR | KM U1-3 SNCR STUDY | 25,392 | | (25,392) | - | - | - | - |
| MR014SNCR | MR U1-4 SNCR STUDY | 25,392 | | (25,392) | - | - | - | - |
| | OPCo Total | 12,068,067 | - | (9,728,917) | - | 2,339,150 | - | 2,339,150 |
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| | | | | | | - | - | - |
| Grand Total | | $ 52,730,190 | $ 625,000 | $ 1,495,799 | $ (501,043) | $ 54,225,989 | $ 123,957 | $ 54,349,946 |

# Capital Program Approval Requisition

## Reason for Revision

The SNCR program is now complete, but requires CI Revision 3 to close the program because of the scope change within the program. The scope and strategy of the SNCR Program was modified to eliminate SNCR installations at Conesville 5 & 6 and Big Sandy 1 as well as feasibility studies for Tanners Creek 4, Kanawha River 1-2, Kammer 1-3, and Muskingum River 1-4. The funds allotted for these eliminated projects were used within the program to help mitigate accelerated in service dates, extended start-up periods and additional scope not addressed in the previous version.

## Justification for Version 3

Since the SNCR Program was covered under a Program CI, the funds originally forecasted for the cancelled projects were shifted to cover cost increases for the remaining projects at Clinch River, Sporn, and Tanners Creek. The cost increases for Clinch River, Tanner's Creek and Sporn are as follows:

**Clinch River 1-3**

The CR Units 1-3 SNCR Project included the installation of unitized SNCR and $SO_3$ Injection Systems, a rail delivery and Urea Bulk Storage System, and ammonia slip monitors. Although the NSR Mandate did not require the installation until the end of 2009, AEP's strategy for meeting NOx caps required the installation by the end of 2008. Therefore, the project schedule was fast-tracked and crashed to meet the 2008 date. Subsequently, 85% of the previous CI version funding (CI V2) was spent in 2008. However, at the end of 2008 the $SO_3$ System demolition and installation had not been started, the Urea Bulk Storage System was only partially installed, the SNCR System included several components that were only temporarily installed, and the permanent installation and ultimate change-out of the ammonia slip monitors had yet to occur. The project was approximately 50% complete and was ultimately finished in Q1 2011. A total of approximately $13,000,000 was required in addition to the previous revision of the CI to complete the project. These cost increases can be attributed to the following areas:

- Material – The delta in material cost between CI V2 and this submittal is approximately $3,000,000. The new slip monitors and air compressor account for approximately $600,000 of the difference. Also, purchase orders for piping, valves, electrical components, and heat trace were issued to cover the SNCR permanent installation scope.
- Labor – Removal. The majority of the project removal scope included the partial demolition of the existing $SO_3$ Injection System. The cost between CI V2 and this submittal is a decrease of approximately $500,000 due to the ease of demolition and a scope that was reduced after negotiations with the plant. This delta was shifted to cover increased capital labor costs.
- Labor – UCCI, the construction contractor, was also managing another large capital project at CR in 2008 (the CR Coal Blend Project). UCCI was not able to manage labor productivity for both projects simultaneously and exhibited generally poor performance. Therefore, AEP chose to stop UCCI's work on the project in April 2009 and rebid the remaining work to D&Z and UCCI. D&Z was the winning bidder. D&Z was utilized to complete the balance of the SNCR and Bulk Storage Systems, the demo and installation of the $SO_3$ System, and the slip monitor rework. D&Z charges alone equaled $3,200,000 and were not known when CI V2 was submitted. Also, Site Support Services (Nursing, Insulation, Scaffolding) T&M contracts exceeded previous estimates due to the extended project duration, and several additional support service contracts were issued. The delta in labor costs between CI V2 and this submittal is approximately $7,000,000.
- PME&C – Project Management, Engineering and Construction, and the Plant, supported the project through the extended project duration and the delta in PME&C between CI V2 and this submittal is approximately $1,100,000.
- Outside Services - The previous CI version allocated enough funding to cover the S/U support contracts however the outside engineering contract required $900,000 greater than the previous version.
- AFUDC & AEP Allocations - The delta in AFUDC and AEP Allocations between CI V2 and this submittal is approximately $2,000,000. This increase is a result of the extended project duration.
- Contingency – The $1,000,000 contingency was reduced to zero in this revision of the CI since the project is complete and no contingency funds are required.

# Capital Program Approval Requisition

## Justification for Version 3 (continued)

**Sporn 3 & 4**

Sporn Units 3 and 4 SNCR Project included the permanent installation of a previously installed temporary test system. A total of approximately $1,700,000 was required in addition to the previous revision of the CI to complete the project. These cost increases can be attributed to the following areas:

- Labor – 80% of the additional project funding can be attributed to labor. The conversion of the temporary system proved to be more labor intensive than was previously estimated.
- AEP Allocations – The balance of the additional funding can be attributed to AEP Allocations. The allocations included in CI V2 were underestimated.

**Tanner's Creek 1-3**

The variance between the final costs for the SNCR at Tanners Creek installed on Units 1-3 and the CI cost was $3,483,103. The final cost was approximately 130% of the CI amount. The explanation of the variance was that the CI amount was based on an indicative estimate from Clinch River SNCR estimate and scope. The estimate was revised upward as actual experience and understanding was gained from over time. The $3.5M could be broken down as follows:

- The labor contracts were bid and the three major labor contracts for civil, mechanical and electrical were managed to their contract amount, however the awarded amounts were approximately 35% higher (+$1.7M) than estimated amounts. The higher costs could be attributed to;
    - Difficulty in accessing the existing boilers and etc.
    - Added redundancy of installed equipment due to consent decree,
    - Added containment for three ammonia storage tanks,
- The engineering and material contracts were more defined and were awarded within the estimated costs. (-$0.7M)
- Outside services costs were approximately as estimated.
- Startup services were contracted out and exceeded the estimate (+$0.6M) due to the added hours to starting up each unit individually to support the demands of the Plant operations schedule.
- AEPSC PM&EC charges exceeded the estimated costs by 110% (+$0.7M) due to the number of personnel involved with managing the work, tracking the cost and schedule and reporting.
- AEP AFUDC charges were 100% higher and allocations were 1000% higher than estimated (+$1.2M).

## Project Justification CI Version 2

AEP's New Source Review (NSR) consent decree settlement requires AEP to install Selective Non-Catalytic Reduction (SNCR) at Clinch River Units 1-3 with a mandated operation date of 12/31/2009 as well as NOx caps for the Eastern Fleet starting 1/1/2009.

Clinch River Units 1-3 SNCR installation will remove approximately 2,000 tons of NOx per year. The SNCR installation and $SO_3$ Injection system installation requires an additional $12.5 million for a total project direct cost of $21.7 million. The Version 1 CI funding request was an indicative estimate based on the temporary installation at Sporn with no site-specific engineering and design completed. During the engineering and planning phase the following items, which contributed to increased cost, were identified which were not originally taken into consideration:

- Redundancy requirements to support the NSR Consent Decree mandate – approximately $3.5 million
- Rail unloading facility and bulk storage tank for material handling and storage - approximately $2 million.
- Environmental and safety requirements such as urea containment for ground water protection, platforms, lighting, and tank venting - approximately $1.5 million.
- Unitized Stack Particulate Control ($SO_3$ Injection) system design basis compared to a single system feeding 3 units - approximately $2.5 million.
- Other site specific impacts such as labor availability and physical location for material deliveries - approximately $2.3 million
- Outside engineering services to execute the project within an expedited 9 month schedule - approximately $ 0.7 million.

# Capital Program Approval Requisition

**Project Justification CI Version 2 (continued)**

Sporn Units 3 and 4 SNCR conversion will remove approximately 900 tons of NOx per year. The conversion to a permanent system requires an additional $2.6 million for a total project direct cost of $3.8 million. The Version 1 CI funding request was an indicative estimate without site specific engineering and design. During the engineering and planning phase the following items, which contributed to increased cost, were identified which were not originally taken into consideration:

- Requirement for piles to support the day tanks and skid equipment - $0.5 million
- Environmental and safety requirements such as urea containment for ground water protection, platforms, lighting, and tank venting - $0.75 million
- New skid enclosure, utility connections, and relocation of the existing skid - $ 0.5 million
- Truck loading facility from the Mountaineer Ammonia on Demand urea system - $ 0.5 million
- Outside engineering services to execute the project task track – $ 0.35 million

A corporate SNCR strategy team has been assembled consisting of team members Projects, Engineering, Generation, Commercial Operations, Corporate Planning & Budgeting, Fuels, Emissions, & Logistics, and Strategic Policy Analysis. The team was chartered to provide strategic guidance on SNCR installation requirements and sequences to meet the consent decree mandated NOx caps going forward. Future versions of this CI will request authorization for funding that involves SNCR installations based on team evaluated compliance strategy and directed by senior management.

Based on the current regulatory compliance and economic strategic analysis the following SNCR installation sequence, following Clinch River 1-3 and Sporn 3 and 4, has been determined for this CI Version 2:

- Tanners Creek 1-3 SNCR installation is required to balance some of Indiana Michigan Power NOx needs. The installation will remove approximately 1,400 tons of NOx per year by 8/1/2009.
- Conesville 5 & 6 SNCR installation will remove approximately 2,700 tons of NOx per year by 5/1/2010
- Big Sandy 1 SNCR installation will remove approximately 1,000 tons of NOx per year by 8/1/2010.

The total current estimated program direct costs have increased from $21.8 million in Version 1 of the CI to $53.4 million in Version 2 involving SNCR installation at Clinch River 1-3, Sporn 3 and 4, Tanners Creek 1-3, Conesville 5 and 6, and Big Sandy 1.

**Project Justification CI Version 1**

Two main models are used to forecast and budget for generation and subsequent emissions within the AEP's fleet: Gentrader and PROMOD. Recent results of the Gentrader simulation suggest that AEP will need to reduce $NO_x$ below current levels to achieve compliance with the NSR consent decree mandated Eastern Fleet NOx cap in 2009. Commercial Operations' preliminary estimate indicates that the loss in revenue associated with reducing NOx emissions by 2,000 tons to the cap level in 2009 through modified dispatch of high NOx emitting units is $25-$30 million. Moving the Clinch River 1-3 SNCR project schedule ahead by one year would roughly achieve the same 2,000-ton reduction and would cost approximately $960,000 in carrying costs and $2 million in annual operating costs. As such, expediting the in-service date of another SNCR system could provide an extra margin of financial surety pending satisfactory CFD modeling results. Strategic Policy & Analysis, Commercial Operations, Corporate Planning and Budgeting, and Risk Analysis are currently undertaking a study to evaluate the risk associated with the 2009 NOx cap and other NSR consent decree caps and will provide the results as they become available to the key stakeholders and project sponsors of this Non-SCR Fleet, $NO_x$ Compliance Program.

Currently, Sporn Units 3 and 4 operate with a temporary SNCR system. Funding to convert existing temporary installations to permanent operational SNCR systems by 12/31/2008 has been included in this request. Feasibility studies will also be performed at Tanners Creek, Big Sandy and Kanawha River to determine possible future sites for SNCR installations within the AEP system.

# Capital Program Approval Requisition

## Project Justification CI Version 1 (continued)

In conjunction with the SNCR installations, a reliable $SO_3$ injection system (flue gas conditioning) is necessary to control the potential deleterious effects of $NH_3$ slip on opacity. The need for an $SO_3$ injection system is also closely tied to the coal and its constituents including sulfur content. Considering the current and future need for fuel flexibility, funds for $SO_3$ injection system installations are considered essential for SNCR installations to ensure not only NOx reduction but also to maintain opacity within compliance.

In fiscal year 2009, commodity and O&M annual costs are estimated at $2.5 to $3.0 million for Clinch River Units 1-3 and $1.0 to $1.5 million for Sporn Units 3 and 4.

## Alternatives Considered

This Program will consider SNCR and combustion tuning as potential low-capital NOx reduction technologies. Other NOx reduction technologies, such as SCR retrofits, were not considered as part of this program due to significantly higher installation costs.

## Conclusion

Through a program of staged installation of SNCR and associated systems, AEP will be capable of economically meeting future NOx caps reductions. Adding the SNCR at the Clinch River plant before the NSR Consent Decree-required date of 12/31/2009 will support compliance with the 2009 NOx cap requirement.

**Associated/Future Projects** – N/A

## REQUEST

Refer to Kentucky Power's response to Staffs First Request, Item 18.

a. Provide a detailed description of the materials purchased in the amount of $5,966,590 for the wet flue gas desulfurization ("WFGD") associated with the 2004-2006 Preliminary Scrubber Analysis.

b. Explain whether this material will be used on the proposed DFGD.

c. Provide copies of all journal entries that support the $15,212,425 along with accompanying journal entry explanations of the charges.

## RESPONSE

a. Attachment 1 shows the invoices that support the $5.9 M classified as materials purchased. However, these invoices were classified incorrectly. These costs were for engineering work pertaining to vendors whom we would have been purchasing material from if and when actual construction would have begun. All of these costs should have been classified to outside services.

b. Because the costs incurred were for engineering work, there was no material to be used on the proposed DFGD.

c. Please see attachment 2, page 4 of the journal entry. The last four entries on this page show the $15,212,425 being transferred from account 1070001 to account 1830000. The costs are broken down between $13,563,683.54 and $1,648,741.38 that make up the $15,212,425 balance. Page 5 of this attachment shows the breakdown of the dollars with cost descriptions.

**WITNESS:** Ranie K Wohnhas

| | |
|---|---|
| Project Name | BIG SANDY U2 DFGD W/ FF |
| GL Business Unit (GLBU) (Code) | 117 |
| Project ID | 000009633 |
| Account Number (Code) | 1070001 |
| Cost Component (Code) | (All) |
| Invoice Number (expensed) | (All) |
| Journal Date | (All) |
| Journal Descr | (All) |
| Journal ID (Code) | (All) |
| Project Type ID # | (All) |
| PSoft Level 20 (Descr) | (All) |
| PSoft Level 30 (Descr) | (All) |
| PSoft Level 40 (Descr) | (All) |
| Purchase Order | (All) |
| Reporting Period | (All) |
| Shutdown Number | (All) |
| Transaction Type (Code) | (All) |
| Voucher ID (Code) | (All) |
| Work Order Number with Task Number | (All) |
| Work Order Status Description | (All) |
| Work Order Task Status Description | (All) |
| Work Order Nb | (All) |
| Work Order Desc | (All) |
| Department ID (Descr) | (All) |

Sum of Transaction Amount (Actual)

| Cost Component (Descr) | Workorder (Code) | Vendor Name | Total |
|---|---|---|---|
| 310 MMS From Stock General | X117031044 | - | 13,086 |
| | **X117031044 Total** | | **13,086** |
| **310 MMS From Stock General Total** | | | **13,086** |
| 390 Direct Purchase-Other Than MMS | X117031202 | BANK ONE COMMERCIAL CARD ACTIVITY | 277 |
| | | MCCOY & MCCOY LABORATORIES INC | 73 |
| | **X117031202 Total** | | **349** |
| | X117031302 | ENERFAB INC | 1,101 |
| | **X117031302 Total** | | **1,101** |
| | X117031601 | TYLER MOUNTAIN WATER CO INC | (141) |
| | **X117031601 Total** | | **(141)** |
| | 4061536501 | BANK ONE COMMERCIAL CARD ACTIVITY | 116 |
| | **4061536501 Total** | | **116** |
| **390 Direct Purchase-Other Than MMS Total** | | | **1,426** |
| 391 Material - Outside Contractor | X117031501 | BLACK & VEATCH LTD | 5,952,079 |
| | **X117031501 Total** | | **5,952,079** |
| **391 Material - Outside Contractor Total** | | | **5,952,079** |
| 393 Sales & Use Tax Accrual | X117031501 | - | (212,444) |
| | | BLACK & VEATCH LTD | 212,444 |
| | **X117031501 Total** | | **-** |
| **393 Sales & Use Tax Accrual Total** | | | **-** |
| **Grand Total** | | | **5,966,590** |

| Account Number (Code) | Cost Component (Code) | Journal Date | Journal ID (Code) | Project ID | Vendor Name | Voucher ID (Code) | Work Order Desc | Workorder (Code) | Transaction Amount (Actual) |
|---|---|---|---|---|---|---|---|---|---|
| 1070001 | 390 | 10/27/2005 | APACC49567 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00043107 | PLT LABOR BIG SANDY 2-FGD-F & | 4061536501 | 64.43 |
| 1070001 | 390 | 12/2/2005 | APACC63930 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00043809 | PLT LABOR BIG SANDY 2-FGD-F & | 4061536501 | 51.36 |
| 1070001 | 310 | 3/22/2006 | INDUS06679 | 000009633 | - | | BS2 DUCT INSPECTION | X117031044 | 13,085.64 |
| 1070001 | 390 | 2/7/2005 | APACC41648 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00036925 | PLANT LABOR | X117031202 | 39.68 |
| 1070001 | 390 | 5/10/2005 | APACC80523 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00039141 | PLANT LABOR | X117031202 | 42.61 |
| 1070001 | 390 | 6/22/2005 | APACC97897 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00040309 | PLANT LABOR | X117031202 | 51.35 |
| 1070001 | 390 | 8/30/2005 | APACC26303 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00041839 | PLANT LABOR | X117031202 | 60.41 |
| 1070001 | 390 | 2/14/2006 | APACC92339 | 000009633 | BANK ONE COMMERCIAL CARD ACTIVITY | 00045358 | PLANT LABOR | X117031202 | 82.58 |
| 1070001 | 390 | 4/14/2005 | APACC69719 | 000009633 | MCCOY & MCCOY LABORATORIES INC | 00038572 | PLANT LABOR | X117031202 | 35.88 |
| 1070001 | 390 | 8/16/2005 | APACC20607 | 000009633 | MCCOY & MCCOY LABORATORIES INC | 00041463 | PLANT LABOR | X117031202 | 36.88 |
| 1070001 | 390 | 8/16/2005 | INDUS20851 | 000009633 | ENERFAB INC | | ENERFAB -PROVIDE SCAFFOLDING | X117031302 | 1,101.21 |
| 1070001 | 390 | 8/17/2005 | INDUS21263 | 000009633 | ENERFAB INC | | ENERFAB -PROVIDE SCAFFOLDING | X117031302 | (1,101.21) |
| 1070001 | 390 | 8/17/2005 | APACC21052 | 000009633 | ENERFAB INC | 00041560 | ENERFAB -PROVIDE SCAFFOLDING | X117031302 | 1,101.21 |
| 1070001 | 391 | 9/26/2005 | APACC36634 | 000009633 | BLACK & VEATCH LTD | 00042480 | BLK & VTCH (OEM) | X117031501 | 2,228,760.00 |
| 1070001 | 391 | 12/12/2005 | APACC67281 | 000009633 | BLACK & VEATCH LTD | 00044021 | BLK & VTCH (OEM) | X117031501 | 529,331.00 |
| 1070001 | 391 | 12/15/2005 | APACC68746 | 000009633 | BLACK & VEATCH LTD | 00044137 | BLK & VTCH (OEM) | X117031501 | 1,849,970.00 |
| 1070001 | 391 | 1/23/2006 | APACC82922 | 000009633 | BLACK & VEATCH LTD | 00044870 | BLK & VTCH (OEM) | X117031501 | 768,010.00 |
| 1070001 | 391 | 2/16/2006 | APACC93284 | 000009633 | BLACK & VEATCH LTD | 00045441 | BLK & VTCH (OEM) | X117031501 | 153,602.00 |
| 1070001 | 391 | 3/20/2006 | APACC05426 | 000009633 | BLACK & VEATCH LTD | 00046125 | BLK & VTCH (OEM) | X117031501 | 422,406.00 |
| 1070001 | 393 | 1/31/2006 | TXOUAJASUT | 000009633 | - | | BLK & VTCH (OEM) | X117031501 | (160,602.85) |
| 1070001 | 393 | 2/28/2006 | TXOUAJASUT | 000009633 | - | | BLK & VTCH (OEM) | X117031501 | (51,840.68) |
| 1070001 | 393 | 12/12/2005 | APACC67281 | 000009633 | BLACK & VEATCH LTD | 00044021 | BLK & VTCH (OEM) | X117031501 | 35,729.85 |
| 1070001 | 393 | 12/15/2005 | APACC68746 | 000009633 | BLACK & VEATCH LTD | 00044137 | BLK & VTCH (OEM) | X117031501 | 124,873.00 |
| 1070001 | 393 | 1/23/2006 | APACC82922 | 000009633 | BLACK & VEATCH LTD | 00044870 | BLK & VTCH (OEM) | X117031501 | 51,840.68 |
| 1070001 | 390 | 10/17/2005 | APACC45479 | 000009633 | TYLER MOUNTAIN WATER CO INC | 00204254 | MATERIALS | X117031601 | (140.78) |
| | | | | | | | | | 5,966,590.25 |

| Line | Line Type | Line Title | Committed $ | Prior Invoiced $ | This Invoice's $ | Work Order | Dept | PC BU | Account | GL BU | Ben Loc | ABM Act | Cost Comp | Budget Project |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-0001 | Material | 1.0 Down Payment | $3,072,040.32 | $3,072,040.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0002 | Material | 2.0 Submit Documents for DRB | $192,003.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0003 | Material | 3.0 Receive Chiyoda Basic Engineering Package (BEP) | $576,008.00 | $576,008.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0004 | Material | 4.0 Initial Issue of General Arrangement Drawings | $268,804.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0005 | Material | 5.0 Issue JBR Shell Purchase Order | $691,209.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0006 | Material | 6.0 Revise DBR Documents | $76,801.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0007 | Material | 7.0 Issue Ball Mill Purchase Order | $652,809.26 | $652,809.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0008 | Material | 8.0 Issue Gas Cooler Purchase Order | $576,008.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0009 | Material | 9.0 Issue JBR FRB Internals Purchase Order | $883,212.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0010 | Material | 10.0 Issue Vacuum Filter Purchase Order | $614,408.00 | $614,408.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0011 | Material | 11.0 Issue Oxidation Air Blower Purchase Order | $230,403.00 | $230,403.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0012 | Material | 12.0 Issue P&IDs for Routing | $268,804.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0013 | Material | 13.0 Initial Issue of Control Logic Diagrams | $115,202.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0014 | Material | 14.0 Initial Issue of JBR Ductwork Drawings | $115,202.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0015 | Material | 15.0 Issue Mist Eliminator Purchase Order | $153,602.00 | $153,602.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0016 | Material | 16.0 Issue Agitator Purchase Order | $153,602.00 | $153,602.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0017 | Material | 17.0 Issue Ductwork Material Purchase Order | $230,403.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0018 | Material | 18.0 Issue Slurry and General Service Pump Purchase Order | $422,406.00 | $422,405.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0019 | Material | 19.0 Initial Issue of JBR External Piping Drawings | $115,202.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0020 | Material | 20.0 Initial Issue of Limestone Preparation Piping Drawings | $115,202.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0021 | Material | 21.0 Initial Issue of Gypsum Dewatering Piping Drawings | $38,401.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0022 | Material | 22.0 Issue Flow Model PO | $76,770.41 | $76,801.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0023 | Material | 23.0 Submit Final Flow Model Report | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0024 | Material | 24.0 Issue Training Program Manuals | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0025 | Material | 25.0 Release Ball Mills for Fabrication | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0026 | Material | 26.0 Relase JBR Shell for Fabrication | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0027 | Material | 27.0 Release Vacuum Filter for Fabrication | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0028 | Material | 28.0 Release JBR FRP Internals for Fabrication | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0029 | Material | 29.0 Release Gas Cooler for Fabrication | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0030 | Unit Price | 30.0 B&V Site Mobilization | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0031 | Material | 31.0 Site Delivery of JBR Shell and Roof Materials | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0032 | Unit Price | 32.0 JBR Shell/Roof Erection Subcontractor Mobilization | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0033 | Material | 33.0 Site Delivery of JBR FRP Internals | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0034 | Unit Price | 34.0 JBR Sideshell Erection Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0035 | Unit Price | 35.0 JBR FRP Internals Erection Subcontractor Mobilization | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0036 | Material | 36.0 Site Delivery of Gas Cooler | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0037 | Material | 37.0 Sire Delivery of Ductwork Material | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0038 | Material | 38.0 Site Delivery of Ball Mills | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0039 | Material | 39.0 Site Delivery of Vacuum Filters | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0040 | Material | 40.0 Site Delivery of Mist Eliminators | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0041 | Material | 41.0 Site Delivery of Oxidation of Air Blowers | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0042 | Material | 42.0 Site Delivery of Slurry and General Service Pumps | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0043 | Unit Price | 43.0 JBR Upper and Lower Deck Installation Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0044 | Unit Price | 44.0 Gas Cooler Erection Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0045 | Unit Price | 45.0 JBR Outlet Ductwork Erection Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0046 | Material | 46.0 Site Delivery of Agitators | $1.00 | $0.00 | | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| L-0047 | Unit Price | 47.0 JBR Internal Piping and Nozzles Installation Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0048 | Unit Price | 48.0 Mist Eliminator Erection Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0049 | Unit Price | 49.0 JBR Roof Erection Complete | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0050 | Unit Price | 50.0 Mechanical Completion | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0051 | Unit Price | 51.0 Substanial Completion | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0052 | Unit Price | 52.0 Successful Completion of Acceptance Test | $1.00 | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| L-0053 | Material | 53.0 Letter of Credit | $0.01 | $0.00 | $4,122.16 | X117031501 | 11988 | WSREG | 1070001 | 117 | 1068 | 53 | 391 | 000009633 |
| N-0001 | Lump Sum | Contract Allowance Line | | $0.00 | | X117031701 | 11988 | WSREG | 1070001 | 117 | 1068 | 54 | 210 | 000009633 |
| | | Totals: | $9,638,532.00 | $5,952,079.00 | $4,122.16 | | | | | | | | | |

**Attn: Accounts Payable - The attached invoice must be imaged/scanned**

FROM AEPIMS

September 27, 2005

**The following invoice was submitted electronically from AEPIMS/PIMM to Accounts Payable:**

| | |
|---|---|
| Contractor: | BLACK & VEATCH |
| Business Unit: | 117 |
| Accts/Payable Vendor ID: | 5001352802 |
| Invoice Number: | 181626 |
| Accts/Payable Voucher ID: | 00042480 |
| Invoice Date: | 7/28/2005 00:00:00 |
| Invoice Approval Date: | 9/26/2005 11:41:13 |
| Tot Invoice Amt: | $2,228,760.00 |
| Withhold Retention: | No |

MAIL THIS COVER LETTER ALONG WITH ALL SUPPORTING DOCUMENTS FOR THIS INVOICE TO CANTON ACCOUNTS PAYABLE

**Generation Application Notification**
09/26/2005 10:08 AM

To: Russell E Starcher/CA1/AEPIN@AEPIN, Holly J Holmes/CA1/AEPIN@AEPIN
cc:
Subject: Invoice Final Approval

Invoice 181626 has been approved by all approvers in the routing list.
Details:
-- Contract 848252 Release 0002, with $5,608,000.00 committed and $0.00 invoiced
Invoice 181626 for $2,228,760.00
Vendor 5001352802: BLACK & VEATCH
Remit Vendor 0000013528: BLACK & VEATCH

| Approver's Name | Emp ID | Title | Status | Date |
|---|---|---|---|---|
| Lascheld, William F. | S183823 | Project Accountant | Courtesy Copy | |
| Thomas, Jeremy L. | S152224 | Cost Analyst | Approved | Sep 26, 2005 08:42 am |
| Robinson, Leonard G. | S185581 | Project Engineer | Approved | Sep 26, 2005 08:55 am |
| Calvert, Winter O. | S182825 | Project Manager | Approved | Sep 26, 2005 09:13 am |
| Walton, Robert L. | S933612 | Program Director | Approved | Sep 26, 2005 09:46 am |
| Rencheck, Michael W. | S008020 | Senior V.P. | Approved | Sep 26, 2005 10:07 am |

Please go to PMM to approve this invoice and, if necessary, send it to Accounts Payable.

Contract No: 848252 Type: CP; LS; UP (w/ EWOs)
Contractor: BLAC02 - BLACK & VEATCH

Release #: 0002 Rev #: 1 Title: BS-2 WFGD Retrofit Project Design&Supply OEM
Release Type: Blanket release LOA: LRP Code: BS8348

Contract | Release

Release Info | Release Rates | Line Items | Invoice | Cost Summary | Performance

| # | Invoice No. | Status | Tot Invoice Amt | Orig Inv Date | Inv Recd Date | Period From Date | Period End Date |
|---|---|---|---|---|---|---|---|
| 1 | 181626 | Preliminary | $2,228,760.00 | 07/28/2005 | 07/28/2005 | 07/28/2005 | 07/28/2005 |

Invoice:
Amount:

**Invoice Approval Routing**

Invoice Routing List: (Drag and drop rows to reorder the list)

| Sort Order | Emp ID | Employee Name | Title | Role | Validate C P & B Authorization | Notify If Rejected | Notify If Late | Courtesy Copy | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | S183823 | Lascheid, William F. | Project Accountant | Project Accountant | | ✓ | | ✓ | Per |
| 2 | S152224 | Thomas, Jeremy L. | Cost Analyst | Cost Analyst - R | | ✓ | | | Per |
| 3 | S185581 | Robinson, Leonard G. | Project Engineer | Project Engineer - R | | ✓ | | | Per |
| 4 | S182825 | Calvert, Winter O. | Project Manager | Project Manager - A | ✓ | ✓ | | | Per |
| 5 | S933612 | Walton, Robert L. | Program Director | Program Director - A | ✓ | | | | Per |
| 6 | S008020 | Rencheck, Michael W. | Senior V.P. | Senior V. P. - A | ✓ | | | | Per |

Invoice Routing Comments:

This invoice was held waiting on the set up of the contract. The contractor is Invoicing for 8% of the contract value of $27,859,500.00

Route for Approval | Recall | OK | Cancel

BLACK & VEATCH

~ INVOICE ~

BLACK & VEATCH CORPORATION

PLEASE REMIT TO:
BLACK & VEATCH CORPORATION
P.O. BOX 803823
KANSAS CITY MO 64180-3823
FED ID:431833073

RECEIVED BY
JUL 28 2005
AEP
COST CONTROL

J.P. (NICK) NICKLESS
AMERICAN ELECTRIC POWER
1 RIVERSIDE PLAZA
COLUMBUS OH 43215-2373

| | |
|---|---|
| CLIENT REF | : 848252-0002X117 |
| INVOICE DATE | : 7/28/2005 |
| PAYMENT DUE | : DUE IMMEDIATELY |
| INVOICE NO | : 181626 |
| PROJECT NAME | : BIG SANDY OEM |
| PROJECT NO | : 141643 |
| B&V CONTACT | : SOLAR, JOHN R |
| TELEPHONE | : 913/458-7770 |

| DESCRIPTION | AMOUNT |
|---|---|
| AWARD PAYMENT 8% OF 27,859,500 | 2,228,760.00 |
| TOTAL DUE (USD) | 2,228,760.00 |

WIRE TRANSFER INFORMATION :
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER : 5336422
COMMERCE BANK, N.A. KC, MO. USA
ABA NUMBER : 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
****PLEASE INCLUDE INVOICE NUMBER**********

Russell E Starcher
07/29/2005 03:05 PM

To: Jeremy L Thomas/AEPIN@AEPIN, W Fred Lascheld/AEPIN@AEPIN
cc:
Subject: Black & veatch BS FGD Contract 848252-0002 Line Set up

**Jeremy and Fred can you complete the attached contract line request form for the Big Sandy Black & Veatch contract 848252-0002? We currently have an invoice for $2,228,760.00 and the contract is not set up in PMM. Also the Big Sandy project is using a WBS system so that needs to be considered.**

Attached is a new form designed to be completed for the set up of contract lines. We are working to have this form included in all new contracts. Until this happens we will be using the following amended process.

1. Contract needs set up in PMM.
   Action
   - **Cost Coordinator / Cost Tech**
     - Completes the following:
     - Project
     - Contractor
     - Contract Number
     - Contract Description
     - Send the attached contract line request form to the Cost Analyst for completion.
   - **Cost Analyst**
     - Complete the following:
     - Bid Line
     - Description Of Bid Item
     - Bid basis
     - Unit of Measure
     - Estimated Units or Hours
     - Unit or Hourly Rate
     - Product Code / WBS
     - Work Order
     - Cost Analyst will forward the form to the Project Accountant
     - **Project Accountant**
     - Complete the following:
     - Cost Component
     - Cost Analyst will return the completed form to the Cost Coordinator / Cost Tech
   - **Cost Coordinator / Cost Tech**
     - Reviews the form for content.
     - Forward the form to Contract Administration (Tom Cameron) to be entered in PMM.
   - **Contract Administration**
     - Informs Cost Coordinator / Cost Tech when the contract is set up.

Contract Line Request Form Black Veatch 848250000

Russell E. Starcher
Cost Coordinator
740-925-3291
Audinet 277-3291
Fax 740-925-3296
Audinet Fax 277-3296
Cell phone 740-339-7290
Have a Great Day

**Attn: Accounts Payable - The attached invoice must be imaged/scanned**

FROM AEPIMS

December 13, 2005

**The following invoice was submitted electronically from AEPIMS/PMM to Accounts Payable:**

| | |
|---|---|
| Contractor: | BLACK & VEATCH |
| Business Unit: | 117 |
| Accts/Payable Vendor ID: | 5001352802 |
| Invoice Number: | 187422 |
| Accts/Payable Voucher ID: | 00044021 |
| Invoice Date: | 10/31/2005 00:00:00 |
| Invoice Approval Date: | 12/12/2005 06:58:38 |
| Tot Invoice Amt: | $529,331.00 |
| Withhold Retention: | No |

MAIL THIS COVER LETTER ALONG WITH ALL SUPPORTING DOCUMENTS FOR THIS INVOICE TO CANTON ACCOUNTS PAYABLE

Generation Application Notification /AEPIN
12/09/2005 03:55 PM

To Russell E Starcher/CA1/AEPIN@AEPIN, Holly J Holmes/CA1/AEPIN@AEPIN
cc
bcc
Subject Invoice Final Approval

Invoice 187422 has been approved by all approvers in the routing list.
Details:
-- Contract 848252 Release 0002, with $3,801,699.59 committed and $2,228,760.00 invoiced
Invoice 187422 for $529,331.00
Vendor 5001352802: BLACK & VEATCH
Remit Vendor 0000013528: BLACK & VEATCH

| Approver's Name | Emp ID | Title | Status | Date |
|---|---|---|---|---|
| Lascheid, William F. | S183823 | Project Accountant | Courtesy Copy | |
| Thomas, Jeremy L. | S152224 | Cost Analyst | Approved | Dec 06, 2005 10:19 am |
| Robinson, Leonard G. | S185581 | Project Engineer | Approved | Dec 06, 2005 11:50 am |
| Vandemiet, Clark L. | S007518 | Project Manager | Approved | Dec 09, 2005 12:16 pm |
| Walton, Robert L. | S933612 | Program Director | Approved | Dec 09, 2005 15:50 pm |

Please go to PMM to approve this invoice and, if necessary, send it to Accounts Payable.

BLACK & VEATCH

~ INVOICE ~

BLACK & VEATCH CORPORATION

PLEASE REMIT TO:
BLACK & VEATCH CORPORATION
P.O. BOX 803823
KANSAS CITY MO 64180-3823
FED ID : 431833073

| | | |
|---|---|---|
| CLIENT REF | : | 848252-0002X117 |
| INVOICE DATE | : | 31-OCT-2005 |
| PAYMENT DUE | : | 30-NOV-2005 |
| INVOICE NO | : | 187422 |
| PROJECT NAME | : | BIG SANDY OEM |
| PROJECT NO | : | 141643 |
| B&V CONTACT | : | SOLAR, JOHN R |
| TELEPHONE | : | 913/458-7770 |

J.P. (NICK) NICKLESS
AMERICAN ELECTRIC POWER
COST CONTROL CENTER
1557 GRAVEL HILL ROAD
CHESIRE, OH 45620

RECEIVED BY
NOV 0 9 2005
AEP
COST CONTROL

| DESCRIPTION | AMOUNT |
|---|---|
| ISSUE FLOW MODEL PO | 473,612.00 |
| | 55,719.00 |
| TOTAL DUE (USD) | 529,331.00 |

WIRE TRANSFER INFORMATION :
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER : 5336422
COMMERCE BANK, N.A. KC, MO. USA
ABA NUMBER : 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
****PLEASE INCLUDE INVOICE NUMBER**********

# AEP Tier II FGD Projects
# Big Sandy Unit 2

## Milestone Payment Breakdown

| *Item Description* | % of Contract Value | Date |
|---|---|---|
| Down Payment | 8.0% | Jul-05 |
| Submit documents for DRB | 0.5% | Oct-05 |
| Receive Chiyoda Basic Engineering Package (BEP) | 1.5% | Oct-05 |
| Initial issue of general arrangement drawings | 0.7% | Nov-05 |
| Issue JBR Shell Purchase Order | 1.8% | Nov-05 |
| Revise DBR documents | 0.2% | Jan-06 |
| Issue Ball Mill Purchase Order | 1.7% | Jan-06 |
| Issue Gas Cooler Purchase Order | 1.5% | Jan-06 |
| Issue JBR FRP Internals Purchase Order | 2.3% | Jan-06 |
| Issue Vacuum Filter Purchase Order | 1.6% | Jan-06 |
| Issue Oxidation Air Blower Purchase Order | 0.6% | Jan-06 |
| Issue P&IDs for routing | 0.7% | Feb-06 |
| Initial issue of control logic diagrams | 0.3% | Feb-06 |
| Initial issue of JBR ductwork drawings | 0.3% | Feb-06 |
| Issue Mist Eliminator Purchase Order | 0.4% | Feb-06 |
| Issue Agitator Purchase Order | 0.4% | Feb-06 |
| Issue Ductwork Material Purchase Order | 0.6% | Feb-06 |
| Issue Slurry and General Service Pump Purchase Order | 1.1% | Mar-06 |
| Initial issue of JBR external piping drawings | 0.3% | Apr-06 |
| Initial issue of limestone preparation piping drawings | 0.3% | Apr-06 |
| Initial issue of gypsum dewatering piping drawings | 0.3% | Apr-06 |
| Issue flow model PO | 0.2% | Jun-06 |
| Submit final flow model report | 0.6% | Jan-07 |
| Issue training program manuals | 0.5% | Jul-07 |
| Release Ball Mills for fabrication | 3.0% | Dec-07 |
| Release JBR Shell for fabrication | 4.5% | Dec-07 |
| Release Vacuum Filter for fabrication | 3.1% | Mar-08 |
| Release JBR FRP Internals for fabrication | 5.9% | Mar-08 |
| Release Gas Cooler for fabrication | 2.4% | Apr-08 |
| B&V Site Mobilization | 1.0% | Jul-08 |
| Site delivery of JBR Shell and Roof materials | 6.0% | Aug-08 |
| JBR Shell/Roof Erection Subcontractor Mobilization | 1.1% | Aug-08 |
| Site delivery of JBR FRP Internals | 5.0% | Dec-08 |
| JBR Sideshell erection complete | 2.1% | Dec-08 |
| JBR FRP Internals Erection Subcontractor Mobilization | 2.9% | Dec-08 |
| Site delivery of Gas Cooler | 2.0% | Jan-09 |
| Site delivery of Ductwork Material | 1.0% | Jan-09 |
| Site delivery of Ball Mills | 4.0% | Feb-09 |
| Site delivery of Vacuum Filters | 4.0% | Feb-09 |
| Site delivery of Mist Eliminators | 1.0% | Feb-09 |
| Site delivery of Oxidation Air Blowers | 2.0% | Mar-09 |
| Site delivery of Slurry and General Service Pumps | 2.0% | Mar-09 |
| JBR Upper and Lower Deck installation complete | 4.9% | Mar-09 |

| | | |
|---|---|---|
| Gas Cooler erection complete | 1.4% | May-09 |
| JBR Outlet Ductwork erection complete | 1.8% | Jun-09 |
| Site delivery of Agitators | 1.0% | Jun-09 |
| JBR Internal Piping and Nozzles installation complete | 2.9% | Jun-09 |
| Mist Eliminator erection complete | 0.6% | Jun-09 |
| JBR Roof erection complete | 1.0% | Jul-09 |
| Mechanical completion | 1.0% | Sep-09 |
| Substantial completion | 5.0% | Feb-10 |
| Successful completion of Acceptance Test | 1.0% | Apr-10 |
| | 100.0% | |

BLACK & VEATCH
building a world of difference™

ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM FGD Projects

B&V Project 141547
B&V File 141547.01A
October 28, 2005
78.0205

FlowTack LLC.
1003 Morrisville Parkway, Suite 190
Morrisville, NC 27560
Telephone: 919-468-0113
Facsimile: 919-468-0153
Email: sbible@flowtack.com

Subject: Service Contract
Flue Gas Ductwork Flow Modeling

Attention: Mr. Stewart Bible

Gentlemen:

This letter shall serve as official notice of award to FlowTack Service Contractor for the CT-121 OEM FGD Projects, Flue Gas Ductwork Flow Modeling. Service Contractor is hereby authorized to proceed immediately with activities necessary to perform under the attached Service Contract. Please note that the attached Service Contract is a release for 5 different Projects, all with different Service Contract Numbers.

Two (2) signed originals of the Purchase Order / Contract signature page are included. Please sign both and return one original signature pages to the following address within five (5) business days of receiving this transmittal.

Black & Veatch Corporation
Cardinal Project - 141547
Attention: Mr. Rick Solar, Project Manager
11401 Lamar Avenue
Overland Park, KS 66211

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Rick Solar

Rick Solar
Project Manager

cab
Enclosure

FlowTack LLC.
Mr. Stewart Bible

B&V Project 141547
October 28, 2005

cc: R. Solar / File
G. Bergt
E. Sprinkle
E.L. DeForest
C. Bebow
A. Mahabaleshwarkar
K. Saxton
N. Winkle

Contractor: Black & Veatch Corporation
Contract /Release: 8482520002X117
Project: Big Sandy - OEM

Date: 11/2/2005

## Billing Control Form

AEP AMERICAN ELECTRIC POWER

Invoice # 187422

| | Bid Item / Milestone | Description | Contract Value | Revisions / Change Orders | Revised Contract Value | Quantity / Percent This Period | Totals This Period | Previous Total | Completed to Date | Cost Component | WHS | Work Orders Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.0 | Down Payment | $ 2,228,760 | | $ 2,228,760 | 0% | $ - | $ 2,228,760 | $ 2,228,760 | 391 | 9.N | X117031501 |
| 2 | 2.0 | Submit documents for DRB | $ 139,298 | | $ 139,298 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 3 | 3.0 | Receive Chiyoda Basic Engineering Package (BEP) | $ 417,893 | | $ 417,893 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 4 | 4.0 | Initial issue of general arrangement drawings | $ 195,017 | | $ 195,017 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 5 | 5.0 | Issue JBR Shell Purchase Order | $ 501,471 | | $ 501,471 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 6 | 6.0 | Revise DBR documents | $ 55,719 | | $ 55,719 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 7 | 7.0 | Issue Ball Mill Purchase Order | $ 473,612 | | $ 473,612 | 100% | $ 473,612 | $ - | $ 473,612 | 391 | 2.F.0 | X117031501 |
| 8 | 8.0 | Issue Gas Cooler Purchase Order | $ 417,893 | | $ 417,893 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 9 | 9.0 | Issue JBR FRP Internals Purchase Order | $ 640,769 | | $ 640,769 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 10 | 10.0 | Issue Vacuum Filter Purchase Order | $ 445,752 | | $ 445,752 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 11 | 11.0 | Issue Oxidation Air Blower Purchase Order | $ 167,157 | | $ 167,157 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 12 | 12.0 | Issue P&IDs for routing | $ 195,017 | | $ 195,017 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 13 | 13.0 | Initial issue of control logic diagrams | $ 83,579 | | $ 83,579 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 14 | 14.0 | Initial issue of JBR ductwork drawings | $ 83,579 | | $ 83,579 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 15 | 15.0 | Issue Mist Eliminator Purchase Order | $ 111,438 | | $ 111,438 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 16 | 16.0 | Issue Agitator Purchase Order | $ 111,438 | | $ 111,438 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 17 | 17.0 | Issue Ductwork Material Purchase Order | $ 167,157 | | $ 167,157 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 18 | 18.0 | Issue Slurry and General Service Pump Purchase Order | $ 306,455 | | $ 306,455 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 19 | 19.0 | Initial issue of JBR external piping drawings | $ 83,579 | | $ 83,579 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 20 | 20.0 | Initial issue of limestone preparation piping drawings | $ 83,579 | | $ 83,579 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 21 | 21.0 | Initial issue of gypsum dewatering piping drawings | $ 83,579 | | $ 83,579 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 22 | 22.0 | Issue flow model PO | $ 55,719 | | $ 55,719 | 100% | $ 55,719 | $ - | $ 55,719 | 391 | 2.E.O | X117031501 |
| 23 | 23.0 | Submit final flow model report | $ 167,157 | | $ 167,157 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 24 | 24.0 | Issue training program manuals | $ 139,298 | | $ 139,298 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 25 | 25.0 | Release Ball Mills for fabrication | $ 835,785 | | $ 835,785 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 26 | 26.0 | Release JBR Shell for fabrication | $ 1,253,678 | | $ 1,253,678 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 27 | 27.0 | Release Vacuum Filter for fabrication | $ 863,645 | | $ 863,645 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 28 | 28.0 | Release JBR FRP Internals for fabrication | $ 1,643,711 | | $ 1,643,711 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 29 | 29.0 | Release Gas Cooler for fabrication | $ 698,628 | | $ 698,628 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 30 | 30.0 | B&V Site Mobilization | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |

Contractor: Black & Veatch Corporation
Contract /Release: 8482520002X117
Project: Big Sandy - OEM

Date: 11/2/2006

## Billing Control Form

AMERICAN ELECTRIC POWER

Invoice # 187422

| PMM Line # | Bid Item / Milestone | Description | Contract Value | Revisions / Change Orders | Revised Contract Value | Quantity / Percent This Period | Totals This Period | Previous Total | Completed to Date | Cost Component | WBS | Work Orders Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 31.0 | Site delivery of JBR Shell and Roof materials | $ 1,671,570 | | $ 1,671,570 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 32 | 32.0 | JBR Shell/Roof Erection Subcontractor Mobilization | $ 308,455 | | $ 308,455 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 33 | 33.0 | Site delivery of JBR FRP Internals | $ 1,392,975 | | $ 1,392,975 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 34 | 34.0 | JBR Sideshell erection complete | $ 585,050 | | $ 585,050 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 35 | 35.0 | JBR FRP Internals Erection Subcontractor Mobilization | $ 807,926 | | $ 807,926 | 0% | $ - | $ - | $ - | 210 | 8.A.2 | X117031701 |
| 36 | 36.0 | Site delivery of Gas Cooler | $ 557,190 | | $ 557,190 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 37 | 37.0 | Site delivery of Ductwork Material | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 38 | 38.0 | Site delivery of Ball Mills | $ 1,114,380 | | $ 1,114,380 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 39 | 39.0 | Site delivery of Vacuum Filters | $ 1,114,380 | | $ 1,114,380 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 40 | 40.0 | Site delivery of Mist Eliminators | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 41 | 41.0 | Site delivery of Oxidation Air Blowers | $ 557,190 | | $ 557,190 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 42 | 42.0 | Site delivery of Slurry and General Service Pumps | $ 557,190 | | $ 557,190 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 43 | 43.0 | JBR Upper and Lower Deck installation complete | $ 1,365,116 | | $ 1,365,116 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 44 | 44.0 | Gas Cooler erection complete | $ 390,033 | | $ 390,033 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 45 | 45.0 | JBR Outlet Ductwork erection complete | $ 501,471 | | $ 501,471 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 46 | 46.0 | Site delivery of Agitators | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 47 | 47.0 | JBR Internal Piping and Nozzles installation complete | $ 807,926 | | $ 807,926 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 48 | 48.0 | Mist Eliminator erection complete | $ 167,157 | | $ 167,157 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 49 | 49.0 | JBR Roof erection complete | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 50 | 50.0 | Mechanical completion | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 51 | 51.0 | Substantial completion | $ 1,392,975 | | $ 1,392,975 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 52 | 52.0 | Successful completion of Acceptance Test | $ 278,595 | | $ 278,595 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| | | | $ 27,859,500 | $ - | $ 27,859,500 | | $ 529,331 | $ 2,228,760 | $ 2,758,091 | | | |

| | |
|---|---|
| Total Contract Value | $ 27,859,500 |
| Invoiced to Date | $ 2,758,091 |
| Contract Balance | $ 25,101,410 |

I certify that the quantities reported are accurate and complete to the best of my knowledge: ______________________

Approved for Payment ______________________

AEP Representative

# PARTIAL WAIVER OF LIEN

State of Kansas
County of Johnson

Black & Veatch Corporation, being duly sworn, states that:

The undersigned is a duly authorized officer of Black & Veatch Corporation (the "Contractor"). In consideration of $ 529,331.00, Contractor waives any liens and right to a lien under the laws of Kentucky for all labor performed on and materials furnished up to and including October 31, 2005 in connection with Big Sandy Plant, Unit 2 WFGD, entered into on July 22, 2005 between Kentucky Power Company (the "Owner") and Black & Veatch Corporation (the "Contractor") involving work on Owner's property located at Owner's Big Sandy Plant near Louisa, Kentucky.

Contractor acknowledges that it has secured similar lien waivers from its subcontractors, suppliers, laborers, or material men.

This Partial Waiver of Lien is conditioned upon receipt of the scheduled payment of $529,331.00 set forth above. This Partial Waiver of Lien does not include future scheduled payments for work yet to be performed and payments yet to be received under the Contract.

Dated: 12-5-05

Black & Veatch Corporation

By: Rick Solar
Rick Solar
Associate Vice President

Sworn before me and subscribed in my presence this 5th day of December, 2005:

Diane Schwartz
Notary

DIANE SCHWARTZ NOTARY PUBLIC STATE OF KANSAS

Contract No: 848252 Type: CP, LS, UR (w/ EWOs) Release #: 0002 Rev #: 3 Title: BS-2 WFGD Retrofit Project Design&Supply OEM

Contractor: BLAC02 BLACK & VEATCH Release Type: Blanket release LOA: LRP Code: BS8348

Contract | Release

Release Info | Release Rates | Line Items | Invoice | Cost Summary | Performance

| # | Invoice No. | Status | Tot Invoice Amt | Orig Inv Date | Inv Recd Date | Period From Date | Period End Date |
|---|---|---|---|---|---|---|---|
| 1 | 187422 | Preliminary | $529,331.00 | 10/31/2005 | 11/09/2005 | 10/31/2005 | 10/31/2005 |

Invoice:
Amount:
Date:

**Invoice Approval Routing**

Invoice Routing List (Drag and drop rows to reorder the list)

| Sort Order | Emp ID | Employee Name | Title | Role | Validate C P & B Authorization | Notify If Rejected | Notify If Late | Courtesy Copy | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | S183823 | Lascheid, William F. | Project Accountant | Project Accountant | | ✓ | | ✓ | Per |
| 2 | S152224 | Thomas, Jeremy L. | Cost Analyst | Cost Analyst - R | | ✓ | | | Per |
| 3 | S185581 | Robinson, Leonard G. | Project Engineer | Project Engineer - R | | ✓ | | | Per |
| 4 | S007518 | Vandemiet, Clark L. | Project Manager | Project Manager - A | ✓ | ✓ | | | Per |
| 5 | S933612 | Walton, Robert L. | Program Director | Program Director - | ✓ | | | | Per |

Invoice Routing Comments:

Mile stone payment for Issue Ball Mill PO and Issue flow model PO

Route for Approval | Recall | OK | Cancel

BLACK & VEATCH

~ INVOICE ~

BLACK & VEATCH CORPORATION

PLEASE REMIT TO:
BLACK & VEATCH CORPORATION
P.O. BOX 803823
KANSAS CITY MO 64180-3823
FED ID : 431833073

*OR* ELECTRONIC WIRE TRANSFER TO:
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER: 5336422
COMMERCE BANK, N.A., KC, MO. USA
ABA NUMBER: 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
***PLEASE INCLUDE INVOICE NUMBER

J.P. (NICK) NICKLESS
AMERICAN ELECTRIC POWER
COST CONTROL CENTER
1557 GRAVEL HILL ROAD
CHESIRE, OH 45620

CLIENT REF : 848252-0002X117
INVOICE DATE : 09-DEC-2005
PAYMENT DUE : 30-DEC-2005
INVOICE NO : 169979
PROJECT NAME : BIG SANDY OEM
PROJECT NO : 141643
B&V CONTACT : SOLAR, JOHN R
TELEPHONE : 913/458-7770

| DESCRIPTION | CONTRACT COMMITTED VALUE | PREVIOUSLY INVOICED | AMOUNT OF MILESTONE |
|---|---|---|---|
| DOWN PAYMENT | 3,072,040.00 | 2,228,760.00 | 843,280.00 |
| RECEIVE CHIYODA BASIC ENGINEERING PACKAGE (BEP) | 576,008.00 | 0.00 | 576,008.00 |
| ISSUE BALL MILL PURCHASE ORDER | 652,809.00 | 473,612.00 | 179,197.00 |
| ISSUE P&IDs FOR ROUTING | 230,403.00 | 0.00 | 230,403.00 |
| ISSUE FLOW MODEL PO | 76,801.00 | 55,719.00 | 21,082.00 |
| TOTAL DUE (USD) | | | 1,849,970.00 |

TOTAL BILLED TO DATE 4,608,060.00

DEC 2 2005

WIRE TRANSFER INFORMATION :
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER : 5336422
COMMERCE BANK, N.A. KC, MO. USA
ABA NUMBER : 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
****PLEASE INCLUDE INVOICE NUMBER**********

# PARTIAL WAIVER OF LIEN

State of Kansas
County of Johnson

Black & Veatch Corporation, being duly sworn, states that:

The undersigned is a duly authorized officer of Black & Veatch Corporation (the "Contractor"). In consideration of $ 1,849,970.00, Contractor waives any liens and right to a lien under the laws of Kentucky for all labor performed on and materials furnished up to and including December 2, 2005 in connection with Big Sandy Plant, Unit 2 WFGD, entered into on July 22, 2005 between Kentucky Power Company (the "Owner") and Black & Veatch Corporation (the "Contractor") involving work on Owner's property located at Owner's Big Sandy Plant near Louisa, Kentucky.

Contractor acknowledges that it has secured similar lien waivers from its subcontractors, suppliers, laborers, or material men.

This Partial Waiver of Lien is conditioned upon receipt of the scheduled payment of $ 1,849,970.00 set forth above. This Partial Waiver of Lien does not include future scheduled payments for work yet to be performed and payments yet to be received under the Contract.

Dated : 12-9-05

Black & Veatch Corporation

By : Rick Solar
Rick Solar
Associate Vice President

Sworn before me and subscribed in my presence this 9 day of December 2005:

Melissa A. Dean
Notary

NOTARY PUBLIC STATE OF KANSAS MELISSA A. DEAN My Appt. Exp. 01/09/06

Contractor: Black & Veatch Corporation
Contract /Release: 5432520002X117
Project: Big Sandy - OSM

Date: 12/3/2005

## Billing Control Form

AMERICAN ELECTRIC POWER

Invoice # 189979

| Bid Item / Milestone | Description | Contract Value | Revisions / Change Orders | Revised Contract Value | Quantity / Percent This Period | Totals This Period | Previous Total | Completed to Date | Cost Component | WBS | Work Order Task |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 | Down Payment | $ 2,228,760 | $ 843,280 | $ 3,072,040 | 27% | $ 843,280 | $ 2,228,760 | $ 3,072,040 | 391 | 9.N | X117031501 |
| 2.0 | Submit documents for DRG | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 3.0 | Receive Chiyoda Basic Engineering Package (BEP) | $ 417,893 | $ 158,115 | $ 576,008 | 100% | $ 576,008 | $ - | $ 576,008 | 391 | 9.N | X117031501 |
| 4.0 | Initial issue of general arrangement drawings | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 5.0 | Issue JBR Shell Purchase Order | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 6.0 | Revise DBR documents | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 7.0 | Issue Ball Mill Purchase Order | $ 473,612 | $ 179,197 | $ 652,809 | 27% | $ 179,197 | $ 473,612 | $ 652,809 | 391 | 2.F.0 | X117031501 |
| 8.0 | Issue Gas Cooler Purchase Order | $ 417,893 | $ 158,115 | $ 576,008 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 9.0 | Issue JBR FRP Internals Purchase Order | $ 640,769 | $ 242,443 | $ 883,212 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 10.0 | Issue Vacuum Filter Purchase Order | $ 445,752 | $ 168,656 | $ 614,408 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031601 |
| 11.0 | Issue Oxidation Air Blower Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 100% | $ 230,403 | $ - | $ 230,403 | 391 | 2.E.0 | X117031601 |
| 12.0 | Issue P&IDs for routing | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 13.0 | Initial issue of control logic diagrams | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 14.0 | Initial issue of JBR ductwork drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 15.0 | Issue Mist Eliminator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031601 |
| 16.0 | Issue Agitator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 17.0 | Issue Ductwork Material Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031601 |
| 18.0 | Issue Slurry and General Service Pump Purchase Order | $ 306,455 | $ 115,951 | $ 422,406 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 19.0 | Initial issue of JBR external piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 20.0 | Initial issue of limestone preparation piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 21.0 | Initial issue of gypsum dewatering piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031601 |
| 22.0 | Issue flow model PO | $ 55,719 | $ 21,082 | $ 76,801 | 27% | $ 21,082 | $ 55,719 | $ 76,801 | 391 | 2.E.0 | X117031601 |
| 23.0 | Submit final flow model report | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 24.0 | Issue training program manuals | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 25.0 | Release Ball Mills for fabrication | $ 835,785 | $ 316,230 | $ 1,152,015 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 26.0 | Release JBR Shell for fabrication | $ 1,253,678 | $ 474,345 | $ 1,728,023 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031601 |
| 27.0 | Release Vacuum Filter for fabrication | $ 863,645 | $ 326,771 | $ 1,190,416 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031601 |
| 28.0 | Release JBR FRP Internals for fabrication | $ 1,643,711 | $ 621,918 | $ 2,265,629 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 29.0 | Release Gas Cooler for fabrication | $ 668,628 | $ 252,984 | $ 921,612 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031601 |
| 30.0 | B&V Site Mobilization | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 31.0 | Site delivery of JBR Shell and Roof materials | $ 1,671,570 | $ 632,460 | $ 2,304,030 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 32.0 | JBR Shell/Roof Erection Subcontractor Mobilization | $ 306,455 | $ 115,951 | $ 422,406 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 33.0 | Site delivery of JBR FRP internals | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 34.0 | JBR Sideshell erection complete | $ 585,050 | $ 221,361 | $ 806,411 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 35.0 | JBR FRP Internals Erection Subcontractor Mobilization | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 8.A.2 | X117031701 |
| 36.0 | Site delivery of Gas Cooler | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 37.0 | Site delivery of Ductwork Material | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 38.0 | Site delivery of Ball Mills | $ 1,114,380 | $ 421,640 | $ 1,536,020 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 39.0 | Site delivery of Vacuum Filters | $ 1,114,380 | $ 421,640 | $ 1,536,020 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031601 |
| 40.0 | Site delivery of Mist Eliminators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 41.0 | Site delivery of Oxidation Air Blowers | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.G.0 | X117031601 |
| 42.0 | Site delivery of Slurry and General Service Pumps | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 43.0 | JBR Upper and Lower Deck installation complete | $ 1,363,116 | $ 518,509 | $ 1,881,625 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 44.0 | Gas Cooler erection complete | $ 390,033 | $ 147,574 | $ 537,607 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 45.0 | JBR Outlet Ductwork erection complete | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 46.0 | Site delivery of Agitators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 47.0 | JBR Internal Piping and Nozzles Installation complete | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 48.0 | Mist Eliminator erection complete | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 49.0 | JBR Roof erection complete | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 50.0 | Mechanical completion | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 51.0 | Substantial completion | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 52.0 | Successful completion of Acceptance Test | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| | | $ [illegible] | $ [illegible] | $ [illegible] | | $ [illegible] | $ [illegible] | $ [illegible] | | | |

| | |
|---|---|
| Total Contract Value | $ [illegible] |
| Invoiced to Date | $ [illegible] |
| Contract Balance | $ [illegible] |

I certify that the quantities reported are accurate and complete to the best of my knowledge. ______________________

Approved for Payment ______________________

AEP Representative

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ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM FGD Projects

B&V Project 141547
B&V File 62.0403.01A
November 23, 2005

Atlas Copco Compressors Inc.
94 North Elm Street
Floor 4
Westfield, MA 01085
Telephone: 303-986-2244
Facsimile: 303-986-2227
Email: chad.holmes@us.atlascopco.com

Subject: *Purchase Order Letter of Award*
*Oxidation Air Blowers*

Attention: Chad Holmes

Pending issuance of a formal Purchase Order, Black & Veatch Corporation (Purchaser) is pleased to issue this Letter of Award indicating our award to Atlas Copco Compressors Inc. (Supplier) covering the furnishing of Oxidation Air Blowers for the following Projects: Cardinal Units 1 & 2, Muskingum River Unit 5, Kyger Creek Units 1 thru 5, Conesville Unit 4 and Big Sandy Unit 2.

This Letter of Award is based on the requirements for Purchaser's Request for Quotation dated September 02, 2005 (141448.62.0403), except as specifically stated below and attached.

- Section 00400 includes Price Breakdown, Option and/or Unit Adjustment Pricing (if applicable), Delivery Dates, and Schedule of Submittals.
- RFQ Commercial and Technical documents modified to reflect agreements reached during the negotiation and conditioning process of this Purchase Order.

In addition, this Letter of Award releases Supplier to proceed with the Work to the extent listed below, and upon Supplier's unqualified acceptance of this Letter of Award, is a binding commitment on the part of the Purchaser and Supplier.

- Supplier is released to proceed with all activities associated with the Work associated required to maintain the agreed upon schedule, see below. The following are the associated Purchase Order Numbers and Price for each site. Refer to *Section 00400* for further price breakdown.

  Full Release for All Activities

  **Cardinal Units 1 & 2 – PO# 141547.62.0403**, Firm Lump Sum Price of US$2,203,430.00
  **Muskingum River Unit 5 – PO# 141641. 62.0403**, Firm Lump Sum Price of US$1,293,820.00
  **Kyger Creek Units 1 thru 5 – PO# 141642. 62.0403**, Firm Lump Sum Price of US$1,927,490.00
  **Conesville Unit 4 – PO# 141644. 62.0403**, Firm Lump Sum Price of US$1,358,620.00
  **Big Sandy Unit 2 – PO# 141643. 62.0403**, Firm Lump Sum Price of US$1,304,565.00

Atlas Copco Compressors Inc.
Mr. Chad Holmes

B&V Project 141547
November 23, 2005

The formal conformed Purchase Orders are currently under preparation and are scheduled for issuance shortly. Supplier agrees to execute such Purchase Orders and return to Purchaser within five working days of receipt, or, to notify Purchaser within said time frame that the Supplier deems that the conformed Purchase Order does not agree with this Letter of Award.

Please acknowledge acceptance of the above by your signature in the blocks designated below, and return the signed original document to Mr. Rick Solar at 11401 Lamar Avenue, Overland Park, Kansas, 66211.

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Rick Solar

Rick Solar
Project Manager

ACKNOWLEDGEMENT

Emile Bado
[Signature]

EMILE BADO
[Printed Name]

VICE PRESIDENT, OILFREEAIR BUSINESS LINE
[Title]

NOVEMBER 28, 2005
Date

cab
Enclosures

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ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM FGD Projects

B&V Project 141547
B&V File 141547.01A
October 28, 2005
78.0205

FlowTack LLC.
1003 Morrisville Parkway, Suite 190
Morrisville, NC 27560
Telephone: 919-468-0113
Facsimile: 919-468-0153
Email: sbible@flowtack.com

Subject: Service Contract
Flue Gas Ductwork Flow Modeling

Attention: Mr. Stewart Bible

Gentlemen:

This letter shall serve as official notice of award to FlowTack Service Contractor for the CT-121 OEM FGD Projects, Flue Gas Ductwork Flow Modeling. Service Contractor is hereby authorized to proceed immediately with activities necessary to perform under the attached Service Contract. Please note that the attached Service Contract is a release for 5 different Projects, all with different Service Contract Numbers.

Two (2) signed originals of the Purchase Order / Contract signature page are included. Please sign both and return one original signature pages to the following address within five (5) business days of receiving this transmittal.

Black & Veatch Corporation
Cardinal Project - 141547
Attention: Mr. Rick Solar, Project Manager
11401 Lamar Avenue
Overland Park, KS 66211

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Rick Solar

Rick Solar
Project Manager

cab
Enclosure

FlowTack LLC.
Mr. Stewart Bible

B&V Project 141547
October 28, 2005

cc: R. Solar / File
G. Bergt
E. Sprinkle
E.L. DeForest
C. Bebow
A. Mahabaleshwarkar
K. Saxton
N. Winkle

opportunity; loss of goodwill; cost of substitute facilities, goods or services; cost of capital; cost of replacement power; governmental and regulatory sanctions; and claims of customers for such damages; or for any special, consequential, incidental, indirect or exemplary damages.

**00471.5.7 Binding Effect**
This Agreement will be binding upon and will inure to the benefit of the parties and their respective heirs, legatees, personal representatives and other legal representatives, successors and permitted assigns. Except as otherwise specifically provided, this Agreement is not intended and will not be construed to confer upon or to give any person other than the parties any rights or remedies.

**00471.5.8 Waiver**
To the fullest extent allowed by law, releases from, waivers of, and limitations of liability shall apply notwithstanding the breach of contract, tort, including negligence, strict liability, or other theory of legal liability of the Party released or whose liability is limited.

**00471.5.9 Professional Liability Insurance**
As this Service Contract requires professional services by Service Contractor, evidence of professional liability insurance is required. The policy limits shall be in at least the amount of $1,000,000 for each occurrence and $1,000,000 in the aggregate. Such policy shall include contractual liability coverage, and such coverage shall remain in effect for at least two years after final payment (and Service Contractor shall furnish Purchaser certificates of insurance evidencing continuation of such insurance at final payment and one year thereafter.

IN WITNESS WHEREOF, Purchaser and Service Contractor have signed this Service Contract in duplicate.

| | FlowTack LLC. | | Black & Veatch Corporation |
|---|---|---|---|
| | (Service Contractor) | | (Purchaser) |
| By | Stewart Bible | By | Rick Solar |
| | (Printed Name) | | (Printed Name) |
| By | S Bible | By | Rick Solar |
| | (Signature) | | (Signature) |
| | General Manager | | Project Manager |
| | (Title) | | (Title) |
| | 10-31-05 | | 10-28-05 |
| | (Date) | | (Date) |
| | 41-2112949 | | |
| | Service Contractor Federal Tax ID Number | | |

141547.78.0205.01A
File
A. Mahabaleshwarkar
C. Bolton
G. Borg?
E. Sprinkle

# BASIC ENGINEERING PACKAGE OF THE CT-121 FGD PROCESS FOR AEP BIG SANDY PLANT UNIT 2 TO BLACK & VEATCH CORPORATION

NOVEMBER 2005

CHIYODA CORPORATION

BLACK & VEATCH
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ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM Projects

B&V Project 141547
B&V File 62.1802.01A
October 28, 2005

FFE Minerals USA Inc.
3235 Schoenersville Road
Bethlehem, PA 18017-2103
Telephone: 610-264-6468
Facsimile: 610-264-6802
Email: Anthony.filidore@ffeminerals.com

Subject: Purchase Order Letter of Award
FGD Reagent Preparation System

Attention: Mr. Anthony Filidore

Pending issuance of a formal Purchase Order, Black & Veatch Corporation (Purchaser) is pleased to issue this Letter of Award indicating our award to FFE Minerals USA Inc. (Supplier) covering the furnishing of FGD Reagent Preparation System Equipment for the following Projects: Cardinal Units 1 & 2, Muskingum River Unit 5, Kyger Creek Units 1 thru 5, Conesville Unit 4 and Big Sandy Unit 2.

This Letter of Award is based on the requirements for Purchaser's Request for Quotation dated 7/22/05 (141448.62.1802), except as specifically stated below and attached.

- Section 00400 includes Price Breakdown, Option and/or Unit Adjustment Pricing (if applicable), Delivery Dates, and Schedule of Submittals.
- RFQ Commercial and Technical documents modified to reflect agreements reached during the negotiation and conditioning process of this Purchase Order.

In addition, this Letter of Award releases Supplier to proceed with the Work to the extent listed below, and upon Supplier's unqualified acceptance of this Letter of Award, is a binding commitment on the part of the Purchaser and Supplier.

- Supplier is released to proceed with all activities associated with the Work or only engineering activities associated required to maintain the agreed upon schedule, see below. The following are the associated Purchase Order Numbers and Price for each site. Refer to Section 00400 for further price breakdown.

  Full Release for All Activities

  **Cardinal Units 1 & 2 – PO# 141547.62.1802**, Lump Sum Price of US[redacted]
  **Muskingum River Unit 5 – PO# 141641.62.1802**, Lump Sum Price of US[redacted]
  **Kyger Creek Units 1 thru 5 – PO# 141642.62.1802**, Firm Lump Sum Price of US[redacted]

  Release for Engineering Only

  **Conesville Unit 4 – PO# 141644.62.1802**, Firm Lump Sum Price of US[redacted] (Engineering Only) which is 10% of the Total Lump Sum cost for Conesville indicated in Section 00400.1, Price Breakdown. The balance of the Work Lump Sum Price is US[redacted] which is subject to mutually agreed upon adjustments to become a Firm Lump Sum Price prior to Release for Manufacturing.

Black & Veatch Corporation · 11401 Lamar · Overland Park, KS 66211 USA · Telephone: 913.458.2000

**Big Sandy Unit 2 – PO# 141643.62.1802**, Firm Lump Sum Price of US[redacted] (Engineering Only) which is 10% of the Total Lump Sum cost for Conesville indicated in Section 00400.1, Price Breakdown. The balance of the Work Lump Sum Price is US[redacted] which is subject to mutually agreed upon adjustments to become a Firm Lump Sum Price prior to Release for Manufacturing.

The formal conformed Purchase Orders are currently under preparation and are scheduled for issuance shortly. Supplier agrees to execute such Purchase Orders and return to Purchaser within five working days of receipt, or, to notify Purchaser within said time frame that the Supplier deems that the conformed Purchase Order does not agree with this Letter of Award.

Please acknowledge acceptance of the above by your signature in the blocks designated below, and return the signed original document to Mr. Rick Solar at 11401 Lamar Avenue, Overland Park, Kansas, 66211.

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Rick Solar

Rick Solar
Project Manager

<u>FFE Minerals USA Inc.</u>
ACKNOWLEDGEMENT

[Signature]

ANTHONY T. FILIBORG
[Printed Name]

FGD INDUSTRY MANAGER
[Title]

17-NOV-2005
Date

cab
Enclosures

BLACK & VEATCH

BLACK & VEATCH CORPORATION

~ INVOICE ~

PLEASE REMIT TO:
BLACK & VEATCH CORPORATION
P.O. BOX 803823
KANSAS CITY MO 64180-3823
FED ID : 431833073

CLIENT REF : 848252-0002X117

INVOICE DATE : 05-JAN-2006

PAYMENT DUE : 03-FEB-2006

INVOICE NO : 191510
PROJECT NAME : BIG SANDY OEM
PROJECT NO : 141643
B&V CONTACT : SOLAR, JOHN R
TELEPHONE : 913/458-7770

J.P. (NICK) NICKLESS
AMERICAN ELECTRIC POWER
COST CONTROL CENTER
1557 GRAVEL HILL ROAD
CHESIRE, OH 45620

JAN 0 9 2006
COST CONTROL

| DESCRIPTION | CONTRACT COMMITTED VALUE | PREVIOUSLY INVOICED | AMOUNT OF MILESTONE |
|---|---|---|---|
| ISSUE VACUUM FILTER PURCHASE ORDER | 614,408.00 | 0.00 | 614,408.00 |
| ISSUE MIST ELIMINATOR PURCHASE ORDER | 153,602.00 | 0.00 | 153,602.00 |
| TOTAL DUE (USD) | | | 768,010.00 |

TOTAL BILLED TO DATE 5,376,070.00

WIRE TRANSFER INFORMATION :
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER : 5336422
COMMERCE BANK, N.A. KC, MO. USA
ABA NUMBER : 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
****PLEASE INCLUDE INVOICE NUMBER**********

# PARTIAL WAIVER OF LIEN

State of Kansas
County of Johnson

Black & Veatch Corporation, being duly sworn, states that:

The undersigned is a duly authorized officer of Black & Veatch Corporation (the "Contractor"). In consideration of $ 768,010.00, Contractor waives any liens and right to a lien under the laws of Kentucky for all labor performed on and materials furnished up to and including December 30, 2005 in connection with Big Sandy Plant, Unit 2 WFGD, entered into on July 22, 2005 between Kentucky Power Company (the "Owner") and Black & Veatch Corporation (the "Contractor") involving work on Owner's property located at Owner's Big Sandy Plant near Louisa, Kentucky.

Contractor acknowledges that it has secured similar lien waivers from its subcontractors, suppliers, laborers, or material men.

This Partial Waiver of Lien is conditioned upon receipt of the scheduled payment of $ 768,010.00 set forth above. This Partial Waiver of Lien does not include future scheduled payments for work yet to be performed and payments yet to be received under the Contract.

Dated : 1-6-06

Black & Veatch Corporation

By : Rick Solar
Rick Solar
Associate Vice President

Sworn before me and subscribed in my presence this 6th day of January, 2006:

Diane Schwartz
Notary
MCE 12-5-07

DIANE SCHWARTZ NOTARY PUBLIC STATE OF KANSAS

# AEP Tier II FGD Projects
# Big Sandy Unit 2

## Milestone Payment Breakdown

| *Item Description* | % of Contract Value | Expected Date | Milestone Amount | |
|---|---|---|---|---|
| Down Payment | 8.0% | Jul-05 | 3,072,040 | |
| Submit documents for DRB | 0.5% | Oct-05 | 192,003 | |
| Receive Chiyoda Basic Engineering Package (BEP) | 1.5% | Oct-05 | 576,008 | |
| Initial issue of general arrangement drawings | 0.7% | Nov-05 | 268,804 | |
| Issue JBR Shell Purchase Order | 1.8% | Nov-05 | 691,209 | |
| Revise DBR documents | 0.2% | Jan-06 | 76,801 | |
| Issue Ball Mill Purchase Order | 1.7% | Jan-06 | 652,809 | |
| Issue Gas Cooler Purchase Order | 1.5% | Jan-06 | 576,008 | |
| Issue JBR FRP Internals Purchase Order | 2.3% | Jan-06 | 883,212 | |
| Issue Vacuum Filter Purchase Order | 1.6% | Jan-06 | 614,408 | |
| Issue Oxidation Air Blower Purchase Order | 0.6% | Jan-06 | 230,403 | |
| Issue P&IDs for routing | 0.7% | Feb-06 | 268,804 | |
| Initial issue of control logic diagrams | 0.3% | Feb-06 | 115,202 | |
| Initial issue of JBR ductwork drawings | 0.3% | Feb-06 | 115,202 | |
| Issue Mist Eliminator Purchase Order | 0.4% | Feb-06 | 153,602 | |
| Issue Agitator Purchase Order | 0.4% | Feb-06 | 153,602 | |
| Issue Ductwork Material Purchase Order | 0.6% | Feb-06 | 230,403 | |
| Issue Slurry and General Service Pump Purchase Order | 1.1% | Mar-06 | 422,406 | |
| Initial issue of JBR external piping drawings | 0.3% | Apr-06 | 115,202 | |
| Initial issue of limestone preparation piping drawings | 0.3% | Apr-06 | 115,202 | |
| Initial issue of gypsum dewatering piping drawings | 0.3% | Apr-06 | 115,202 | |
| Issue flow model PO | 0.2% | Jun-06 | 76,801 | |
| Submit final flow model report | 0.6% | Jan-07 | 230,403 | |
| Issue training program manuals | 0.5% | Jul-07 | 192,003 | |
| Release Ball Mills for fabrication | 3.0% | Dec-07 | 1,152,015 | |
| Release JBR Shell for fabrication | 4.5% | Dec-07 | 1,728,023 | |
| Release Vacuum Filter for fabrication | 3.1% | Mar-08 | 1,190,416 | |
| Release JBR FRP Internals for fabrication | 5.9% | Mar-08 | 2,265,630 | |
| Release Gas Cooler for fabrication | 2.4% | Apr-08 | 921,612 | |
| B&V Site Mobilization | 1.0% | Jul-08 | 384,005 | |
| Site delivery of JBR Shell and Roof materials | 6.0% | Aug-08 | 2,304,030 | |
| JBR Shell/Roof Erection Subcontractor Mobilization | 1.1% | Aug-08 | 422,406 | |
| Site delivery of JBR FRP Internals | 5.0% | Dec-08 | 1,920,025 | |
| JBR Sideshell erection complete | 2.1% | Dec-08 | 806,411 | |
| JBR FRP Internals Erection Subcontractor Mobilization | 2.9% | Dec-08 | 1,113,615 | |
| Site delivery of Gas Cooler | 2.0% | Jan-09 | 768,010 | |
| Site delivery of Ductwork Material | 1.0% | Jan-09 | 384,005 | |
| Site delivery of Ball Mills | 4.0% | Feb-09 | 2,086,260 | Rev 1 |
| Site delivery of Vacuum Filters | 4.0% | Feb-09 | 1,536,020 | |
| Site delivery of Mist Eliminators | 1.0% | Feb-09 | 384,005 | |
| Site delivery of Oxidation Air Blowers | 2.0% | Mar-09 | 768,010 | |
| Site delivery of Slurry and General Service Pumps | 2.0% | Mar-09 | 768,010 | |
| JBR Upper and Lower Deck installation complete | 4.9% | Mar-09 | 1,881,625 | |
| Gas Cooler erection complete | 1.4% | May-09 | 537,607 | |
| JBR Outlet Ductwork erection complete | 1.8% | Jun-09 | 691,209 | |
| Site delivery of Agitators | 1.0% | Jun-09 | 384,005 | |
| JBR Internal Piping and Nozzles installation complete | 2.9% | Jun-09 | 1,113,615 | |
| Mist Eliminator erection complete | 0.6% | Jun-09 | 230,403 | |
| JBR Roof erection complete | 1.0% | Jul-09 | 384,005 | |
| Mechanical completion | 1.0% | Sep-09 | 384,005 | |
| Substantial completion | 5.0% | Feb-10 | 1,920,025 | |
| Successful completion of Acceptance Test | 1.0% | Apr-10 | 384,005 | |
| | 100.0% | | 38,950,740 | |

Note - total amount includes erection of JBR, JBR internals, gas cooler, outlet duct, and mist eliminator.

Revision Summary
1 - Incorporation of ball mill allowance into contract.

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ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM FGD Projects

B&V Project 141547
B&V File 62.1803.01A
December 12, 2005

Dorr-Oliver Eimco USA Inc.
2850 South Decker Lake Drive
Salt Lake City, UT 84119-2300
Telephone: 801-526-2506
Facsimile: 801-526-2923
Email: sean.enright@glv.com

Subject: Purchase Order Letter of Award
FGD Byproduct Dewatering

Attention: Mr. Sean Enright

Pending issuance of a formal Purchase Order, Black & Veatch Corporation (Purchaser) is pleased to issue this Letter of Award indicating our award to Dorr-Oliver Eimco USA Inc. (Supplier) covering the furnishing of FGD Byproduct Dewatering Equipment for the following Projects: Cardinal Units 1 & 2, Muskingum River Unit 5, Kyger Creek Units 1 thru 5, Conesville Unit 4 and Big Sandy Unit 2.

The Effective Date for items in the Schedule of Submittals and for the Delivery Schedule shall be **November 9, 2005.**

This Letter of Award is based on the requirements for Purchaser's Request for Quotation dated 9/6/05 (141448.62.1803), except as specifically stated below and attached.

- Section 00400 includes Price Breakdown, Option and/or Unit Adjustment Pricing (if applicable), Delivery Dates, and Schedule of Submittals.
- RFQ Commercial and Technical documents modified to reflect agreements reached during the negotiation and conditioning process of this Purchase Order.

In addition, this Letter of Award releases Supplier to proceed with the Work to the extent listed below, and upon Supplier's unqualified acceptance of this Letter of Award, is a binding commitment on the part of the Purchaser and Supplier.

- Supplier is released to proceed with all activities associated with the Work or only engineering activities associated required to maintain the agreed upon schedule, see below. The following are the associated Purchase Order Numbers and Price for each site. Refer to Section 00400 for further price breakdown.

  Full Release for All Activities

  **Cardinal Units 1 & 2 – PO# 141547.62.1803**, Firm Lump Sum Price of US$2,969,380.00
  **Muskingum River Unit 5 – PO# 141641.62.1803**, Firm Lump Sum Price of US$1,485,270.00

  Release for Engineering Only

  **Kyger Creek Units 1 thru 5 – PO# 141642.62.1803**, Firm Lump Sum Price of US$98,329.25 (Engineering Only). The balance of the Work Lump Sum Price is US$1,868,255.75 which is subject to mutually agreed upon adjustments and become a Firm Lump Sum Price prior to Release to Manufacture.

Dorr-Oliver Eimco USA Inc.
Mr. Sean Enright

B&V Project 141547
December 12, 2005

**Conesville Unit 4 – PO# 141644.62.1803**, Firm Lump Sum Price of US$72,398.75 (Engineering Only). The balance of the Work Lump Sum Price is US$1,375,576.25 which is subject to mutually agreed upon adjustments and become a Firm Lump Sum Price prior to Release to Manufacture.

**Big Sandy Unit 2 – PO# 141643.62.1803**, Firm Lump Sum Price of US$72,398.75 (Engineering Only). The balance of the Work Lump Sum Price is US$1,375,576.25 which is subject to mutually agreed upon adjustments and become a Firm Lump Sum Price prior to Release to Manufacture.

The formal conformed Purchase Orders are currently under preparation and are scheduled for issuance shortly. Supplier agrees to execute such Purchase Orders and return to Purchaser within five working days of receipt, or, to notify Purchaser within said time frame that the Supplier deems that the conformed Purchase Order does not agree with this Letter of Award.

Please acknowledge acceptance of the above by your signature in the blocks designated below, and return the signed original document to Mr. Rick Solar at 11401 Lamar Avenue, Overland Park, Kansas, 66211.

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Rick Solar

Rick Solar
Project Manager

SUPPLIER ACKNOWLEDEGEMENT
**Dorr-Oliver Eimco**

[Signature]

Nathan Nelson
[Printed Name]

Contract Administrator
[Title]

12/16/05
Date

cab
Enclosure

BLACK & VEATCH
building a world of difference
ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM FGD Projects

B&V Project 141547
B&V File 62.2415.01A
December 19, 2005

Munters Corporation
108 Sixth Street
Fort Myers, FL 33911
Telephone: 800-446-6868 x727
Facsimile: 239-278-1316
Email: dtaylor@munters.com

Subject: Purchase Order Letter of Award
Mist Eliminators

Attention: David Taylor

Pending issuance of a formal Purchase Order, Black & Veatch Corporation (Purchaser) is pleased to issue this Letter of Award indicating our award to Munters Corporation (Supplier) covering the furnishing of Mist Eliminators for the following Projects: Cardinal Units 1 & 2, Muskingum River Unit 5, Conesville Unit 4 and Big Sandy Unit 2.

This Letter of Award is based on the requirements for Purchaser's Request for Quotation dated September 12, 2005 (141448.62.2415), except as specifically stated below and attached.

- Section 00400 includes Price Breakdown, Option and/or Unit Adjustment Pricing (if applicable), Delivery Dates, and Schedule of Submittals.
- RFQ Commercial and Technical documents modified to reflect agreements reached during the negotiation and conditioning process of this Purchase Order.

In addition, this Letter of Award releases Supplier to proceed with the Work to the extent listed below, and upon Supplier's unqualified acceptance of this Letter of Award, is a binding commitment on the part of the Purchaser and Supplier.

- Supplier is released to proceed with all activities associated with the Work associated required to maintain the agreed upon schedule, see below. The following are the associated Purchase Order Numbers and Price for each site. Refer to Section 00400 for further price breakdown.

  <u>Full Release for All Activities</u>

  **Cardinal Units 1 & 2 – PO# 141547.62.2415,** Firm Lump Sum Price of US$769,965.00
  **Muskingum River Unit 5 – PO# 141641. 62.2415,** Firm Lump Sum Price of US$393,830.00
  **Conesville Unit 4 – PO# 141644. 62.2415,** Firm Lump Sum Price of US$544,525.00
  **Big Sandy Unit 2 – PO# 141643. 62.2415,** Firm Lump Sum Price of US$548,625.00

Munters Corporation
Mr. David Taylor

B&V Project 141547
December 19, 2005

The formal conformed Purchase Orders are currently under preparation and are scheduled for issuance shortly. Supplier agrees to execute such Purchase Orders and return to Purchaser within five working days of receipt, or, to notify Purchaser within said time frame that the Supplier deems that the conformed Purchase Order does not agree with this Letter of Award.

Please acknowledge acceptance of the above by your signature in the blocks designated below, and return the signed original document to Mr. Rick Solar at 11401 Lamar Avenue, Overland Park, Kansas, 66211.

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Rick Solar

Rick Solar
Project Manager

MUNTERS CORPORATION
ACKNOWLEDGEMENT

David Taylor
[Signature]

DAVID TAYLOR
[Printed Name]

SALES MANAGER
[Title]

12-20-05
Date

cab
Enclosures

Contractor: Black & Veatch Corporation
Contract /Release: 6482526002X117
Project: Big Sandy - OEM

Billing Control Form

AEP AMERICAN ELECTRIC POWER

Date: 12/28/2005

Invoice # 191510

| Line | Bid Item / Milestone | Description | Contract Value | Revisions / Change Orders | Revised Contract Value | Quantity / Percent This Period | Totals This Period | Previous Total | Completed to Date | Cost Component | WBS | Work Order Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.0 | Down Payment | $ 2,228,760 | $ 843,280 | $ 3,072,040 | 0% | $ - | $ 3,072,040 | $ 3,072,040 | 391 | 9.N | X117031501 |
| 2 | 2.0 | Submit documents for DRB | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 3 | 3.0 | Receive Chiyoda Basic Engineering Package (BEP) | $ 417,893 | $ 158,116 | $ 576,008 | 0% | $ - | $ 576,008 | $ 576,008 | 391 | 9.N | X117031501 |
| 4 | 4.0 | Initial issue of general arrangement drawings | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 5 | 5.0 | Issue JBR Shell Purchase Order | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 6 | 6.0 | Revise DBR documents | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 7 | 7.0 | Issue Ball Mill Purchase Order | $ 473,612 | $ 179,197 | $ 652,809 | 0% | $ - | $ 652,809 | $ 652,809 | 391 | 2.F.0 | X117031501 |
| 8 | 8.0 | Issue Gas Cooler Purchase Order | $ 417,893 | $ 158,116 | $ 576,008 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 9 | 9.0 | Issue JBR FRP Internals Purchase Order | $ 640,769 | $ 242,443 | $ 883,212 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 10 | 10.0 | Issue Vacuum Filter Purchase Order | $ 445,752 | $ 168,656 | $ 614,408 | 100% | $ 614,408 | $ - | $ 614,408 | 391 | 4.G.2 | X117031501 |
| 11 | 11.0 | Issue Oxidation Air Blower Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ 230,403 | $ 230,403 | 391 | 2.E.0 | X117031501 |
| 12 | 12.0 | Issue P&IDs for routing | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 13 | 13.0 | Initial issue of control logic diagrams | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 14 | 14.0 | Initial issue of JBR ductwork drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 15 | 15.0 | Issue Mist Eliminator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 100% | $ 153,602 | $ - | $ 153,602 | 391 | 2.E.0 | X117031501 |
| 16 | 16.0 | Issue Agitator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 17 | 17.0 | Issue Ductwork Material Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 18 | 18.0 | Issue Slurry and General Service Pump Purchase Order | $ 306,455 | $ 115,951 | $ 422,406 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 19 | 19.0 | Initial issue of JBR external piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 20 | 20.0 | Initial issue of limestone preparation piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 21 | 21.0 | Initial issue of gypsum dewatering piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 22 | 22.0 | Issue flow model PO | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ 76,801 | $ 76,801 | 391 | 2.E.0 | X117031501 |
| 23 | 23.0 | Submit final flow model report | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 24 | 24.0 | Issue training program manuals | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 25 | 25.0 | Release Ball Mills for fabrication | $ 835,785 | $ 316,230 | $ 1,152,015 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 26 | 26.0 | Release JBR Shell for fabrication | $ 1,253,678 | $ 474,345 | $ 1,728,023 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 27 | 27.0 | Release Vacuum Filter for fabrication | $ 863,645 | $ 326,771 | $ 1,190,416 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 28 | 28.0 | Release JBR FRP Internals for fabrication | $ 1,643,711 | $ 621,919 | $ 2,265,630 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 29 | 29.0 | Release Gas Cooler for fabrication | $ 668,628 | $ 252,984 | $ 921,612 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 30 | 30.0 | B&V Site Mobilization | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 31 | 31.0 | Site delivery of JBR Shell and Roof materials | $ 1,671,570 | $ 632,460 | $ 2,304,030 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 32 | 32.0 | JBR Shell/Roof Erection Subcontractor Mobilization | $ 306,455 | $ 115,951 | $ 422,405 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 33 | 33.0 | Site delivery of JBR FRP Internals | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 34 | 34.0 | JBR Sideshell erection complete | $ 585,050 | $ 221,361 | $ 806,411 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 35 | 35.0 | JBR FRP Internals Erection Subcontractor Mobilization | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 6.A.2 | X117031701 |
| 36 | 36.0 | Site delivery of Gas Cooler | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 37 | 37.0 | Site delivery of Ductwork Material | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 38 | 38.0 | Site delivery of Ball Mills | $ 1,114,380 | $ 421,640 | $ 1,536,020 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 39 | 39.0 | Site delivery of Vacuum Filters | $ 1,114,380 | $ 421,640 | $ 1,536,020 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 40 | 40.0 | Site delivery of Mist Eliminators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 41 | 41.0 | Site delivery of Oxidation Air Blowers | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 42 | 42.0 | Site delivery of Slurry and General Service Pumps | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 43 | 43.0 | JBR Upper and Lower Deck Installation complete | $ 1,365,116 | $ 516,509 | $ 1,881,625 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 44 | 44.0 | Gas Cooler erection complete | $ 390,033 | $ 147,574 | $ 537,607 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 45 | 45.0 | JBR Outlet Ductwork erection complete | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 46 | 46.0 | Site delivery of Agitators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 47 | 47.0 | JBR Internal Piping and Nozzles Installation complete | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 48 | 48.0 | Mist Eliminator erection complete | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 49 | 49.0 | JBR Roof erection complete | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 50 | 50.0 | Mechanical completion | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 51 | 51.0 | Substantial completion | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 52 | 52.0 | Successful completion of Acceptance Test | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| | | | $ [illegible] | $ [illegible] | $ [illegible] | | $ 764,010 | $ [illegible] | $ 6,376,870 | | | |

| | |
|---|---|
| Total Contract Value | $ [illegible] |
| Invoiced to Date | $ [illegible] |
| Contract Balance | $ [illegible] |

I certify that the quantities reported are accurate and complete to the best of my knowledge: Rick Solan 1-6-06 Approved for Payment ______________

AEP Representative

BLACK & VEATCH

~ INVOICE ~

BLACK & VEATCH CORPORATION

PLEASE REMIT TO:
BLACK & VEATCH CORPORATION
P.O. BOX 803823
KANSAS CITY MO 64180-3823
FED ID : 431833073

CLIENT REF : 848252-0002X117

INVOICE DATE : 02-FEB-2006

PAYMENT DUE : 03-Mar-2006

J.P. (NICK) NICKLESS
AMERICAN ELECTRIC POWER
COST CONTROL CENTER
1557 GRAVEL HILL ROAD
CHESIRE, OH 45620

INVOICE NO : 193597
PROJECT NAME : BIG SANDY OEM
PROJECT NO : 141643
B&V CONTACT : SOLAR, JOHN R
TELEPHONE : 913/458-7770

| DESCRIPTION | CONTRACT COMMITTED VALUE | PREVIOUSLY INVOICED | AMOUNT OF MILESTONE |
|---|---|---|---|
| Issue Agitator Purchase Order | 153,602.00 | 0.00 | 153,602.00 |

TOTAL DUE (USD) 153,602.00

TOTAL BILLED TO DATE 6,529,672.00

WIRE TRANSFER INFORMATION :
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER : 5336422
COMMERCE BANK, N.A. KC, MO. USA
ABA NUMBER : 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
****PLEASE INCLUDE INVOICE NUMBER**********

RECEIVED BY
FEB 0 6 2006
AEP
COST CONTROL

# PARTIAL WAIVER OF LIEN

**State of Kansas**
**County of Johnson**

Black & Veatch Corporation, being duly sworn, states that:

The undersigned is a duly authorized officer of Black & Veatch Corporation (the "Contractor"). In consideration of $ 153,602.00, Contractor waives any liens and right to a lien under the laws of Kentucky for all labor performed on and materials furnished up to and including January 27, 2006 in connection with Big Sandy Plant, Unit 2 WFGD, entered into on July 22, 2005 between Kentucky Power Company (the "Owner") and Black & Veatch Corporation (the "Contractor") involving work on Owner's property located at Owner's Big Sandy Plant near Louisa, Kentucky.

Contractor acknowledges that it has secured similar lien waivers from its subcontractors, suppliers, laborers, or material men.

This Partial Waiver of Lien is conditioned upon receipt of the scheduled payment of $ 153,602.00.00 set forth above. This Partial Waiver of Lien does not include future scheduled payments for work yet to be performed and payments yet to be received under the Contract.

Dated : 2-3-06

Black & Veatch Corporation

By : Rick Solar
Rick Solar
Associate Vice President

Sworn before me and subscribed in my presence this 3rd day of February, 2006:

Diane Schwartz
Notary
MCE 1-25-07

DIANE SCHWARTZ NOTARY PUBLIC STATE OF KANSAS

# AEP Tier II FGD Projects
# Big Sandy Unit 2 - 141643

## Milestone Payment Breakdown

| | | | 38,400,500 |
|---|---|---|---|
| *Item Description* | % of Contract Value | Date | |
| Down Payment | 8.0% | Jul-05 | 3,072,040 |
| Submit documents for DRB | 0.5% | Oct-05 | 192,003 |
| Receive Chiyoda Basic Engineering Package (BEP) | 1.5% | Oct-05 | 576,008 |
| Initial issue of general arrangement drawings | 0.7% | Nov-05 | 268,804 |
| Issue JBR Shell Purchase Order | 1.8% | Nov-05 | 691,209 |
| Revise DBR documents | 0.2% | Jan-06 | 76,801 |
| Issue Ball Mill Purchase Order | 1.7% | Jan-06 | 652,809 |
| Issue Gas Cooler Purchase Order | 1.5% | Jan-06 | 576,008 |
| Issue JBR FRP Internals Purchase Order | 2.3% | Jan-06 | 883,212 |
| Issue Vacuum Filter Purchase Order | 1.6% | Jan-06 | 614,408 |
| Issue Oxidation Air Blower Purchase Order | 0.6% | Jan-06 | 230,403 |
| Issue P&IDs for routing | 0.7% | Feb-06 | 268,804 |
| Initial issue of control logic diagrams | 0.3% | Feb-06 | 115,202 |
| Initial issue of JBR ductwork drawings | 0.3% | Feb-06 | 115,202 |
| Issue Mist Eliminator Purchase Order | 0.4% | Feb-06 | 153,602 |
| Issue Agitator Purchase Order | 0.4% | Feb-06 | 153,602 |
| Issue Ductwork Material Purchase Order | 0.6% | Feb-06 | 230,403 |
| Issue Slurry and General Service Pump Purchase Order | 1.1% | Mar-06 | 422,406 |
| Initial issue of JBR external piping drawings | 0.3% | Apr-06 | 115,202 |
| Initial issue of limestone preparation piping drawings | 0.3% | Apr-06 | 115,202 |
| Initial issue of gypsum dewatering piping drawings | 0.3% | Apr-06 | 115,202 |
| Issue flow model PO | 0.2% | Jun-06 | 76,801 |
| Submit final flow model report | 0.6% | Jan-07 | 230,403 |
| Issue training program manuals | 0.5% | Jul-07 | 192,003 |
| Release Ball Mills for fabrication | 3.0% | Dec-07 | 1,152,015 |
| Release JBR Shell for fabrication | 4.5% | Dec-07 | 1,728,023 |
| Release Vacuum Filter for fabrication | 3.1% | Mar-08 | 1,190,416 |
| Release JBR FRP Internals for fabrication | 5.9% | Mar-08 | 2,265,630 |
| Release Gas Cooler for fabrication | 2.4% | Apr-08 | 921,612 |
| B&V Site Mobilization | 1.0% | Jul-08 | 384,005 |
| Site delivery of JBR Shell and Roof materials | 6.0% | Aug-08 | 2,304,030 |
| JBR Shell/Roof Erection Subcontractor Mobilization | 1.1% | Aug-08 | 422,406 |
| Site delivery of JBR FRP Internals | 5.0% | Dec-08 | 1,920,025 |
| JBR Sideshell erection complete | 2.1% | Dec-08 | 806,411 |
| JBR FRP Internals Erection Subcontractor Mobilization | 2.9% | Dec-08 | 1,113,615 |
| Site delivery of Gas Cooler | 2.0% | Jan-09 | 768,010 |
| Site delivery of Ductwork Material | 1.0% | Jan-09 | 384,005 |
| Site delivery of Ball Mills | 4.0% | Feb-09 | 1,536,020 |
| Site delivery of Vacuum Filters | 4.0% | Feb-09 | 1,536,020 |
| Site delivery of Mist Eliminators | 1.0% | Feb-09 | 384,005 |
| Site delivery of Oxidation Air Blowers | 2.0% | Mar-09 | 768,010 |
| Site delivery of Slurry and General Service Pumps | 2.0% | Mar-09 | 768,010 |
| JBR Upper and Lower Deck installation complete | 4.9% | Mar-09 | 1,881,625 |

| | | | |
|---|---|---|---|
| Gas Cooler erection complete | 1.4% | May-09 | 537,607 |
| JBR Outlet Ductwork erection complete | 1.8% | Jun-09 | 691,209 |
| Site delivery of Agitators | 1.0% | Jun-09 | 384,005 |
| JBR Internal Piping and Nozzles installation complete | 2.9% | Jun-09 | 1,113,615 |
| Mist Eliminator erection complete | 0.6% | Jun-09 | 230,403 |
| JBR Roof erection complete | 1.0% | Jul-09 | 384,005 |
| Mechanical completion | 1.0% | Sep-09 | 384,005 |
| Substantial completion | 5.0% | Feb-10 | 1,920,025 |
| Successful completion of Acceptance Test | 1.0% | Apr-10 | 384,005 |
| | 100.0% | | |
| | | | 38,400,500 |

J0100

BLACK & VEATCH
building a world of difference

ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM Projects

B&V Project 141547
B&V File 65.0702.01A
January 24, 2006

Mixtec North America
3625 South West Temple
Salt Lake City, UT 84115
Telephone: 801-265-1000 x173
Facsimile: 801-265-1080
Email: mhardcastle@westech-inc.com

Subject: Purchase Order Letter of Award
FGD Agitators

Attention: Mr. Mark Hardcastle

Pending issuance of a formal Purchase Order, Black & Veatch Corporation (Purchaser) is pleased to issue this Letter of Award indicating our award to Mixtec North America (Supplier) covering the furnishing of FGD Agitators for the following Projects: Cardinal Units 1 & 2, Muskingum River Unit 5, Kyger Creek Units 1 thru 5, Conesville Unit 4 and Big Sandy Unit 2.

This Letter of Award is based on the requirements for Purchaser's Request for Quotation dated 10/31/05 (141448.65.0702), except as specifically stated below and attached.

- Section 00400 includes Price Breakdown, Option and/or Unit Adjustment Pricing (if applicable), Delivery Dates, and Schedule of Submittals.
- RFQ Commercial and Technical documents modified to reflect agreements reached during the negotiation and conditioning process of this Purchase Order.

In addition, this Letter of Award releases Supplier to proceed with the Work to the extent listed below, and upon Supplier's unqualified acceptance of this Letter of Award, is a binding commitment on the part of the Purchaser and Supplier.

- Supplier is released to proceed with all activities associated with the Work required to maintain the agreed upon schedule. The following are the associated Purchase Order Numbers and Price for each site. Refer to Section 00400 for further price breakdown.

  Full Release for All Activities

  **Cardinal Units 1 & 2 – PO# 141547.65.0702**, Firm Lump Sum Price of US$1,563,538.19
  **Muskingum River Unit 5 – PO# 141641.65.0702**, Firm Lump Sum Price of US$849,255.79
  **Kyger Creek Units 1 thru 5 – PO# 141642.65.0702**, Firm Lump Sum Price of US$1,308,565.52
  **Conesville Unit 4 – PO# 141644.65.0702**, Firm Lump Sum Price of US$846,420.83
  **Big Sandy Unit 2 – PO# 141643.65.0702**, Firm Lump Sum Price of US$799,884.47

The formal conformed Purchase Orders are currently under preparation and are scheduled for issuance shortly. Supplier agrees to execute such Purchase Orders and return to Purchaser within five working days of receipt, or, to notify Purchaser within said time frame that the Supplier deems that the conformed Purchase Order does not agree with this Letter of Award.

Mixtec North America
Mr. Mark Hardcastle

B&V Project 141547
January 24, 2006

Please acknowledge acceptance of the above by your signature in the blocks designated below, and return the signed original document to Mr. Rick Solar at 11401 Lamar Avenue, Overland Park, Kansas, 66211.

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

for Rick Solar

Rick Solar
Project Manager

**Mixtec North America**
ACKNOWLEDGEMENT

Steven T. Brewster
[Signature]

Steven T. Brewster
[Printed Name]

President - WesTech dba Mixtec
[Title]

1-30-06
Date

cab
Enclosures

cc: R. Solar / File
G. Bergt
E. Sprinkle
E.L. DeForest
C. Bebow
T. Edsall
J. Bockelman
K. McAlpin
N. Winkel
N. Zirpie
S. Staehle
G. Zinkiewicz

Contractor: Black & Veatch Corporation
Contract /Release: 8402520902X117
Project: Big Sandy - OEM

Date: 1/31/2006

**Billing Control Form**

AEP AMERICAN ELECTRIC POWER

Invoice #

| Print Lines | Bid Item / Milestone | Description | Contract Value | Revisions / Change Orders | Revised Contract Value | Quantity / Percent This Period | Totals This Period | Previous Total | Completed to Date | Cost Component | WBS | Work Order Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.0 | Down Payment | $ 2,228,760 | $ 843,280 | $ 3,072,040 | 0% | $ - | $ 3,072,040 | $ 3,072,040 | 391 | 9.N | X117031501 |
| 2 | 2.0 | Submit documents for ORB | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 3 | 3.0 | Receive Chiyoda Basic Engineering Package (BEP) | $ 417,893 | $ 158,115 | $ 576,008 | 0% | $ - | $ 576,008 | $ 576,008 | 391 | 9.N | X117031501 |
| 4 | 4.0 | Initial issue of general arrangement drawings | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 5 | 5.0 | Issue JBR Shell Purchase Order | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 6 | 6.0 | Revise DBR documents | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 7 | 7.0 | Issue Ball Mill Purchase Order | $ 473,612 | $ 179,197 | $ 652,809 | 0% | $ - | $ 652,809 | $ 652,809 | 391 | 2.F.0 | X117031501 |
| 8 | 8.0 | Issue Gas Cooler Purchase Order | $ 417,893 | $ 158,115 | $ 576,008 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 9 | 9.0 | Issue JBR FRP Internals Purchase Order | $ 640,769 | $ 242,443 | $ 883,212 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 10 | 10.0 | Issue Vacuum Filter Purchase Order | $ 445,752 | $ 168,656 | $ 614,408 | 0% | $ - | $ 614,408 | $ 614,408 | 391 | 4.G.2 | X117031501 |
| 11 | 11.0 | Issue Oxidation Air Blower Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ 230,403 | $ 230,403 | 391 | 2.E.0 | X117031501 |
| 12 | 12.0 | Issue P&IDs for routing | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 13 | 13.0 | Initial issue of control logic diagrams | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 14 | 14.0 | Initial issue of JBR ductwork drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 15 | 15.0 | Issue Mist Eliminator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 0% | $ - | $ 153,602 | $ 153,602 | 391 | 2.E.0 | X117031501 |
| 16 | 16.0 | Issue Agitator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 100% | $ 153,602 | $ - | $ 153,602 | 391 | 2.E.0 | X117031501 |
| 17 | 17.0 | Issue Ductwork Material Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 18 | 18.0 | Issue Slurry and General Service Pump Purchase Order | $ 306,455 | $ 115,951 | $ 422,406 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 19 | 19.0 | Initial issue of JBR external piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 20 | 20.0 | Initial issue of limestone preparation piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 21 | 21.0 | Initial issue of gypsum dewatering piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 22 | 22.0 | Issue flow model PO | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ 76,801 | $ 76,801 | 391 | 2.E.0 | X117031501 |
| 23 | 23.0 | Submit final flow model report | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 24 | 24.0 | Issue training program manuals | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 25 | 25.0 | Release Ball Mills for fabrication | $ 835,785 | $ 316,230 | $ 1,152,015 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 26 | 26.0 | Release JBR Shell for fabrication | $ 1,253,678 | $ 474,345 | $ 1,728,023 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 27 | 27.0 | Release Vacuum Filter for fabrication | $ 863,645 | $ 326,771 | $ 1,190,416 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 28 | 28.0 | Release JBR FRP Internals for fabrication | $ 1,643,711 | $ 621,919 | $ 2,265,630 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 29 | 29.0 | Release Gas Cooler for fabrication | $ 668,028 | $ 252,984 | $ 921,012 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 30 | 30.0 | B&V Site Mobilization | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 31 | 31.0 | Site delivery of JBR Shell and Roof materials | $ 1,671,570 | $ 632,460 | $ 2,304,030 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 32 | 32.0 | JBR Shell/Roof Erection Subcontractor Mobilization | $ 306,455 | $ 115,951 | $ 422,406 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 33 | 33.0 | Site delivery of JBR FRP Internals | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 34 | 34.0 | JBR Sideshell erection complete | $ 585,050 | $ 221,361 | $ 806,411 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 35 | 35.0 | JBR FRP Internals Erection Subcontractor Mobilization | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 8.A.2 | X117031701 |
| 36 | 36.0 | Site delivery of Gas Cooler | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 37 | 37.0 | Site delivery of Ductwork Material | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 38 | 38.0 | Site delivery of Ball Mills | $ 1,114,380 | $ 421,640 | $ 1,536,020 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 39 | 39.0 | Site delivery of Vacuum Filters | $ 1,114,380 | $ 421,640 | $ 1,536,020 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 40 | 40.0 | Site delivery of Mist Eliminators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 41 | 41.0 | Site delivery of Oxidation Air Blowers | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 42 | 42.0 | Site delivery of Slurry and General Service Pumps | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 43 | 43.0 | JBR Upper and Lower Deck installation complete | $ 1,365,116 | $ 516,509 | $ 1,881,625 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 44 | 44.0 | Gas Cooler erection complete | $ 390,033 | $ 147,574 | $ 537,607 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 45 | 45.0 | JBR Outlet Ductwork erection complete | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 46 | 46.0 | Site delivery of Agitators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 47 | 47.0 | JBR Internal Piping and Nozzles installation complete | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 48 | 48.0 | Mist Eliminator erection complete | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 49 | 49.0 | JBR Roof erection complete | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 50 | 50.0 | Mechanical completion | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 51 | 51.0 | Substantial completion | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 52 | 52.0 | Successful completion of Acceptance Test | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| | | | $ 17,759,500 | $ 10,641,000 | $ 28,400,500 | | $ 153,602 | $ 5,378,070 | $ 5,531,672 | | | |

| | |
|---|---|
| Total Contract Value | $ 28,400,500 |
| Invoiced to Date | $ 5,531,672 |
| Contract Balance | $ 22,868,828 |

I certify that the quantities reported are accurate and complete to the best of my knowledge: Rick Aslan 2-5-06

Approved for Payment ______________________
AEP Representative

BLACK & VEATCH

~ INVOICE ~

BLACK & VEATCH CORPORATION

PLEASE REMIT TO:
BLACK & VEATCH CORPORATION
P.O. BOX 803823
KANSAS CITY MO 64180-3823
FED ID : 431833073

CLIENT REF : 848252-0002X117

INVOICE DATE : 3/10/2006

PAYMENT DUE : 04/10/2006

J.P. (NICK) NICKLESS
AMERICAN ELECTRIC POWER
COST CONTROL CENTER
1557 GRAVEL HILL ROAD
CHESIRE, OH 45620

RECEIVED BY
MAR 13 2006
AEP
COST CONTROL

INVOICE NO : 195867
PROJECT NAME : BIG SANDY OEM
PROJECT NO : 141643
B&V CONTACT : SOLAR, JOHN R
TELEPHONE : 913/458-7770

| DESCRIPTION | CONTRACT COMMITTED VALUE | PREVIOUSLY INVOICED | AMOUNT OF MILESTONE |
|---|---|---|---|
| Issue Slurry Pumps Purchase Order | 986,719.00 | 0.00 | 422,406.00 |
| TOTAL DUE (USD) | | | 422,406.00 |

TOTAL BILLED TO DATE 5,952,078.00

WIRE TRANSFER INFORMATION :
BLACK & VEATCH CORPORATION
ACCOUNT NUMBER : 5336422
COMMERCE BANK, N.A. KC, MO. USA
ABA NUMBER : 101000019
TELEX NO. 6715509, S.W.I.F.T. NO. CBKCUS44
****PLEASE INCLUDE INVOICE NUMBER**********

# PARTIAL WAIVER OF LIEN

State of Kansas
County of Johnson

Black & Veatch Corporation, being duly sworn, states that:

The undersigned is a duly authorized officer of Black & Veatch Corporation (the "Contractor"). In consideration of $ 422,406.00, Contractor waives any liens and right to a lien under the laws of Kentucky for all labor performed on and materials furnished up to and including March 03, 2006 in connection with Big Sandy Plant, Unit 2 WFGD, entered into on July 22, 2005 between Kentucky Power Company (the "Owner") and Black & Veatch Corporation (the "Contractor") involving work on Owner's property located at Owner's Big Sandy Plant near Louisa, Kentucky.

Contractor acknowledges that it has secured similar lien waivers from its subcontractors, suppliers, laborers, or material men.

This Partial Waiver of Lien is conditioned upon receipt of the scheduled payment of $ 422,406.00 set forth above. This Partial Waiver of Lien does not include future scheduled payments for work yet to be performed and payments yet to be received under the Contract.

Dated: 3-10-06

Black & Veatch Corporation

By: Rick Solar
Rick Solar
Associate Vice President

Sworn before me and subscribed in my presence this 10th day of March, 2006:

Diane Schwartz
Notary
MCE 1-18-07

DIANE SCHWARTZ
NOTARY PUBLIC
STATE OF KANSAS

BLACK & VEATCH
building a world of difference™

ENERGY WATER INFORMATION GOVERNMENT

CT-121 OEM FGD Projects

B&V Project 141547
B&V File 62.2612.01A
February 21, 2006

Metso Minerals
621 S. Sierra Madre
Colorado Springs, CO 80903
*Telephone:* 719-386-0419
Facsimile: 719-386-0237
Email: Robert.ables@metso.com

Subject: Purchase Order Letter of Award
Slurry Pumps

Attn: Mr. Robert Ables

Pending issuance of a formal Purchase Order, Black & Veatch Corporation (Purchaser) is pleased to issue this Letter of Award indicating our award to Metso Minerals (Supplier) covering the furnishing of *SLURRY PUMPS for the following Projects: Cardinal* Units 1 & 2, Muskingum River Unit 5, Kyger Creek Units 1 thru 5, Conesville Unit 4 and Big Sandy Unit 2.

This Letter of Award is based on the requirements for Purchaser's Request for Quotation dated 11/18/05 (141448.62.2612), except as specifically stated below and attached.

- Section 00400 includes Price Breakdown, Unit Adjustment Pricing, Delivery Dates, and Schedule of Submittals.
- RFQ Commercial and Technical documents modified to reflect agreements reached during the negotiation and conditioning process of this Purchase Order.

In addition, this Letter of Award releases Supplier to proceed with the Work to the extent listed below, and upon Supplier's unqualified acceptance of this Letter of Award, is a binding commitment on the part of the Purchaser and Supplier.

- Supplier is released to proceed with all activities associated with the Work required to maintain the *agreed upon schedule, see below. The following are the* associated Purchase Order Numbers and Price for each site. Refer to Section 00400 for further price breakdown.

  Full Release for All Activities

  **Cardinal Units 1 & 2 – PO# 141547.62.2612**, Firm Lump Sum Price of US$1,454,043.00
  **Kyger Creek Units 1 thru 5 – PO# 141642.62.2612**, Firm Lump Sum Price of US$1,403,997.00
  **Muskingum River Unit 5 – PO# 141641.62.2612**, Firm Lump Sum Price of US$850,990.00
  **Conesville Unit 4 – PO# 141644.62.2612**, Firm Lump Sum Price of US$895,439.00
  **Big Sandy Unit 2 – PO# 141643.62.2612**, Firm Lump Sum Price of US$986,719.00

The formal conformed Purchase Orders are currently under preparation and are scheduled for issuance shortly. Supplier agrees to execute such Purchase Orders and return to Purchaser within five working days of receipt, or, to notify Purchaser within said time frame that the Supplier deems that the conformed Purchase Order does not agree with this Letter of Award.

Metso Minerals
Mr. Robert Ables

B&V Project 141547
February 21, 2006

Please acknowledge acceptance of the above by your signature in the blocks designated below, and return the signed original document to Mr. Rick Solar at 11401 Lamar Avenue, Overland Park, Kansas, 66211.

If you have any questions, please call me at (913) 458-7770.

Very truly yours,

BLACK & VEATCH

Jeff Bessette (for Rick Solar)

Rick Solar
Project Manager

**Metso Minerals**
ACKNOWLEDGEMENT

[Signature]

Bob Ables
[Printed Name]

Project Manager
[Title]

2/27/06
Date

cab
Enclosures

cc: R. Solar / File
G. Bergt
E. Sprinkle
G. Krage
C. Bebow
T. Edsall
N. Zirpie
E. Dean
S. Staehle
K. McAlpin
N. Winkel
G. Zinkiewicz

# AEP Tier II FGD Projects
# Big Sandy Unit 2 - 141643

## Milestone Payment Breakdown

| | | | 38,400,500 |
|---|---|---|---|
| ***Item Description*** | **% of Contract Value** | **Date** | |
| Down Payment | 8.0% | Jul-05 | [illegible] |
| Submit documents for DRB | 0.5% | Oct-05 | 192,003 |
| Receive Chiyoda Basic Engineering Package (BEP) | 1.5% | Oct-05 | [illegible] |
| Initial issue of general arrangement drawings | 0.7% | Nov-05 | 268,804 |
| Issue JBR Shell Purchase Order | 1.8% | Nov-05 | 691,209 |
| Revise DBR documents | 0.2% | Jan-06 | 76,801 |
| Issue Ball Mill Purchase Order | [illegible] | Jan-06 | [illegible] |
| Issue Gas Cooler Purchase Order | 1.5% | Jan-06 | 576,008 |
| Issue JBR FRP Internals Purchase Order | 2.3% | Jan-06 | 883,212 |
| Issue Vacuum Filter Purchase Order | 1.6% | Jan-06 | [illegible] |
| Issue Oxidation Air Blower Purchase Order | [illegible] | Jan-06 | [illegible] |
| Issue P&IDs for routing | 0.7% | Feb-06 | 268,804 |
| Initial issue of control logic diagrams | 0.3% | Feb-06 | 115,202 |
| Initial issue of JBR ductwork drawings | 0.3% | Feb-06 | 115,202 |
| Issue Mist Eliminator Purchase Order | 0.4% | Feb-06 | [illegible] |
| Issue Agitator Purchase Order | 0.4% | Feb-06 | [illegible] |
| Issue Ductwork Material Purchase Order | 0.6% | Feb-06 | 230,403 |
| Issue Slurry and General Service Pump Purchase Order | 1.1% | Mar-06 | 422,406 |
| Initial issue of JBR external piping drawings | 0.3% | Apr-06 | 115,202 |
| Initial issue of limestone preparation piping drawings | 0.3% | Apr-06 | 115,202 |
| Initial issue of gypsum dewatering piping drawings | 0.3% | Apr-06 | 115,202 |
| Issue flow model P.O. | [illegible] | [illegible] | [illegible] |
| Submit final flow model report | 0.6% | Jan-07 | 230,403 |
| Issue training program manuals | 0.5% | Jul-07 | 192,003 |
| Release Ball Mills for fabrication | 3.0% | Dec-07 | 1,152,015 |
| Release JBR Shell for fabrication | 4.5% | Dec-07 | 1,728,023 |
| Release Vacuum Filter for fabrication | 3.1% | Mar-08 | 1,190,416 |
| Release JBR FRP Internals for fabrication | 5.9% | Mar-08 | 2,265,630 |
| Release Gas Cooler for fabrication | 2.4% | Apr-08 | 921,612 |
| B&V Site Mobilization | 1.0% | Jul-08 | 384,005 |
| Site delivery of JBR Shell and Roof materials | 6.0% | Aug-08 | 2,304,030 |
| JBR Shell/Roof Erection Subcontractor Mobilization | 1.1% | Aug-08 | 422,406 |
| Site delivery of JBR FRP Internals | 5.0% | Dec-08 | 1,920,025 |
| JBR Sideshell erection complete | 2.1% | Dec-08 | 806,411 |
| JBR FRP Internals Erection Subcontractor Mobilization | 2.9% | Dec-08 | 1,113,615 |
| Site delivery of Gas Cooler | 2.0% | Jan-09 | 768,010 |
| Site delivery of Ductwork Material | 1.0% | Jan-09 | 384,005 |
| Site delivery of Ball Mills | 4.0% | Feb-09 | 1,536,020 |
| Site delivery of Vacuum Filters | 4.0% | Feb-09 | 1,536,020 |
| Site delivery of Mist Eliminators | 1.0% | Feb-09 | 384,005 |
| Site delivery of Oxidation Air Blowers | 2.0% | Mar-09 | 768,010 |
| Site delivery of Slurry and General Service Pumps | 2.0% | Mar-09 | 768,010 |
| JBR Upper and Lower Deck installation complete | 4.9% | Mar-09 | 1,881,625 |

| | | | |
|---|---|---|---|
| Gas Cooler erection complete | 1.4% | May-09 | 537,607 |
| JBR Outlet Ductwork erection complete | 1.8% | Jun-09 | 691,209 |
| Site delivery of Agitators | 1.0% | Jun-09 | 384,005 |
| JBR Internal Piping and Nozzles installation complete | 2.9% | Jun-09 | 1,113,615 |
| Mist Eliminator erection complete | 0.6% | Jun-09 | 230,403 |
| JBR Roof erection complete | 1.0% | Jul-09 | 384,005 |
| Mechanical completion | 1.0% | Sep-09 | 384,005 |
| Substantial completion | 5.0% | Feb-10 | 1,920,025 |
| Successful completion of Acceptance Test | 1.0% | Apr-10 | 384,005 |
| | 100.0% | | |
| | | | 38,400,500 |

Contractor: Black & Veatch Corporation
Contract /Release: 8482520002X117
Project: Big Sandy - OEM

Date: 2/27/2006

## Billing Control Form

AEP AMERICAN ELECTRIC POWER

Invoice # 195867

| PMM Line # | Bid Item / Milestone | Description | Contract Value | Revisions / Change Orders | Revised Contract Value | Quantity / Percent This Period | Totals This Period | Previous Total | Completed to Date | Cost Component | WBS | Work Orders Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.0 | Down Payment | $ 2,228,760 | $ 843,280 | $ 3,072,040 | 0% | $ - | $ 3,072,040 | $ 3,072,040 | 391 | 9.N | X117031501 |
| 2 | 2.0 | Submit documents for DRB | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 3 | 3.0 | Receive Chiyoda Basic Engineering Package (BEP) | $ 417,893 | $ 158,115 | $ 576,008 | 0% | $ - | $ 576,008 | $ 576,008 | 391 | 9.N | X117031501 |
| 4 | 4.0 | Initial issue of general arrangement drawings | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 5 | 5.0 | Issue JBR Shell Purchase Order | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 6 | 6.0 | Revise DBR documents | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 7 | 7.0 | Issue Ball Mill Purchase Order | $ 473,612 | $ 178,197 | $ 652,809 | 0% | $ - | $ 652,809 | $ 652,809 | 391 | 2.F.0 | X117031501 |
| 8 | 8.0 | Issue Gas Cooler Purchase Order | $ 417,893 | $ 158,115 | $ 576,008 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 9 | 9.0 | Issue JBR FRP Internals Purchase Order | $ 640,769 | $ 242,443 | $ 883,212 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 10 | 10.0 | Issue Vacuum Filter Purchase Order | $ 445,752 | $ 168,656 | $ 614,408 | 0% | $ - | $ 614,408 | $ 614,408 | 391 | 4.G.2 | X117031501 |
| 11 | 11.0 | Issue Oxidation Air Blower Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ 230,403 | $ 230,403 | 391 | 2.E.0 | X117031501 |
| 12 | 12.0 | Issue P&IDs for routing | $ 195,017 | $ 73,787 | $ 268,804 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 13 | 13.0 | Initial issue of control logic diagrams | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 14 | 14.0 | Initial issue of JBR ductwork drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 15 | 15.0 | Issue Mist Eliminator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 0% | $ - | $ 153,602 | $ 153,602 | 391 | 2.E.0 | X117031501 |
| 16 | 16.0 | Issue Agitator Purchase Order | $ 111,438 | $ 42,164 | $ 153,602 | 0% | $ - | $ 153,602 | $ 153,602 | 391 | 2.E.0 | X117031501 |
| 17 | 17.0 | Issue Ductwork Material Purchase Order | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 18 | 18.0 | Issue Slurry and General Service Pump Purchase Order | $ 306,455 | $ 115,951 | $ 422,406 | 100% | $ 422,406 | $ - | $ 422,406 | 391 | 2.F.0 | X117031501 |
| 19 | 19.0 | Initial issue of JBR external piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 20 | 20.0 | Initial issue of limestone preparation piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 21 | 21.0 | Initial issue of gypsum dewatering piping drawings | $ 83,579 | $ 31,623 | $ 115,202 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 22 | 22.0 | Issue flow model PO | $ 55,719 | $ 21,082 | $ 76,801 | 0% | $ - | $ 76,801 | $ 76,801 | 391 | 2.E.O | X117031501 |
| 23 | 23.0 | Submit final flow model report | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 24 | 24.0 | Issue training program manuals | $ 139,298 | $ 52,705 | $ 192,003 | 0% | $ - | $ - | $ - | 391 | 9.N | X117031501 |
| 25 | 25.0 | Release Ball Mills for fabrication | $ 835,785 | $ 316,230 | $ 1,152,015 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 26 | 26.0 | Release JBR Shell for fabrication | $ 1,253,678 | $ 474,345 | $ 1,728,023 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 27 | 27.0 | Release Vacuum Filter for fabrication | $ 863,645 | $ 326,771 | $ 1,190,416 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 28 | 28.0 | Release JBR FRP Internals for fabrication | $ 1,643,711 | $ 621,919 | $ 2,265,630 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 29 | 29.0 | Release Gas Cooler for fabrication | $ 668,628 | $ 252,984 | $ 921,612 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 30 | 30.0 | B&V Site Mobilization | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 31 | 31.0 | Site delivery of JBR Shell and Roof materials | $ 1,671,570 | $ 632,460 | $ 2,304,030 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 32 | 32.0 | JBR Shell/Roof Erection Subcontractor Mobilization | $ 306,455 | $ 115,951 | $ 422,406 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 33 | 33.0 | Site delivery of JBR FRP Internals | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 34 | 34.0 | JBR Sideshell erection complete | $ 585,050 | $ 221,361 | $ 806,411 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 35 | 35.0 | JBR FRP Internals Erection Subcontractor Mobilization | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 8.A.2 | X117031701 |
| 36 | 36.0 | Site delivery of Gas Cooler | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 37 | 37.0 | Site delivery of Ductwork Material | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 38 | 38.0 | Site delivery of Ball Mills | $ 1,114,380 | $ 971,880 | $ 2,086,260 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 39.0 | Site delivery of Vacuum Filters | $ 1,114,380 | $ 516,790 | $ 1,631,170 | 0% | $ - | $ - | $ - | 391 | 4.G.2 | X117031501 |
| 40 | 40.0 | Site delivery of Mist Eliminators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 41 | 41.0 | Site delivery of Oxidation Air Blowers | $ 557,190 | $ 294,371 | $ 851,561 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 42 | 42.0 | Site delivery of Slurry and General Service Pumps | $ 557,190 | $ 210,820 | $ 768,010 | 0% | $ - | $ - | $ - | 391 | 2.F.0 | X117031501 |
| 43 | 43.0 | JBR Upper and Lower Deck installation complete | $ 1,385,118 | $ 516,508 | $ 1,861,625 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 44 | 44.0 | Gas Cooler erection complete | $ 390,033 | $ 147,574 | $ 537,607 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 45 | 45.0 | JBR Outlet Ductwork erection complete | $ 501,471 | $ 189,738 | $ 691,209 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 46 | 46.0 | Site delivery of Agitators | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 391 | 2.E.0 | X117031501 |
| 47 | 47.0 | JBR Internal Piping and Nozzles Installation complete | $ 807,926 | $ 305,689 | $ 1,113,615 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 48 | 48.0 | Mist Eliminator erection complete | $ 167,157 | $ 63,246 | $ 230,403 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 49 | 49.0 | JBR Roof erection complete | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 50 | 50.0 | Mechanical completion | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 51 | 51.0 | Substantial completion | $ 1,392,975 | $ 527,050 | $ 1,920,025 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| 52 | 52.0 | Successful completion of Acceptance Test | $ 278,595 | $ 105,410 | $ 384,005 | 0% | $ - | $ - | $ - | 210 | 2.E.0 | X117031701 |
| | | | | | | | | | | | | |
| | | | $ 27,859,500 | $ 11,269,941 | $ 39,129,441 | | $ 422,406 | $ 5,529,672 | $ 5,952,078 | | | |

| | | |
|---|---|---|
| Total Contract Value | $ | 39,129,441 |
| Invoiced to Date | $ | 5,952,078 |
| Contract Balance | $ | 33,177,364 |

I certify that the quantities reported are accurate and complete to the best of my knowledge: Rick Aslas

Approved for Payment ______________________

AEP Representative

AMERICAN ELECTRIC POWER    Report ID: GLC7501

AEP Financials
## JOURNAL ENTRY DETAIL REPORT

Page No. 1
Run Date 10/26/2011
Run Time 3:30:05PM

| | | | | | |
|---|---|---|---|---|---|
| Unit: | 117 | Ledger Group: | ACTUALS | Foreign Currency: | USD |
| Journal ID: | OAABS2FGD | Source: | UPL | Rate Type: | CRRNT |
| Date: | 4/30/2006 | Reversal: | N | Effective Date: | 5/1/2006 |
| Journal status | P | Reversal Date: | | Exchange Rate: | 1.00 |
| Description: | WORK ORDERS SUSPENDED. REVERSE AFUDC AND TRANSFER REMAINING BALANCE TO 1830000 | | | Trans Ref Num: | NONREC |

117    Total Lines: 30    Total Base Debits: 15,723,476.07    Total Base Credits: 15,723,476.07

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -8,262.57 | USD | -8,262.57 | USD |
| | | | | 000008348 | X116976001 | 023 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |
| 2 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -8,386.24 | USD | -8,386.24 | USD |
| | | | | 000008348 | X115976001 | 024 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |
| 3 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -8,112.92 | USD | -8,112.92 | USD |
| | | | | 000008348 | X116976201 | 023 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |
| 4 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -6,432.96 | USD | -6,432.96 | USD |
| | | | | 000008348 | X116976201 | 024 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |
| 5 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -3,355.66 | USD | -3,355.66 | USD |
| | | | | 000008348 | X116977001 | 023 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |
| 6 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -3,451.28 | USD | -3,451.28 | USD |
| | | | | 000008348 | X116977001 | 024 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |
| 7 117 | 1070001 | 99990 | WSREG | | CRRNT | 1.00000000 | -17,987.02 | USD | -17,987.02 | USD |
| | | | | 000008348 | X116976001 | 023 | 974 | | | |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | |

AEP AMERICAN® ELECTRIC POWER    Report ID: GLC7501

AEP Financials

# JOURNAL ENTRY DETAIL REPORT


Run Date 10/26/2011
Run Time 3:30:05PM

| | | | | | |
|---|---|---|---|---|---|
| Unit: | 117 | Ledger Group: | ACTUALS | Foreign Currency: | USD |
| Journal ID: | OAABS2FGD | Source: | UPL | Rate Type: | CRRNT |
| Date: | 4/30/2006 | Reversal: | N | Effective Date: | 5/1/2006 |
| Journal status | P | Reversal Date: | | Exchange Rate: | 1.00 |
| Description: | WORK ORDERS SUSPENDED. REVERSE AFUDC AND TRANSFER REMAINING BALANCE TO 1830000 | | | Trans Ref Num: | NONREC |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 117 | 1070001 | 99990 | WSREG | 000008348 | X116979001 | CRRNT | 1.00000000 | 024 | -17,851.46 | USD | 974 | -17,851.46 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 9 | 117 | 4320000 | 99990 | NONBU | GLNANDA | G0000117 | CRRNT | 1.00000000 | 023 | 37,718.17 | USD | 974 | 37,718.17 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 10 | 117 | 4191000 | 99990 | NONBU | GLNANDA | G0000117 | CRRNT | 1.00000000 | 024 | 36,121.94 | USD | 974 | 36,121.94 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 11 | 117 | 1070001 | 99990 | WSREG | 000009633 | 4061536501 | CRRNT | 1.00000000 | 023 | -50.92 | USD | 974 | -50.92 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 12 | 117 | 1070001 | 99990 | WSREG | 000009633 | 4061536501 | CRRNT | 1.00000000 | 024 | -47.16 | USD | 974 | -47.16 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 13 | 117 | 1070001 | 99990 | WSREG | 000009633 | X117031001 | CRRNT | 1.00000000 | 023 | -35,927.16 | USD | 974 | -35,927.16 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 14 | 117 | 1070001 | 99990 | WSREG | 000009633 | X117031001 | CRRNT | 1.00000000 | 024 | -35,161.86 | USD | 974 | -35,161.86 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |
| 15 | 117 | 1070001 | 99990 | WSREG | 000009633 | X117031101 | CRRNT | 1.00000000 | 023 | -10,033.43 | USD | 974 | -10,033.43 | USD | Description: REVERSE AFUDC | Reference: | Open Item Key: |

AMERICAN ELECTRIC POWER Report ID: GLC7501

AEP Financials

# JOURNAL ENTRY DETAIL REPORT

Page No. 3
Run Date 10/26/2011
Run Time 3:30:05PM

| | | | | | |
|---|---|---|---|---|---|
| Unit: | 117 | Ledger Group: | ACTUALS | Foreign Currency: | USD |
| Journal ID: | OAABS2FGD | Source: | UPL | Rate Type: | CRRNT |
| Date: | 4/30/2006 | Reversal: | N | Effective Date: | 5/1/2006 |
| Journal status | P | Reversal Date: | | Exchange Rate: | 1.00 |
| Description: | WORK ORDERS SUSPENDED. REVERSE AFUDC AND TRANSFER REMAINING BALANCE TO 1830000 | | | Trans Ref Num: | NONREC |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 117 | 1070001 | 99990 | WSREG | 000009633 | X117031101 | CRRNT | 1.00000000 | -9,752.20 | USD | -9,752.20 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 024 | 974 | | | |
| 17 117 | 1070001 | 99990 | WSREG | 000009633 | X117031201 | CRRNT | 1.00000000 | -3,690.77 | USD | -3,690.77 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 023 | 974 | | | |
| 18 117 | 1070001 | 99990 | WSREG | 000009633 | X117031201 | CRRNT | 1.00000000 | -3,605.88 | USD | -3,605.88 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 024 | 974 | | | |
| 19 117 | 1070001 | 99990 | WSREG | 000009633 | X117031301 | CRRNT | 1.00000000 | -4,946.43 | USD | -4,946.43 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 023 | 974 | | | |
| 20 117 | 1070001 | 99990 | WSREG | 000009633 | X117031301 | CRRNT | 1.00000000 | -4,535.45 | USD | -4,535.45 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 024 | 974 | | | |
| 21 117 | 1070001 | 99990 | WSREG | 000009633 | X117031401 | CRRNT | 1.00000000 | -86,662.62 | USD | -86,662.62 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 023 | 974 | | | |
| 22 117 | 1070001 | 99990 | WSREG | 000009633 | X117031401 | CRRNT | 1.00000000 | -81,928.47 | USD | -81,928.47 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 024 | 974 | | | |
| 23 117 | 1070001 | 99990 | WSREG | 000009633 | X117031501 | CRRNT | 1.00000000 | -86,923.27 | USD | -86,923.27 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | 023 | 974 | | | |

AMERICAN® ELECTRIC POWER    Report ID: GLC7501

AEP Financials
JOURNAL ENTRY DETAIL REPORT

Page No. 4
Run Date 10/26/2011
Run Time 3:30:05PM

| | | | | | |
|---|---|---|---|---|---|
| Unit: | 117 | Ledger Group: | ACTUALS | Foreign Currency: | USD |
| Journal ID: | OAABS2FGD | Source: | UPL | Rate Type: | CRRNT |
| Date: | 4/30/2006 | Reversal: | N | Effective Date: | 5/1/2006 |
| Journal status | P | Reversal Date: | | Exchange Rate: | 1.00 |
| Description: | WORK ORDERS SUSPENDED, REVERSE AFUDC AND TRANSFER REMAINING BALANCE TO 1830000 | | | Trans Ref Num: | NONREC |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 117 | 1070001 | 99990 | WSREG | 000009633 | X117031501 | CRRNT | 1.00000000 / 024 | -75,047.52 / 974 | USD | -75,047.52 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | | |
| 25 117 | 4320000 | 99990 | NONBU | GLNANDA | G0000117 | CRRNT | 1.00000000 / 023 | 227,134.50 / 974 | USD | 227,134.50 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | | |
| 26 117 | 4191000 | 99990 | NONBU | GLNANDA | G0000117 | CRRNT | 1.00000000 / 024 | 210,078.54 / 974 | USD | 210,078.54 | USD |
| Description: | REVERSE AFUDC | | Reference: | | Open Item Key: | | | | | | |
| 27 117 | 1070001 | 99990 | WSREG | 000009633 | W001453401 | CRRNT | 1.00000000 / 090 | -13,563,683.54 / 974 | USD | -13,563,683.54 | USD |
| Description: | Transfer Remaining Balance | | Reference: | | Open Item Key: | | | | | | |
| 28 117 | 1070001 | 99990 | WSREG | 000008348 | W001453301 | CRRNT | 1.00000000 / 090 | -1,646,741.38 / 974 | USD | -1,646,741.38 | USD |
| Description: | Transfer Remaining Balance | | Reference: | | Open Item Key: | | | | | | |
| 29 117 | 1830000 | 99990 | WSREG | 000009633 | 4075684001 | CRRNT | 1.00000000 / 090 | 13,563,683.54 / 974 | USD | 13,563,683.54 | USD |
| Description: | Transfer Remaining Balance | | Reference: | | Open Item Key: | | | | | | |
| 30 117 | 1830000 | 99990 | WSREG | 000008349 | 4075685201 | CRRNT | 1.00000000 / 090 | 1,646,741.38 / 974 | USD | 1,646,741.38 | USD |
| Description: | Transfer Remaining Balance | | Reference: | | Open Item Key: | | | | | | |

End of Report

Kentucky Power

| Sum of amount | | project | | |
|---|---|---|---|---|
| | | Big Sandy FGD Landfill | BIG SANDY Scrubber /FGD | |
| cost_element | cost_element description | 8348 | 9633 | Grand Total |
| 020 | construction and retirement overheads. | $ 111,253.82 | $ 911,461.18 | $ 1,022,715.00 |
| 023 | Allowance for borrowed funds used during construction (Debt) | $ (682.23) | $ (1,278.12) | $ (1,960.35) |
| 024 | Allowance for other funds used during construction (Equity) | $ (752.27) | $ (1,409.33) | $ (2,161.60) |
| 11E | Exempt Labor | | $ 33,502.98 | $ 33,502.98 |
| 11N | Non Exempt Labor | | $ 2,756.91 | $ 2,756.91 |
| 120 | Labor Fringes (Straight-time) | | $ 25,337.87 | $ 25,337.87 |
| 121 | Labor Fringes (Overtime) | | $ 22.62 | $ 22.62 |
| 122 | Labor Fringes (Incentive Accruals) | | $ 927.01 | $ 927.01 |
| 123 | Labor Fringes -Other NTL Pymt | | $ 66.71 | $ 66.71 |
| 125 | Payroll Dist Nonproductive | | $ 10,831.37 | $ 10,831.37 |
| 13E | Exempt OT Labor | | $ 186.15 | $ 186.15 |
| 141 | Incentive Accrual Dept Level | | $ 6,967.02 | $ 6,967.02 |
| 143 | Other Lump Sum Payments | | $ 6.17 | $ 6.17 |
| 145 | Stock-based Compensation | | $ 80.98 | $ 80.98 |
| 146 | Safety Incentive Payments | | $ 551.13 | $ 551.13 |
| 149 | Fossil & Hydro Gen Incentives | | $ 681.35 | $ 681.35 |
| 1AA | Payroll Labor Accruals | | $ - | $ - |
| 1AB | Labor Accrual Reversals | | $ - | $ - |
| 210 | Contract Labor (General) | $ 3,660.50 | $ 64,753.37 | $ 68,413.87 |
| 214 | Outside Shop Service | | $ 692.72 | $ 692.72 |
| 260 | Outside Services - Professional Services/ Expenses (General) | $ 630,931.90 | $ 4,378,033.19 | $ 5,008,965.09 |
| 266 | Outside Services - Engineering | | $ 319,988.45 | $ 319,988.45 |
| 285 | Temporary Staffing | $ 7,093.74 | $ 46,809.40 | $ 53,903.14 |
| 290 | Outside Services Gen - Other | $ 31,966.82 | $ 469,294.87 | $ 501,261.69 |
| 310 | MMS From Stock General | | $ 13,085.64 | $ 13,085.64 |
| 390 | Direct Purchase-Other Than MMS | | $ 1,425.61 | $ 1,425.61 |
| 391 | Material Outside Contractor | | $ 5,952,079.00 | $ 5,952,079.00 |
| 393 | Sales & Use Tax Accrual | $ 3.04 | $ (0.00) | $ 3.04 |
| 411 | Vehicle Distribution - Other | | $ 8.84 | $ 8.84 |
| 413 | Fleet Clearing | | $ 20.23 | $ 20.23 |
| 510 | Busin Exp 100% Deduct Gen | | $ 6,105.52 | $ 6,105.52 |
| 520 | Business Exp Part Deduct Gen | | $ 1,057.02 | $ 1,057.02 |
| 620 | Overheads | | $ 38.35 | $ 38.35 |
| 738 | Shared Services - Fleet products/services. | | $ 278.96 | $ 278.96 |
| 780 | AEPSC Bill | $ 225,202.03 | $ 1,306,533.69 | $ 1,531,735.72 |
| 935 | Insurance Proceeds | | $ 3.85 | $ 3.85 |
| 941 | Land Purchase | $ 630,018.00 | | $ 630,018.00 |
| 999 | Miscellaneous All Other | $ 10,045.00 | | $ 10,045.00 |
| 9AA | Accounts Payable Accruals | $ 848,076.84 | $ 11,810,630.16 | $ 12,658,707.00 |
| 9AB | Accounts Payable Accruals Reversal | $ (848,076.84) | $ (11,806,130.16) | $ (12,654,207.00) |
| U3E | Exempt Uncompensated Overtime | | $ 8,176.89 | $ 8,176.89 |
| **Grand Total** | | **$ 1,648,740.35** | **$ 13,563,577.60** | **$ 15,212,317.95** |
| | Per Journal Entry OAABSFGD 04/30/2006 | $ 1,648,741.38 | $ 13,563,683.54 | $ 15,212,424.92 |
| | Difference | **$ 1.03** | **$ 105.94** | **$ 106.97** |

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 23. Attachment 1 summarizes the 2004-2011 scrubber projects at various AEP plants. The $/kW column for the 800 MW units appears to have a range between $385 per kW at Amos to $755 per kW at Big Sandy Unit 2, as referenced in Staff's First Request, Item 17, among the different 800 MW units. Explain the reasons for the wide range of $/kW cost.

## RESPONSE

A number of factors give rise to the range of costs. Most common are the effects of inflation in construction costs and the ability to use common facilities in connection with multiple facilities. For example, the nominal cost at Amos must be converted to 2011-2016 dollars. Escalating the Amos cost of $385/kW to reflect performing this project in the 2011 - 2016 timeframe (5.1% per year for 5 years) results in a cost of $494/kW. Taking the $755/kW estimated cost for Big Sandy 2 and deducting the 20% contingency equates to $629/kW, producing a $135/kW or $108M difference. This difference is a result of being able to utilize common FGD material handling, material preparation and dewatering equipment at Amos, as well as the common landfill, and being able to spread the costs across all three units at Amos. Big Sandy 2 incurs these costs on a stand-alone basis.

WITNESS: Robert L Walton

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 25. Explain whether or not Kentucky Power used a bid process in the selection of the architect/engineer engaged for the Big Sandy Unit 2 project.

## RESPONSE

Kentucky Power did not formally solicit competitive proposals for architect/engineering services specifically for the Big Sandy 2 project. The architect/engineer was selected as outlined in the response to Commission Staff's First Request, Item 25b.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 26. On page 5, lines 20-23, of the direct Testimony of Robert L. Walton, it states, "[t]he formal process begins with the preparation and approval of a Capital improvement Requisition (CI)." Kentucky Power's response to Staffs First Request, Item 26.b. states, "[t]he CI was approved by the AEP Subcompany Board on January 26, 2012."

a. Explain whether the formal process of the Big Sandy DFGD began on January 26, 2012.

b. If the response to part a. of this request is yes, explain whether the formal process of the Big Sandy DFGD began as a result of Staff's First Request.

c. Provide a description of an "AEP Subcompany Board." Who are the board members and what are the board's functions within the AEP corporate framework?

## RESPONSE

a. No. The CI provided in Staff's First Request, Item 26.b. was the approved Revision 4 to the original Big Sandy FGD CI that was approved in 2004.

b. N/A

c. The Subcompany Board of Directors meets monthly and authorizes various types of transactions, such as the election of officers, the issuances of securities, and the approval of capital and lease improvements.

The Subcompany Board consists of the following 8 individuals:

President and Chief Executive Officer, American Electric Power
Executive Vice President - AEP Transmission, American Electric Power
Senior Vice President, General Counsel and Secretary, American Electric Power
Executive Vice President - Generation, American Electric Power
Executive Vice President and Chief Operating Officer, American Electric Power
Senior Vice President - Shared Services, American Electric Power
Executive Vice President and Chief Financial Officer, American Electric Power
Executive Vice President and Chief Administrative Officer, American Electric Power

**WITNESS:** Robert L Walton

# Kentucky Power Company

## REQUEST

Refer to Staff's First Request, Item 26, Attachment 1.

a. The CI states that "The WFGD scope of work was suspended in 2006.. . ." Explain how Kentucky Power planned to satisfy its capacity and energy requirements at the time it entered into the 2007 New Source Review Consent Decree.

b. Explain whether or not it is required that the AEP Subcompany Board approve CI's that exceed $900 million in total capital expenditures. If so, has the AEP Subcompany Board approved the CI for the construction of the Big Sandy Unit 2 DFGD?

c. Provide the approval limits of the AEP Subcompany Board and the AEP Board.

d. Provide the amount and type of expenditures on the Big Sandy DFGD project prior to the AEP Subcompany Board approval on January 26, 2012.

## RESPONSE

a. KPCo's intended to retrofit Big Sandy Unit 2 with FGD technology in accordance with the Consent Decree.

b. Yes, it is required that the AEP Subcompany Board approve the total CI capital expenditures required for the Big Sandy 2 DFGD project. The AEP Subcompany Board will approve several CI revisions, aggregating in value, in the phased approach described in Company witness Walton's Direct Testimony pages 5 through 8, culminating with the Phase III revision authorizing the construction of the DFGD project.

c. There are no approval limits associated with the AEP Subcompany Board.

d. Please see Page 2 of this response.

**WITNESS:** Robert L Walton

| Direct Costs | Cost Category | Description | 2004 | 2005 | 2006 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|
| | Internal Labor | Internal labor | 46,485 | 404,943 | 155,212 | | | 347,568 | 133,933 |
| | Matls And Supplies | FGD vendor (B&V), suppliers | 145 | 4,774,568 | 1,202,841 | | | 37 | |
| | Other Cost Cat | Expenses | 946 | 49,631 | 64,217 | 0 | 1,363 | 6,447 | 17,071 |
| | Outside Svcs | Architect Engineer & Professional Services | 268,776 | 4,641,598 | 1,100,515 | 603,789 | 259,354 | 1,199,504 | 1,003,799 |
| Direct Costs | | Sum: | 316,352 | 9,870,741 | 2,522,785 | 603,789 | 260,717 | 1,553,556 | 1,154,804 |
| Indirect Costs | AFUDC & Overheads | Sum: | 76,735 | 1,131,475 | 705,869 | 21,877 | 34,416 | 769,381 | 760,728 |
| Total Costs | | Sum: | 393,087 | 11,002,216 | 3,228,654 | 625,665 | 295,133 | 2,322,937 | 1,915,532 |

## Kentucky Power Company

### REQUEST

Refer to Staff's First Request, Item 30. Explain whether the technical requirement of a 0.09lb/mmBtu SO2 emission rate (98% removal efficiency) is necessary to comply with the requirements of the 2007 New Source Review Consent Decree or whether the higher removal efficiency is required to meet the Cross-State Air Pollution Rule, Mercury, and Air Toxics Standards, and National Ambient Air Quality Standard limits.

### RESPONSE

The requirement is necessary to comply with the Cross-State Air Pollution Rule. Taking a three year average (2008-2010) of annual emitted tons of SO2 when burning the current 1.4 lb/mmBTU fuel and equating that to annual tons of SO2 when burning a 4.5 lb/mmBTU fuel, a minimum 94% reduction is required to meet the 2014 allocations under the CSAPR, with no margin. The 98% removal efficiency provides a necessary margin to cover upset conditions and unit startups and shutdowns and still remain within the allowances.

WITNESS: Robert L Walton

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 32. Explain when the requested information will be made available.

## RESPONSE

The requested information is anticipated to be available in the fourth quarter of 2012 at the conclusion of Phase I activities.

WITNESS: Robert L Walton

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staffs First Request, Item 45. The response states, "KPCo does not plan to use the ESPs with the NID technology, resulting in an approximate 2 MW savings in auxiliary at full load."

a. Explain whether the Electro-Static Precipitators ("ESPs"), will be retired.

b. If the answer to part a. this request is yes, provide the amount of original cost and associated accumulated depreciation of the ESPs as of September 30, 2009.

## RESPONSE

a. Yes, the ESP will be retired.

b. The detailed ESP gross plant cost and accumulated depreciation is not readily available. Property other than mass Distribution investment in accounts 364-373 is maintained in the Company's continuing property records by record unit where the record unit is defined as the account title (the record unit for account 312, Boiler Plant Equipment is defined as "Boiler Plant Equipment"). Therefore, further detailed categorization of the equipment in this account and other Steam Generation Plant accounts is not available. FERC Order No. 598 permits utility companies to keep their property records at a record unit level and book estimated retirements.

   The Company is currently developing an estimate to answer the request; however, it cannot provide the estimate at this time. The Company expects to provide the information in a supplemental response no later than February 24, 2012.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to the response to Staff's First Request, Item 49.

a. The response at c. describes the source of the natural gas price as "a combination of the AEP-Fundamental Analysis group's commodity pricing forecast and AEP-FEL's indicative estimates for the cost of gas delivered to the Big Sandy facility." Provide a description of the information that the AEP groups relied on to make their projections and the method they used to develop the natural gas price projections.

b. Describe how these forecasts were combined.

c. It appears that the Fleet Transmission-CSAPR "Base" Fleet natural gas forecast used in the Strategist Model for the base case is 33 to 35 percent above the EIA Annual Energy Outlook 2011 forecast. In addition, the Energy Information Administration Annual Energy Outlook 2012 Early Release indicates that natural gas price forecasts will remain below $5.00 per thousand cubic feet through 2023. Explain the difference and impact this has on the resultant analysis.

## RESPONSE

a. See response to Sierra Club 1-47 and the supplemental response to Sierra Club 1-47 dated February 16, 2012.

b. In order to create a natural gas commodity price, the AEP Fundamental Analysis group's forecast of Henry Hub gas price was adjusted by a 50/50 split of the forecasted of TGPL Zone 1 and Zone 4 basis differentials from the Henry Hub price. The resulting commodity price was then adjusted to capture gas retainage. Firm and interruptible transportation variable costs were then added to the retainage adjusted commodity price to create a delivered cost of gas to the Big Sandy facility.

c. The EIA Annual Energy Outlook differs from the Company's Fleet Transition-CSAPR Base case primarily in its projection of the impact of impending environmental regulations, specifically the economic viability of uncontrolled coal-fired generation. For example, the Company envisions more coal-fired generation retirements related to HAPs regulations and consequently, more natural gas-fired replacements resulting in greater gas demand and appropriately higher prices. Additionally, the Company projects a CO2 policy beginning in 2022 (not projected by the EIA) which results in additional gas demand.

The Company would also offer that it is imperative not to compare nominal dollar forecasts to real dollar (inflation-adjusted) forecasts. The EIA's AEO 2011 presents natural gas pricing in both nominal dollars and real dollars at both the Henry Hub and for an Average Lower 48 Wellhead Price. A comparison between the Company's Fleet Transition-CSAPR Base Henry Hub natural gas price forecast (nominal $) and the EIA's AEO 2011 Reference Henry Hub natural gas price (nominal $) reveals yearly differences that average less than 10 %.

**WITNESS:** Scott C Weaver

# Kentucky Power Company

## REQUEST

Refer to the response to Staff's First Request, Item 50.

a. Part a. of the response indicates that Kentucky Power is "under the notion that this Commission would ultimately desire such a regional/local 'metal-in-the ground' solution." Provide support for this comment.

b. Describe in more detail the reference in part a. to "PJM-RPM market pricing vagaries."

c. For initial modeling runs, it may be reasonable to assume proxies for market purchases. However, without soliciting capacity and power purchases from the market (PJM or otherwise) and all neighboring generators, explain how Kentucky Power has performed its proper due diligence in seeking a best and least-cost option.

d. To the extent possible, provide the results of recent short and medium term power purchase/auctions on the PJM system.

## RESPONSE

a. As indicated in the response, that was a notional statement. The Company has no definitive understanding as to this Commission's ultimate desire in this regard. See also the response to Staff Second Request, Item No. 16.

b. This statement suggests that there is greater market uncertainty around the price of replacement (RPM) capacity as well as energy vis-a-vis the relative stable costs-of-service associated with the Big Sandy units. For instance, page 3 of this response offers a comparison of the historical PJM base residual auction (BRA) clearing prices for capacity from the initial 2007/08 planning year BRA to the most recent auction for the 2014/15 planning year.

Further, page 4 of this response offers a profile of recent (2010 and 2011) historical PJM day-ahead and real-time hourly locational marginal pricing (LMP) -- for energy pricing at the AEP Generation Hub. Finally, on page 5 of this response a view is offered of such PJM day-ahead daily price variation "frequencies" for those respective years, overlaying similar comparisons for NYMEX daily spot natural gas commodity pricing. It indicates that for each of those years, LMP day-ahead pricing exhibits significantly more daily pricing volatility than does, particularly, daily natural gas commodity pricing. This greater volatility can be rationalized to some degree by recognizing that LMP also must consider daily load/weather swings, nodal congestion points on the grid, marginal losses, as well as the fact that this commodity --unlike natural gas-- cannot be stored.

With that, the statement was then intended to suggest that with an assumed retirement of both Big Sandy Units 1 and 2, the more significant block of eliminated capacity and energy from those units would result in the "extended" (dollar) cost of any such replacement PJM market capacity and energy would naturally become even more varied.

c. To affirm the response to Staff First Request, Item No. 50, the Company views the PJM-RPM market construct for capacity, as well as the PJM energy market, as a very reasonable interim or "bridge" valuation basis, only, between the period in which the Big Sandy units would be retired and new-build combined cycle capacity would be built (modeled Options #4A and #4B). Both commodity constructs represent transparent and fungible markets.

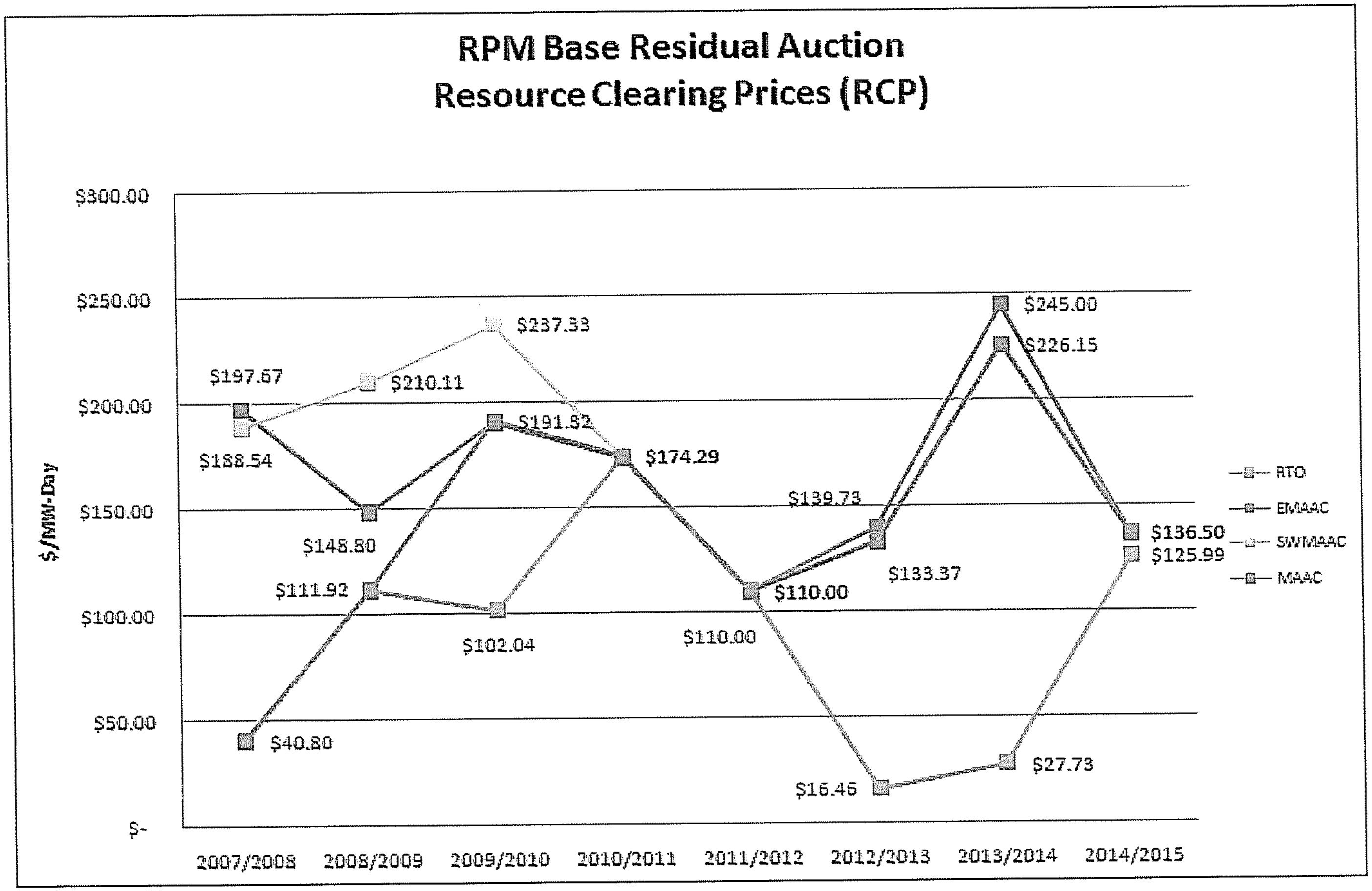
d. Page 6 of this response offers a high-level transaction summary of, typically, short-term power and energy auctions occurring within PJM in which AEP was the selling party.

**WITNESS:** Scott C Weaver

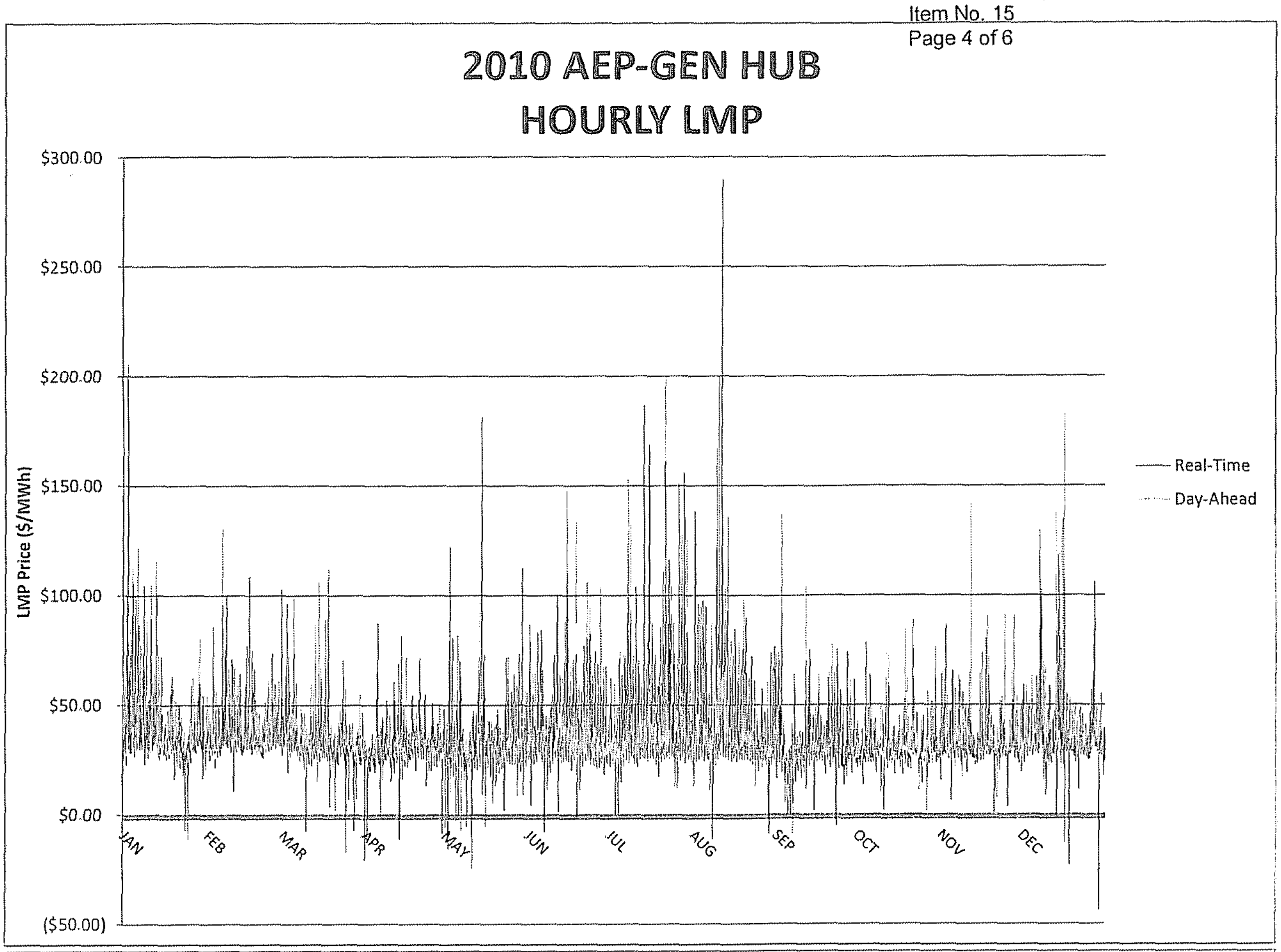
# 2014/2015 RPM Base Residual Auction Results

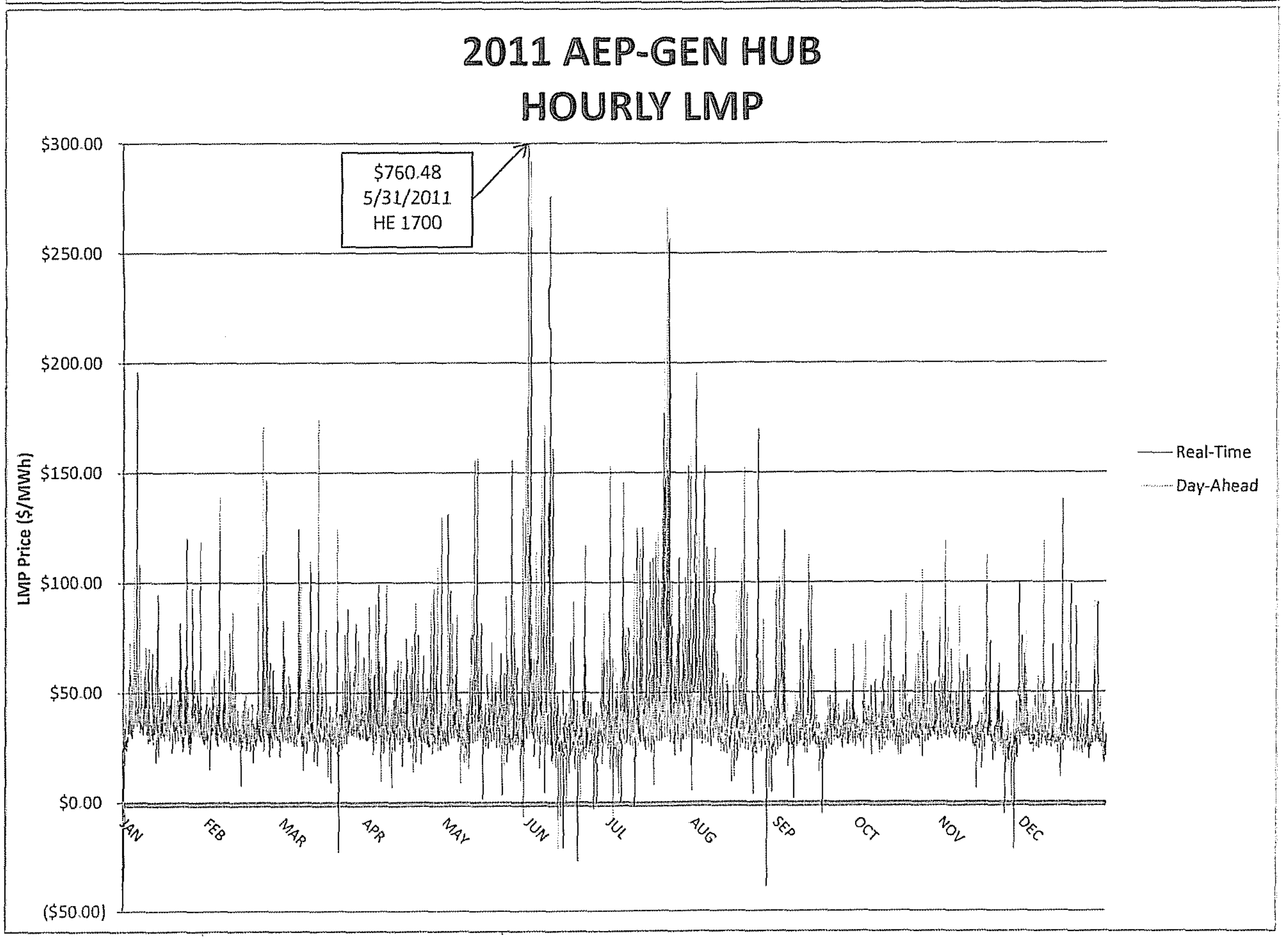
*Figure 2* illustrates the trends in Resource Clearing Prices for the RTO, MAAC, EMAAC, and SWMAAC LDAs for each RPM Base Residual Auction cleared to date.

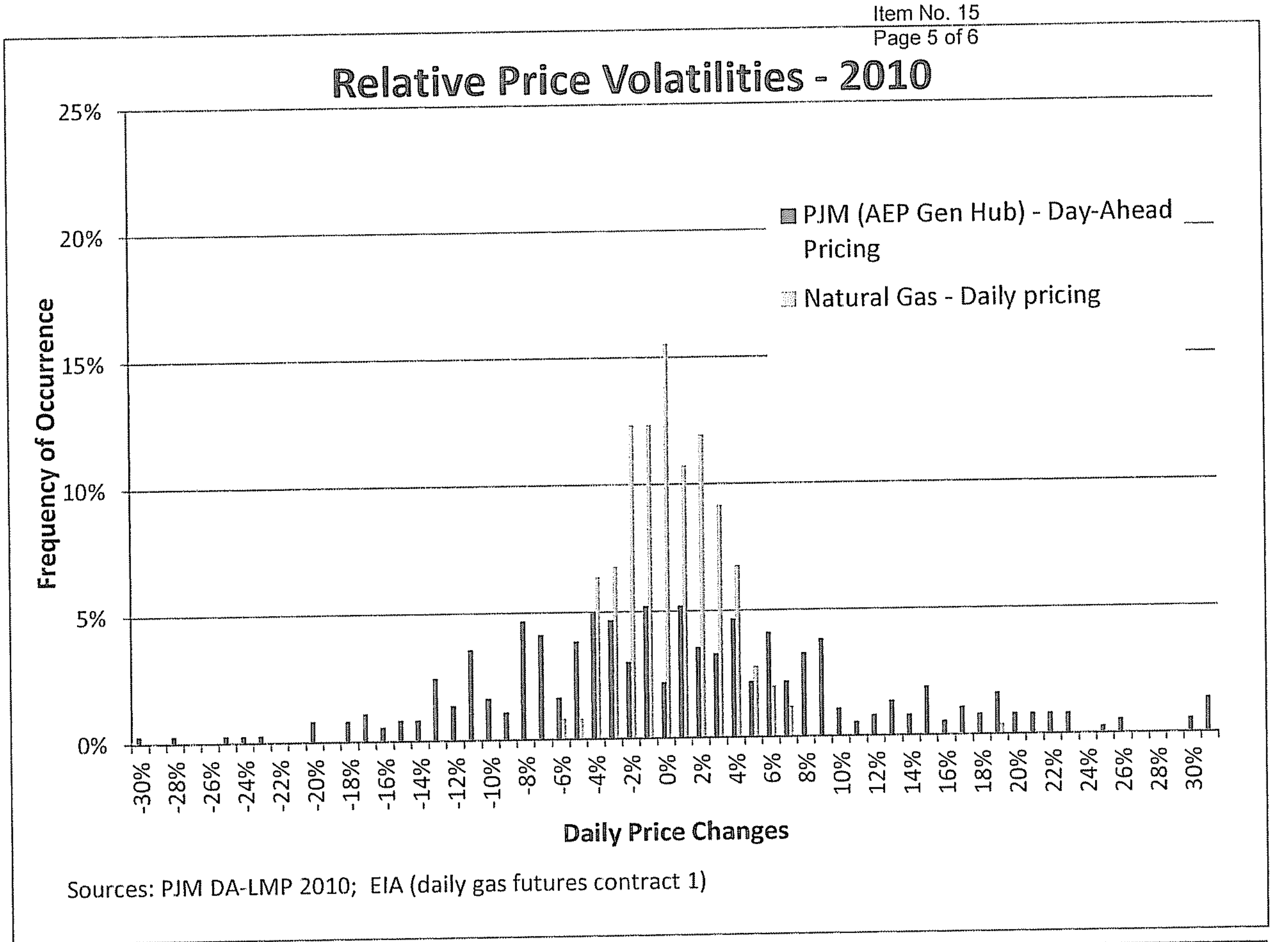
**Figure 2 – Base Residual Auction Resource Clearing Prices**

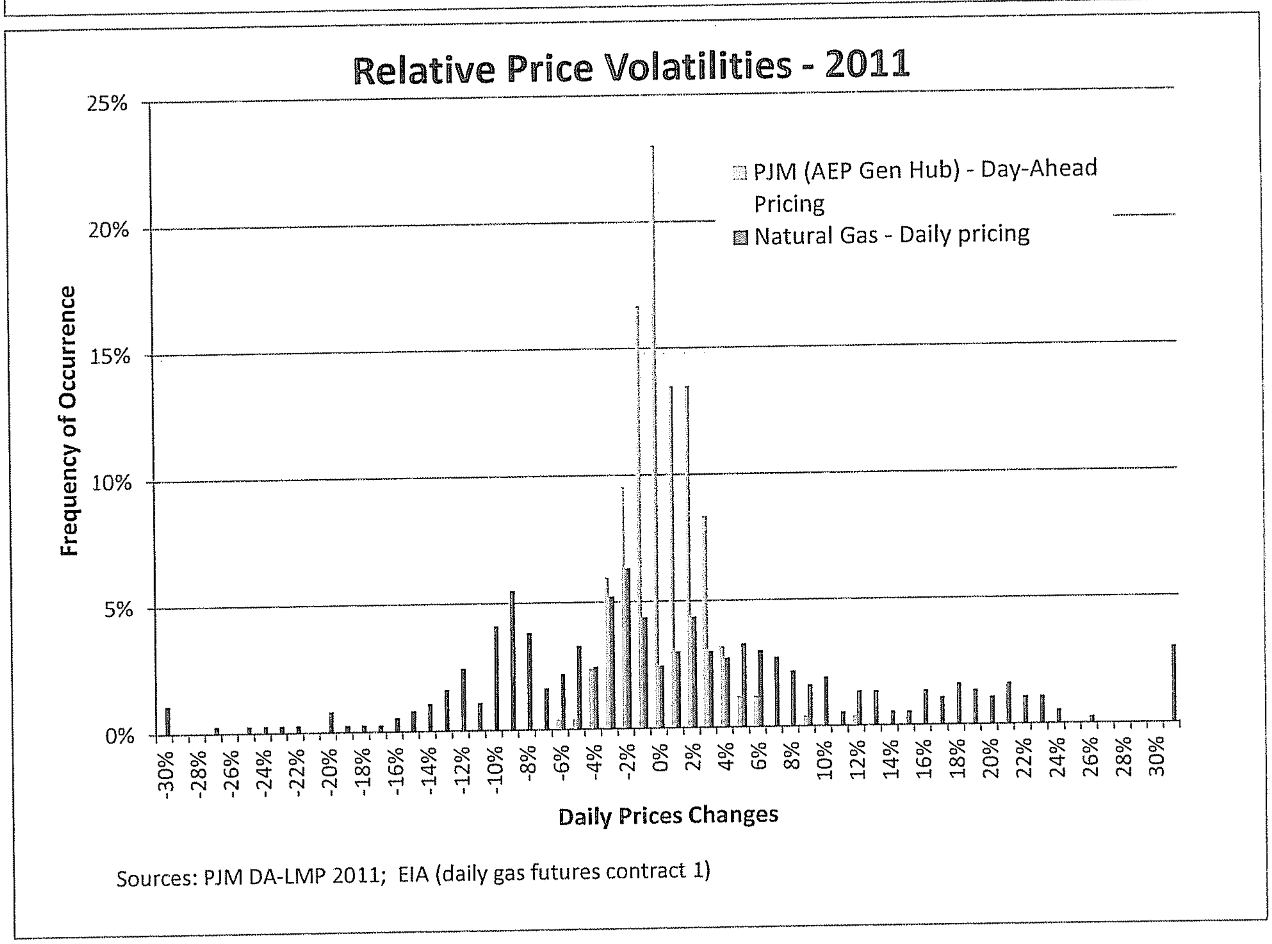



* RTO and MAAC Resource Clearing Prices for the 2007/2008, 2008/2009, 2010/2011, and 2011/2012 BRA are equal.


2010 AEP-GEN HUB
HOURLY LMP
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
($50.00)
LMP Price ($/MWh)
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Real-Time
Day-Ahead


2011 AEP-GEN HUB
HOURLY LMP
$760.48
5/31/2011
HE 1700
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
($50.00)
LMP Price ($/MWh)
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Real-Time
Day-Ahead


Relative Price Volatilities - 2010
25%
20%
15%
10%
5%
0%
Frequency of Occurrence
PJM (AEP Gen Hub) - Day-Ahead Pricing
Natural Gas - Daily pricing
-30% -28% -26% -24% -22% -20% -18% -16% -14% -12% -10% -8% -6% -4% -2% 0% 2% 4% 6% 8% 10% 12% 14% 16% 18% 20% 22% 24% 26% 28% 30%
Daily Price Changes
Sources: PJM DA-LMP 2010; EIA (daily gas futures contract 1)


Relative Price Volatilities - 2011
25%
20%
15%
10%
5%
0%
Frequency of Occurrence
PJM (AEP Gen Hub) - Day-Ahead Pricing
Natural Gas - Daily pricing
-30% -28% -26% -24% -22% -20% -18% -16% -14% -12% -10% -8% -6% -4% -2% 0% 2% 4% 6% 8% 10% 12% 14% 16% 18% 20% 22% 24% 26% 28% 30%
Daily Prices Changes
Sources: PJM DA-LMP 2011; EIA (daily gas futures contract 1)

# Current AEP RPM Auction Sales/Obligations

**Completed Bid Auction Summary**

| Seller | Market/RTO | Transaction Closed (Year) | Transaction Price ($/MWh) * | Transaction Duration (Months) |
|---|---|---|---|---|
| AEP | PJM | 2006 | $ 109.76 | 24 |
| AEP | PJM | 2007 | $ 62.12 | 3 |
| AEP | PJM | 2007 | $ 88.24 | 3 |
| AEP | PJM | 2007 | $ 91.16 | 3 |
| AEP | PJM | 2007 | $ 92.42 | 3 |
| AEP | PJM | 2007 | $ 98.50 | 3 |
| AEP | PJM | 2008 | $ 68.33 | 3 |
| AEP | PJM | 2008 | $ 95.96 | 3 |
| AEP | PJM | 2008 | $ 97.39 | 3 |
| AEP | PJM | 2008 | $ 100.36 | 3 |
| AEP | PJM | 2008 | $ 105.44 | 3 |
| AEP | PJM | 2008 | $ 105.88 | 3 |
| AEP | PJM | 2008 | $ 109.34 | 24 |
| AEP | PJM | 2008 | $ 114.57 | 3 |
| AEP | PJM | 2008 | $ 120.76 | 24 |
| AEP | PJM | 2008 | $ 126.71 | 3 |
| AEP | PJM | 2008 | $ 132.69 | 3 |
| AEP | PJM | 2008 | $ 133.64 | 3 |
| AEP | PJM | 2008 | $ 137.36 | 3 |
| AEP | PJM | 2008 | $ 149.32 | 3 |
| AEP | PJM | 2009 | $ 57.95 | 3 |
| AEP | PJM | 2009 | $ 64.16 | 3 |
| AEP | PJM | 2009 | $ 73.98 | 12 |
| AEP | PJM | 2009 | $ 76.55 | 12 |
| AEP | PJM | 2009 | $ 80.66 | 3 |
| AEP | PJM | 2009 | $ 82.38 | 12 |
| AEP | PJM | 2009 | $ 86.78 | 12 |
| AEP | PJM | 2009 | $ 88.66 | 3 |
| AEP | PJM | 2010 | $ 54.10 | 24 |
| AEP | PJM | 2010 | $ 54.55 | 12 |
| AEP | PJM | 2010 | $ 55.24 | 12 |
| AEP | PJM | 2010 | $ 56.58 | 36 |
| AEP | PJM | 2010 | $ 56.69 | 3 |
| AEP | PJM | 2010 | $ 62.14 | 3 |
| AEP | PJM | 2010 | $ 62.85 | 3 |
| AEP | PJM | 2010 | $ 63.49 | 3 |
| AEP | PJM | 2010 | $ 67.55 | 14 |
| AEP | PJM | 2010 | $ 71.06 | 17 |
| AEP | PJM | 2010 | $ 73.68 | 3 |
| AEP | PJM | 2010 | $ 73.94 | 3 |
| AEP | PJM | 2010 | $ 74.67 | 17 |
| AEP | PJM | 2010 | $ 76.37 | 12 |
| AEP | PJM | 2010 | $ 76.72 | 3 |
| AEP | PJM | 2010 | $ 77.46 | 3 |
| AEP | PJM | 2010 | $ 77.55 | 3 |
| AEP | PJM | 2010 | $ 78.33 | 11 |
| AEP | PJM | 2010 | $ 79.60 | 3 |
| AEP | PJM | 2010 | $ 86.63 | 3 |
| AEP | PJM | 2010 | $ 88.44 | 3 |
| AEP | PJM | 2010 | $ 91.34 | 24 |
| AEP | PJM | 2011 | $ 49.72 | 17 |
| AEP | PJM | 2011 | $ 51.10 | 29 |
| AEP | PJM | 2011 | $ 52.80 | 24 |
| AEP | PJM | 2011 | $ 54.92 | 24 |
| AEP | PJM | 2011 | $ 56.13 | 12 |
| AEP | PJM | 2011 | $ 57.47 | 36 |
| AEP | PJM | 2011 | $ 58.74 | 3 |
| AEP | PJM | 2011 | $ 60.25 | 3 |
| AEP | PJM | 2011 | $ 68.54 | 3 |
| AEP | PJM | 2011 | $ 70.97 | 12 |
| AEP | PJM | 2011 | $ 72.04 | 12 |
| AEP | PJM | 2011 | $ 75.21 | 3 |
| AEP | PJM | 2011 | $ 75.68 | 3 |
| AEP | PJM | 2011 | $ 76.09 | 3 |
| AEP | PJM | 2011 | $ 76.58 | 3 |
| AEP | PJM | 2012 | $ 44.75 | 24 |
| AEP | PJM | 2012 | $ 66.64 | 12 |

**PJM BRA Capacity Costs ($/MW-Day)**

| Delivery Year | RTO | EMAAC | SWMAAC | MAAC |
|---|---|---|---|---|
| 2007/08 | $40.80 | $197.67 | $188.54 | $40.80 |
| 2008/09 | $111.92 | $148.80 | $210.11 | $111.92 |
| 2009/10 | $102.04 | $191.32 | $237.33 | $191.32 |
| 2010/11 | $174.29 | $174.29 | $174.29 | $174.29 |
| 2011/12 | $110.00 | $110.00 | $110.00 | $110.00 |
| 2012/13 | $16.46 | $139.73 | $133.37 | $133.37 |
| 2013/14 | $27.73 | $245.00 | $226.15 | $226.15 |
| 2014/15 | $125.99 | $136.50 | $136.50 | $136.50 |

* The transaction price shown represents an All-IN Rate. In each case the capacity price used to create the All-IN Rate would have been predicated upon the specific delivery point's RPM settlement price (above) 3for the applicable delivery year.

# Kentucky Power Company

## REQUEST

Refer to the response to Staff's First Request, Item 65. Part a. of the response states that Kentucky Power management had a "going-in desire that any long-term solution should maintain generation presence in eastern Kentucky."

a. Explain the basis for this comment.

b. Describe how this "desire" was incorporated into the analysis.

## RESPONSE

a. To first clarify, the response characterizes the Company's inclination as a "desire" and as a "preference." It was not intended to be, and was not, determinative of the Company's analysis. As set out in the Company's application, supporting testimony, and discovery responses, the Company's 2011 Environmental Compliance Plan, including each of its components, is a reasonable and a cost-effective means for the Company to comply with "those federal, state, or local environmental requirements which apply to coal-combustion wastes and by-products from facilities used for production of energy from coal…." In addition, as further supported by the Company's filings, the DFGD scrubber and associated facilities are required by the public convenience and necessity.

   Second, and more generally, the Commission itself recognized the importance of maintaining a Kentucky-based presence as recently as September, 2010 when, in connection with its review and approval and approval of a change in corporate control, it explained:

   The Commission believes that this commitment [to extend the period during which Louisville & Electric Company and Kentucky Utilities Company would maintain their headquarters in Louisville and Lexington respectively] is extremely important not only to LG&E and KU ratepayers, but also to the Louisville and Lexington communities where these headquarters are located. Maintaining the LG&E and KU headquarters in Kentucky helps to ensure the utilities officers have firsthand knowledge of the rate and service issues faced by the customers they serve and makes these officers more responsive to the needs of their customers. In addition, the physical presence of these headquarters contributes to the economic vitality of the Louisville and Lexington communities.

Order, *In the Matter of: Joint Motion of PPL Corporation, E.ON AG, E.ON US Investments Corp., E.ON U.S. LLC., Louisville Gas and Electric Company, and Kentucky Utilities Company For Approval Of An Acquisition Of Ownership And Control Of Utilities*, Case No. 2010-00204 at 17 (Ky. P.S.C. September 30, 2010).

Kentucky Power recognizes that the quoted language arose in a case decided under a different subsection of KRS 278.020 than is applicable here, and involved the retention of corporate headquarter as opposed to a generating unit. But the economic impact of retaining Big Sandy Unit No. 2, as set out in the Company's testimony, certainly is of the same order of magnitude as the retention of corporate headquarters. In addition, there is room for overlap between the "public convenience and necessity" standard of KRS 278.020(1) and the "consistent with the public interest" standard of KRS 278.020(6). Certainly, under the facts of this case, the Company's expressed "preference" and "desire" is antithetical to neither KRS 278.183 nor KRS 278.020(1). To the contrary, the retention of a coal-burning facility in Eastern Kentucky is fully consistent with the General Assembly's statutorily expressed policy of "encourag[ing] the use of Kentucky coal by electric utilities serving the Commonwealth...," KRS 278.020(1), as well as its intent, in enacting KRS 2787.183, "to give an incentive to use Kentucky coal which in turn would help stabilize the large coal economy for Kentucky." *Kentucky Industrial Utilities Customers, Inc. v. Kentucky Utilities Company*, 983 S.W.2d 493, 498 (Ky. 1998).

Third, retaining a generation presence in Eastern Kentucky would minimize the effect that retirement of <u>both</u> Big Sandy 1 and Big Sandy 2 might have grid stability, voltage support, and overall transmission reliability. The Company has no reason to believe PJM has performed such an analysis given the Company's current recommendation to retrofit and continue to operate Big Sandy 2.

b. The preference was not an explicit input to Mr. Weaver's analysis. The four options modeled reflected the Company's judgment concerning the alternatives most likely to be the most reasonable and cost-effective means of complying with applicable environmental requirements. For example, although the first three options involved Kentucky-based generation, Option 4 did not.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Staff's First Request, Item 72.c. The response refers to Kentucky Power's response to the Attorney General's ("AG") Initial Data Request, Items 22 and 23. It is not clear in those responses that the Commission's question was addressed. Also, it is not clear the responses address why AEP and/or Kentucky Power chose not to go forward with negotiations. Explain where in the responses these questions are addressed

## RESPONSE

[redacted]

[redacted]

WITNESS: Ranie K Wohnhas

## Kentucky Power Company

### REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 81. On page 8 of the Direct Testimony of Ranie K. Wohnhas, lines 15-17, it states, "[i]n addition, the Company calculated that the gas option would have reduced payroll and property taxes respectively by $3.2 million and $461,000 annually." Provide Kentucky Power's estimated amount of payroll and property taxes if it had converted to the gas option.

### RESPONSE

$3.2 million in payroll taxes would be lost because the gas options would result in less jobs at the plant. The $461,000 reduction in property taxes would result only if the Big Sandy plant no longer existed. Because a gas unit and a coal fire unit are subject to the same property tax rate, the only difference in the property taxes paid would result from a difference in the values of the respective plants. The Company has not made that calculation.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 84. Provide the date this analysis was performed.

## RESPONSE

The analysis was completed in March 2011.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Item 88.

a. Using Exhibit LPM-2, page 1, column 3, provide the change in the annual revenue requirement using the 3.78 percent depreciation rate versus the 6.67 percent depreciation rate used in this proceeding.

b. Using Exhibit LPM-2, page 1, column 3, provide the change in the annual revenue requirement assuming that the current AEP East Pool is terminated January 1, 2014 and also assuming a 3.78 percent depreciation rate.

c. Explain why Scrubber assets at other AEP plants are depreciated over the remaining life of the plant and not 15 years.

## RESPONSE

a. The change in the annual revenue requirement using the 3.78% depreciation rate versus the 6.67% rate is estimated to be a decrease of $19,428,368.

b. There are no AEP East Pool charges associated with Exhibit LPM-2; therefore, the change in the revenue requirement due to the termination of the AEP East Pool and the change in the depreciation rate noted above is still estimated to be $19,428,368.

c. The depreciation rate used for any given plant is based on a number of factors. Without regard to other AEP plants, the depreciation rate used in this filing is based on the expected useful life of the plant in order to prevent the possibility of stranded costs.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Kentucky Industrial Utility Customer's First Set of Data Requests ("KIUC's First Request"), Item 9, concerning expected retirements of existing assets as a result of the proposed DFGD construction. The Commission has historically required the impact of any such retired assets be removed from base rates and operating expenses, disallowing future recovery of those retired assets. [1]

a. Provide the original cost and accumulated depreciation at September 30, 2009 of any utility plant equipment which is going to be retired as a result of installing new facilities proposed in this proceeding to comply with environmental requirements.

b. Provide, by year and plant, the associated retirements for all facilities included in the monthly environmental surcharge reports for the expense months for years 2009, 2010, and 2011.

[1] Case No. 96-489, Application of Kentucky Power Company d/b/a American Electric Power to Assess a Surcharge Under KKS 278.183 to Recover Costs of Compliance with the Clean Air Act and Those Environmental Requirements Which Apply to Coal Combustion Waste and By-products (Ky. PSC Jul. 8, 1997).

## RESPONSE

a. Please see the Company's response to KPSC 2-13.

b. Please see page 2 of this response for a list, by year and plant, the associated retirements for all facilities included in the monthly environmental surcharge report.

WITNESS: Ranie K Wohnhas

**Kentucky Power Company**
**Associated Plant Retirements**

| Location | 2009 | 2010 | 2011 |
|---|---|---|---|
| Big Sandy Generating Plant | 150,033 | - | 848,197 |
| Cardinal Generating Plant | 685,301 | 372,350 | 1,042,395 |
| Gavin Generating Plant | 8,119,934 | 936,544 | 1,359,288 |
| John E Amos Generating Plant | 30,792,475 | 1,550,926 | 1,253,986 |
| Kammer Generating Plant | 15,399 | 55,513 | 70,035 |
| Mitchell Generating Plant | 367,333 | 196,262 | 794,100 |
| Muskingum River Generating Plant | 1,152,129 | 1,314,843 | 1,376,783 |
| Phillip Sporn Generating Plant | 18,980 | 31,615 | 178,104 |
| Rockport Generating Plant | 79,795 | 565,500 | 156,514 |
| Tanners Creek Generating Plant | 509,755 | 139,313 | 344,247 |
| **Total Retirements** | **41,891,134** | **5,162,866** | **7,423,649** |

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to KIUC's First Request, Item 17. Explain whether the FERC-approved annual rate is 16.49 percent, as stated in Kentucky Power's response, or 16.44 percent (1 .37 percent X 12).

## RESPONSE

Yes, the FERC-approved annual rate is 16.49% (1.374167 X 12) as provided for by Orders dated July 27, 1979 and September 24, 1979 in FERC Docket No. E-9408.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to KIUC's First Request, Item 22. Provide, in electronic format with formulas intact and unprotected, the detail, by year, for the basis the Jurisdictional Annual Revenue Increase, Percent Increase, Monthly Bill Effect with 1,000 kWh usage, and the average monthly usage for years 2012-2016.

## RESPONSE

The requested documents are attached:

Attachment 1 includes all ECR projects in this filing that are expected to be in-service by 2016;
Attachment 2 includes only those projects that will be in-service by 2013; and
Attachment 3 includes only those projects that are already in-service.

Please see enclosed CD for the excel file with formulas intact, unprotected, and labeled by year to match the response to KIUC's First Request, Item 22.

**WITNESS:** Lila P Munsey

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Big Sandy Plant**
**Dry Flue Gas Desulfurization (DFGD)**

| Line No. (1) | Big Sandy Unit #2 Description (2) | Dry Flue Gas Desulfurization Unit (DFGD) (3) |
|---|---|---|
| | In-Service Date: Second Quarter of 2016 | |
| 1 | Total Capital Environmental Costs | $ 940,300,067 |
| 2 | Preliminary Scrubber Analysis 2004-2006 | $ 15,212,425 |
| 3 | Capital Costs Not Associated with CAA | $ - |
| 4 | Capital Booked in Last Base Case | $ - |
| 5 | KPCo's Net In-Service Investment (L1 + L2 - L3 - L4) | $ 955,512,492 |
| | | |
| 6 | Annual Operation Expense | $ 46,067,000 |
| 7 | Annual Maintenance Expense | $ 2,600,000 |
| 8 | Total Operation & Maintenance Expense | $ 48,667,000 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Annual Revenue Requirement**
**Associated with Big Sandy Plant**

| Line No. (1) | Description (2) | | Capital Costs of KY Retail Revenues (3) |
|---|---|---|---|
| | **Return on Rate Base** | | |
| 1 | Utility Plant Installed Net (Exhibit LPM-1, L5) | $ | 955,512,492 |
| 2 | Less: Accumulated Depreciation | $ | 63,732,683 |
| 3 | Less: Accumulated Deferred Income Taxes | $ | 23,505,607 |
| 4 | Net Utility Plant (L1- L2 - L3) | $ | 868,274,202 |
| 5 | Annual Weighted Average Cost of Capital (Exhibit LPM-3, L5, C8) | | 10.69% |
| 6 | Annual Return on Rate Base (L4 X L5) | $ | 92,818,512 |
| | **Operating Expenses** | | |
| 7 | Annual Depreciation (L2) | $ | 63,732,683 |
| 8 | Annual Property Tax Expense (Exhibit LPM-4, L5) | $ | 1,337,670 |
| 9 | Annual Non-Fuel O&M Expense (Exhibit LPM-1, L8) | $ | 48,667,000 |
| 10 | Total Operating Expenses (L7 + L8 + L9) | $ | 113,737,353 |
| 11 | Total Revenue Requirement Associated with BS Env. Facilities (L6 + L10) | $ | 206,555,865 |
| 12 | Annual Revenue Allocation Factor (Exhibit LPM-5, L15, C3 or C6) | | 78.91% |
| 13 | Subtotal (L11 X L12) | $ | 162,993,233 |
| 14 | KY Jurisdiction Revenue Allocation Factor (Exhibit LPM-5, L14, C3) | | |
| 15 | Total KY Retail Revenue Requirement (L13 X L14) | $ | 162,993,233 |
| 16 | KY Jurisdiction 12-month Revenue (Exhibit LPM-5, L13, C3) | $ | 569,593,245 |
| 17 | Percent Change (L15 / L16) | | 28.62% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Weighted Cost of Capital Calculations for August 2011**

| Line No. (1) | Description (2) | Capital Balance as of April 30, 2010 [2] (3) | Capital Structure (4) | Cost of Capital Rates (5) | WACC Net of Tax (6) | Gross Revenue Conversion Factor (7) | WACC Pre Tax (8) |
|---|---|---|---|---|---|---|---|
| 1 | Long-term Debt | $ 550,000,000 | 51.941% | 6.48% | 3.37% | | 3.37% |
| 2 | Short-term Debt | $ - | 0.000% | 0.83% | 0.00% | | 0.00% |
| 3 | A/R Financing | $ 43,588,933 | 4.116% | 1.22% | 0.05% | | 0.05% |
| 4 | Common Equity | $ 465,314,088 | 43.943% | **10.50%** [1] | 4.61% | 1.5762 [3] | 7.27% |
| 5 | Total | $ 1,058,903,021 | 100.000% | | 8.03% | | 10.69% |

[1] Weighted Average Cost of Capital (WACC) ROR on Common Equity per Case No. 2010-00020.
[2] WACC Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.
[3] Gross Revenue Conversion Factor Calculations per Order in Case No. 2010-00318:

| | | |
|---|---|---|
| 1 | OPERATING REVENUE | 100.0000 |
| 2 | UNCOLLECTIBLE ACCOUNTS EXPENSE (0.24%) | 0.2400 |
| 3 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 4 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 99.6100 |
| 5 | STATE INCOME TAX EXPENSE, NET OF 199 DEDUCTION (SEE BELOW) | 5.6384 |
| 6 | FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 93.9716 |
| 7 | 199 DEDUCTION PHASE-IN | 5.6372 |
| 8 | FEDERAL TAXABLE PRODUCTION INCOME | 88.3344 |
| 9 | FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%) | 30.9171 |
| 10 | AFTER-TAX PRODUCTION INCOME | 57.4173 |
| 11 | GROSS-UP FACTOR FOR PRODUCTION INCOME: | |
| 12 | AFTER-TAX PRODUCTION INCOME | 57.4173 |
| 13 | 199 DEDUCTION PHASE-IN | 5.6372 |
| 14 | UNCOLLECTIBLE ACCOUNTS EXPENSE | 0.2400 |
| 15 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 16 | TOTAL GROSS-UP FACTOR FOR PRODUCTION INCOME (ROUNDED) | 63.4445 |
| 17 | BLENDED FEDERAL AND STATE TAX RATE: | |
| 18 | FEDERAL (LINE 9) | 30.9171 |
| 19 | STATE (LINE 5) | 5.6384 |
| 20 | BLENDED TAX RATE | 36.5555 |
| 21 | GROSS REVENUE CONVERSION FACTOR (100 / Line 16) | 1.5762 |

STATE INCOME TAX CALCULATION:

| | | |
|---|---|---|
| 1 | PRE-TAX PRODUCTION INCOME | 100.0000 |
| 2 | COLLECTIBLE ACCOUNTS EXPENSE (0.24%) | 0.2400 |
| 3 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 4 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 99.6100 |
| 5 | LESS: STATE 199 DEDUCTION | 5.6372 |
| 6 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 93.9728 |
| 7 | STATE INCOME TAX RATE | 6.0000 |
| 8 | STATE INCOME TAX EXPENSE (LINE 6 X LINE 7) | 5.6384 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Estimated Property Taxes**
**Associated with Big Sandy Plant Pollution Control Facilities**

| Line No. (1) | Description (2) | Installed Costs (3) |
|---|---|---|
| 1 | DFGD Installed Capital at BS#2 (LPM-2, L1, C3) | $ 955,512,492 |
| 2 | Less: Accumulated Depreciation (LPM-2, L2, C3) | $ 63,732,683 |
| 3 | Net Plant Investment Assessed Value (L1 - L2) | $ 891,779,809 |
| 4 | Property Tax Rate | 0.15% |
| 5 | Increase in Property Tax (L3 X L4) | $ 1,337,670 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Revenue Allocation Percentages**
**12-months ended August 31, 2011**

| Line No. (1) | Month (2) | KY Retail Jurisdiction (3) | FERC Wholesale (4) | Total KY Full Requirement Revenues (5)=(3)+(4) | Associated Utilities (6) | Non-Associated Utilities (7) | Total Rev for Surcharge Purposes (8)=(5)+(6)+(7) |
|---|---|---|---|---|---|---|---|
| 1 | September 2010 | $ 40,903,323 | $ 495,401 | $ 41,398,724 | $ 6,337,586 | $ 5,270,698 | $ 53,007,008 |
| 2 | October 2010 | $ 39,106,852 | $ 386,166 | $ 39,493,018 | $ 6,800,222 | $ 4,192,455 | $ 50,485,695 |
| 3 | November 2010 | $ 40,488,923 | $ 410,737 | $ 40,899,660 | $ 4,661,941 | $ 3,884,802 | $ 49,446,403 |
| 4 | December 2010 | $ 56,106,329 | $ 639,267 | $ 56,745,596 | $ 2,533,257 | $ 5,561,003 | $ 64,839,856 |
| 5 | January 2011 | $ 65,952,346 | $ 603,837 | $ 66,556,183 | $ 5,085,114 | $ 6,199,202 | $ 77,840,499 |
| 6 | February 2011 | $ 58,755,458 | $ 529,203 | $ 59,284,661 | $ 4,720,801 | $ 5,024,766 | $ 69,030,228 |
| 7 | March 2011 | $ 44,307,469 | $ 459,737 | $ 44,767,206 | $ 5,691,192 | $ 5,445,168 | $ 55,903,566 |
| 8 | April 2011 | $ 42,540,201 | $ 427,836 | $ 42,968,037 | $ 4,530,299 | $ 6,578,375 | $ 54,076,711 |
| 9 | May 2011 | $ 40,424,987 | $ 784,420 | $ 41,209,407 | $ 6,373,043 | $ 4,536,768 | $ 52,119,218 |
| 10 | June 2011 | $ 46,953,714 | $ 462,091 | $ 47,415,805 | $ 6,987,065 | $ 10,149,681 | $ 64,552,551 |
| 11 | July 2011 | $ 46,534,433 | $ 530,987 | $ 47,065,420 | $ 8,031,761 | $ 13,076,250 | $ 68,173,431 |
| 12 | August 2011 | $ 47,519,210 | $ 525,287 | $ 48,044,497 | $ 5,676,708 | $ 8,673,690 | $ 62,394,895 |
| 13 | 12-month Total | **$ 569,593,245** | $ 6,254,969 | $ 575,848,214 | $ 67,428,989 | $ 78,592,858 | $ 721,870,061 |
| 14 | Rev. Alloc. %s | **98.91%** | 1.09% | 100.00% | | | |
| 15 | Rev. Alloc. %s | **78.91%** | 0.87% | | 9.34% | 10.88% | 100.00% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP Pool Surplus Companies**
**Net Investment in**
**Environmental Facilities**

| Line No. (1) | Generating Unit (2) | Description of Environmental Facilities (3) | In-Service Date (4) | Cost of Environmental Facilities (5) | Less Original Facility Cost in Base Rates (6) | OPCo or I&M Percentage (7) | I&M's Environmental Investment (8)=[(5)-(6)]x(7) | OPCo's Environmental Investment (9)=[(5)-(6)]x(7) |
|---|---|---|---|---|---|---|---|---|
| | **Surplus Companies** | | | | | | | |
| 1 | Amos Unit 3 | Dry Fly Ash Disposal Conversion | 8/3/2010 | $ 58,717,352 | $ - | 66.67% | | $ 39,146,859 |
| 2 | Amos Common | Hg In-Pond Chemical Treatment | 7/15/2011 | $ 2,484,972 | $ - | 29.89% | | $ 742,758 |
| 3 | Amos Common | FGD Hg Waste Water Treatment | 4th Qtr 2012 | $ 12,827,197 | $ - | 29.89% | | $ 3,834,049 |
| 4 | Amos Common | Ash Pond Discharge Diffuser | 4th Qtr 2012 | $ 2,447,711 | $ - | 29.89% | | $ 731,621 |
| 5 | Amos Subtotal | Sum of Lines 1 to 4 | | $ 76,477,232 | $ - | | | $ 44,455,287 |
| 6 | Rockport Units 1 & 2 | Activated Carbon Injection (ACI) | 9/28/2009 | $ 23,405,482 | $ - | 85% | $ 19,894,660 | |
| 7 | Tanners Creek Units 1, 2, & 3 | Selective Non-Catalytic Reduction (SNCR) System | 12/11/2009 | $ 14,152,243 | $ - | 100% | $ 14,152,243 | $ - |
| 8 | Total Surplus Companies | L5 + L6 + L7 | | $ 114,034,957 | $ - | | $ 34,046,903 | $ 44,455,287 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool**
**Capacity Equalization Settlement for**
**August 2011**

**Calculation of Member Capacity Surplus / (Deficit) (kW)**

| Line No. | Generating Company | Internal (MLR) Max 60-Minute Integrated Demand in 12 ME 8/31/11 (MW) | Member Load Ratio | Member Primary Capacity (kW) | Primary Capacity Reservation (kW) | Capacity Surplus (Deficit) (kW) |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6)=Total kW x (4) | (7)=(5)-(6) |
| 1 | APCo | 7,542 | 31.181% | 6,377,000 | 8,293,500 | (1,916,500) |
| 2 | KPCo | 1,596 | 6.598% | 1,471,000 | 1,754,900 | (283,900) |
| 3 | I&M | 4,837 | 19.998% | 5,428,000 | 5,319,100 | 108,900 |
| 4 | OPCo | 5,544 | 22.920% | 8,465,000 | 6,096,300 | 2,368,700 |
| 5 | CSP | 4,669 | 19.303% | 4,857,000 | 5,134,200 | (277,200) |
| 6 | Total | 24,188 | 100.000% | 26,598,000 | 26,598,000 | - |

**Calculation of Member Capacity Settlement**

| Line No. | Generating Company | Capacity Surplus (Deficit) (kW) | Capacity Rate ($/kW) | Estimated Credit (Charge) ($) |
|---|---|---|---|---|
| | (2) | (7)=(5)-(6) | (8)=(9) / (7) | (9) |
| 7 | APCo | (1,916,500) | $13.60 | (26,070,502) |
| 8 | KPCo | (283,900) | $13.60 | (3,861,944) |
| 9 | I&M | 108,900 | $14.76 | 1,607,364 |
| 10 | OPCo | 2,368,700 | $13.55 | 32,095,885 |
| 11 | CSP | (277,200) | $13.60 | (3,770,803) |
| 12 | Total | - | | $ - |

Equalization capacity rate (The is the average $/kW rate paid by deficit members.): **13.6032**

Revised Exhibit LPM-7

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool**
**Capacity Rate Calculations for**
**Surplus Member Companies**
**August 2011**

| Line No. | Description | Formula | Units | I&M | OPCo | |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | |
| | **Primary Capacity Investment Rate:** | | | | | |
| 1 | Steam Production Plant as of 12-mo ended 12/31/10 | | ($) | 4,040,461,038 | 6,654,950,782 | |
| 2 | Steam Capacity as of 12-mo ended 12/31/10 | | (kW) | 5,414,000 | 8,440,000 | |
| 3 | Average Cost of Investment | L1 / L2 | ($/kW) | $746.30 | $788.50 | |
| 4 | Carrying Charge (16.44% / 12 months) | | ($/kW/Month) | 0.0137 | 0.0137 | |
| 5 | Primary Capacity Investment Rate | L3 X L4 | | $10.22 | $10.80 | |
| | **Monthly Fixed Operating Rate:** | | | | | |
| 6 | Steam Plant Operation Expense (less: fuel) | | ($) | 18,440,310 | 17,311,512 | |
| 7 | 1/2 Maintenance Expense | | ($) | 6,117,393 | 5,856,913 | |
| 8 | Subtotal - Fixed Operating Expense | L6 + L7 | ($) | 24,557,703 | 23,168,425 | |
| 9 | Steam Capability | L2 | (kW) | 5,414,000 | 8,440,000 | |
| 10 | Fixed Operating Rate | L8 / L9 | ($/kW) | $4.54 | $2.75 | |
| 11 | **Capacity Rate** | L5 + L10 | ($/kW) | $14.76 | $13.55 | |
| | **Calculate AEP Pool Average Capacity Rate:** | | | | | |
| 12 | Surplus Capacity | Exhibit LPM-7, C7, L3 or L4 | (kW) | 108,900 | 2,368,700 | |
| 13 | Member's Percent of Pool's Total Surplus | | (%) | 4.40% | 95.60% | |
| 14 | Surplus Member's Capacity Rate | L11 | ($/kW) | $14.76 | $13.55 | |
| 15 | Surpl. Memb. CAP Rate Recv. From Deficit Memb. | L13 X L14 | ($/kW) | $0.65 | $12.95 | |
| 16 | **AEP Pool's Average Capacity Rate** | | ($/kW) | | | $13.60 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool Monthly**
**Environmental Capacity Costs**

| Line No. | Description | Exhibit or Formula | I&M | OPCo | KPCo |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | Net Cost of Environmental Facilities Investment Installed | Exhibit LPM-6, L8 | $ 34,046,903 | $ 44,455,287 | |
| 2 | Installed Capacity (kW) | Exhibit LPM-8, L2 | 5,414,000 | 8,440,000 | |
| 3 | Weighted Average Installed Cost ($/kW) | L1 / L2 | $6.29 | $5.27 | |
| 4 | Monthly Return on Investment | Exhibit LPM-8, L4 | 0.0137 | 0.0137 | |
| 5 | Envir. Member Capacity Investment Rate ($/kW/Mo.) | L3 X L4 | $0.09 | $0.07 | |
| | **Plus: Operations & 1/2 Maintenance** | | | | |
| 6 | OPCo's Amos Unit No. 3 & Common Plant | Exhibit LPM-10, L21, C14 | | $0.01 | |
| 7 | I&M's: Rockport & Tanners Creek Units | Exhibit LPM-11, L15, C14 | $0.06 | | |
| 8 | Subtotal | L5 + L6 + L7 | $0.15 | $0.08 | |
| 9 | Surplus Company Weighting | Exhibit LPM-8, L13 | 4.40% | 95.60% | |
| 10 | Surplus Capacity | L8 X L9 | $0.01 | $0.08 | $0.09 |
| 11 | KPCo's Pool Capacity Deficit | Exhibit LPM-7, L2, C7 | 283,900 | 283,900 | 283,900 |
| 12 | KPCo's Monthly Envir. Pool Capacity Charge | L10 X L11 | $ 2,839 | $ 22,712 | $ 25,551 |
| 13 | Number of months | | | | 12 |
| 14 | **Annual Effect of Envir. Pool Capacity Charge** | L12 X L13 | | | $ 306,612 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Ohio Power Company**

| Line No. | Description | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 | Month 9 | Month 10 | Month 11 | Month 12 | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| | Operations: | | | | | | | | | | | | | |
| 1 | Amos Unit #3 Dry Fly Ash Disposal Conversion | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $36,500.00 |
| 2 | Amos Common - FGD Hg Waste Water Treatment | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $1,033,500.00 |
| 3 | Amos Common - Hg In-Pond Chemical Treatment | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $1,657,500.00 |
| 4 | Amos Common - Ash Pond Discharge Diffuser | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 5 | Total Common Plant Operations (L2 + L3 + L4) | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $2,691,000.00 |
| | Maintenance: | | | | | | | | | | | | | |
| 6 | Amos Unit #3 Dry Fly Ash Disposal Conversion | $ 3,042 | $ 3,042 | $ 2,867 | $ 762 | $ 20,802 | $ 1,706 | $ 4,042 | $ 3,896 | $ (4,704) | $ 22,701 | $ 4,431 | $ 877 | $63,463.44 |
| 7 | 1/2 Amos Unit #3 Maintenance (L6 / 2) | $ 1,521 | $ 1,521 | $ 1,433 | $ 381 | $ 10,401 | $ 853 | $ 2,021 | $ 1,948 | $ (2,352) | $ 11,350 | $ 2,216 | $ 439 | $31,732.00 |
| 8 | Amos Common - FGD Hg Waste Water Treatment | $ 2,208 | $ 2,208 | $ 2,209 | $ 2,208 | $ 2,208 | $ 2,209 | $ 2,208 | $ 2,208 | $ 2,209 | $ 2,208 | $ 2,208 | $ 2,209 | $26,500.00 |
| 9 | Amos Common - Hg In-Pond Chemical Treatment | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $42,500.00 |
| 10 | Amos Common - Ash Pond Discharge Diffuser | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 11 | Total Common Plant Maintenance (L8 + L9 + L10) | $ 5,750 | $ 10,313 | $ 10,050 | $ 6,893 | $ 36,953 | $ 8,309 | $ 11,813 | $ 11,594 | $ (1,306) | $ 39,801 | $ 12,397 | $ 7,066 | $159,632.44 |
| 12 | 1/2 Common Plant Maintenance (L11 / 2) | $ 2,875 | $ 5,157 | $ 5,025 | $ 3,446 | $ 18,477 | $ 4,154 | $ 5,906 | $ 5,797 | $ (653) | $ 19,900 | $ 6,199 | $ 3,533 | $79,816.00 |
| 13 | Total Amos Unit #3 Fixed O&M (L1 + L7) | $ 4,563 | $ 4,563 | $ 4,474 | $ 3,423 | $ 13,443 | $ 3,894 | $ 5,063 | $ 4,990 | $ 689 | $ 14,392 | $ 5,258 | $ 3,480 | $68,232.00 |
| 14 | OPCo's % Ownership (Exh. LPM-6, L1, C7) | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | |
| 15 | OPCo's Share of Amos #3 Fixed O&M (L13 X L14) | $ 3,042 | $ 3,042 | $ 2,983 | $ 2,282 | $ 8,962 | $ 2,596 | $ 3,376 | $ 3,327 | $ 459 | $ 9,595 | $ 3,506 | $ 2,320 | $45,490.00 |
| 16 | Total Amos Common Plant Fixed O&M (L5 + L12) | $ 227,125 | $ 229,407 | $ 229,275 | $ 227,696 | $ 242,727 | $ 228,404 | $ 230,156 | $ 230,047 | $ 223,597 | $ 244,150 | $ 230,449 | $ 227,783 | $2,770,816.00 |
| 17 | OPCo's % Ownership (Exh. LPM-6, L2, C7) | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | |
| 18 | OPCo's Share of Common Pl Fixed O&M (L16 X L17) | $ 67,888 | $ 68,570 | $ 68,530 | $ 68,058 | $ 72,551 | $ 68,270 | $ 68,794 | $ 68,761 | $ 66,833 | $ 72,976 | $ 68,881 | $ 68,084 | $828,196.00 |
| 19 | OPCo's Share of Fixed O&M (L15 + L18) | $ 70,930 | $ 71,612 | $ 71,513 | $ 70,340 | $ 81,513 | $ 70,866 | $ 72,170 | $ 72,088 | $ 67,292 | $ 82,571 | $ 72,387 | $ 70,404 | $873,686.00 |
| 20 | OPCo Steam Capacity (kW) (Exh LPM-9, L2, C5) | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | |
| 21 | OPCo Rate ($/kW) (L19 / L20) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | |
| 22 | OPCo Surplus Weighting (%) (Exh LPM-9, L9, C5) | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | |
| 23 | Effect on Wt. Ave. Rate ($/kW) (L21 X L22) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | |
| 24 | Portion of Weighted Average Capacity Rate Attributed to OPCo Facilities (L23) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | |
| 25 | KPCo's Pool Capacity Deficit (Exh. LPM-7, L2, C7) | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 |
| 26 | KPCo's Share of OPCo (L24 X L25) | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $34,068 |

Kentucky Power Company
Pollution Control Environmental Facilities
Indiana and Michigan Power Company

| Line No. (1) | Description (2) | Month 1 (3) | Month 2 (4) | Month 3 (5) | Month 4 (6) | Month 5 (7) | Month 6 (8) | Month 7 (9) | Month 8 (10) | Month 9 (11) | Month 10 (12) | Month 11 (13) | Month 12 (14) | Total (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Operations: | | | | | | | | | | | | | |
| 1 | Rkpt1&2 Activated Carbon Injection (ACI) | $ 471,649 | $ 613,139 | $ 463,686 | $ 536,123 | $ 448,647 | $ 290,791 | $ 288,112 | $ 165,345 | $ 30,592 | $ 165,068 | $ 134,893 | $ 379,076 | $3,987,119.48 |
| 2 | TC 1, 2, &3 Selective Non-Catalytic Reduction (SNCR) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $945.14 |
| | Maintenance: | | | | | | | | | | | | | |
| 3 | Rkpt1&2 Activated Carbon Injection (ACI) | $ 2,314 | $ - | $ 558 | $ 1,349 | $ 650 | $ - | $ - | $ 4,047 | $ 8,642 | $ 32,485 | $ 23,769 | $ 279 | $74,093.50 |
| 4 | 1/2 Rockport Maintenance (L3 / 2) | $ 1,157 | $ - | $ 279 | $ 675 | $ 325 | $ - | $ - | $ 2,024 | $ 4,321 | $ 16,243 | $ 11,884 | $ 139 | $37,047.00 |
| 5 | TC 1, 2, &3 Selective Non-Catalytic Reduction (SNCR) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |
| 6 | 1/2 Tanners Creek Maintenance (L5 / 2) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |
| 7 | Total Rockport Fixed O&M (L1 + L4) | $ 472,806 | $ 613,139 | $ 463,965 | $ 536,798 | $ 448,972 | $ 290,791 | $ 288,112 | $ 167,369 | $ 34,913 | $ 181,311 | $ 146,777 | $ 379,215 | $4,024,166.48 |
| 8 | I&M's Percentage Ownership (Exh. LPM-6, L6, C7) | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | |
| 9 | I&M's Share of Rockport Fixed O&M (L7 X L8) | $ 401,885 | $ 521,168 | $ 394,370 | $ 456,278 | $ 381,626 | $ 247,172 | $ 244,895 | $ 142,264 | $ 29,676 | $ 154,114 | $ 124,761 | $ 322,333 | $3,420,542.00 |
| 10 | Total Tanners Creek Fixed O&M (L2 + L6) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $945.14 |
| 11 | I&M's Percentage Ownership (Exh. LPM-6, L7, C7) | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | |
| 12 | I&M's Share of TC Fixed O&M (L10 X L11) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $946.00 |
| 13 | I&M's Share of Fixed O&M (L9 + L12) | $ 403,120 | $ 521,194 | $ 393,978 | $ 456,246 | $ 381,631 | $ 247,180 | $ 244,879 | $ 142,284 | $ 29,702 | $ 154,071 | $ 124,763 | $ 322,440 | $3,421,488.00 |
| 14 | I&M Steam Capacity (kW) (Exh. LPM-9, L2, C4) | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | |
| 15 | Indiana Rate ($/kW) (L13 / L14) | $0.07 | $0.10 | $0.07 | $0.08 | $0.07 | $0.05 | $0.05 | $0.03 | $0.01 | $0.03 | $0.02 | $0.06 | |
| 16 | I&M Surplus Weighting (%) (Exh LPM-9, L9, C4) | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | |
| 17 | Effect on Wt. Ave. Rate ($/kW) (L15 X L16) | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | |
| 18 | Portion of Weighted Average Capacity Rate Attributed to I&M Environmental Controls | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | |
| 19 | KPCo's Pool Capacity Deficit (Exh. LPM-7, L2, C7) | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | |
| 20 | KPCo's Share: ACI & SNCR (L18 X L19) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Rockport Environmental Surcharge Calculations**
**Revenue Requirement**

| Line No. | Cost Component | Formula | Rockport Total |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 1 | Rockport #1 & #2 Activated Carbon Injection (ACI) | Exhibit LPM-6, L6, C5 | $23,405,482 |
| 2 | Less: Accumulated Depreciation | L1 X 3.52% | $823,873 |
| 3 | Less: Accumulated Deferred Income Tax | L1 X 1.3% | $304,271 |
| 4 | Total Rate Base | L1 - L2 - L3 | $22,277,338 |
| 5 | Weighted Average Cost of Capital for Aug. 2011 | Exhibit LPM-3, L5, C8 | 10.69% |
| 6 | Monthly Weighted Average Cost of Capital | L5 / 12 | 0.8908% |
| 7 | Monthly Return on Rate Base | L4 X L6 | $198,447 |
| | **Operating Expenses** | | |
| 8 | Monthly Depreciation Expense | L2 / 12 | $68,656 |
| 9 | Total Operating Expense | | $68,656 |
| 10 | Total Revenue Requirement Associated with Rockport ACI | L7 + L9 | $267,103 |
| 11 | KPCo's Percentage of Rockport's upgrades | 100% - Exhibit LPM-6, L6, C7 | 15% |
| 12 | KPCo's Portion of Rockport's upgrades | L10 X L11 | $40,065 |
| 13 | Annualize | | 12 |
| 14 | **Annualized Revenue Requirement** | L12 X L13 | **$ 480,780** |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**New Environmental Costs Associated with**
**Allowance Inventory**

| Line No. | Description | Formula | | KY Retail Rev Requirement |
|---|---|---|---|---|
| (1) | (2) | (3) | | (4) |
| 1 | Estimated Monthly CSAPR SO2 Allowance Inventory | KIUC 1-20 | $ | 425,976 |
| 2 | Estimated Monthly CSAPR NOx Allowance Inventory | KIUC 1-20 | $ | 2,053 |
| 3 | Estimated Monthly CSAPR SO2 Consumption Expense | L11 / 12 | $ | 517,667 |
| 4 | Estimated Monthly CSAPR NOx Consumption Expense | L12 / 12 | $ | (54,167) |
| 5 | Net Monthly Expenses (Consumption less Gains) | L3 + L4 | $ | 463,500 |
| 6 | Cash Working Capital Allowance (in accordance with ES FORM 3.13) | L5 / 8 | $ | 57,938 |
| 7 | *Total Rate Base* | L1 + L2 + L6 | $ | 485,967 |
| 8 | Annual Weighted Average Cost of Capital | Exhibit LPM-3, L5, C8 | | 10.69% |
| 9 | Return of Rate Base | L7 X L8 | $ | 51,950 |
| 10 | Estimated Monthly CSAPR SO2 Consumption Expense | Wohnhas testimony | $ | 6,212,000 |
| 11 | Estimated Monthly CSAPR NOx Consumption Expense | Wohnhas testimony | $ | (650,000) |
| 12 | Total Operating Expenses | L10 + L11 | $ | 5,562,000 |
| 13 | Total Revenue Requirement | L9 + L12 | $ | 5,613,950 |
| 14 | Annual Revenue Allocation Factor | Exhibit LPM-5, L15, C3 | | 78.91% |
| 15 | Subtotal | L13 X L14 | $ | 4,429,968 |
| 16 | KY Jurisdiction Revenue Allocation Factor | Exhibit LPM-5, L14, C3 | | 98.91% |
| 17 | Total KY Retail Revenue Requirement | L15 X L16 | $ | 4,381,681 |
| 18 | KY Jurisdiction 12-month Revenue | Exhibit LPM-5, L13, C3 | $ | 569,593,245 |
| 19 | Percent Change | L17 / L18 | | 0.77% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**New Environmental Costs**
**Effect on Residential Customers**

| Line No. | Description | Formula | Annual Amount | Percent Increase |
|---|---|---|---|---|
| (1) | (2) | (3) | (5) | (6) |
| 1 | Annual Effect of New Environmental Pool Capacity Charges | Exhibit LPM-9, L14 | $306,612 | |
| 2 | KPCo's Share of Rockport | Exhibit LPM-12, L14 | $480,780 | |
| 3 | Total Environmental Cost | L1 + L2 | $787,392 | |
| 4 | KPCo's Average Retail Allocation for 12 months ended August 2011 | Exhibit LPM-5, L.15, C3 | 78.91% | |
| 5 | Net Annual Impact on the Kentucky Retail Customers | L3 X L4 | $621,331 | 0.10% |
| 6 | KY Retail Allowances | Exhibit LPM-13, L17, C4 | $4,381,681 | 0.77% |
| 7 | KY Retail Revenue Requirement for Big Sandy Environmental Additions | Exhibit LPM-2, L15, C3 | $162,993,233 | 28.62% |
| 8 | Total Environmental Projects in this Filing | L5 + L6 + L7 | $167,996,245 | 29.49% |
| 9 | Billed Revenues for 12 months ended August 2011 | Exhibit LPM-5, L13, C3 | $569,593,245 | |
| 10 | Percent Increase | L8 / L9 | 29.49% | |
| | | **Usage in kWh:** | **1,000** | |
| 11 | Monthly Effect on a Residential Customers | | $ 28.88 | |
| 12 | Annualize | | 12 | |
| 13 | **Annual Effect on a Residential Customers** | L11 X L12 | $ 346.56 | |

Kentucky Power Company
New Environmental Costs
Effect on Residential Customer

| Typical Residential Bill - computed on average monthly kWh usage of: | | 1,000 kWh | | | |
|---|---|---|---|---|---|
| | Rate | Now | If Approved | Monthly Increase | Annual Increase |
| Service Charge ($/customer) | $8.00 | $ 8.00 | $ 8.00 | | |
| Energy Usage ($/kWh) | $0.0859 | $ 85.90 | $ 85.90 | | |
| Fuel Adjustment Charge for August 2011 ($/kWh) | ($0.0006513) | $ (0.65) | $ (0.65) | | |
| Capacity Charge ($/kWh) | $0.00097 | $ 0.97 | $ 0.97 | | |
| Demand-side Management ($/kWh) | $0.000774 | $ 0.77 | $ 0.77 | | |
| Home Energy Assistance Program ($/customer) | | $ 0.15 | $ 0.15 | | |
| Subtotal 1 | | $ 95.14 | $ 95.14 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 2.79 | $ 33.54 | $ 30.75 | |
| Subtotal 2 | | $ 97.93 | $ 128.68 | | |
| Monthly effect on a Residential Customer | | | | **$ 30.75** | $ 369.00 |
| **Percent Increase (As Filed)** | | | **31.40%** | | |
| Subtotal 1 | | $ 95.14 | $ 95.14 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 2.79 | $ 31.67 | $ 28.88 | |
| Subtotal 2 | | $ 97.93 | $ 126.81 | | |
| Monthly effect on a Residential Customer | | | | **$ 28.88** | $ 346.56 |
| **Percent Increase (Revised)** | | | **29.49%** | | |

| Typical Residential Bill - computed on average monthly kWh usage of: | | 1,376 kWh | | | |
|---|---|---|---|---|---|
| | Rate | Now | If Approved | Monthly Increase | Annual Increase |
| Service Charge ($/customer) | $8.00 | $ 8.00 | $ 8.00 | | |
| Energy Usage ($/kWh) | $0.0859 | $ 118.20 | $ 118.20 | | |
| Fuel Adjustment Charge for August 2011 ($/kWh) | ($0.0006513) | $ (0.90) | $ (0.90) | | |
| Capacity Charge ($/kWh) | $0.00097 | $ 1.33 | $ 1.33 | | |
| Demand-side Management ($/kWh) | $0.000774 | $ 1.07 | $ 1.07 | | |
| Home Energy Assistance Program ($/customer) | | $ 0.15 | $ 0.15 | | |
| Subtotal 1 | | $ 127.85 | $ 127.85 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 3.74 | $ 45.06 | $ 41.32 | |
| Subtotal 2 | | $ 131.59 | $ 172.91 | | |
| Monthly effect on a Residential Customer | | | | **$ 41.32** | $ 495.84 |
| **Percent Increase (As Filed)** | | | **31.40%** | | |
| Subtotal 1 | | $ 127.85 | $ 127.85 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 3.74 | $ 42.55 | $ 38.81 | |
| Subtotal 2 | | $ 131.59 | $ 170.40 | | |
| Monthly effect on a Residential Customer | | | | **$ 38.81** | $ 465.72 |
| **Percent Increase** | | | **29.49%** | | |

| | |
|---|---|
| Big Sandy Capital in $Ms | $ 956 |
| Rockport Capital in $Ms | $ 23 |
| Amos & Tanners Creek Pool Capital in $Ms | $ 91 |
| | $ 1,070 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Big Sandy Plant**
**Dry Flue Gas Desulfurization (DFGD)**

| Line No. (1) | Big Sandy Unit #2 Description (2) | Dry Flue Gas Desulfurization Unit (DFGD) (3) |
|---|---|---|
| | In-Service Date: Second Quarter of 2016 | |
| 1 | Total Capital Environmental Costs | $ - |
| 2 | Preliminary Scrubber Analysis 2004-2006 | $ - |
| 3 | Capital Costs Not Associated with CAA | $ - |
| 4 | Capital Booked in Last Base Case | $ - |
| 5 | KPCo's Net In-Service Investment (L1 + L2 - L3 - L4) | $ - |
| 6 | Annual Operation Expense | $ - |
| 7 | Annual Maintenance Expense | $ - |
| 8 | Total Operation & Maintenance Expense | $ - |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Annual Revenue Requirement**
**Associated with Big Sandy Plant**

| Line No. (1) | Description (2) | Capital Costs of KY Retail Revenues (3) |
|---|---|---|
| | <u>Return on Rate Base</u> | |
| 1 | Utility Plant Installed Net (Exhibit LPM-1, L5) | $ - |
| 2 | Less: Accumulated Depreciation | $ - |
| 3 | Less: Accumulated Deferred Income Taxes | $ - |
| 4 | Net Utility Plant (L1- L2 - L3) | $ - |
| 5 | Annual Weighted Average Cost of Capital (Exhibit LPM-3, L5, C8) | 10.69% |
| 6 | Annual Return on Rate Base (L4 X L5) | $ - |
| | <u>Operating Expenses</u> | |
| 7 | Annual Depreciation (L2) | $ - |
| 8 | Annual Property Tax Expense (Exhibit LPM-4, L5) | $ - |
| 9 | Annual Non-Fuel O&M Expense (Exhibit LPM-1, L8) | $ - |
| 10 | Total Operating Expenses (L7 + L8 + L9) | $ - |
| 11 | Total Revenue Requirement Associated with BS Env. Facilities (L6 + L10) | $ - |
| 12 | Annual Revenue Allocation Factor (Exhibit LPM-5, L15, C3 or C6) | 78.91% |
| 13 | Subtotal (L11 X L12) | $ - |
| 14 | KY Jurisdiction Revenue Allocation Factor (Exhibit LPM-5, L14, C3) | |
| 15 | Total KY Retail Revenue Requirement (L13 X L14) | $ - |
| 16 | KY Jurisdiction 12-month Revenue (Exhibit LPM-5, L13, C3) | $ 569,593,245 |
| 17 | Percent Change (L15 / L16) | 0.00% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Weighted Cost of Capital Calculations for August 2011**

| Line No. (1) | Description (2) | Capital Balance as of April 30, 2010 [2] (3) | Capital Structure (4) | Cost of Capital Rates (5) | WACC Net of Tax (6) | Gross Revenue Conversion Factor (7) | WACC Pre Tax (8) |
|---|---|---|---|---|---|---|---|
| 1 | Long-term Debt | $ 550,000,000 | 51.941% | 6.48% | 3.37% | | 3.37% |
| 2 | Short-term Debt | $ - | 0.000% | 0.83% | 0.00% | | 0.00% |
| 3 | A/R Financing | $ 43,588,933 | 4.116% | 1.22% | 0.05% | | 0.05% |
| 4 | Common Equity | $ 465,314,088 | 43.943% | **10.50%** [1] | 4.61% | 1.5762 [3] | 7.27% |
| 5 | Total | $ 1,058,903,021 | 100.000% | | 8.03% | | 10.69% |

[1] Weighted Average Cost of Capital (WACC) ROR on Common Equity per Case No. 2010-00020.
[2] WACC Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.
[3] Gross Revenue Conversion Factor Calculations per Order in Case No. 2010-00318:

| | | |
|---|---|---|
| 1 | OPERATING REVENUE | 100.0000 |
| 2 | UNCOLLECTIBLE ACCOUNTS EXPENSE (0.24%) | 0.2400 |
| 3 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 4 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 99.6100 |
| 5 | STATE INCOME TAX EXPENSE, NET OF 199 DEDUCTION (SEE BELOW) | 5.6384 |
| 6 | FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 93.9716 |
| 7 | 199 DEDUCTION PHASE-IN | 5.6372 |
| 8 | FEDERAL TAXABLE PRODUCTION INCOME | 88.3344 |
| 9 | FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%) | 30.9171 |
| 10 | AFTER-TAX PRODUCTION INCOME | 57.4173 |
| 11 | GROSS-UP FACTOR FOR PRODUCTION INCOME: | |
| 12 | AFTER-TAX PRODUCTION INCOME | 57.4173 |
| 13 | 199 DEDUCTION PHASE-IN | 5.6372 |
| 14 | UNCOLLECTIBLE ACCOUNTS EXPENSE | 0.2400 |
| 15 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 16 | TOTAL GROSS-UP FACTOR FOR PRODUCTION INCOME (ROUNDED) | 63.4445 |
| 17 | BLENDED FEDERAL AND STATE TAX RATE: | |
| 18 | FEDERAL (LINE 9) | 30.9171 |
| 19 | STATE (LINE 5) | 5.6384 |
| 20 | BLENDED TAX RATE | 36.5555 |
| 21 | GROSS REVENUE CONVERSION FACTOR (100 / Line 16) | 1.5762 |

STATE INCOME TAX CALCULATION:

| | | |
|---|---|---|
| 1 | PRE-TAX PRODUCTION INCOME | 100.0000 |
| 2 | COLLECTIBLE ACCOUNTS EXPENSE (0.24%) | 0.2400 |
| 3 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 4 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 99.6100 |
| 5 | LESS: STATE 199 DEDUCTION | 5.6372 |
| 6 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 93.9728 |
| 7 | STATE INCOME TAX RATE | 6.0000 |
| 8 | STATE INCOME TAX EXPENSE (LINE 6 X LINE 7) | 5.6384 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Estimated Property Taxes**
**Associated with Big Sandy Plant Pollution Control Facilities**

| Line No. (1) | Description (2) | Installed Costs (3) |
|---|---|---|
| 1 | DFGD Installed Capital at BS#2 (LPM-2, L1, C3) | $ - |
| 2 | Less: Accumulated Depreciation (LPM-2, L2, C3) | $ - |
| 3 | Net Plant Investment Assessed Value (L1 - L2) | $ - |
| 4 | Property Tax Rate | 0.15% |
| 5 | Increase in Property Tax (L3 X L4) | $ - |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Revenue Allocation Percentages**
**12-months ended August 31, 2011**

| Line No. (1) | Month (2) | KY Retail Jurisdiction (3) | FERC Wholesale (4) | Total KY Full Requirement Revenues (5)=(3)+(4) | Associated Utilities (6) | Non-Associated Utilities (7) | Total Rev for Surcharge Purposes (8)=(5)+(6)+(7) |
|---|---|---|---|---|---|---|---|
| 1 | September 2010 | $ 40,903,323 | $ 495,401 | $ 41,398,724 | $ 6,337,586 | $ 5,270,698 | $ 53,007,008 |
| 2 | October 2010 | $ 39,106,852 | $ 386,166 | $ 39,493,018 | $ 6,800,222 | $ 4,192,455 | $ 50,485,695 |
| 3 | November 2010 | $ 40,488,923 | $ 410,737 | $ 40,899,660 | $ 4,661,941 | $ 3,884,802 | $ 49,446,403 |
| 4 | December 2010 | $ 56,106,329 | $ 639,267 | $ 56,745,596 | $ 2,533,257 | $ 5,561,003 | $ 64,839,856 |
| 5 | January 2011 | $ 65,952,346 | $ 603,837 | $ 66,556,183 | $ 5,085,114 | $ 6,199,202 | $ 77,840,499 |
| 6 | February 2011 | $ 58,755,458 | $ 529,203 | $ 59,284,661 | $ 4,720,801 | $ 5,024,766 | $ 69,030,228 |
| 7 | March 2011 | $ 44,307,469 | $ 459,737 | $ 44,767,206 | $ 5,691,192 | $ 5,445,168 | $ 55,903,566 |
| 8 | April 2011 | $ 42,540,201 | $ 427,836 | $ 42,968,037 | $ 4,530,299 | $ 6,578,375 | $ 54,076,711 |
| 9 | May 2011 | $ 40,424,987 | $ 784,420 | $ 41,209,407 | $ 6,373,043 | $ 4,536,768 | $ 52,119,218 |
| 10 | June 2011 | $ 46,953,714 | $ 462,091 | $ 47,415,805 | $ 6,987,065 | $ 10,149,681 | $ 64,552,551 |
| 11 | July 2011 | $ 46,534,433 | $ 530,987 | $ 47,065,420 | $ 8,031,761 | $ 13,076,250 | $ 68,173,431 |
| 12 | August 2011 | $ 47,519,210 | $ 525,287 | $ 48,044,497 | $ 5,676,708 | $ 8,673,690 | $ 62,394,895 |
| 13 | 12-month Total | **$ 569,593,245** | $ 6,254,969 | $ 575,848,214 | $ 67,428,989 | $ 78,592,858 | $ 721,870,061 |
| 14 | Rev. Alloc. %s | **98.91%** | 1.09% | 100.00% | | | |
| 15 | Rev. Alloc. %s | **78.91%** | 0.87% | | 9.34% | 10.88% | 100.00% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP Pool Surplus Companies**
**Net Investment in**
**Environmental Facilities**

| Line No. (1) | Generating Unit (2) | Description of Environmental Facilities (3) | In-Service Date (4) | Cost of Environmental Facilities (5) | Less Original Facility Cost in Base Rates (6) | OPCo or I&M Percentage (7) | I&M's Environmental Investment (8)=[(5)-(6)]x(7) | OPCo's Environmental Investment (9)=[(5)-(6)]x(7) |
|---|---|---|---|---|---|---|---|---|
| | **Surplus Companies** | | | | | | | |
| 1 | Amos Unit 3 | Dry Fly Ash Disposal Conversion | 8/3/2010 | $ 58,717,352 | $ - | 66.67% | | $ 39,146,859 |
| 2 | Amos Common | Hg In-Pond Chemical Treatment | 7/15/2011 | $ 2,484,972 | $ - | 29.89% | | $ 742,758 |
| 3 | Amos Common | FGD Hg Waste Water Treatment | 4th Qtr 2012 | $ 12,827,197 | $ - | 29.89% | | $ 3,834,049 |
| 4 | Amos Common | Ash Pond Discharge Diffuser | 4th Qtr 2012 | $ 2,447,711 | $ - | 29.89% | | $ 731,621 |
| 5 | Amos Subtotal | Sum of Lines 1 to 4 | | $ 76,477,232 | $ - | | | $ 44,455,287 |
| 6 | Rockport Units 1 & 2 | Activated Carbon Injection (ACI) | 9/28/2009 | $ 23,405,482 | $ - | 85% | $ 19,894,660 | |
| 7 | Tanners Creek Units 1, 2, & 3 | Selective Non-Catalytic Reduction (SNCR) System | 12/11/2009 | $ 14,152,243 | $ - | 100% | $ 14,152,243 | $ - |
| 8 | Total Surplus Companies | L5 + L6 + L7 | | $ 114,034,957 | $ - | | $ 34,046,903 | $ 44,455,287 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool**
**Capacity Equalization Settlement for**
**August 2011**

## Calculation of Member Capacity Surplus / (Deficit) (kW)

| Line No. | Generating Company | Internal (MLR) Max 60-Minute Integrated Demand in 12 ME 8/31/11 (MW) | Member Load Ratio | Member Primary Capacity (kW) | Primary Capacity Reservation (kW) | Capacity Surplus (Deficit) (kW) |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6)=Total kW x (4) | (7)=(5)-(6) |
| 1 | APCo | 7,542 | 31.181% | 6,377,000 | 8,293,500 | (1,916,500) |
| 2 | KPCo | 1,596 | 6.598% | 1,471,000 | 1,754,900 | (283,900) |
| 3 | I&M | 4,837 | 19.998% | 5,428,000 | 5,319,100 | 108,900 |
| 4 | OPCo | 5,544 | 22.920% | 8,465,000 | 6,096,300 | 2,368,700 |
| 5 | CSP | 4,669 | 19.303% | 4,857,000 | 5,134,200 | (277,200) |
| 6 | Total | 24,188 | 100.000% | 26,598,000 | 26,598,000 | - |

## Calculation of Member Capacity Settlement

| Line No. | Generating Company | Capacity Surplus (Deficit) (kW) | Capacity Rate ($/kW) | Estimated Credit (Charge) ($) |
|---|---|---|---|---|
| | (2) | (7)=(5)-(6) | (8)=(9) / (7) | (9) |
| 7 | APCo | (1,916,500) | $13.60 | (26,070,502) |
| 8 | KPCo | (283,900) | $13.60 | (3,861,944) |
| 9 | I&M | 108,900 | $14.76 | 1,607,364 |
| 10 | OPCo | 2,368,700 | $13.55 | 32,095,885 |
| 11 | CSP | (277,200) | $13.60 | (3,770,803) |
| 12 | Total | - | | $ - |

Equalization capacity rate (The is the average $/kW rate paid by deficit members.): **13.6032**

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool**
**Capacity Rate Calculations for**
**Surplus Member Companies**
**August 2011**

| Line No. | Description | Formula | Units | I&M | OPCo | |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | |
| | Primary Capacity Investment Rate: | | | | | |
| 1 | Steam Production Plant as of 12-mo ended 12/31/10 | | ($) | 4,040,461,038 | 6,654,950,782 | |
| 2 | Steam Capacity as of 12-mo ended 12/31/10 | | (kW) | 5,414,000 | 8,440,000 | |
| 3 | Average Cost of Investment | L1 / L2 | ($/kW) | $746.30 | $788.50 | |
| 4 | Carrying Charge (16.44% / 12 months) | | ($/kW/Month) | 0.0137 | 0.0137 | |
| 5 | Primary Capacity Investment Rate | L3 X L4 | | $10.22 | $10.80 | |
| | Monthly Fixed Operating Rate: | | | | | |
| 6 | Steam Plant Operation Expense (less: fuel) | | ($) | 18,440,310 | 17,311,512 | |
| 7 | 1/2 Maintenance Expense | | ($) | 6,117,393 | 5,856,913 | |
| 8 | Subtotal - Fixed Operating Expense | L6 + L7 | ($) | 24,557,703 | 23,168,425 | |
| 9 | Steam Capability | L2 | (kW) | 5,414,000 | 8,440,000 | |
| 10 | Fixed Operating Rate | L8 / L9 | ($/kW) | $4.54 | $2.75 | |
| 11 | **Capacity Rate** | L5 + L10 | ($/kW) | $14.76 | $13.55 | |
| | Calculate AEP Pool Average Capacity Rate: | | | | | |
| 12 | Surplus Capacity | Exhibit LPM-7, C7, L3 or L4 | (kW) | 108,900 | 2,368,700 | |
| 13 | Member's Percent of Pool's Total Surplus | | (%) | 4.40% | 95.60% | |
| 14 | Surplus Member's Capacity Rate | L11 | ($/kW) | $14.76 | $13.55 | |
| 15 | Surpl. Memb. CAP Rate Recv. From Deficit Memb. | L13 X L14 | ($/kW) | $0.65 | $12.95 | |
| 16 | **AEP Pool's Average Capacity Rate** | | ($/kW) | | | $13.60 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool Monthly**
**Environmental Capacity Costs**

| Line No. | Description | Exhibit or Formula | I&M | OPCo | KPCo |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | Net Cost of Environmental Facilities Investment Installed | Exhibit LPM-6, L8 | $ 34,046,903 | $ 44,455,287 | |
| 2 | Installed Capacity (kW) | Exhibit LPM-8, L2 | 5,414,000 | 8,440,000 | |
| 3 | Weighted Average Installed Cost ($/kW) | L1 / L2 | $6.29 | $5.27 | |
| 4 | Monthly Return on Investment | Exhibit LPM-8, L4 | 0.0137 | 0.0137 | |
| 5 | Envir. Member Capacity Investment Rate ($/kW/Mo.) | L3 X L4 | $0.09 | $0.07 | |
| | **Plus: Operations & 1/2 Maintenance** | | | | |
| 6 | OPCo's Amos Unit No. 3 & Common Plant | Exhibit LPM-10, L21, C14 | | $0.01 | |
| 7 | I&M's: Rockport & Tanners Creek Units | Exhibit LPM-11, L15, C14 | $0.06 | | |
| 8 | Subtotal | L5 + L6 + L7 | $0.15 | $0.08 | |
| 9 | Surplus Company Weighting | Exhibit LPM-8, L13 | 4.40% | 95.60% | |
| 10 | Surplus Capacity | L8 X L9 | $0.01 | $0.08 | $0.09 |
| 11 | KPCo's Pool Capacity Deficit | Exhibit LPM-7, L2, C7 | 283,900 | 283,900 | 283,900 |
| 12 | KPCo's Monthly Envir. Pool Capacity Charge | L10 X L11 | $ 2,839 | $ 22,712 | $ 25,551 |
| 13 | Number of months | | | | 12 |
| 14 | **Annual Effect of Envir. Pool Capacity Charge** | L12 X L13 | | | $ 306,612 |

Kentucky Power Company
Pollution Control Environmental Facilities
Ohio Power Company

| Line No. | Description | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 | Month 9 | Month 10 | Month 11 | Month 12 | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| | Operations: | | | | | | | | | | | | | |
| 1 | Amos Unit #3 Dry Fly Ash Disposal Conversion | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $36,500.00 |
| 2 | Amos Common - FGD Hg Waste Water Treatment | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $ 86,125 | $1,033,500.00 |
| 3 | Amos Common - Hg In-Pond Chemical Treatment | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $1,657,500.00 |
| 4 | Amos Common - Ash Pond Discharge Diffuser | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 5 | Total Common Plant Operations (L2 + L3 + L4) | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $ 224,250 | $2,691,000.00 |
| | Maintenance: | | | | | | | | | | | | | |
| 6 | Amos Unit #3 Dry Fly Ash Disposal Conversion | $ 3,042 | $ 3,042 | $ 2,867 | $ 762 | $ 20,802 | $ 1,706 | $ 4,042 | $ 3,896 | $ (4,704) | $ 22,701 | $ 4,431 | $ 877 | $63,463.44 |
| 7 | 1/2 Amos Unit #3 Maintenance (L6 / 2) | $ 1,521 | $ 1,521 | $ 1,433 | $ 381 | $ 10,401 | $ 853 | $ 2,021 | $ 1,948 | $ (2,352) | $ 11,350 | $ 2,216 | $ 439 | $31,732.00 |
| 8 | Amos Common - FGD Hg Waste Water Treatment | $ 2,208 | $ 2,208 | $ 2,209 | $ 2,208 | $ 2,208 | $ 2,209 | $ 2,208 | $ 2,208 | $ 2,209 | $ 2,208 | $ 2,208 | $ 2,209 | $26,500.00 |
| 9 | Amos Common - Hg In-Pond Chemical Treatment | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $42,500.00 |
| 10 | Amos Common - Ash Pond Discharge Diffuser | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 11 | Total Common Plant Maintenance (L8 + L9 + L10) | $ 5,750 | $ 10,313 | $ 10,050 | $ 6,893 | $ 36,953 | $ 8,309 | $ 11,813 | $ 11,594 | $ (1,306) | $ 39,801 | $ 12,397 | $ 7,066 | $159,632.44 |
| 12 | 1/2 Common Plant Maintenance (L11 / 2) | $ 2,875 | $ 5,157 | $ 5,025 | $ 3,446 | $ 18,477 | $ 4,154 | $ 5,906 | $ 5,797 | $ (653) | $ 19,900 | $ 6,199 | $ 3,533 | $79,816.00 |
| 13 | Total Amos Unit #3 Fixed O&M (L1 + L7) | $ 4,563 | $ 4,563 | $ 4,474 | $ 3,423 | $ 13,443 | $ 3,894 | $ 5,063 | $ 4,990 | $ 689 | $ 14,392 | $ 5,258 | $ 3,480 | $68,232.00 |
| 14 | OPCo's % Ownership (Exh. LPM-6, L1, C7) | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | |
| 15 | OPCo's Share of Amos #3 Fixed O&M (L13 X L14) | $ 3,042 | $ 3,042 | $ 2,983 | $ 2,282 | $ 8,962 | $ 2,596 | $ 3,376 | $ 3,327 | $ 459 | $ 9,595 | $ 3,506 | $ 2,320 | $45,490.00 |
| 16 | Total Amos Common Plant Fixed O&M (L5 + L12) | $ 227,125 | $ 229,407 | $ 229,275 | $ 227,696 | $ 242,727 | $ 228,404 | $ 230,156 | $ 230,047 | $ 223,597 | $ 244,150 | $ 230,449 | $ 227,783 | $2,770,816.00 |
| 17 | OPCo's % Ownership (Exh. LPM-6, L2, C7) | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | |
| 18 | OPCo's Share of Common Pl Fixed O&M (L16 X L17) | $ 67,888 | $ 68,570 | $ 68,530 | $ 68,058 | $ 72,551 | $ 68,270 | $ 68,794 | $ 68,761 | $ 66,833 | $ 72,976 | $ 68,881 | $ 68,084 | $828,196.00 |
| 19 | OPCo's Share of Fixed O&M (L15 + L18) | $ 70,930 | $ 71,612 | $ 71,513 | $ 70,340 | $ 81,513 | $ 70,866 | $ 72,170 | $ 72,088 | $ 67,292 | $ 82,571 | $ 72,387 | $ 70,404 | $873,686.00 |
| 20 | OPCo Steam Capacity (kW) (Exh LPM-9, L2, C5) | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | |
| 21 | OPCo Rate ($/kW) (L19 / L20) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | |
| 22 | OPCo Surplus Weighting (%) (Exh LPM-9, L9, C5) | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | |
| 23 | Effect on Wt. Ave. Rate ($/kW) (L21 X L22) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | |
| 24 | Portion of Weighted Average Capacity Rate Attributed to OPCo Facilities (L23) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | |
| 25 | KPCo's Pool Capacity Deficit (Exh. LPM-7, L2, C7) | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 |
| 26 | KPCo's Share of OPCo (L24 X L25) | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $34,068 |

Kentucky Power Company
Pollution Control Environmental Facilities
Indiana and Michigan Power Company

| Line No. (1) | Description (2) | Month 1 (3) | Month 2 (4) | Month 3 (5) | Month 4 (6) | Month 5 (7) | Month 6 (8) | Month 7 (9) | Month 8 (10) | Month 9 (11) | Month 10 (12) | Month 11 (13) | Month 12 (14) | Total (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Operations: | | | | | | | | | | | | | |
| 1 | Rkpt1&2 Activated Carbon Injection (ACI) | $ 471,649 | $ 613,139 | $ 463,686 | $ 536,123 | $ 448,647 | $ 290,791 | $ 288,112 | $ 165,345 | $ 30,592 | $ 165,068 | $ 134,893 | $ 379,076 | $3,987,119.48 |
| 2 | TC 1, 2, &3 Selective Non-Catalytic Reduction (SNCR) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $945.14 |
| | Maintenance: | | | | | | | | | | | | | |
| 3 | Rkpt1&2 Activated Carbon Injection (ACI) | $ 2,314 | $ - | $ 558 | $ 1,349 | $ 650 | $ - | $ - | $ 4,047 | $ 8,642 | $ 32,485 | $ 23,769 | $ 279 | $74,093.50 |
| 4 | 1/2 Rockport Maintenance (L3 / 2) | $ 1,157 | $ - | $ 279 | $ 675 | $ 325 | $ - | $ - | $ 2,024 | $ 4,321 | $ 16,243 | $ 11,884 | $ 139 | $37,047.00 |
| 5 | TC 1, 2, &3 Selective Non-Catalytic Reduction (SNCR) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |
| 6 | 1/2 Tanners Creek Maintenance (L5 / 2) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |
| 7 | Total Rockport Fixed O&M (L1 + L4) | $ 472,806 | $ 613,139 | $ 463,965 | $ 536,798 | $ 448,972 | $ 290,791 | $ 288,112 | $ 167,369 | $ 34,913 | $ 181,311 | $ 146,777 | $ 379,215 | $4,024,166.48 |
| 8 | I&M's Percentage Ownership (Exh. LPM-6, L6, C7) | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | |
| 9 | I&M's Share of Rockport Fixed O&M (L7 X L8) | $ 401,885 | $ 521,168 | $ 394,370 | $ 456,278 | $ 381,626 | $ 247,172 | $ 244,895 | $ 142,264 | $ 29,676 | $ 154,114 | $ 124,761 | $ 322,333 | $3,420,542.00 |
| 10 | Total Tanners Creek Fixed O&M (L2 + L6) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $945.14 |
| 11 | I&M's Percentage Ownership (Exh. LPM-6, L7, C7) | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | |
| 12 | I&M's Share of TC Fixed O&M (L10 X L11) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $946.00 |
| 13 | I&M's Share of Fixed O&M (L9 + L12) | $ 403,120 | $ 521,194 | $ 393,978 | $ 456,246 | $ 381,631 | $ 247,180 | $ 244,879 | $ 142,284 | $ 29,702 | $ 154,071 | $ 124,763 | $ 322,440 | $3,421,488.00 |
| 14 | I&M Steam Capacity (kW) (Exh. LPM-9, L2, C4) | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | |
| 15 | Indiana Rate ($/kW) (L13 / L14) | $0.07 | $0.10 | $0.07 | $0.08 | $0.07 | $0.05 | $0.05 | $0.03 | $0.01 | $0.03 | $0.02 | $0.06 | |
| 16 | I&M Surplus Weighting (%) (Exh LPM-9, L9, C4) | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | |
| 17 | Effect on Wt. Ave. Rate ($/kW) (L15 X L16) | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | |
| 18 | Portion of Weighted Average Capacity Rate Attributed to I&M Environmental Controls | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | |
| 19 | KPCo's Pool Capacity Deficit (Exh. LPM-7, L2, C7) | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | |
| 20 | KPCo's Share: ACI & SNCR (L18 X L19) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Rockport Environmental Surcharge Calculations**
**Revenue Requirement**

| Line No. | Cost Component | Formula | Rockport Total |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 1 | Rockport #1 & #2 Activated Carbon Injection (ACI) | Exhibit LPM-6, L6, C5 | $23,405,482 |
| 2 | Less: Accumulated Depreciation | L1 X 3.52% | $823,873 |
| 3 | Less: Accumulated Deferred Income Tax | L1 X 1.3% | $304,271 |
| 4 | Total Rate Base | L1 - L2 - L3 | $22,277,338 |
| 5 | Weighted Average Cost of Capital for Aug. 2011 | Exhibit LPM-3, L5, C8 | 10.69% |
| 6 | Monthly Weighted Average Cost of Capital | L5 / 12 | 0.8908% |
| 7 | Monthly Return on Rate Base | L4 X L6 | $198,447 |
| | **Operating Expenses** | | |
| 8 | Monthly Depreciation Expense | L2 / 12 | $68,656 |
| 9 | Total Operating Expense | | $68,656 |
| 10 | Total Revenue Requirement Associated with Rockport ACI | L7 + L9 | $267,103 |
| 11 | KPCo's Percentage of Rockport's upgrades | 100% - Exhibit LPM-6, L6, C7 | 15% |
| 12 | KPCo's Portion of Rockport's upgrades | L10 X L11 | $40,065 |
| 13 | Annualize | | 12 |
| 14 | **Annualized Revenue Requirement** | L12 X L13 | **$ 480,780** |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**New Environmental Costs Associated with**
**Allowance Inventory**

| Line No. | Description | Formula | | KY Retail Rev Requirement |
|---|---|---|---|---|
| (1) | (2) | (3) | | (4) |
| 1 | Estimated Monthly CSAPR SO2 Allowance Inventory | KIUC 1-20 | $ | 425,976 |
| 2 | Estimated Monthly CSAPR NOx Allowance Inventory | KIUC 1-20 | $ | 2,053 |
| 3 | Estimated Monthly CSAPR SO2 Consumption Expense | L11 / 12 | $ | 517,667 |
| 4 | Estimated Monthly CSAPR NOx Consumption Expense | L12 / 12 | $ | (54,167) |
| 5 | Net Monthly Expenses (Consumption less Gains) | L3 + L4 | $ | 463,500 |
| 6 | Cash Working Capital Allowance (in accordance with ES FORM 3.13) | L5 / 8 | $ | 57,938 |
| 7 | Total Rate Base | L1 + L2 + L6 | $ | 485,967 |
| 8 | Annual Weighted Average Cost of Capital | Exhibit LPM-3, L5, C8 | | 10.69% |
| 9 | Return of Rate Base | L7 X L8 | $ | 51,950 |
| 10 | Estimated Monthly CSAPR SO2 Consumption Expense | Wohnhas testimony | $ | 6,212,000 |
| 11 | Estimated Monthly CSAPR NOx Consumption Expense | Wohnhas testimony | $ | (650,000) |
| 12 | Total Operating Expenses | L10 + L11 | $ | 5,562,000 |
| 13 | Total Revenue Requirement | L9 + L12 | $ | 5,613,950 |
| 14 | Annual Revenue Allocation Factor | Exhibit LPM-5, L15, C3 | | 78.91% |
| 15 | Subtotal | L13 X L14 | $ | 4,429,968 |
| 16 | KY Jurisdiction Revenue Allocation Factor | Exhibit LPM-5, L14, C3 | | 98.91% |
| 17 | Total KY Retail Revenue Requirement | L15 X L16 | $ | 4,381,681 |
| 18 | KY Jurisdiction 12-month Revenue | Exhibit LPM-5, L13, C3 | $ | 569,593,245 |
| 19 | Percent Change | L17 / L18 | | 0.77% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**New Environmental Costs**
**Effect on Residential Customers**

| Line No. | Description | Formula | Annual Amount | Percent Increase |
|---|---|---|---|---|
| (1) | (2) | (3) | (5) | (6) |
| 1 | Annual Effect of New Environmental Pool Capacity Charges | Exhibit LPM-9, L14 | $306,612 | |
| 2 | KPCo's Share of Rockport | Exhibit LPM-12, L14 | $480,780 | |
| 3 | Total Environmental Cost | L1 + L2 | $787,392 | |
| 4 | KPCo's Average Retail Allocation for 12 months ended August 2011 | Exhibit LPM-5, L.15, C3 | 78.91% | |
| 5 | Net Annual Impact on the Kentucky Retail Customers | L3 X L4 | $621,331 | 0.11% |
| 6 | KY Retail Allowances | Exhibit LPM-13, L17, C4 | $4,381,681 | 0.77% |
| 7 | KY Retail Revenue Requirement for Big Sandy Environmental Additions | Exhibit LPM-2, L15, C3 | $0 | 0.00% |
| 8 | Total Environmental Projects in this Filing | L5 + L6 + L7 | $5,003,012 | 0.88% |
| 9 | Billed Revenues for 12 months ended August 2011 | Exhibit LPM-5, L13, C3 | $569,593,245 | |
| 10 | Percent Increase | L8 / L9 | 0.88% | |
| | | **Usage in kWh:** | **1,000** | |
| 11 | Monthly Effect on a Residential Customers | | $ 0.86 | |
| 12 | Annualize | | 12 | |
| 13 | **Annual Effect on a Residential Customers** | L11 X L12 | $ 10.32 | |

Kentucky Power Company
New Environmental Costs
Effect on Residential Customer

| Typical Residential Bill - computed on average monthly kWh usage of: | | 1,000 kWh | | | |
|---|---|---|---|---|---|
| | Rate | Now | If Approved | Monthly Increase | Annual Increase |
| Service Charge ($/customer) | $8.00 | $ 8.00 | $ 8.00 | | |
| Energy Usage ($/kWh) | $0.0859 | $ 85.90 | $ 85.90 | | |
| Fuel Adjustment Charge for August 2011 ($/kWh) | ($0.0006513) | $ (0.65) | $ (0.65) | | |
| Capacity Charge ($/kWh) | $0.00097 | $ 0.97 | $ 0.97 | | |
| Demand-side Management ($/kWh) | $0.000774 | $ 0.77 | $ 0.77 | | |
| Home Energy Assistance Program ($/customer) | | $ 0.15 | $ 0.15 | | |
| Subtotal 1 | | $ 95.14 | $ 95.14 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 2.79 | $ 33.54 | $ 30.75 | |
| Subtotal 2 | | $ 97.93 | $ 128.68 | | |
| Monthly effect on a Residential Customer | | | | **$ 30.75** | $ 369.00 |
| **Percent Increase (As Filed)** | | | **31.40%** | | |
| Subtotal 1 | | $ 95.14 | $ 95.14 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 2.79 | $ 3.65 | $ 0.86 | |
| Subtotal 2 | | $ 97.93 | $ 98.79 | | |
| Monthly effect on a Residential Customer | | | | **$ 0.86** | $ 10.32 |
| **Percent Increase (Revised)** | | | **0.88%** | | |

| Typical Residential Bill - computed on average monthly kWh usage of: | | 1,376 kWh | | | |
|---|---|---|---|---|---|
| | Rate | Now | If Approved | Monthly Increase | Annual Increase |
| Service Charge ($/customer) | $8.00 | $ 8.00 | $ 8.00 | | |
| Energy Usage ($/kWh) | $0.0859 | $ 118.20 | $ 118.20 | | |
| Fuel Adjustment Charge for August 2011 ($/kWh) | ($0.0006513) | $ (0.90) | $ (0.90) | | |
| Capacity Charge ($/kWh) | $0.00097 | $ 1.33 | $ 1.33 | | |
| Demand-side Management ($/kWh) | $0.000774 | $ 1.07 | $ 1.07 | | |
| Home Energy Assistance Program ($/customer) | | $ 0.15 | $ 0.15 | | |
| Subtotal 1 | | $ 127.85 | $ 127.85 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 3.74 | $ 45.06 | $ 41.32 | |
| Subtotal 2 | | $ 131.59 | $ 172.91 | | |
| Monthly effect on a Residential Customer | | | | **$ 41.32** | $ 495.84 |
| **Percent Increase (As Filed)** | | | **31.40%** | | |
| Subtotal 1 | | $ 127.85 | $ 127.85 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 3.74 | $ 4.90 | $ 1.16 | |
| Subtotal 2 | | $ 131.59 | $ 132.75 | | |
| Monthly effect on a Residential Customer | | | | **$ 1.16** | $ 13.92 |
| **Percent Increase** | | | **0.88%** | | |

| | |
|---|---|
| Big Sandy Capital in $Ms | $ - |
| Rockport Capital in $Ms | $ 23 |
| Amos & Tanners Creek Pool Capital in $Ms | $ 91 |
| | $ 114 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Big Sandy Plant**
**Dry Flue Gas Desulfurization (DFGD)**

| Line No. (1) | Big Sandy Unit #2 Description (2) | Dry Flue Gas Desulfurization Unit (DFGD) (3) |
|---|---|---|
| | In-Service Date: Second Quarter of 2016 | |
| 1 | Total Capital Environmental Costs | $ - |
| 2 | Preliminary Scrubber Analysis 2004-2006 | $ - |
| 3 | Capital Costs Not Associated with CAA | $ - |
| 4 | Capital Booked in Last Base Case | $ - |
| 5 | KPCo's Net In-Service Investment (L1 + L2 - L3 - L4) | $ - |
| | | |
| 6 | Annual Operation Expense | $ - |
| 7 | Annual Maintenance Expense | $ - |
| 8 | Total Operation & Maintenance Expense | $ - |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Annual Revenue Requirement**
**Associated with Big Sandy Plant**

| Line No. (1) | Description (2) | Capital Costs of KY Retail Revenues (3) |
|---|---|---|
| | **Return on Rate Base** | |
| 1 | Utility Plant Installed Net (Exhibit LPM-1, L5) | $ - |
| 2 | Less: Accumulated Depreciation | $ - |
| 3 | Less: Accumulated Deferred Income Taxes | $ - |
| 4 | Net Utility Plant (L1- L2 - L3) | $ - |
| 5 | Annual Weighted Average Cost of Capital (Exhibit LPM-3, L5, C8) | 10.69% |
| 6 | Annual Return on Rate Base (L4 X L5) | $ - |
| | **Operating Expenses** | |
| 7 | Annual Depreciation (L2) | $ - |
| 8 | Annual Property Tax Expense (Exhibit LPM-4, L5) | $ - |
| 9 | Annual Non-Fuel O&M Expense (Exhibit LPM-1, L8) | $ - |
| 10 | Total Operating Expenses (L7 + L8 + L9) | $ - |
| 11 | Total Revenue Requirement Associated with BS Env. Facilities (L6 + L10) | $ - |
| 12 | Annual Revenue Allocation Factor (Exhibit LPM-5, L15, C3 or C6) | 78.91% |
| 13 | Subtotal (L11 X L12) | $ - |
| 14 | KY Jurisdiction Revenue Allocation Factor (Exhibit LPM-5, L14, C3) | |
| 15 | Total KY Retail Revenue Requirement (L13 X L14) | $ - |
| 16 | KY Jurisdiction 12-month Revenue (Exhibit LPM-5, L13, C3) | $ 569,593,245 |
| 17 | Percent Change (L15 / L16) | 0.00% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Weighted Cost of Capital Calculations for August 2011**

| Line No. (1) | Description (2) | Capital Balance as of April 30, 2010 [2] (3) | Capital Structure (4) | Cost of Capital Rates (5) | WACC Net of Tax (6) | Gross Revenue Conversion Factor (7) | WACC Pre Tax (8) |
|---|---|---|---|---|---|---|---|
| 1 | Long-term Debt | $ 550,000,000 | 51.941% | 6.48% | 3.37% | | 3.37% |
| 2 | Short-term Debt | $ - | 0.000% | 0.83% | 0.00% | | 0.00% |
| 3 | A/R Financing | $ 43,588,933 | 4.116% | 1.22% | 0.05% | | 0.05% |
| 4 | Common Equity | $ 465,314,088 | 43.943% | **10.50%** [1] | 4.61% | 1.5762 [3] | 7.27% |
| 5 | Total | $ 1,058,903,021 | 100.000% | | 8.03% | | 10.69% |

[1] Weighted Average Cost of Capital (WACC) ROR on Common Equity per Case No. 2010-00020.
[2] WACC Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.
[3] Gross Revenue Conversion Factor Calculations per Order in Case No. 2010-00318:

| | | |
|---|---|---|
| 1 | OPERATING REVENUE | 100.0000 |
| 2 | UNCOLLECTIBLE ACCOUNTS EXPENSE (0.24%) | 0.2400 |
| 3 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 4 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 99.6100 |
| 5 | STATE INCOME TAX EXPENSE, NET OF 199 DEDUCTION (SEE BELOW) | 5.6384 |
| 6 | FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 93.9716 |
| 7 | 199 DEDUCTION PHASE-IN | 5.6372 |
| 8 | FEDERAL TAXABLE PRODUCTION INCOME | 88.3344 |
| 9 | FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%) | 30.9171 |
| 10 | AFTER-TAX PRODUCTION INCOME | 57.4173 |
| 11 | GROSS-UP FACTOR FOR PRODUCTION INCOME: | |
| 12 | AFTER-TAX PRODUCTION INCOME | 57.4173 |
| 13 | 199 DEDUCTION PHASE-IN | 5.6372 |
| 14 | UNCOLLECTIBLE ACCOUNTS EXPENSE | 0.2400 |
| 15 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 16 | TOTAL GROSS-UP FACTOR FOR PRODUCTION INCOME (ROUNDED) | 63.4445 |
| 17 | BLENDED FEDERAL AND STATE TAX RATE: | |
| 18 | FEDERAL (LINE 9) | 30.9171 |
| 19 | STATE (LINE 5) | 5.6384 |
| 20 | BLENDED TAX RATE | 36.5555 |
| 21 | GROSS REVENUE CONVERSION FACTOR (100 / Line 16) | 1.5762 |

STATE INCOME TAX CALCULATION:

| | | |
|---|---|---|
| 1 | PRE-TAX PRODUCTION INCOME | 100.0000 |
| 2 | COLLECTIBLE ACCOUNTS EXPENSE (0.24%) | 0.2400 |
| 3 | Kentucky Public Service Commission Assessment (0.15%) | 0.1500 |
| 4 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 99.6100 |
| 5 | LESS: STATE 199 DEDUCTION | 5.6372 |
| 6 | STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION | 93.9728 |
| 7 | STATE INCOME TAX RATE | 6.0000 |
| 8 | STATE INCOME TAX EXPENSE (LINE 6 X LINE 7) | 5.6384 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Estimated Property Taxes**
**Associated with Big Sandy Plant Pollution Control Facilities**

| Line No. (1) | Description (2) | Installed Costs (3) |
|---|---|---|
| 1 | DFGD Installed Capital at BS#2 (LPM-2, L1, C3) | $ - |
| 2 | Less: Accumulated Depreciation (LPM-2, L2, C3) | $ - |
| 3 | Net Plant Investment Assessed Value (L1 - L2) | $ - |
| 4 | Property Tax Rate | 0.15% |
| 5 | Increase in Property Tax (L3 X L4) | $ - |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Revenue Allocation Percentages**
**12-months ended August 31, 2011**

| Line No. (1) | Month (2) | KY Retail Jurisdiction (3) | FERC Wholesale (4) | Total KY Full Requirement Revenues (5)=(3)+(4) | Associated Utilities (6) | Non-Associated Utilities (7) | Total Rev for Surcharge Purposes (8)=(5)+(6)+(7) |
|---|---|---|---|---|---|---|---|
| 1 | September 2010 | $ 40,903,323 | $ 495,401 | $ 41,398,724 | $ 6,337,586 | $ 5,270,698 | $ 53,007,008 |
| 2 | October 2010 | $ 39,106,852 | $ 386,166 | $ 39,493,018 | $ 6,800,222 | $ 4,192,455 | $ 50,485,695 |
| 3 | November 2010 | $ 40,488,923 | $ 410,737 | $ 40,899,660 | $ 4,661,941 | $ 3,884,802 | $ 49,446,403 |
| 4 | December 2010 | $ 56,106,329 | $ 639,267 | $ 56,745,596 | $ 2,533,257 | $ 5,561,003 | $ 64,839,856 |
| 5 | January 2011 | $ 65,952,346 | $ 603,837 | $ 66,556,183 | $ 5,085,114 | $ 6,199,202 | $ 77,840,499 |
| 6 | February 2011 | $ 58,755,458 | $ 529,203 | $ 59,284,661 | $ 4,720,801 | $ 5,024,766 | $ 69,030,228 |
| 7 | March 2011 | $ 44,307,469 | $ 459,737 | $ 44,767,206 | $ 5,691,192 | $ 5,445,168 | $ 55,903,566 |
| 8 | April 2011 | $ 42,540,201 | $ 427,836 | $ 42,968,037 | $ 4,530,299 | $ 6,578,375 | $ 54,076,711 |
| 9 | May 2011 | $ 40,424,987 | $ 784,420 | $ 41,209,407 | $ 6,373,043 | $ 4,536,768 | $ 52,119,218 |
| 10 | June 2011 | $ 46,953,714 | $ 462,091 | $ 47,415,805 | $ 6,987,065 | $ 10,149,681 | $ 64,552,551 |
| 11 | July 2011 | $ 46,534,433 | $ 530,987 | $ 47,065,420 | $ 8,031,761 | $ 13,076,250 | $ 68,173,431 |
| 12 | August 2011 | $ 47,519,210 | $ 525,287 | $ 48,044,497 | $ 5,676,708 | $ 8,673,690 | $ 62,394,895 |
| 13 | 12-month Total | **$ 569,593,245** | $ 6,254,969 | $ 575,848,214 | $ 67,428,989 | $ 78,592,858 | $ 721,870,061 |
| 14 | Rev. Alloc. %s | **98.91%** | 1.09% | 100.00% | | | |
| 15 | Rev. Alloc. %s | **78.91%** | 0.87% | | 9.34% | 10.88% | 100.00% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP Pool Surplus Companies**
**Net Investment in**
**Environmental Facilities**

| Line No. (1) | Generating Unit (2) | Description of Environmental Facilities (3) | In-Service Date (4) | Cost of Environmental Facilities (5) | Less Original Facility Cost in Base Rates (6) | OPCo or I&M Percentage (7) | I&M's Environmental Investment (8)=[(5)-(6)]x(7) | OPCo's Environmental Investment (9)=[(5)-(6)]x(7) |
|---|---|---|---|---|---|---|---|---|
| | **Surplus Companies** | | | | | | | |
| 1 | Amos Unit 3 | Dry Fly Ash Disposal Conversion | 8/3/2010 | $ 58,717,352 | $ - | 66.67% | | $ 39,146,859 |
| 2 | Amos Common | Hg In-Pond Chemical Treatment | 7/15/2011 | $ 2,484,972 | $ - | 29.89% | | $ 742,758 |
| 3 | Amos Common | FGD Hg Waste Water Treatment | 4th Qtr 2012 | $ - | $ - | 29.89% | | $ - |
| 4 | Amos Common | Ash Pond Discharge Diffuser | 4th Qtr 2012 | $ - | $ - | 29.89% | | $ - |
| 5 | Amos Subtotal | Sum of Lines 1 to 4 | | $ 61,202,324 | $ - | | | $ 39,889,617 |
| 6 | Rockport Units 1 & 2 | Activated Carbon Injection (ACI) | 9/28/2009 | $ 23,405,482 | $ - | 85% | $ 19,894,660 | |
| 7 | Tanners Creek Units 1, 2, & 3 | Selective Non-Catalytic Reduction (SNCR) System | 12/11/2009 | $ 14,152,243 | $ - | 100% | $ 14,152,243 | $ - |
| 8 | Total Surplus Companies | L5 + L6 + L7 | | $ 98,760,049 | $ - | | $ 34,046,903 | $ 39,889,617 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool**
**Capacity Equalization Settlement for**
**August 2011**

**Calculation of Member Capacity Surplus / (Deficit) (kW)**

| Line No. | Generating Company | Internal (MLR) Max 60-Minute Integrated Demand in 12 ME 8/31/11 (MW) | Member Load Ratio | Member Primary Capacity (kW) | Primary Capacity Reservation (kW) | Capacity Surplus (Deficit) (kW) |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6)=Total kW x (4) | (7)=(5)-(6) |
| 1 | APCo | 7,542 | 31.181% | 6,377,000 | 8,293,500 | (1,916,500) |
| 2 | KPCo | 1,596 | 6.598% | 1,471,000 | 1,754,900 | (283,900) |
| 3 | I&M | 4,837 | 19.998% | 5,428,000 | 5,319,100 | 108,900 |
| 4 | OPCo | 5,544 | 22.920% | 8,465,000 | 6,096,300 | 2,368,700 |
| 5 | CSP | 4,669 | 19.303% | 4,857,000 | 5,134,200 | (277,200) |
| 6 | Total | 24,188 | 100.000% | 26,598,000 | 26,598,000 | - |

**Calculation of Member Capacity Settlement**

| Line No. | Generating Company | Capacity Surplus (Deficit) (kW) | Capacity Rate ($/kW) | Estimated Credit (Charge) ($) |
|---|---|---|---|---|
| | (2) | (7)=(5)-(6) | (8)=(9) / (7) | (9) |
| 7 | APCo | (1,916,500) | $13.60 | (26,070,502) |
| 8 | KPCo | (283,900) | $13.60 | (3,861,944) |
| 9 | I&M | 108,900 | $14.76 | 1,607,364 |
| 10 | OPCo | 2,368,700 | $13.55 | 32,095,885 |
| 11 | CSP | (277,200) | $13.60 | (3,770,803) |
| 12 | Total | - | | $ - |

Equalization capacity rate (The is the average $/kW rate paid by deficit members.): **13.6032**

Revised Exhibit LPM-7

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool**
**Capacity Rate Calculations for**
**Surplus Member Companies**
**August 2011**

| Line No. | Description | Formula | Units | I&M | OPCo | |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | |
| | Primary Capacity Investment Rate: | | | | | |
| 1 | Steam Production Plant as of 12-mo ended 12/31/10 | | ($) | 4,040,461,038 | 6,654,950,782 | |
| 2 | Steam Capacity as of 12-mo ended 12/31/10 | | (kW) | 5,414,000 | 8,440,000 | |
| 3 | Average Cost of Investment | L1 / L2 | ($/kW) | $746.30 | $788.50 | |
| 4 | Carrying Charge (16.44% / 12 months) | | ($/kW/Month) | 0.0137 | 0.0137 | |
| 5 | Primary Capacity Investment Rate | L3 X L4 | | $10.22 | $10.80 | |
| | Monthly Fixed Operating Rate: | | | | | |
| 6 | Steam Plant Operation Expense (less: fuel) | | ($) | 18,440,310 | 17,311,512 | |
| 7 | 1/2 Maintenance Expense | | ($) | 6,117,393 | 5,856,913 | |
| 8 | Subtotal - Fixed Operating Expense | L6 + L7 | ($) | 24,557,703 | 23,168,425 | |
| 9 | Steam Capability | L2 | (kW) | 5,414,000 | 8,440,000 | |
| 10 | Fixed Operating Rate | L8 / L9 | ($/kW) | $4.54 | $2.75 | |
| 11 | **Capacity Rate** | L5 + L10 | ($/kW) | $14.76 | $13.55 | |
| | Calculate AEP Pool Average Capacity Rate: | | | | | |
| 12 | Surplus Capacity | Exhibit LPM-7, C7, L3 or L4 | (kW) | 108,900 | 2,368,700 | |
| 13 | Member's Percent of Pool's Total Surplus | | (%) | 4.40% | 95.60% | |
| 14 | Surplus Member's Capacity Rate | L11 | ($/kW) | $14.76 | $13.55 | |
| 15 | Surpl. Memb. CAP Rate Recv. From Deficit Memb. | L13 X L14 | ($/kW) | $0.65 | $12.95 | |
| 16 | **AEP Pool's Average Capacity Rate** | | ($/kW) | | | $13.60 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**AEP System Pool Monthly**
**Environmental Capacity Costs**

| Line No. | Description | Exhibit or Formula | I&M | OPCo | KPCo |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | Net Cost of Environmental Facilities Investment Installed | Exhibit LPM-6, L8 | $ 34,046,903 | $ 39,889,617 | |
| 2 | Installed Capacity (kW) | Exhibit LPM-8, L2 | 5,414,000 | 8,440,000 | |
| 3 | Weighted Average Installed Cost ($/kW) | L1 / L2 | $6.29 | $4.73 | |
| 4 | Monthly Return on Investment | Exhibit LPM-8, L4 | 0.0137 | 0.0137 | |
| 5 | Envir. Member Capacity Investment Rate ($/kW/Mo.) | L3 X L4 | $0.09 | $0.06 | |
| | **Plus: Operations & 1/2 Maintenance** | | | | |
| 6 | OPCo's Amos Unit No. 3 & Common Plant | Exhibit LPM-10, L21, C14 | | $0.01 | |
| 7 | I&M's: Rockport & Tanners Creek Units | Exhibit LPM-11, L15, C14 | $0.06 | | |
| 8 | Subtotal | L5 + L6 + L7 | $0.15 | $0.07 | |
| 9 | Surplus Company Weighting | Exhibit LPM-8, L13 | 4.40% | 95.60% | |
| 10 | Surplus Capacity | L8 X L9 | $0.01 | $0.07 | $0.08 |
| 11 | KPCo's Pool Capacity Deficit | Exhibit LPM-7, L2, C7 | 283,900 | 283,900 | 283,900 |
| 12 | KPCo's Monthly Envir. Pool Capacity Charge | L10 X L11 | $ 2,839 | $ 19,873 | $ 22,712 |
| 13 | Number of months | | | | 12 |
| 14 | **Annual Effect of Envir. Pool Capacity Charge** | L12 X L13 | | | $ 272,544 |

Kentucky Power Company
Pollution Control Environmental Facilities
Ohio Power Company

| Line No. | Description | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 | Month 9 | Month 10 | Month 11 | Month 12 | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| | **Operations:** | | | | | | | | | | | | | |
| 1 | Amos Unit #3 Dry Fly Ash Disposal Conversion | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $ 3,042 | $ 3,042 | $ 3,041 | $36,500.00 |
| 2 | Amos Common - FGD Hg Waste Water Treatment | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 3 | Amos Common - Hg In-Pond Chemical Treatment | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $1,657,500.00 |
| 4 | Amos Common - Ash Pond Discharge Diffuser | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 5 | Total Common Plant Operations (L2 + L3 + L4) | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $ 138,125 | $1,657,500.00 |
| | **Maintenance:** | | | | | | | | | | | | | |
| 6 | Amos Unit #3 Dry Fly Ash Disposal Conversion | $ 3,042 | $ 3,042 | $ 2,867 | $ 762 | $ 20,802 | $ 1,706 | $ 4,042 | $ 3,896 | $ (4,704) | $ 22,701 | $ 4,431 | $ 877 | $63,463.44 |
| 7 | 1/2 Amos Unit #3 Maintenance (L6 / 2) | $ 1,521 | $ 1,521 | $ 1,433 | $ 381 | $ 10,401 | $ 853 | $ 2,021 | $ 1,948 | $ (2,352) | $ 11,350 | $ 2,216 | $ 439 | $31,732.00 |
| 8 | Amos Common - FGD Hg Waste Water Treatment | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 9 | Amos Common - Hg In-Pond Chemical Treatment | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $ 3,542 | $ 3,542 | $ 3,541 | $42,500.00 |
| 10 | Amos Common - Ash Pond Discharge Diffuser | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0.00 |
| 11 | Total Common Plant Maintenance (L8 + L9 + L10) | $ 3,542 | $ 8,105 | $ 7,841 | $ 4,685 | $ 34,745 | $ 6,100 | $ 9,605 | $ 9,386 | $ (3,515) | $ 37,593 | $ 10,189 | $ 4,857 | $133,132.44 |
| 12 | 1/2 Common Plant Maintenance (L11 / 2) | $ 1,771 | $ 4,053 | $ 3,920 | $ 2,342 | $ 17,373 | $ 3,050 | $ 4,802 | $ 4,693 | $ (1,758) | $ 18,796 | $ 5,095 | $ 2,429 | $66,566.00 |
| 13 | Total Amos Unit #3 Fixed O&M (L1 + L7) | $ 4,563 | $ 4,563 | $ 4,474 | $ 3,423 | $ 13,443 | $ 3,894 | $ 5,063 | $ 4,990 | $ 689 | $ 14,392 | $ 5,258 | $ 3,480 | $68,232.00 |
| 14 | OPCo's % Ownership (Exh. LPM-6, L1, C7) | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | 66.67% | |
| 15 | OPCo's Share of Amos #3 Fixed O&M (L13 X L14) | $ 3,042 | $ 3,042 | $ 2,983 | $ 2,282 | $ 8,962 | $ 2,596 | $ 3,376 | $ 3,327 | $ 459 | $ 9,595 | $ 3,506 | $ 2,320 | $45,490.00 |
| 16 | Total Amos Common Plant Fixed O&M (L5 + L12) | $ 139,896 | $ 142,178 | $ 142,045 | $ 140,467 | $ 155,498 | $ 141,175 | $ 142,927 | $ 142,818 | $ 136,367 | $ 156,921 | $ 143,220 | $ 140,554 | $1,724,066.00 |
| 17 | OPCo's % Ownership (Exh. LPM-6, L2, C7) | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | 29.89% | |
| 18 | OPCo's Share of Common Pl Fixed O&M (L16 X L17) | $ 41,815 | $ 42,497 | $ 42,457 | $ 41,986 | $ 46,478 | $ 42,197 | $ 42,721 | $ 42,688 | $ 40,760 | $ 46,904 | $ 42,808 | $ 42,012 | $515,323.00 |
| 19 | OPCo's Share of Fixed O&M (L15 + L18) | $ 44,857 | $ 45,539 | $ 45,440 | $ 44,268 | $ 55,440 | $ 44,793 | $ 46,097 | $ 46,015 | $ 41,219 | $ 56,499 | $ 46,314 | $ 44,332 | $560,813.00 |
| 20 | OPCo Steam Capacity (kW) (Exh LPM-9, L2, C5) | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | 8,440,000 | |
| 21 | OPCo Rate ($/kW) (L19 / L20) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.00 | $0.01 | $0.01 | $0.01 | |
| 22 | OPCo Surplus Weighting (%) (Exh LPM-9, L9, C5) | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | 95.60% | |
| 23 | Effect on Wt. Ave. Rate ($/kW) (L21 X L22) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.00 | $0.01 | $0.01 | $0.01 | |
| 24 | Portion of Weighted Average Capacity Rate Attributed to OPCo Facilities (L23) | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 | $0.00 | $0.01 | $0.01 | $0.01 | |
| 25 | KPCo's Pool Capacity Deficit (Exh. LPM-7, L2, C7) | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 |
| 26 | KPCo's Share of OPCo (L24 X L25) | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ 2,839 | $ - | $ 2,839 | $ 2,839 | $ 2,839 | $31,229 |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**Indiana and Michigan Power Company**

| Line No. (1) | Description (2) | Month 1 (3) | Month 2 (4) | Month 3 (5) | Month 4 (6) | Month 5 (7) | Month 6 (8) | Month 7 (9) | Month 8 (10) | Month 9 (11) | Month 10 (12) | Month 11 (13) | Month 12 (14) | Total (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Operations: | | | | | | | | | | | | | |
| 1 | Rkpt1&2 Activated Carbon Injection (ACI) | $ 471,649 | $ 613,139 | $ 463,686 | $ 536,123 | $ 448,647 | $ 290,791 | $ 288,112 | $ 165,345 | $ 30,592 | $ 165,068 | $ 134,893 | $ 379,076 | $3,987,119.48 |
| 2 | TC 1, 2, &3 Selective Non-Catalytic Reduction (SNCR) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $945.14 |
| | Maintenance: | | | | | | | | | | | | | |
| 3 | Rkpt1&2 Activated Carbon Injection (ACI) | $ 2,314 | $ - | $ 558 | $ 1,349 | $ 650 | $ - | $ - | $ 4,047 | $ 8,642 | $ 32,485 | $ 23,769 | $ 279 | $74,093.50 |
| 4 | 1/2 Rockport Maintenance (L3 / 2) | $ 1,157 | $ - | $ 279 | $ 675 | $ 325 | $ - | $ - | $ 2,024 | $ 4,321 | $ 16,243 | $ 11,884 | $ 139 | $37,047.00 |
| 5 | TC 1, 2, &3 Selective Non-Catalytic Reduction (SNCR) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |
| 6 | 1/2 Tanners Creek Maintenance (L5 / 2) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |
| 7 | Total Rockport Fixed O&M (L1 + L4) | $ 472,806 | $ 613,139 | $ 463,965 | $ 536,798 | $ 448,972 | $ 290,791 | $ 288,112 | $ 167,369 | $ 34,913 | $ 181,311 | $ 146,777 | $ 379,215 | $4,024,166.48 |
| 8 | I&M's Percentage Ownership (Exh. LPM-6, L6, C7) | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | 85.00% | |
| 9 | I&M's Share of Rockport Fixed O&M (L7 X L8) | $ 401,885 | $ 521,168 | $ 394,370 | $ 456,278 | $ 381,626 | $ 247,172 | $ 244,895 | $ 142,264 | $ 29,676 | $ 154,114 | $ 124,761 | $ 322,333 | $3,420,542.00 |
| 10 | Total Tanners Creek Fixed O&M (L2 + L6) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $945.14 |
| 11 | I&M's Percentage Ownership (Exh. LPM-6, L7, C7) | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | |
| 12 | I&M's Share of TC Fixed O&M (L10 X L11) | $ 1,235 | $ 26 | $ (392) | $ (32) | $ 5 | $ 8 | $ (16) | $ 20 | $ 26 | $ (43) | $ 2 | $ 107 | $946.00 |
| 13 | I&M's Share of Fixed O&M (L9 + L12) | $ 403,120 | $ 521,194 | $ 393,978 | $ 456,246 | $ 381,631 | $ 247,180 | $ 244,879 | $ 142,284 | $ 29,702 | $ 154,071 | $ 124,763 | $ 322,440 | $3,421,488.00 |
| 14 | I&M Steam Capacity (kW) (Exh. LPM-9, L2, C4) | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | 5,414,000 | |
| 15 | Indiana Rate ($/kW) (L13 / L14) | $0.07 | $0.10 | $0.07 | $0.08 | $0.07 | $0.05 | $0.05 | $0.03 | $0.01 | $0.03 | $0.02 | $0.06 | |
| 16 | I&M Surplus Weighting (%) (Exh LPM-9, L9, C4) | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | 4.40% | |
| 17 | Effect on Wt. Ave. Rate ($/kW) (L15 X L16) | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | |
| 18 | Portion of Weighted Average Capacity Rate Attributed to I&M Environmental Controls | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | |
| 19 | KPCo's Pool Capacity Deficit (Exh. LPM-7, L2, C7) | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | 283,900 | |
| 20 | KPCo's Share: ACI & SNCR (L18 X L19) | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $0 |

## Kentucky Power Company
## Pollution Control Environmental Facilities
## Rockport Environmental Surcharge Calculations
## Revenue Requirement

| Line No. | Cost Component | Formula | Rockport Total |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 1 | Rockport #1 & #2 Activated Carbon Injection (ACI) | Exhibit LPM-6, L6, C5 | $23,405,482 |
| 2 | Less: Accumulated Depreciation | L1 X 3.52% | $823,873 |
| 3 | Less: Accumulated Deferred Income Tax | L1 X 1.3% | $304,271 |
| 4 | Total Rate Base | L1 - L2 - L3 | $22,277,338 |
| 5 | Weighted Average Cost of Capital for Aug. 2011 | Exhibit LPM-3, L5, C8 | 10.69% |
| 6 | Monthly Weighted Average Cost of Capital | L5 / 12 | 0.8908% |
| 7 | Monthly Return on Rate Base | L4 X L6 | $198,447 |
| | **Operating Expenses** | | |
| 8 | Monthly Depreciation Expense | L2 / 12 | $68,656 |
| 9 | Total Operating Expense | | $68,656 |
| 10 | Total Revenue Requirement Associated with Rockport ACI | L7 + L9 | $267,103 |
| 11 | KPCo's Percentage of Rockport's upgrades | 100% - Exhibit LPM-6, L6, C7 | 15% |
| 12 | KPCo's Portion of Rockport's upgrades | L10 X L11 | $40,065 |
| 13 | Annualize | | 12 |
| 14 | **Annualized Revenue Requirement** | L12 X L13 | **$ 480,780** |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**New Environmental Costs Associated with**
**Allowance Inventory**

| Line No. | Description | Formula | KY Retail Rev Requirement |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 1 | Estimated Monthly CSAPR SO2 Allowance Inventory | KIUC 1-20 | $ 425,976 |
| 2 | Estimated Monthly CSAPR NOx Allowance Inventory | KIUC 1-20 | $ 2,053 |
| 3 | Estimated Monthly CSAPR SO2 Consumption Expense | L11 / 12 | $ 517,667 |
| 4 | Estimated Monthly CSAPR NOx Consumption Expense | L12 / 12 | $ (54,167) |
| 5 | Net Monthly Expenses (Consumption less Gains) | L3 + L4 | $ 463,500 |
| 6 | Cash Working Capital Allowance (in accordance with ES FORM 3.13) | L5 / 8 | $ 57,938 |
| 7 | Total Rate Base | L1 + L2 + L6 | $ 485,967 |
| 8 | Annual Weighted Average Cost of Capital | Exhibit LPM-3, L5, C8 | 10.69% |
| 9 | Return of Rate Base | L7 X L8 | $ 51,950 |
| 10 | Estimated Monthly CSAPR SO2 Consumption Expense | Wohnhas testimony | $ 6,212,000 |
| 11 | Estimated Monthly CSAPR NOx Consumption Expense | Wohnhas testimony | $ (650,000) |
| 12 | Total Operating Expenses | L10 + L11 | $ 5,562,000 |
| 13 | Total Revenue Requirement | L9 + L12 | $ 5,613,950 |
| 14 | Annual Revenue Allocation Factor | Exhibit LPM-5, L15, C3 | 78.91% |
| 15 | Subtotal | L13 X L14 | $ 4,429,968 |
| 16 | KY Jurisdiction Revenue Allocation Factor | Exhibit LPM-5, L14, C3 | 98.91% |
| 17 | Total KY Retail Revenue Requirement | L15 X L16 | $ 4,381,681 |
| 18 | KY Jurisdiction 12-month Revenue | Exhibit LPM-5, L13, C3 | $ 569,593,245 |
| 19 | Percent Change | L17 / L18 | 0.77% |

**Kentucky Power Company**
**Pollution Control Environmental Facilities**
**New Environmental Costs**
***Effect on Residential Customers***

| Line No. | Description | Formula | Annual Amount | Percent Increase |
|---|---|---|---|---|
| (1) | (2) | (3) | (5) | (6) |
| 1 | Annual Effect of New Environmental Pool Capacity Charges | Exhibit LPM-9, L14 | $272,544 | |
| 2 | KPCo's Share of Rockport | Exhibit LPM-12, L14 | $480,780 | |
| 3 | Total Environmental Cost | L1 + L2 | $753,324 | |
| 4 | KPCo's Average Retail Allocation for 12 months ended August 2011 | Exhibit LPM-5, L.15, C3 | 78.91% | |
| 5 | Net Annual Impact on the Kentucky Retail Customers | L3 X L4 | $594,448 | 0.10% |
| 6 | KY Retail Allowances | Exhibit LPM-13, L17, C4 | $4,381,681 | 0.77% |
| 7 | KY Retail Revenue Requirement for Big Sandy Environmental Additions | Exhibit LPM-2, L15, C3 | $0 | 0.00% |
| 8 | Total Environmental Projects in this Filing | L5 + L6 + L7 | $4,976,129 | 0.87% |
| 9 | Billed Revenues for 12 months ended August 2011 | Exhibit LPM-5, L13, C3 | $569,593,245 | |
| 10 | Percent Increase | L8 / L9 | 0.87% | |
| | | **Usage in kWh:** | **1,000** | |
| 11 | Monthly Effect on a Residential Customers | | $ 0.85 | |
| 12 | Annualize | | 12 | |
| 13 | ***Annual Effect on a Residential Customers*** | L11 X L12 | $ 10.20 | |

Kentucky Power Company
New Environmental Costs
Effect on Residential Customer

| Typical Residential Bill - computed on average monthly kWh usage of: | | 1,000 kWh | | | |
|---|---|---|---|---|---|
| | Rate | Now | If Approved | Monthly Increase | Annual Increase |
| Service Charge ($/customer) | $8.00 | $ 8.00 | $ 8.00 | | |
| Energy Usage ($/kWh) | $0.0859 | $ 85.90 | $ 85.90 | | |
| Fuel Adjustment Charge for August 2011 ($/kWh) | ($0.0006513) | $ (0.65) | $ (0.65) | | |
| Capacity Charge ($/kWh) | $0.00097 | $ 0.97 | $ 0.97 | | |
| Demand-side Management ($/kWh) | $0.000774 | $ 0.77 | $ 0.77 | | |
| Home Energy Assistance Program ($/customer) | | $ 0.15 | $ 0.15 | | |
| Subtotal 1 | | $ 95.14 | $ 95.14 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 2.79 | $ 33.54 | $ 30.75 | |
| Subtotal 2 | | $ 97.93 | $ 128.68 | | |
| Monthly effect on a Residential Customer | | | | **$ 30.75** | $ 369.00 |
| **Percent Increase (As Filed)** | | | **31.40%** | | |
| Subtotal 1 | | $ 95.14 | $ 95.14 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 2.79 | $ 3.64 | $ 0.85 | |
| Subtotal 2 | | $ 97.93 | $ 98.78 | | |
| Monthly effect on a Residential Customer | | | | **$ 0.85** | $ 10.20 |
| **Percent Increase (Revised)** | | | **0.87%** | | |

| Typical Residential Bill - computed on average monthly kWh usage of: | | 1,376 kWh | | | |
|---|---|---|---|---|---|
| | Rate | Now | If Approved | Monthly Increase | Annual Increase |
| Service Charge ($/customer) | $8.00 | $ 8.00 | $ 8.00 | | |
| Energy Usage ($/kWh) | $0.0859 | $ 118.20 | $ 118.20 | | |
| Fuel Adjustment Charge for August 2011 ($/kWh) | ($0.0006513) | $ (0.90) | $ (0.90) | | |
| Capacity Charge ($/kWh) | $0.00097 | $ 1.33 | $ 1.33 | | |
| Demand-side Management ($/kWh) | $0.000774 | $ 1.07 | $ 1.07 | | |
| Home Energy Assistance Program ($/customer) | | $ 0.15 | $ 0.15 | | |
| Subtotal 1 | | $ 127.85 | $ 127.85 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 3.74 | $ 45.06 | $ 41.32 | |
| Subtotal 2 | | $ 131.59 | $ 172.91 | | |
| Monthly effect on a Residential Customer | | | | **$ 41.32** | $ 495.84 |
| **Percent Increase (As Filed)** | | | **31.40%** | | |
| Subtotal 1 | | $ 127.85 | $ 127.85 | | |
| Environmental Surchage for August 2011 (Subtotal 1 x rate) | 2.9277% | $ 3.74 | $ 4.88 | $ 1.14 | |
| Subtotal 2 | | $ 131.59 | $ 132.73 | | |
| Monthly effect on a Residential Customer | | | | **$ 1.14** | $ 13.68 |
| **Percent Increase** | | | **0.87%** | | |

| | |
|---|---|
| Big Sandy Capital in $Ms | $ - |
| Rockport Capital in $Ms | $ 23 |
| Amos & Tanners Creek Pool Capital in $Ms | $ 75 |
| | $ 99 |

# Kentucky Power Company

## REQUEST

Refer to Kentucky's Power's response to KIUC's First Request, Item 38. Kentucky Power collects its environmental surcharge monthly, which provides "current" cost recovery, with a two-month lag, on environmental projects previously approved as part of an environmental compliance plan. With such a timeframe for recovery of costs, identify and explain in detail all factors Kentucky Power has considered, and believes the Commission should consider, regarding the use of a cash return on the Construction Work in Progress approach for the costs of the proposed Big Sandy Unit 2 DFGD.

## RESPONSE

The environmental surcharge allows the Company a timely recovery of costs for an environmental project after it is placed in service. However the customer will experience a large increase when the environmental project is placed into service. The cash return on CWIP approach provides a transition period prior to the in-service date of the project that will ease that one time large increase with smaller stepped increases and reduce the in-service cost of the project which will provide benefits to customers over the life of the asset.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Sierra Club, et al.'s Initial Requests for Information ("Sierra Club's First Request"), Item 15.

a. Explain whether there are retirements associated with the boiler modifications.

b. If the answer to part a. of this request is yes, provide the total amount of associated retirement.

c. Does Kentucky Power anticipate that it will remove the associated retirement amount from the environmental surcharge revenue requirement calculations? If no, explain why.

## RESPONSE

a. There are no anticipated retirements associated with the boiler modifications.

b. N/A.

c. There are no anticipated boiler retirements. More generally, any retirements are accounted for in the annual plant updates at the beginning of each year.

**WITNESS:** Robert L Walton and Lila P Munsey

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Sierra Club's First Request, Item 17.f., concerning Indiana & Michigan Power Company's ("I&M") Certificate of Public Convenience and Necessity filing in Indiana for a flue gas desulfurization ("FGD") on one of its Rockport Units. Explain whether the FGD is going to be placed on Rockport Unit 1, which is jointly owned by I&M and AEP Generating, or Rockport Unit 2, which is under lease.

## RESPONSE

That decision had not been made as of the date of this response.

**WITNESS:** Ranie K Wohnhas

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Sierra Club's First Request, Item 18.

a. Was a depreciation study filed in Kentucky Power's last base rate case? [2]

b. If the answer to part a. of this request is yes:

(1) Explain whether a demolition study was prepared or updated for that depreciation study.

(2) Provide the estimated salvage value by functional plant or plant account used in the depreciation study.

[2] Case No. 2009-00459, Application of Kentucky Power Company for a General Adjustment of Electric Rates (Ky. PSC Jun. 28, 2010).

## RESPONSE

a. Yes, a depreciation study was filed in Case No. 2009-00459.

b. (1) The depreciation study completed was based on a June 2005 demolition study prepared by Brandenburg Industrial Service Company. Please see attachment 1 on the enclosed CD for a full copy of the demolition study.

(2) Please see attachment 2 on the enclosed CD for the complete depreciation study by functional plant.

**WITNESS:** Ranie K Wohnhas

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1 Conceptual Specification/ Cost Estimate

2 Assumptions

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8

**American Electric Power Company**
**Big Sandy Power**
**LOUISA, KY**

**Dismantling Information** **June 1, 2005**

## BIG SANDY AEP POWER PLANT CONCEPTUAL DEMOLITION PLAN

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DEFINITIONS:

**RACM** **(estimated 3,000 cubic yards)**
Regulated Asbestos Containing Material as defined in 40 CFR 61, Subpart M and any other applicable Federal, State, and/or Local rules, regulations and/or ordinances.

**Concrete Debris**
Concrete stacks, cooling towers, and floor slabs (estimated 35,000 cubic yards)

**Construction / Demolition Debris**
Any solid waste resulting from the construction, remodeling, repair, or demolition of structures. Such wastes may include, but not limited to;
roof material/drywall/ceiling tiles/fiberglass (estimated 3,500 yards)
brick (estimated 6,500 yards)
railroad ties (estimated 30,650 ties)

**Contractor**
The individual, partnership or corporation with which AEP Company enters into a contract to perform all of the work described in the Specification.

**Contract**
A purchase order placed by Purchaser and accepted by Contractor, together with this Specification and all other documents referred to in such purchase order, or a formal contract executed by Purchaser and Contractor, together with this Specification and all other documents referred to in such formal contract.

**Engineer**
The Engineer or his authorized representative designated by AEP Company to be assigned to this contract.

**Fill Material**
Material to be used to bring area to grade.

**Greases**
Any used or unused greases or waste containing grease.

**Hazardous Waste**
Hazardous waste as defined in 40 CFR 261.3 or as defined in any applicable state regulation.

**HAZMATs**

Any hazardous, toxic or regulated substance controlled under RCRA, CERCLA or any other Federal, State, or Local law, statute, regulation or ordinance pertaining to the handling, transportation, or disposal of any controlled substance.

**Landfill**

River City Disposal
1837 River Cities Drive
Ashland, KY 41102

**MSDS**

Material Safety Data Sheet.

**Non-Ferrous Scrap (estimated 290,000 lbs)**

All non-ferrous scrap such as copper or brass (estimated 290,000 lbs).

**Oils (estimated 50,000 gallons)**

Any used or unused hydraulic, lubrication, rolling, waste or other such oil or oily waste.

**OSHA**

Occupational Safety and Health Act and amendments thereto.

**PCBs**

Polychlorinated By-phenols (plant personnel verified that there are no PCB's present at the site).

**Process Materials**

Any raw materials, blended raw materials, recyclable process generated dusts (such as flue dust), fly ash, ash slurry and etc.

**SCR Unit**

Selective Catalytic Reduction Unit

**Scrap Ferrous (estimated 22,000 tons)**

All ferrous scrap designated by the Engineer to be suitable for melting at a steel processing plant.

**Structural Removal**

As in the Specification, shall mean all work of every nature described herein, implied herein, or necessary to complete the work described or implied herein, with the exception of Asbestos Abatement.

**AEP Company**

American Electric Power Company

**American Electric Power Company**
**Big Sandy Power**
**LOUISA, KY**

**Information Sheets**

**Dismantling Information** **June 1, 2005**

**BIG SANDY POWER**

1. GENERAL SCOPE OF WORK

1.1. The work to be performed under the terms of this specification shall consist of the dismantling and removal of all facilities, machinery, equipment, all associated structures, foundations, debris, asbestos containing materials, hazardous substances and hazardous waste as directed by the Engineer. Upon completion each dismantling site shall be left in a neat, clean, safe condition.

1.2. Work under this specification shall be performed in accordance with the terms and conditions of the Contract, entered into between AEP Company and the Contractor, and in accordance with all EPA, OSHA, Federal, State, County, and Local laws, statutes, ordinances, and regulations.

1.3. The Contractor shall perform all utility disconnection and/or relocation work which is necessary to complete the proposed dismantling and removal work, without disrupting active utilities.

1.4. The Contractor shall perform all excavation, back-filling, construction and closure work which is necessary to complete the proposed dismantling work.

1.5. The Contractor shall provide all labor, materials, equipment, services and pay all necessary taxes, in addition to securing all required permits, to perform the dismantling.

1.6. The Contractor is responsible to clean up and dispose of any and all materials which are generated as a result of a spill caused by the Contractor, or which are generated as a result of the improper handling of any materials by the Contractor. This includes all RACM, Hazardous Substances, Hazardous Waste, Special wastes, Non-process Debris, Demolition Debris, and combustible materials.

2. FACILITY DISMANTLEMENT AND RELATED WORK

2.1. Perform the environment abatement of the following:

2.1.1. Vacuum, transport and dispose of dust accumulations inside area of Unit 1 Boiler

2.1.2. HAZMAT sweep of structures, tanks and pipe in Unit 1 Boiler area

2.1.3. Abate tank insulation in Unit 1 Boiler along with all connected pipes

2.1.4. Abate Unit 1 Boiler, boiler breeching and piping

2.1.5. Abate Unit 1 Boiler building siding, office and turbine building siding, Unit 1 coil conveyor, Unit 1 coil conveyor transfer building, Unit 1 train coal unload station house and miscellaneous outside structures.

2.1.6. Remove Units 1 fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.1.7. Vacuum, transport and dispose of dust accumulations inside area of Unit 2 Boiler

2.1.8. HAZMAT sweep of structures, tanks and pipe in Unit 2 Boiler area

2.1.9. Abate tank insulation in Unit 2 Boiler along with all connected pipes

2.1.10. Abate Unit 2 Boiler, boiler breeching and piping

2.1.11. Abate Unit 2 miscellaneous outside structures.

2.1.12. Remove Unit 2 fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.1.13. Remove office, storage and maintenance building fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.1.14. Remove the secondary and primary river water pump house building fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.2. Perform the building dismantling, equipment removal, concrete removal to surrounding grade elevation of the following.

2.2.1. Unit 1 boiler building, turbine generator building, precipitators, office and maintenance building, coal conveyor.

2.2.2. Unit 2 boiler building, turbine generator building, precipitators, office and maintenance building the chemical lab building, coal conveyor to Unit 2 coal pile, the SCR building and the Unit 1 & 2 concrete smoke stack.

2.3. Perform the removal of the following to grade elevation.

2.3.1. Unit 1 water cooling tower structure, adjacent pump structures, adjacent condensate water tank to surround grade elevation. Fill the pits and trenches to surround grade elevation.

2.3.2. The pump house and metal cleaning waste treatment tank located west of Unit 1 boiler building.

2.3.3. The coal train car unload building, adjacent control building, the coal conveyor and coal transfer and sampling building.

2.3.4. The tractor shed and locomotive house building.

2.3.5. The remains of the standby river water make-up equipment, railroad ties and pipes to the Big Sandy River.

2.3.6. The in-service sanitary treatment equipment, trenches and tanks located adjacent to the Big Sandy River.

2.3.7. The secondary and primary river water pump building structures, the two electrical control buildings. Remove building and water intakes to surrounding grade elevation. Install a barricade in the water inlet from the Big Sandy River. Remove the water inlet screens from the river.

2.3.8. The ammonia storage building and chemical manufacturing building structure and ammonia storage tank structures.

2.3.9. The 500,000 gallon fuel oil tank and oil pump station. Remove the oil tank dike down to surround grade elevation.

2.3.10. The six single story maintenance, storage and office buildings located south of the Unit 2 boiler building.

2.3.11. The Unit 2 water cooling tower structure, adjacent pump structures, adjacent clean condensate water tank, dirty condensate water tank, the fire water control building, the sulfuric acid storage and control building, the chlorine tank and control building to surround grade elevation. Fill the pits and trenches to surround grade elevation.

2.3.12. The Unit 2 coal conveyor from the coil pile to the Unit 2 boiler.

2.3.13. The coal train unload building, coal conveyor from the unload building to the coal transfer building to the coal storage area. Remove all bents and transfer building to surround grade elevation. Remove the coal truck unload equipment from grade elevation to the bottom of the pit. Fill the truck unload pit and the coal train unload pit to surrounding grade elevation. Fill the pit from the coal train station to the coal conveyor exit with fill material to surround grade elevation.

2.3.14. The coal system sample building, trailer and sample equipment to surrounding grade elevation.

2.3.15. The coal system transportation office and maintenance building located east of the coal storage area.

2.3.16. The two truck scales, control building, and coal train car warming structure and equipment down to surrounding grade elevation.

2.3.17. The abandoned 3,400,000 gallon fuel storage tank. Remove the dike wall surrounding the fuel tank to surrounding grade elevation. Remove all pumps, pipe, wires, and controls from the tank area to the Unit 2 boiler structure.

2.3.18. Remove the maintenance parts storage building located north of the Unit 2 turbine building.

2.3.19. Remove the electrical wire, and electric towers from the transformers located adjacent to Unit 2 boiler building to the 345,000 volt electrical station located north of Highway 23.

2.3.20. Remove the electrical wires and electrical tower from the transformers located adjacent to Unit 1 boiler building to the 134,000 volt electrical station. Remove the four step-down transformers and connections between the 134,000 volt switch yard and the block building. Remove the block building down to surrounding grade elevation.

## 3. WORK BY CONTRACTOR

The Contractor Shall:

3.1. Furnish all supervision, labor, materials, tools, supplies and equipment necessary to perform the work, including dismantling and removal of all the facilities, equipment, structures, etc. noted herein with the exception of specific structures which are designated in this Specification to remain.

3.2. Furnish on the site, during the performance of the work, an experienced supervisor who shall be duly authorized to represent and act for the Contractor in all matters pertaining to the work covered by this Specification.

3.3. Provide all written instructions, orders, and other communications delivered to the Contractor's construction office shall be considered as having been delivered to the Contractor himself.

3.4. Develop detailed written demolition plans for each area to be dismantled, and submit them to the Engineer for his review prior to the start of work in an area. Such plans shall include, but limited to:

3.4.1. A detailed and complete schedule for the performance of the work.

3.4.2. A survey of each area, identifying all materials to be disposed of other than scrap and equipment.

3.4.3. Identification and protection of demolition areas.

3.4.4. Termination and/or relocation of utilities.

3.4.5. Asbestos abatement and disposal.

3.4.6. Handling and disposal of hazardous wastes and materials.

3.4.7. Handling and disposal of oils and greases.

3.4.8. Handling and disposal of non-hazardous debris and materials.

3.4.9. Handling and disposal of ODC's.

3.4.10. Fire prevention and protection.

3.4.11. Handling and storage locations for ferrous and non-ferrous scrap.

3.4.12. Method of demolition and/or equipment removal.

3.4.13. Clean-out, breaking open, and filling of basements, pits, and tunnels.

3.4.14. Final grading and restoration of demolition site.

3.5. Clear each site of existing equipment, structures, and material designated to be removed. Each site will be left in a neat, clean, safe condition in conformity with all applicable Federal, State, or Local laws, statutes and/or regulations, including but not limited to CAA, OSHA, RCRA, SARA, TSCA, and/or CERCLA. The finished condition of each site will be approved by the Engineer.

3.6. Remove all structures down to final grade except where otherwise noted. Final grade will generally be the adjacent grade surrounding the facility to be removed. The removal of concrete & debris and grading will be done concurrent with the demolition work. As one area is cleared of structures, the required concrete removal work in that area will be done simultaneously with the demolition of structures in the next area of work. If the Contractor breaches the provisions of this section AEP Company reserves the right, in AEP Company's sole opinion, to stop the Contractor from doing further demolition until the concrete and debris removal is current.

3.7. Perform all material removal and asbestos abatement work in accordance with all applicable Federal, State, and/or Local rules, regulations and/or ordinances, which is necessary to complete the proposed removal work.

3.8. Perform all utility, telecommunications and telemetering disconnection and/or relocation work which is necessary to complete the proposed removal work.

3.9. Prior to beginning demolition of any facility, Contractor shall ascertain that no live utilities remain in the facility and identify and locate all underground utilities. It shall be the Contractor's exclusive responsibility to determine that all utility systems in each area remain isolated from active utility systems.

3.10. Perform all excavation, back–filling, construction and closure work which is necessary to complete the proposed dismantling and removal work.

3.11. Remove all debris generated as a result of the proposed removal work.

3.12. Break the floors of all pits, trenches and depressions sufficiently to provide drainage and to prevent the accumulation of water within the underground structure.

3.13. Tunnel and basement roof structures which do not support structures designated to remain and which are located less than 3 feet below finish grade elevation will be broken in. Said tunnel excavations will be filled with fill materials approved by the Site Engineer up to finish grade elevation.

3.14. Properly drain and capture all contents of pipelines prior to dismantling any pipelines.

3.15. Empty and shovel clean all pits, sumps, basements, and depressions to the satisfaction of the Engineer. Areas will be inspected by the Site Engineer prior to filling. Any pits, sumps, basements or depressions in contact with a hazardous waste or PCB shall be decontaminated in accordance with any applicable Federal and/or State rules and/or regulations.

3.16. Back-fill all pits, sumps, and depressions up to existing grade. Each site shall be rough graded and left in a neat, clean, safe condition. Contractor will use fill material approved by the Engineer. The final six inches of fill shall be other select fill material approved by the Engineer.

3.17. Furnish all fill material in accordance with the Specification. If the work activity generates more fill material than needed, the Contractor shall pay for the transportation and disposal off site. If the work activity is fill negative, the Contractor shall pay for the purchase and transportation of required fill to the site. Such purchased material shall be approved by the Site Engineer.

3.18. Furnish portable sanitary facilities and drinking water for Contractor's personnel in areas of removal.

3.19. Furnish electric power and temporary lighting in those areas of removal where active utilities are not available.

3.20. Provide adequate protective barriers for open pits, holes and depressions, as a result of the equipment removal work, until they are properly backfilled. Temporary barricades shall conform to all applicable Federal, State and Local, rules and regulations or standards including, but not limited to OSHA.

3.21. Remove above ground utility support systems such as poles, structural steel towers or guy wires which have been designated to be removed by the Engineer.

3.22. Remove and scrap all tanks, including supporting steel and concrete structures. Prior to removal work Contractor shall remove the contents of each tank, drain each tank and otherwise purge each tank in accordance with all applicable rules or regulations to render them safe for removal. Notify Engineer of any potentially contaminated soils. Remove of these tanks shall conform to all applicable Federal, State, and Local laws, statutes, regulations or ordinances.

3.23. Secure the approval of local Fire Department for the Fire Prevention Plan. Contractor shall meet with representatives of the Fire Department prior to commencement of work on each facility. Prior to the commencement of removal work, Contractor shall inspect all fire hydrants in the work area and shall notify the Engineer of those that are not in good operating condition.

3.24. Provide fire extinguishers and fire hoses as required to immediately control any fires resulting from the work. Implement all fire prevention measures as directed by the Fire Department. Measures required by Fire Department may include, but will not be limited to, the maintenance of pressurized fire hoses at each removal site.

3.25. Attend a safety meeting with AEP Company's representatives prior to starting work in each facility or designed area.

3.26. Furnish all temporary or permanent supports or protective devices which are necessary to preserve active pipes, electrical lines or other structures which AEP Company designates to remain in place.

3.27. Abide by AEP Company Contractor Safety Responsibilities, AEP Company Energy Control-Lockout and Tryout Rules, as well as all Federal, State, and Local regulations.

3.28. Secure the Engineer's approval prior to using any railroad track or mobile crane movements to or from the dismantling site.

3.29. Schedule rail movements, order all railroad cars and be solely responsible for demurrage charges resulting from the Contractor's operations.

3.30. Where Contractor removes railroad track, the Contractor shall remove all wooden and concrete ties, and load and transport them to an approved disposal site approved by the Engineer. Contractor shall be responsible for the cost of all removal, loading, transportation, and disposal of such material.

3.31. ACM ABATEMENT

3.31.1. Contractor shall provide all supervision, labor, consumable materials, tools, equipment, documentation, services and permits required to identify, remove, and dispose of all ACM located on, in, adjacent to or forming a part of each structure designated for removal. RACM removal work shall include but is not necessarily limited to the work described herein.

3.31.2. Prepare a complete, written ACM removal plan for each dismantling site. Contractor shall obtain and analyze all bulk sample analyses of any suspect RACM. Prior to the commencement of work, Contractor shall provide the Engineer with the results of the analyses and Contractor's removal plan.

3.31.3. Provide all respirators, protective clothing and equipment required to protect all personnel associated with the RACM removal work. All respirators, protective clothing and equipment shall conform to all applicable rules, regulations, and standards, including but not limited to OSHA..

3.31.4. Employ only competent persons, trained, knowledgeable and qualified in the techniques of abatement, handling and disposal of RACM and subsequent cleaning of contaminated areas. Employees who perform RACM removal work shall posses current, valid asbestos abatement licenses as required by any governmental agency having jurisdiction over the work.

3.31.5. Perform all RACM removal in strict accordance with all applicable Federal, State, and Local laws, statutes, ordinances and regulations. Contractor shall provide timely and accurate notification in accordance with all Federal, State, and Local laws, statutes, and regulations and ordinances.

3.31.6. Adequately wet all friable RACM prior to removal. Adequately wet RACM debris shall be packaged in bags provided by Contractor. Bags of ACM debris shall promptly placed in dumpster boxes provided by Contractor.

3.31.7. Haul all RACM debris from each RACM removal site to the disposal site approved by AEP Company. Contractor shall unload RACM at the disposal site. All transportation of RACM shall be performed in enclosed dumpster boxes.

3.31.8. Be responsible for any spilling, escape or release of RACM which occurs during the transportation of RACM to the disposal site. AEP Company shall be responsible for any spilling, escape or release of RACM which occurs after the RACM has been unloaded by Contractor at the disposal site approved by AEP Company. Contractor shall immediately report to AEP Company any spilling, escape or release of RACM which occurs during the transportation of RACM. Contractor shall submit copies of reports of spilling, escape or release of RACM to all authorities as required by Federal, State or Local laws, statutes, regulations and ordinances.

3.31.9. Maintain complete and accurate records of all removal, transportation and disposal activities in accordance with all Federal, State and Local laws, statutes, regulations and ordinances. Contractor shall submit copies of all such records to AEP Company on a daily basis.

3.31.10. Perform personal and area air monitoring as necessary to assure the safety of all persons associated with the removal of ACM and as required by Federal, State and Local laws, statutes, regulations and ordinances. Contractor shall perform environmental air monitoring in the area at each location where RACM removal work is performed. Environmental air monitoring shall conform to all applicable Federal, State, and Local laws, statutes, regulations and ordinances.

3.32. HAZARDOUS WASTE HANDLING AND DISPOSAL

3.32.1. Contractor shall provide all supervision, labor, consumable materials, tools, equipment, documentation, services and permits required to identify, remove and load any hazardous waste located in, adjacent to or forming a part of the equipment designated for removal. Contractor shall be responsible to perform all in-plant handling of such materials, including, but not limited to removal, loading, and in-plant transportation. Hazardous waste removal work shall include, but is not necessarily limited to, the work described herein.

3.32.2. Contractor is required to secure samples of all materials, which are suspected of being a hazardous waste, located in the areas defined in this Specification. Samples shall be collected in accordance with all applicable regulations. Contractor shall deliver all samples of suspected hazardous waste to the Engineer. AEP Company shall secure required analyses of all such samples.

3.32.3. Prepare a complete written hazardous waste removal plan for each work site that will be submitted to the Engineer for his review prior to the start of work in an area.

3.32.4. Contractor shall provide all respirators, protective clothing and equipment required to protect all personnel associated with the handling or removal of any Hazardous Wastes. All said respirators, protective clothing and equipment shall conform to all applicable rules, regulations and standards, including but not limited to OSHA.

3.32.5. Employ only competent persons, trained, knowledgeable and qualified in the techniques of handling and disposal of hazardous wastes and subsequent cleaning of contaminated areas. Employees who perform hazardous waste removal work shall possess current, valid licenses as required by any government agency having jurisdiction over the work. Perform all hazardous waste removal in strict accordance with all applicable Federal, State and Local laws, statutes, ordinances and regulations. Contractor shall provide timely and accurate notification in accordance with all Federal, State and Local laws, statutes, regulations and ordinances.

3.32.6. Contractor shall post all appropriate warning signs at each work area, as is required by applicable regulations.

3.32.7. Maintain complete and accurate records of all removal activities in accordance with all Federal, State, and Local laws, statutes, regulations and ordinances. Contractor shall submit copies of all such records to AEP Company on a weekly basis.

3.32.8. Perform personal monitoring as necessary to assure the safety of all persons associated with the removal of hazardous wastes and as required by Federal, State, and Local laws, statutes, regulations and ordinances. If so required, Contractor shall perform environmental air monitoring in the area of each location where hazardous waste removal work is performed. Environmental air monitoring shall comply with applicable Federal, State, and Local laws, statutes, regulations and ordinances.

3.32.9. AEP Company shall be responsible for disposal, the method of disposal and the disposal site for all identified hazardous waste except asbestos waste. Contractor shall load all such wastes into trucks or containers provided by AEP Company.

3.33. CONSTRUCTION / DEMOLITION WASTE

3.33.1. Contractor is required to perform the work described herein in a manner that will separate construction / demolition waste from ferrous scrap, combustible waste, non-ferrous scrap, ferrous scrap, process demolition waste, oils and greases, hazardous wastes, and all other materials.

3.33.2. Contractor shall identify all quantities of construction / demolition waste to the Engineer. The Engineer shall positively identify all such materials as being construction / demolition waste.

3.33.3. For all materials which have been positively identified by the Engineer as construction / demolition waste, Contractor shall use such materials as clean fill in locations approved for filling by the Engineer.

3.33.4. Contractor shall be responsible to perform all in-plant handling of such materials, including, but not limited to, screening, separation, from other materials, loading, crushing and transportation.

3.33.5. Contractor shall be responsible for any costs that are incurred as a result of his handling construction / demolition waste, including, but not limited to, sampling, analysis, permit applications, loading, on and off-site transportation, and disposal at an approved disposal site.

3.34. OILS

3.34.1. Contractor is required to secure samples of all oils and oily wastes located in the areas defined in this Specification. Samples shall be collected in accordance with all applicable regulations.

3.34.2. AEP Company shall secure analyses required by the applicable regulations, or by the disposal facility, of all such samples, including, but not limited to, analysis for PCB contamination.

3.34.3. For all oils which have been positively identified as being free of PCB contamination (i.e. less than 50 ppm), Contractor shall be responsible to perform all handling of such materials, including, but not limited to, removal, clean up, loading and transportation.

3.34.4. Contractor shall be responsible to pay for fees to dispose of all oils and oily waste in accordance with all applicable regulations. The Engineer shall approve all methods of disposal and disposal sites for all oils and oily waste.

3.35. GREASES

3.35.1. Contractor is required to secure samples of all greases and wastes containing grease located in the areas defined in this Specification. Samples shall be collected in accordance with all applicable regulations.

3.35.2. AEP Company shall secure analyses required by the applicable regulations, or by the disposal facility, of all such samples.

3.35.3. Contractor shall be responsible to perform all handling of such materials, including, but not limited to, removal, clean up, loading, and transportation.

3.35.4. AEP Company shall be responsible for the disposal of all special and hazardous greases and waste containing greases in accordance with all applicable regulations.

3.36. PROCESS MATERIALS

3.36.1. Contractor is required to perform the work described herein in a manner that will separate process demolition debris from ferrous scrap, combustible debris, non-ferrous scrap, construction / demolition waste, oils and greases, hazardous wastes, and all other materials.

3.36.2. Prior to the start of demolition in an area, Contractor shall identify all quantities of process materials to the Engineer. The Engineer shall positively identify all such materials as being process materials.

3.36.3. All ash process materials will remain on-site. A two foot clay cap will be utilized to cap process material areas of concern.

3.37. PCBs AND EQUIPMENT CONTAINING PCBs

3.37.1. Prior to dismantling, Contractor shall conduct a survey of each dismantling area to locate and identify any electrical or hydraulic equipment which has not been clearly identified as being free of PCB contamination and, therefore, may contain PCBs. Contractor shall provide the Engineer with the location and description of any surveyed equipment which may contain PCBs. Where so directed by AEP Company, Contractor shall provide AEP Company with a sample of the oil contained in the piece of equipment. AEP Company will secure analysis and provide Contractor with the written results.

3.37.2. Prior to dismantling the facility, the Contractor shall remove, intact each piece of PCB contaminated equipment. Contractor shall transport said PCB equipment to AEP Company's designated PCB storage facility. Contractor shall schedule and coordinate said deliveries with the Engineer. Alternatively, at the direction of the Engineer, Contractor shall load PCB equipment onto vehicles provided by AEP Company. Contractor shall schedule and coordinate said loading with the Engineer. Contractor shall schedule and coordinate the pumping and removal of PCB dielectric fluid from transformers prior to loading when so directed by the Engineer.

3.37.3. AEP Company shall be responsible for the disposal of all PCB equipment and fluids.

3.38. PIPING SYSTEMS

3.38.1. Prior to the commencement of dismantling work, Contractor shall identify, plan and perform all piping shut offs, disconnections, and relocation work necessary to complete the work specified in a safe, orderly manner.

3.38.2. Piping shall be purged (where necessary) and shall be removed to a point of origin as designated by the Engineer.

3.38.3. Contractor shall submit plans, procedures and working drawings showing design details for all piping work to the Engineer for review. Contractor shall secure the Engineer's review of all designs, plans and procedures prior to the commencement of work. The correctness of the design shall remain the Contractors responsibility.

3.38.4. Contractor shall provide all supervision, labor, materials, tools and equipment necessary to complete all piping work required for the work as specified herein. Contractor shall be responsible for the identification of all piping construction, disconnection and relocation work which will be required to complete all work specified herein.

3.38.5. Contractor shall perform all piping construction, disconnection and relocation work using methods which will not interrupt AEP Company's ongoing operations.

3.38.6. Secure the Engineer's permission prior to any utility outage. In the absence of the Engineer's approval of Contractor's proposed outage, Contractor shall perform the proposed work on live pressurized lines.

3.39. ELECTRICAL SYSTEMS

3.39.1. Prior to the commencement of dismantling work, Contractor shall identify, plan and perform all electrical shut offs, disconnections, and relocation work necessary to complete the work specified in a safe and orderly manner.

3.39.2. Conduit, cable, wireways, and buss shall be removed to a point of origin as designated by the Engineer.

3.39.3. Contractor shall submit plans, procedures and working drawings showing design details for all electrical and related work to the Engineer for review. Contractor shall secure the Engineer's review of all designs prior to the commencement of work. The correctness of design shall remain the Contractor's responsibility.

3.39.4. Contractor shall provide all supervision, labor, materials, tools and equipment necessary to complete all electrical, telecommunication and telemetering work required for the dismantling work specified herein. Contractor shall be responsible for the identification of all electrical, telecommunication and telemetering construction, disconnection and relocation work which will be required to complete all work specified herein.

3.39.5. Contractor shall perform all electrical construction, disconnection and relocation work using methods which will not interrupt AEP Company's ongoing operations.

3.39.6. Contractor shall secure the Engineer's permission prior to any utility outage. In the absence of the Engineer's approval of Contractor's proposed outage, Contractor shall perform the proposed work on live energized lines.

4. WORK BY PURCHASER:

AEP Company Shall:

4.1. Provide Material Safety Data Sheets (MSDS) in accordance with OSHA "Right to Know" regulations for each substance listed under said regulations.

4.2. Provide, where available, utility services such as 460 Volt, 3 phase, 60 Hz power, 250 Volt DC current, potable water, oxygen, compressed air, or natural gas, which are deemed available by AEP Company. Contractor may, at his own expense and approval of the Engineer, make necessary connections provided there is no interruption to normal production operations. AEP Company assumes no responsibility or liability for loss of, or damage to, the equipment or materials of the Contractor or his subcontractors. Contractor will pay charges that may be assessed. The assessment of charges and/or the availability of utilities may change through the course of the contract as determined.

4.3. Provide existing railroad tracks, railroad tracks sidings, and roadways on plant site, if available, for Contractor's use when and where the Engineer may designate. Contractor shall keep traffic lanes free of congestion so as to avoid interference with normal plant operations.

4.4. Provide one copy of all available drawings necessary for the completion of the work specified. These drawings are to be used by the Contractor for reference only in the performance of the work. Said drawings are not to be construed as a complete description of the Scope of Work, nor as fully depicting existing conditions. Additional copies may be purchased by Contractor through the Purchaser.

4.5. Approve the selection of all subcontractors before they will be allowed to enter the job site and perform work. Subcontractors are subject to all applicable terms and conditions contained herein.

4.6. Provide written releases for the demolition of each specific area or facility as identified in the Schedule of Values. Demolition shall not commence without the receipt of said release.

4.7. Assign to Contractor ownership of each facility to be dismantled. The assignment shall include:

4.7.1. All ferrous and non-ferrous scrap resulting from the dismantling work

4.7.2. All ferrous and non-ferrous scrap located within each dismantling area as identified by Engineer during the site visitation.

4.7.3. Spare parts and/or spare equipment.

4.7.4. All railroad track designated for removal.

4.7.5. All vehicles and mobile equipment located within each dismantling area as identified in the Specification.

4.8. AEP Company will maintain ownership of all real estate

5. Pricing

5.1. Demolition and environmental abatement of Unit 1, 2, structures, equipment, cooling towers, stacks, buildings, railroad tracks and tanks
$12,000,000

5.2. Removal of piping, dewatering and capping of bottom and slurry ash ponds
$20,000,000

# Assumptions

This estimate is based on all roadways, concrete slabs, and foundations remaining in place.

This estimate is based on AEP providing an on-site clay source for the capping of the ash ponds.

This estimate is based on treating and disposal of all water to either the ground or into the river system.

This estimate is based on dewatering 150 acres at 3 feet deep.

This estimate is based on capping a 150 acre site.

This estimate does not include any survey work to establish grades.

This estimate is based on preserving all storm water sewers to the Big Sandy River.

This estimate is based on saving the two electrical sub-stations located on the AEP property.

This estimate is based on disposing all concrete and brick material at the ash slurry ponds.

This proposal does not include any PCB oil and/or equipment disposal.

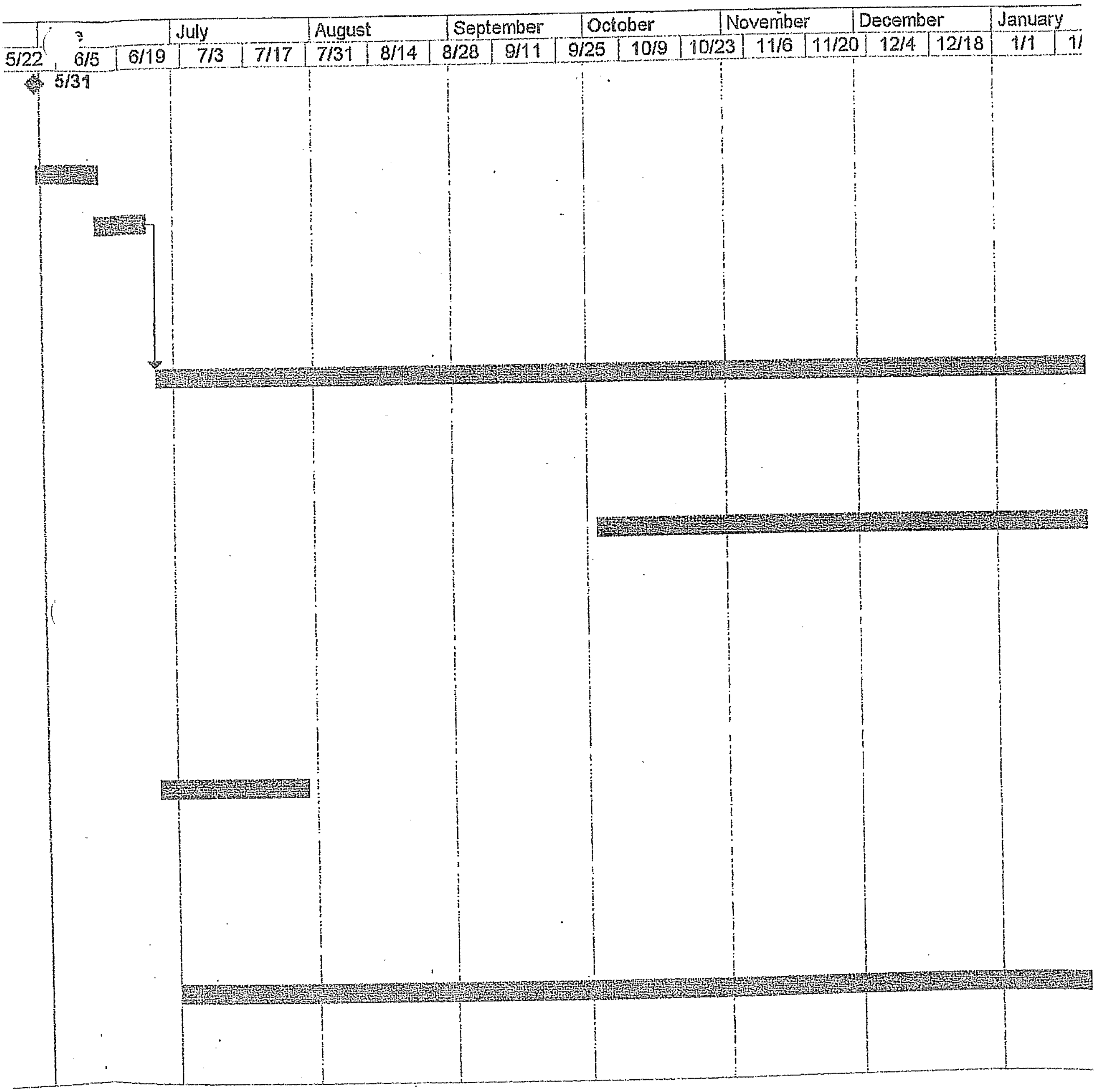
This proposal is based on Brandenburg receiving ownership of all ferrous and non-ferrous scrap.

This proposal does not include any site security.

This proposal is based on Pittsburgh ferrous and non-ferrous pricing from the December 29, 2004 American Metal Market publication minus transportation and preparation.

AEP Company
Big Sandy River Power Plant
Louisa, Kentucky

| ID | | Text1 | Task Name | Duration | Start | 5/22 Jun |
|---|---|---|---|---|---|---|
| 1 | | General Conditions | | 0 days | Tue 5/31/05 | 5/ |
| 2 | | | meetings | 10 days | Tue 5/31/05 | |
| 3 | | | mobilization | 10 days | Mon 6/13/05 | |
| 4 | | | demobilization | 10 days | Mon 8/6/07 | |
| 5 | | | | | | |
| 6 | | Unit 1 | environmental abatement | 150 days | Mon 6/27/05 | |
| 7 | | | demolition | 40 days | Mon 1/23/06 | |
| 8 | | | | | | |
| 9 | | Unit 2 | environmental abatement | 175 days | Mon 10/3/05 | |
| 10 | | | demolition | 50 days | Mon 6/5/06 | |
| 11 | | | | | | |
| 12 | | SCR | demolition | 20 days | Mon 7/10/06 | |
| 13 | | | | | | |
| 14 | | Support Bldgs | demolition | 25 days | Mon 6/27/05 | |
| 15 | | | | | | |
| 16 | | Stack & Cooling Towers | demolition | 120 days | Mon 8/7/06 | |
| 17 | | | | | | |
| 18 | | Slurry Ash/Bottom Ash Pits | dewater | 260 days | Fri 7/1/05 | |
| 19 | | | grade/place cap | 220 days | Mon 10/2/06 | |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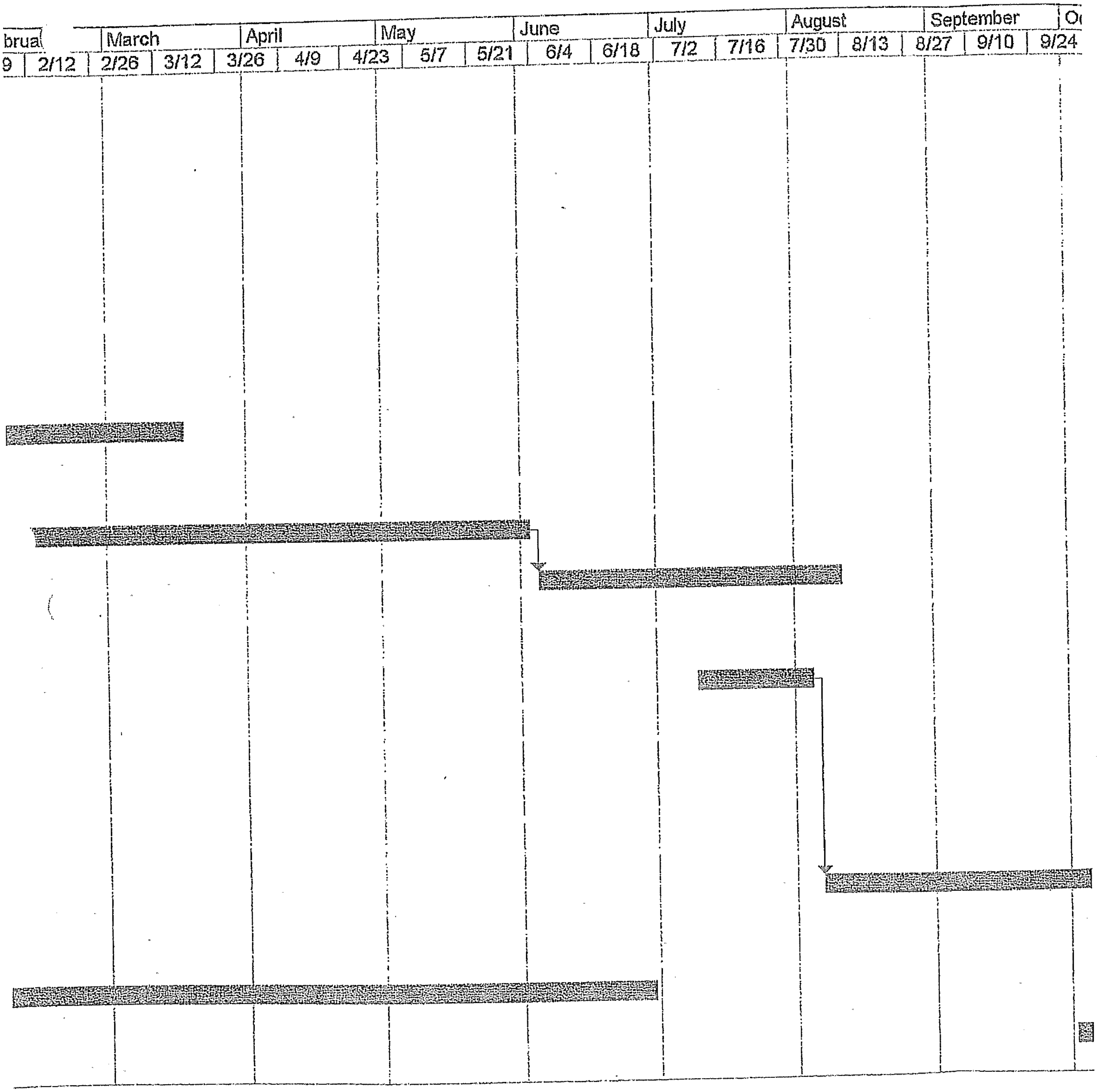
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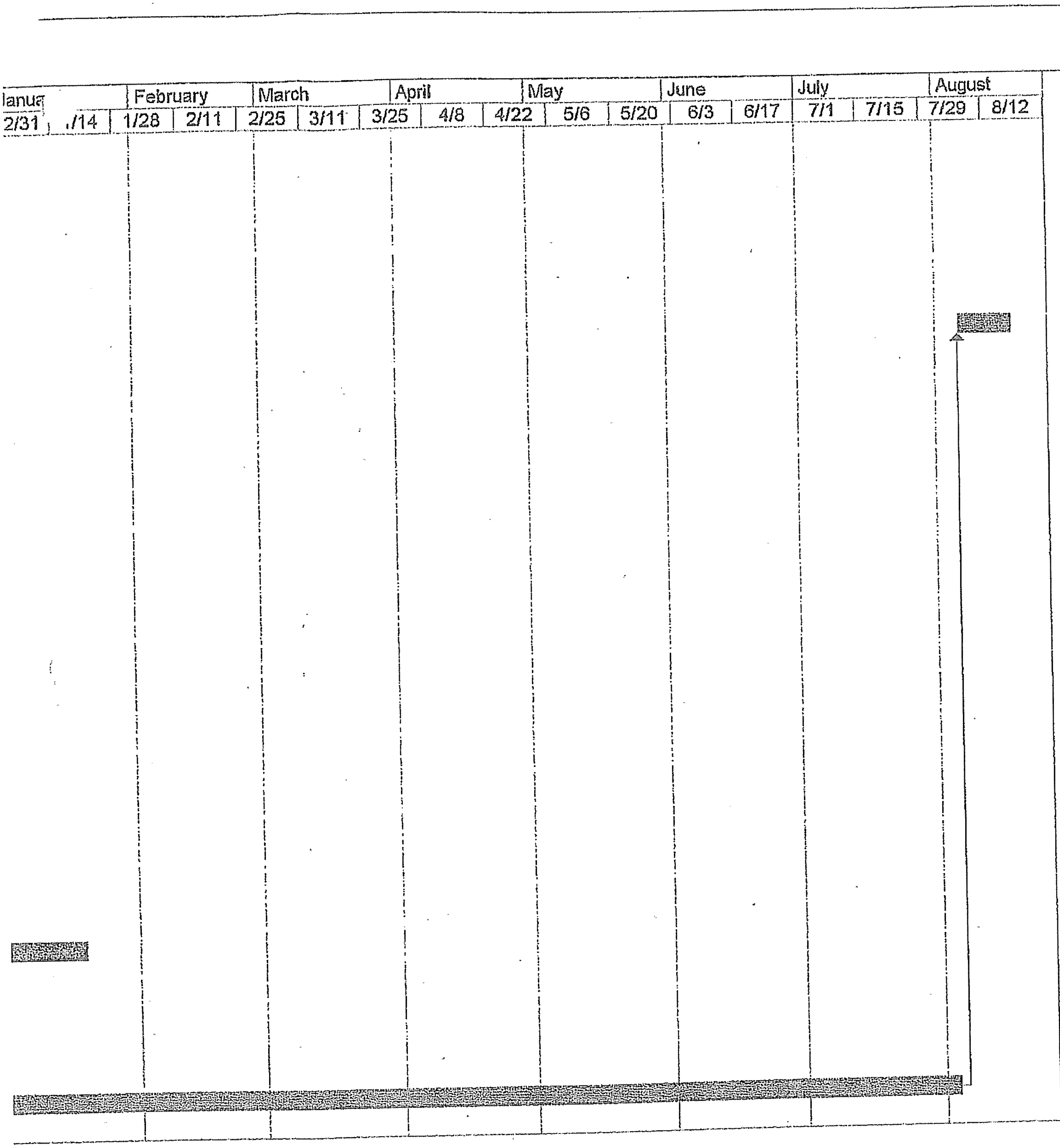
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Brandenburg® Industrial Service Company
1680 John A. Papalas Drive
Lincoln Park, Michigan 48146-1462
Phone (313) 382-2500
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www.ibrandenburg.com

Brandenburg®

# Methodology

## General Project Consistent Activities

The following details Brandenburg's methodology in order to complete the scope of work safely and in a cost effective manner for the decontamination and demolition of the AEP Big Sandy Power Plant.

Mobilization will include bringing equipment on-site, set-up of hydraulic excavators, loaders, unloading of manlifts, bobcats, portable decontamination trailer, job tool and supply box, and the job office/break box.

Brandenburg will conduct a utility verification walk through on each building and/or work area in order to substantiate that all utilities servicing the removal area have been cut, capped, and / or air-gapped prior to proceeding with the removal efforts. During this verification, the color coding of all structures, buildings and tanks will also be verified as painted green and ready for removal. This task will be followed by environmental work including; gathering, staging and packaging of any loose chemicals and/or oils remaining in the buildings, removal of light bulbs and ballasts and followed by asbestos abatement. Once these tasks are complete, Brandenburg will perform a final walk through and complete a facility assessment report that signs off that the utility disconnection/isolation work, the environmental decommissioning and abatement work are complete and the building or structure is ready for demolition. Brandenburg will request the AEP representative to verify this facility assessment and sign the assessment form that concurrence is given to perform the demolition. Brandenburg will install geo-textile fabric over catch basins and / or sewer inlets within the demolition areas scheduled to remain in order to keep material from flowing into the existing system during the removal efforts. Following this preparatory work, the buildings and structures will be demolished.

Work specific to each Building or Structure is discussed below.

## Boiler Units 1 and 2

Barricades consisting of snow fence and caution or danger tape will be placed at entry areas of the building to limit access into the building. Barricade tags obtained through the AEP representative will be complete and attached to the barricade fencing at points of egress.

Brandenburg crews will next "sweep" the units looking for loose chemical containers and remove, stage and package the materials to ready them for disposal. All light bulbs, light ballasts, and self-illuminating exit signs will then be taken down, packaged and staged. Brandenburg crews will access the lights within the units off of A-frame step ladders, lights and ballasts will be carefully removed by hand and through the use of small hand tools as necessary. Manlifts may be used if lights or other regulated materials are present at elevations higher than safely accessible with the ladders. Generally the crew will work in pairs with one person working on the ladder and a ground person retrieving the bulb or ballast after removal to place in a storage container.

Brandenburg shall utilize trained Kentucky licensed asbestos abatement personnel to perform asbestos remediation throughout the structures. Brandenburg shall conform to all state and federal regulations during the abatement efforts.

**Brandenburg® Industrial Service Company**
1680 John A. Papalas Drive
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Phone (313) 382-2500
FAX (313) 382-4373



## General Practices

### Regulated Areas

All Class I, II asbestos work will be conducted within regulated areas.

Access to the regulated area shall be limited to authorized persons.

### Demarcation

Warning signs that demarcate the regulated area will be provided and displayed at each location where a regulated area is required to be established. The warning signs shall bear the following information: Danger, Asbestos, Cancer and Lung Disease Hazard, Authorized Personnel Only, Respirators and Protection Clothing Are Required In This Area.

### Respiratory Selection

Brandenburg will provide at no cost to the employee the appropriate respirator as specified in Table 1 paragraph (h)(2)(iii), (iv),(v)-(h)(4)(ii) of 29 CFR 1926.1101 and maintain a respirator program in accordance with 1910.134(b), (d), (e), and (f).

Brandenburg will ensure that the employee uses the respirator as provided below.

During all Class I work.

During all Class II work where ACM is not removed in a "substantially intact state".

During all Class II work which is not performed using wet methods.

During Class II work where a "negative exposure assessment" has not been prepared.

During any work where exposure occurs above the PEL or excursion limit.

Brandenburg will provide and require the use of an approved half-face air purifying respirator for Class II jobs where a negative exposure assessment has not been performed.

### Protective Clothing

Brandenburg will provide and require the use of protective clothing, such as Tyvek coveralls, head coverings, gloves and foot coverings for all employees performing abatement activities. The competent person will examine work suits worn by employees at least once per work shift for rips or tears that may occur during performance of work and will mend or replace work suits immediately if needed

### Hygiene Facilities and Practices

Will be provided and performed as required in section (j) of 29 CFR 1926.110.

### Engineering Controls

HEPA vacuums will be used as needed.

Wet methods will be used.

Prompt clean up and disposal of waste in leak tight containers.

Local exhaust ventilation equipped with HEPA filters as needed.

Enclosures will be used whenever feasible.

## Specific Removal

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### Thermal System Insulation:

The TSI identified in the facility are the asbestos containing pipe runs, breaching, boiler insulation and tank insulation. Sections of the pipe wrap will be glove bagged to remove the asbestos insulation and expose the pipe surface. Glove bag removal will continue along the pipe runs either continuously until complete or at approximately spacing of 8-feet between glove bags. The pipe runs between the glove bagged areas will be wetted and double wrapped with 6-mill poly-sheeting and duct taped and sealed at the ends to the pipe. Once wrapped and sealed, individual sections of the pipe will be secured with ropes, the pipe torch cut and lowered to the ground. Ground men will then move the pipe to the lined and sealed roll-off box for storage. A containment using the power house existing structure will erected to abate the boiler breaching, boiler insulation and tank insulation. ACM will be wetted, immediately double bagged and placed into roll off containers for disposal.

### Vinyl Asbestos Tile and Mastic

Brandenburg shall remove asbestos containing floor tile within sealed critical areas by way of hand scrapers to "pop up" each tile. The tile removal will use wet methods during the removal work. Mastic associated with the removal of asbestos floor tile shall be accomplished utilizing a chemical adhesive remover. Said adhesive remover shall be collected, loaded, and transported to the landfill for disposal.

### Window & Door Caulk

Prior to razing the structures, Brandenburg will remove windows containing asbestos caulk from the building. The windows will be wrapped in polyethylene sheeting and placed in a roll-off box for disposal as non friable asbestos. Brandenburg will then remove any remaining caulk from the structure using hand labor. Any removed window caulk will be placed in the roll off box with the windows. Polyethylene sheeting will be placed on the ground beneath all caulk removal work. Any caulk collected on the poly will be bagged and placed in the non friable asbestos roll off box. All work will be conducted using wet methods.

### Transite Panels & Fire Doors

Brandenburg shall remove transite panels and fire doors by utilizing asbestos laborers to remove the panels intact. If necessary, man-lifts may be utilized to access the panels for removal. The panels and fire doors will be removed intact, wrapped in polyethylene sheeting, loaded in a lined roll-off box, and hauled to landfill for disposal.

### Ceiling tiles

Ceiling tiles will be located within the building and critical areas sealed. The ceiling tiles will be removed by accessing the ceiling working off of A-frame ladders. The individual tiles will be wetted and removed intact. The removed tiles will be placed into 6-mil polyethylene asbestos

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bags. When the tile removal is complete the bags will be removed from the building and placed in a sealed and lined roll-off box for transport to the landfill for disposal.

**Roofing Materials**

The roofing materials identified in the survey will be removed as part of the demolition of the building. The roof will be wetted with water from fire hoses during the demolition process. Once the roofing materials are pulled to the ground the material will be loaded into Brandenburg trucks for transporting to the landfill as C&D waste material.

Following, the removal of all regulated materials, Brandenburg will prepare for the demolition.

Brandenburg will use a hydraulic excavators equipped with a grapple or shear in order to raze the existing structure in a controlled manner. The building structure will be wetted with a fire hose throughout the demolition effort to control dust emissions. The building debris (C&D) will be placed in a stock pile as the building is being demolished. As the material accumulates it will be loaded via a CAT 980 wheel loader into a Brandenburg trailer and transported to the landfill for disposal. Each load will have a separate bill of lading or manifest associated with the load. These tickets will be kept in the log book at the Brandenburg office area and a concurrent log will be completed to track out going waste volumes.

The basement floor slabs will be cracked for drainage and filled. Existing grade will be determined at the perimeter of the existing structure. Removal of above grade concrete will be accomplished with the excavator equipped with a bucket, concrete processor or hydraulic breaker. Continued misting of the work area with water will be performed to control dust emissions.

Scrap steel shall be segregated, loaded, and hauled off site to a steel recycler.

Brandenburg will utilize onsite concrete as backfill material for the area affected by the removal efforts. Backfill shall be placed and rough graded to the top of the elevation of the surrounding grade.

## Office/Support Buildings

Brandenburg crews will next "sweep" the building looking for loose chemical containers and remove, stage and package the materials to ready them for disposal. All light bulbs, light ballasts, and self-illuminating exit signs will then be taken down, packaged and staged. Brandenburg crews will access the lights within the building off of A-frame step ladders, lights and ballasts will be carefully removed by hand and through the use of small hand tools as necessary. Generally the crew will work in pairs with one person working on the ladder and a ground person retrieving the bulb or ballast after removal to place in a storage container.

Brandenburg shall utilize trained Kentucky licensed asbestos abatement personnel to perform asbestos remediation throughout the structures. Brandenburg shall conform to all state and federal regulations during the abatement efforts.

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## General Practices

### Regulated Areas

All Class I, II asbestos work will be conducted within regulated areas.

Access to the regulated area shall be limited to authorized persons.

### Demarcation

Warning signs that demarcate the regulated area will be provided and displayed at each location where a regulated area is required to be established. The warning signs shall bear the following information: Danger, Asbestos, Cancer and Lung Disease Hazard, Authorized Personnel Only, Respirators and Protection Clothing Are Required In This Area.

### Respiratory Selection

Brandenburg will provide at no cost to the employee the appropriate respirator as specified in Table 1 paragraph (h)(2)(iii), (iv),(v)-(h)(4)(ii) of 29 CFR 1926.1101 and maintain a respirator program in accordance with 1910.134(b), (d), (e), and (f).

Brandenburg will ensure that the employee uses the respirator as provided below.

During all Class I work.

During all Class II work where ACM is not removed in a "substantially intact state".

During all Class II work which is not performed using wet methods.

During Class II work where a "negative exposure assessment" has not been prepared.

During any work where exposure occurs above the PEL or excursion limit.

Brandenburg will provide and require the use of an approved half-face air purifying respirator for Class II jobs where a negative exposure assessment has not been performed.

### Protective Clothing

Brandenburg will provide and require the use of protective clothing, such as Tyvek coveralls, head coverings, gloves and foot coverings for all employees performing abatement activities. The competent person will examine work suits worn by employees at least once per work shift for rips or tears that may occur during performance of work and will mend or replace work suits immediately if needed

### Hygiene Facilities and Practices

Will be provided and performed as required in section (j) of 29 CFR 1926.110.

### Engineering Controls

HEPA vacuums will be used as needed.

Wet methods will be used.

Prompt clean up and disposal of waste in leak tight containers.

Local exhaust ventilation equipped with HEPA filters as needed.

Enclosures will be used whenever feasible.

## Specific Removal

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### Thermal system Insulation:

The TSI identified in the facility are the asbestos containing pipe runs. Sections of the pipe wrap will be glove bagged to remove the asbestos insulation and expose the pipe surface. Glove bag removal will continue along the pipe runs either continuously until complete or at approximately spacing of 8-feet between glove bags. The pipe runs between the glove bagged areas will wetted and then double wrapped with 6-mill poly-sheeting and duct taped and sealed at the ends to the pipe. Once wrapped and sealed, individual sections of the pipe will be secured with ropes, the pipe torch cut and lowered to the ground. Ground men will then move the pipe to the lined and sealed roll-off box for storage.

### Vinyl Asbestos Tile and Mastic

Brandenburg shall remove asbestos containing floor tile within sealed critical areas by way of hand scrapers to "pop up" each tile. The tile removal will use wet methods during the removal work. Mastic associated with the removal of asbestos floor tile shall be accomplished utilizing a chemical adhesive remover. Said adhesive remover shall be collected, loaded, and transported to the landfill for disposal.

### Window & Door Caulk

Prior to razing the structures, Brandenburg will remove windows containing asbestos caulk from the building. The windows will be wrapped in polyethylene sheeting and placed in a roll-off box for disposal as non friable asbestos. Brandenburg will then remove any remaining caulk from the structure using hand labor. Any removed window caulk will be placed in the roll off box with the windows. Polyethylene sheeting will be placed on the ground beneath all caulk removal work. Any caulk collected on the poly will be bagged and placed in the non friable asbestos roll off box. All work will be conducted using wet methods.

### Transite Panels & Fire Doors

Brandenburg shall remove transite panels and fire doors by utilizing asbestos laborers to remove the panels intact. If necessary, man-lifts may be utilized to access the panels for removal. The panels and fire doors will be removed intact, wrapped in polyethylene sheeting, loaded in a lined roll-off box, and hauled to the landfill for disposal.

### Ceiling tiles

Ceiling tiles will be located within the building and critical areas sealed. The ceiling tiles will be removed by accessing the ceiling working off of A-frame ladders. The individual tiles will be wetted and removed intact. The removed tiles will be placed into 6-mil polyethylene asbestos bags. When the tile removal is complete the bags will be removed from the building and placed in a sealed and lined roll-off box for transport to the landfill for disposal.

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**Roofing Materials**

The roofing materials identified in the survey will be removed as part of the demolition of the building. The roof will be wetted with water from fire hoses during the demolition process. Once the roofing materials are pulled to the ground the material will be loaded into Brandenburg trucks for transporting to the landfill as C&D waste material.

Following the removal of all regulated materials, Brandenburg will prepare for the demolition. Brandenburg shall utilize skid steers equipped with biter buckets placed inside of the existing structure to remove the remaining combustible materials from the structure. These materials shall be removed from the building by way of an access opening within an existing exterior wall. Said opening shall be large enough for the easy ingress and egress of the skid steers operating within the structure. Once the material is outside of the existing structure, Brandenburg shall load and transport the waste to the landfill. A combination of a CAT 980 wheel loader and the Bobcat Skid Steer Loaders will be used to load the trucks.

Following, the interior strip out of the existing structure, Brandenburg shall begin the structural removal efforts. Brandenburg will utilize one or two Leibherr 954 hydraulic excavators equipped with whip hammers, hydraulic shears, grapples, and /or hydraulic hammers in order to raze the existing structure in a controlled manner. The excavating equipment will "bite" into the structure and pull the building apart.

The scrap steel material will be pulled from the building and separated from the building debris. The debris will be loaded into Brandenburg trucks for shipment to the landfill. As the building is removed, an area may be established for hot work in order to size some of the structure steel or other heavy steel. The steel will be eventually be loaded and shipped off site to a scrap steel recycler.

Brandenburg will utilize onsite concrete as backfill material for the areas affected by the removal efforts. Backfill shall be placed and rough graded to the top of the elevation of the surrounding grade.

## Unit 1 and 2 Stack & Cooling Towers

Following the completion of demolition of Units 1& 2 and all supporting building structures, tanks, conveyors and equipment, Brandenburg crews will implode the stack and (2) cooling towers.

Brandenburg crews will go through the structures performing the initial walk through to verify that the utilities have been disconnected, isolated or air gapped. Following the walk through, barricades consisting of snow fence and caution or danger tape will be placed at entry areas of the structure to limit access.

Once the concrete structures are imploded, Brandenburg will segregate the scrap steel from the concrete. The steel will be loaded and shipped off-site to a scrap recycler. The concrete will be processed to two feet or less in size and used as bridging material at the slurry ash ponds prior to capping with clay.

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# Bottom Ash Ponds

Brandenburg will remove, transport and dispose of the piping from the boiler units to the ponds. Brandenburg will dewater the bottom ash ponds. The water will be filtered and discharged into the Big Sandy River. Brandenburg will then import clay from the AEP clay borough and place a two feet clay cap on any remaining bottom ash accumulations.

# Slurry Ash Ponds

Brandenburg will remove, transport and dispose of the piping from the boiler units to the ponds. Brandenburg will allow the slurry ash ponds to drain naturally. Once drained, concrete from the demolition of the stack and cooling towers will be utilized to stabilize bridge the ground. The area will be graded and Brandenburg will import clay from the on-site AEP clay borough and place a two foot clay cap over the 150 acre area. Brandenburg will grade the area to allow for water to drain toward Blaine Creek.

# Aboveground/Underground Storage Tanks

Brandenburg shall remove all above ground tanks, including pipe racks, supports, and appurtenances utilizing a hydraulic excavator equipped with a hydraulic shear to cut the existing piping, tank, and appurtenances. Scrap steel shall be segregated, loaded, and hauled off site to a steel recycler. Brandenburg will then remove the tank dike walls down to surrounding grade elevation or top of tank slab. The Tank Ring foundations shall remain in place.

Brandenburg will remove all below grade tanks, pumps and below grade product lines. The tanks will be emptied by conventional means. A hydraulic excavator will be used to excavate and remove the tanks. Brandenburg will utilize onsite concrete as backfill material for the areas affected by the removal efforts. Backfill shall be placed and rough graded to the top of the elevation of the surrounding grade.

# Volumes

| Demolition Material | Volume |
|---|---|
| Concrete | 35,000 yards |
| Asbestos | 3,000 yards |
| Demolition Debris | 5,000 yards |
| Railroad Ties | 30,666 ties |
| Brick | 6,500 yards |
| Scrap Ferrous Steel | 22,000 tons |
| Scrap Non-ferrous Steel | 290,000 lbs |
| Oils/Greases | 50,000 gallons |

# AMM Scrap Iron & Steel Prices

Wednesday, December 29, 2004

## CONSUMER BUYING PRICES

ted domestic consumer buying prices in US$/gross ton; delivered mill price.

| | Birmingham | Carolinas | Chicago | Cleveland | Detroit | Houston area | N.Y | Philly | P-burgh | Seattle/ Portland | St. Louis | Youngstown | Hamilton, Ontario† | Montreal† |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 HEAVY MELT | 180 | 127-129 | 220 | 215 | 245 | 130-132 | 200-202 | 208-210 | 220 | 110-112 | 130 | 220 | 125 | 180 |
| 2 heavy melt | 170 | 118-120 | 210 | 205 | | 116-117 | 190-192 | 195-197 | 212 | 107-108 | 120 | 210 | | 145 |
| 1 bundles | 340 | | 390 | 398 | 373 | 370 | NA | 375 | 398-400 | NA | 315 | NA | 292-294 | |
| No. 2 bundles | 150 | 100(a) | 170 | | NA | 110(a) | NA | 170 | 160(a) | 93-95 | NA | 150(a) | | NA |
| No. 1 busheling | 320 | 290-292 | 390 | 370 | 378 | 375 | 375 | 376 | 405 | | 316 | 395 | 296-298 | 255 |
| No. 1 factory bundles | | | 418 | 416 | 420 | | | NA | 415 | | | | | |
| Shredded auto scrap | 270 | 235 | 275 | 260 | 260 | 245 | 250-252 | 250 | 260 | 127-129 | 205 | 250 | 155 | 250 |
| MACHINE SHOP TURNINGS | 130 | 90 | 175 | 95(a) | | 35(a) | 160 | 153-155 | 155(a) | 85-86 | 83-85 | | 30 | 120 |
| Shoveling turnings | NA | | 175 | 100(a) | | 45(a) | NA | 163-165 | 165(a) | | 83-85 | | 40 | |
| *Cast iron borings* | NA | | 165 | 85(a) | | | | | | NA | 82-84 | | | |
| Mixed borings, turnings | NA | | 165 | NA | | | | | | 70-71 | | | | |
| CUT STRUCTURAL/PLATE, 2' MAX. | NA | 165 | 370 | | | 243-245 | NA | 335 | NA | NA | NA | | NA | 270 |
| Cut structural/plate, 3' max. | 255 | 155 | | | | 233-235 | NA | 290 | 310 | | 170 | | | |
| Cut structural/plate, 5' max. | 212 | 145 | 275 | 240(a) | 255 | 225-227 | 210-212 | 236-238 | 260 | 125-127 | 160 | 260 | 165 | 215 |
| Foundry steel, 2' max. | 245 | | 215 | 265 | 240 | 180 | | 260 | 240 | | | 280 | | |
| CUPOLA CAST | 220 | 195 | 270 | 270 | 250 | 180 | 250(a) | 270 | 260 | NA | | | | 220 |
| Clean auto cast | 270 | 283 | 315 | 310 | 260 | | | 330 | 300 | | | | | |
| Unstripped motor blocks | 183-185 | 230 | 240 | 230 | 210 | 185 | NA | 195 | 200 | | | | | |
| Heavy breakable cast | 160 | | 160 | 190 | 190 | | | 140 | 150 | | | | | |
| Drop broken machinery cast | | 280 | 300 | 275 | 240 | | | 315 | 290 | 144-145 | | | 240 | 265 |
| NO. 1 RR HEAVY MELT | 220 | 150 | 275 | 240 | | 228-230 | | 260 | 260 | 140-142 | 165 | 275 | | |
| Rail crops, 2' max. | 108(a) | 300 | 380 | 375 | | | | 375 | 375 | | | | | |
| Random rails | 175 | | 250 | | | | | 210 | 275 | 125-127 | | | | |
| Steel car wheels | 265 | 280 | 390 | | | | | 385 | 380 | | | | | |
| Other track material (OTM) | 270 | 295 | 280 | 350 | | | | 340 | 370 | 170-172 | | | | |
| CLEAN USED DENSIFIED CANS | | | 235 | 235 | 245 | | | 225 | 195 | | | | | |

(a) Appraisal price
NA—Not available
† Canadian currency; in net tons

## STAINLESS STEEL SCRAP

| | Boston | Buffalo | Chicago | Cleveland | Detroit | Houston | L.A | N.Y | P-burgh | S.F | Montreal† |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DEALERS' BUYING PRICES (¢/lb.) | | | | | | | | | | | |
| 18-8 bundles, solids, clips | 49-50 | 49-50 | 50-51 | 50-51 | 50-51 | 50-51 | 50-51 | 50-51 | 50-51 | 49-50 | 52-56 |
| 18-8 turnings | 45-46 | 45-46 | 46-47 | 46-47 | 46-47 | 46-47 | 46-47 | 46-47 | 46-47 | 45-46 | 48-50 |
| 18-8 new clips | | 50-51 | 51-52 | 51-52 | 51-52 | | 51-52 | 51-52 | 51-52 | 50-51 | 54-58 |
| 430 new clips | 7.5-8.0 | | 7.5-8.0 | 7.5-8.0 | 7.5-8.0 | | | 7.5-8.0 | 7.5-8.0 | | |
| BROKER/PROCESSOR BUYING PRICES ($/gross ton) | | | | | | | | | | | |
| 18-8 bundles, solids, clips | | | 1,375-1,400 | 1,375-1,400 | 1,375-1,400 | 1,375-1,400 | | 1,375-1,400 | 1,375-1,400 | | |
| 18-8 turnings | | | 1,275-1,300 | 1,275-1,300 | 1,275-1,300 | 1,275-1,300 | | 1,275-1,300 | 1,275-1,300 | | |
| 4?' ndles, solids | | | 355-365 | | 355-365 | 355-365 | | | 355-365 | | |
| 4 ings | | | 305-315 | | | | | | 305-315 | | |
| 4. dles, solids | | | 330-340 | | 330-340 | 330-340 | | | 330-340 | | |
| '09 turnings | | | | | | | | | 255-255 | | |

anadian currency

## EXPORT YARD BUYING PRICES

*Estimated prices an export dealer, broker or processor will pay for items delivered to his yard, in US$/gross ton.*

| | Boston | L.A | N.Y | Philly | S.F |
|---|---|---|---|---|---|
| No. 1 heavy melt | 170-172 | 90-92 | 180-182 | 195-197 | 90-92 |
| No. 2 heavy melt | 160-162 | 80-82 | 170-172 | 185-187 | 80-82 |
| No. 2 bundles | 100(a) | NA | 110(a) | 115(a) | 50-52 |
| No. 1 busheling | 300 | | 310 | | |
| Shredded auto scrap | 240 | | | | |
| Machine shop turnings | NA | 70 | 110(a) | | 70 |
| Mixed cast | 170 | | 180 | 200 | |
| Unstripped motor blocks | 170 | 130 | 170 | 180 | 130 |
| Auto bodies | 110 | 100 | 135 | 135 | 90 |
| Cut structural/plate 5' max. | 180-182 | | 190-192 | 218-220 | |
| STAINLESS STEEL SCRAP PRICES ($/ton) | | | | | |
| *18-8 bundles, solids, clips* | | 1,375-1,400 | 1,375-1,400 | 1,375-1,400 | 1,375-1,400 |
| 18-8 turnings | | 1,275-1,300 | 1,275-1,300 | 1,275-1,300 | 1,275-1,300 |
| 430 bundles, solids | 250 | 245 | 245 | 245 | |

(a) Appraisal price

## BROKER BUYING PRICES

Estimated prices in US$/gross ton, f.o.b. car*

| | Atlanta | Boston | Buffalo | Cincinnati | Detroit |
|---|---|---|---|---|---|
| NO. 1 HEAVY MELT | 180 | 180 | 185 | 190 | 230 |
| No. 2 heavy melt | 160 | 170 | 175 | 180 | |
| No. 1 bundles | 305 | 330 | 330 | 325 | 340 |
| No. 2 bundles | 150 | 170 | 180 | 160 | 200 |
| No. 1 busheling | 300 | 330 | 330 | 323 | 355 |
| Shredded auto scrap | 240 | 240 | 220 | 220 | 250 |
| MACHINE SHOP TURNINGS | | NA | 140 | 135 | 130 |
| Shoveling turnings | | NA | 150 | 150 | 130 |
| *Cast iron borings* | | NA | 140 | 135 | 140 |
| Mixed borings, turnings | | | 140 | | 130 |
| CUPOLA CAST | | | 200 | 200 | 180 |
| Cut structural/plate, 5' max. | 205 | | 200 | 200 | 240 |
| Cut structural/plate, 2' max. | | | 300 | 295 | 340 |
| C' auto cast | | | | 300 | 285 |
| ed motor blocks | | 180 | 200 | | 175 |
| oreakable cast | | NA | 170 | | 145 |
| Drop broken machinery cast | | NA | 260 | | 250 |
| crops, 2' max. | | | 260 | 240 | |
| dom rails | | | 200 | 180 | |

*F.o.b. (free on board at the shipping point) from dealer to broker where freight rate is absorbed by broker; freight rate based on single-car shipments.

## STAINLESS CONSUMER BUYING PRICES

($/grosston)
Pittsburgh

| | |
|---|---|
| 18-8 bundles, solids, clips | 1,500-1,625 |
| 18-8 turnings | 1,400-1,425 |
| 430 bundles, solids | 470-480 |
| *430 turnings* | 420-430 |
| 409 bundles, solids | 430-440 |
| 409 turnings | 350-360 |

## ADDITIONAL GRADES

Birmingham

| | |
|---|---|
| Electric furnace, 3' max. | 205 |
| Cut structural/plate, 4' max. | 240 |
| Stove plate | 220 |

Chicago

| | |
|---|---|
| No. 1 industrial heavy melt | 275 |
| Rail crops, 18" max. | 395 |
| Rerolling rails | 325 |
| Steel axles | 310 |
| Heavy forge bar crops | 290 |
| Stove plate | 270 |
| Punching & plate, 12" max. | 360 |

### *Scrap Price Changes Today*

Ferrous scrap price changes were made for these cities:
None

# AMM Nonferrous Scrap Prices

Wednesday, December 29, 2004

Estimated dealer buying prices, in ¢/lb, delivered to yard. Montreal and Toronto prices are in Canadian currency.

## COPPER

| | Atlanta | Boston | Buffalo | Chicago | Cincinnati | Cleveland | Detroit | Houston | L.A. | N.Y | Philly | P-burgh | S.F | St. Louis | Montreal | Toronto |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. 1 heavy copper & wire | 116-118 | 102-104 | 86-88 | 97-99 | 97-99 | 115-117 | 95-97 | 103-105 | 100-102 | 98-100 | 100-102 | 101-103 | 100-102 | 106-108 | 157-159 | 132-134 |
| NO. 2 HEAVY COPPER & WIRE | 96-98 | 92-94 | 76-78 | 89-91 | 86-88 | 103-105 | 85-87 | 92-94 | 90-92 | 88-90 | 90-92 | 91-93 | 90-92 | 96-98 | 128-130 | 116-118 |
| Light copper | 91-93 | 83-85 | 71-73 | 79-81 | 81-83 | 95-97 | 80-82 | 80-82 | 85-87 | 81-83 | 84-86 | 79-81 | 83-85 | 88-90 | 121-123 | 104-106 |
| RED BRASS SOLIDS | 73-75 | 58-60 | 43-45 | 59-61 | 56-58 | 74-76 | 54-55 | 60-62 | 62-64 | 51-53 | 56-58 | 53-55 | 63-65 | 66-68 | 95-97 | 87-89 |
| Red brass turnings, borings | 64-66 | 57-59 | 43-45 | 56-58 | 52-54 | 54-56 | 44-46 | 52-54 | 59-61 | 54-56 | 56-58 | 47-49 | 55-57 | 58-60 | 91-93 | 74-76 |
| Cocks & faucets | 60-62 | 54-56 | 38-40 | 56-58 | 51-53 | 54-56 | 44-46 | 51-53 | 60-63 | 54-56 | 56-58 | 47-49 | 55-57 | 66-68 | 80-82 | 66-68 |
| Brass pipe | 88-90 | 54-56 | 39-41 | 56-58 | 50-52 | 54-56 | 45-47 | 51-53 | 61-63 | 55-56 | 56-58 | 47-49 | 55-57 | 56-58 | 80-82 | 82-84 |
| YELLOW BRASS SOLIDS | 62-64 | 54-56 | 39-41 | 56-58 | 50-52 | 54-56 | 44-46 | 51-53 | 55-57 | 55-56 | 56-58 | 53-55 | 30-32 | 56-58 | 76-78 | 68-70 |
| Mixed yellow brass turnings, borings | 45-47 | 33-35 | 27-29 | 27-29 | 25-27 | 22-24 | 25-27 | 34-36 | 29-31 | 25-27 | 29-31 | 22-24 | 60-62 | 25-27 | 54-56 | 38-40 |
| Yellow brass rod ends | 78-80 | 52-54 | 44-46 | 54-56 | 51-52 | 82-84 | 47-49 | 58-60 | 55-57 | 51-53 | 51-53 | 50-52 | 59-61 | 80-82 | 104-106 | 88-90 |
| Yellow brass rod turnings | 76-78 | 50-52 | 43-44 | 53-55 | 48-49 | 80-82 | 45-47 | 57-59 | 53-55 | 49-51 | 48-50 | 49-51 | 58-60 | 78-80 | 100-102 | 86-88 |
| 70-30 brass clips | 85-87 | 60-62 | 54-56 | 51-53 | 67-69 | 90-92 | 63-65 | 68-70 | 60-62 | 61-63 | 68-70 | 62-64 | 65-67 | 91-93 | 115-117 | 78-80 |
| AUTO RADIATORS (UNSWEATED) | 60-62 | 46-47 | 38-40 | 43-45 | 48-50 | 53-55 | 46-48 | 49-51 | 53-55 | 43-45 | 42-44 | 42-44 | 55-57 | 50-52 | 70-72 | 65-67 |
| High-grade bronze gears | 73-75 | 55-57 | 58-60 | 52-54 | 62-64 | 60-62 | 47-49 | 68-70 | 51-53 | 60-62 | 61-63 | 60-62 | 62-64 | 50-52 | 110-112 | 72-74 |
| High-grade low lead bronze | 73-75 | 35-37 | 53-55 | 48-50 | NA | 60-62 | NA | 45-47 | 45-47 | 55-57 | 57-59 | 48-50 | 58-60 | 45-47 | 85-87 | .... |
| Manganese bronze solids | 40-42 | 35-37 | 38-40 | 31-33 | 39-41 | 30-32 | 18-20 | 47-49 | 37-39 | 41-43 | 42-44 | 36-38 | 37-39 | 33-35 | 65-67 | 46-48 |
| Miscellaneous nickel-"silver" solids | 62-64 | 39-41 | 38-40 | 35-37 | 38-40 | 54-56 | 20-22 | 51-53 | 35-37 | 43-45 | 43-45 | 42-44 | 37-39 | 37-39 | 75-77 | .... |
| Manganese bronze turnings | 24-26 | 24-26 | 25-27 | 23-25 | 25-27 | 25-27 | 5-7 | 30-32 | 23-25 | 27-29 | 27-29 | 25-27 | 25-27 | 21-23 | 65-57 | 28-30 |

## ALUMINUM

| | Atlanta | Boston | Buffalo | Chicago | Cincinnati | Cleveland | Detroit | Houston | L.A | N.Y | Philly | P-burgh | S.F | St. Louis | Montreal | Toronto |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Segregated low copper clips | 44 | 43 | 49 | 46 | 45 | 46 | 44 | 43 | 44 | 49 | 49 | 44 | 44 | 41 | 53 | 53 |
| Mixed low copper clips | 42 | 39 | 45 | 38 | 41 | 43 | 41 | 42 | 39 | 44 | 44 | 40 | 39 | 37 | 44 | 44 |
| Mixed clips | 39 | 36 | 43 | 35 | 37 | 39 | 37 | 38 | 37 | 42 | 42 | 38 | 37 | 35 | 43 | 43 |
| Aluminum borings, turnings, clean & dry | 34 | 30 | 31 | 33 | 35 | 31 | 33 | 36 | 32 | 35 | 27 | 25 | 32 | 28 | 42 | 42 |
| Old aluminum, sheet & cast | 34 | 35 | 38 | 29 | 36 | 40 | 34 | 37 | 36 | 38 | 38 | 38 | 36 | 34 | 43 | 43 |
| Used beverage cans, clean & dry | 35 | NA | 34 | 30 | 34 | 36 | NA | NA | NA | 35 | 35 | 34 | NA | 33 | | |
| Industrial castings | 46 | 42 | 45 | .... | .... | .... | 42 | .... | .... | .... | NA | .... | .... | 44 | .... | .... |
| 63S aluminum solids | 48 | 44 | 62 | 43 | .... | .... | 48 | .... | .... | .... | 50 | .... | .... | 47 | 56 | 56 |
| 75S aluminum clips | 42 | 38 | 43 | .... | .... | .... | 42 | .... | 46 | NA | 46 | .... | NA | .... | .... | .... |
| 75S borings, turnings, as is | 33 | .... | 31 | .... | .... | .... | .... | .... | 30 | NA | 29 | .... | NA | .... | .... | .... |
| Aluminum utensils | NA | NA | 43 | NA | .... | .... | NA | .... | .... | .... | NA | .... | .... | NA | 41 | 41 |
| Painted aluminum siding | 39 | 38 | 41 | 37 | .... | .... | 38 | .... | .... | .... | 41 | .... | .... | 35 | .... | 53 |

(a) Appraisal price

## LEAD

| | Atlanta | Boston | Buffalo | Chicago | Cincinnati | Cleveland | Detroit | Houston | L.A | N.Y | Philly | P_burg | S.F | St. Louis | Montreal | Toronto |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HEAVY SOFT LEAD | 5-6 | 6-7 | 6-7 | 6-7 | 6-7 | 6-7 | 6-7 | 6-7 | 6.5-7.5 | 5 | 5 | 6-7 | 5-6 | 6-7 | 16-18 | 15-17 |
| Mixed hard lead | 6.5-7.5 | .... | .... | .... | 8.5 | .... | 8.6 | .... | .... | .... | .... | 9 | 8-10 | .... | 17-19 | 16-17 |
| Undrained, whole old batteries | .... | .... | .... | .... | .... | .... | 3 | 3 | 2.5-3.5 | 3 | 2 | 3-4 | 4 | 3-4 | 4-6 | 4-6 |
| WHEEL WEIGHTS | 7-9 | 8-10 | 8-9 | 10-11 | 11 | .... | 11 | 6-8 | 6-7 | .... | 4 | 8 | 9-11 | .... | 15-16 | 10-12 |

## ZINC

| | Atlanta | Boston | Buffalo | Chicago | Cincinnati | Cleveland | Detroit | Houston | L.A | N.Y | Philly | P-burgh | S.F | St. Louis | Montreal | Toronto |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N... zinc die cast | .... | 28-29 | 28-29 | 29-31 | 27-28 | .... | 30-32 | 31-32 | 27-28 | 29 | .... | 30-32 | 27-28 | 29-31 | 40-42 | 40-42 |
| ...D ZINC DIE CAST | .... | 26-27 | 26-27 | 27-28 | 23-24 | .... | 24 | 30-31 | 26-27 | 26 | 25 | 28-29 | 25-26 | .... | 38-40 | 38-40 |
| ... zinc scrap | .... | 21-23 | 21-23 | 25-26 | 21-23 | .... | 24 | .... | 20-21 | 24 | 25 | 23-25 | .... | .... | 38-40 | 38-40 |
| ...W ZINC CLIPPINGS, ENGRAVERS' ZINC & LITHO SHEETS | .... | 31-32 | 31-32 | 34-36 | 24-25 | .... | 29 | .... | 28-29 | 31-32 | 38 | 29-31 | 27-28 | 31-32 | 38-40 | 38-40 |
| Zinc die cast automotive grilles | .... | .... | .... | .... | 23-24 | .... | 23 | .... | .... | NA | NA | NA | 23 | .... | 40-42 | 40-42 |

## NICKEL

| | Atlanta | Boston | Buffalo | Chicago | Cincinnati | Cleveland | Detroit | Houston | L.A | N.Y | Philly | P-burgh | S.F | St. Louis | Montreal | Toronto |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New nickel clips & solids | 490-500 | 480-490 | 480-490 | 490-500 | 490-500 | 490-500 | 490-500 | 490-500 | 480-490 | 490-500 | 490-500 | 490-500 | 480-490 | 480-490 | 540-550 | 540-550 |
| Nickel turnings | 480-490 | .... | 470-480 | 480-490 | .... | 480-490 | 480-490 | 480-490 | .... | .... | .... | 480-490 | .... | .... | 530-540 | .... |
| New nickel-copper alloy (e.g., Monel®) clips & solids | 340-350 | 330-340 | 330-340 | 340-350 | 340-350 | 340-350 | 340-350 | 340-350 | 330-340 | 340-350 | 340-350 | 340-350 | 330-340 | 330-340 | .... | .... |
| Nickel-copper alloy (e.g., Monel®) turnings & shavings | 330-340 | 320-330 | 320-330 | 330-340 | 330-340 | 330-340 | 330-340 | 330-340 | 320-330 | 330-340 | 330-340 | 330-340 | 320-330 | .... | .... | .... |
| Nickel-copper alloy (e.g., Monel®) castings | 335-340 | 325-335 | 325-335 | 335-340 | 335-340 | 335-340 | 335-345 | 335-345 | 325-335 | .... | 335-345 | 335-345 | .... | 325-335 | .... | .... |
| Nickel-chrome-iron alloy (e.g., Inconel®) solids | 400-410 | 400-410 | 400-410 | 400-410 | 390-400 | 400-410 | 400-410 | 400-410 | 390-400 | 390-400 | 400-410 | 400-410 | 390-400 | 390-400 | 440-450 | 440-450 |

Monel® and Inconel® are registered trademarks of Inco Alloys International Inc.

## SCRAP METALS

Estimated buying prices
(carload lots, delivered buyers' works)

**BRASS MILL SCRAP**

| | |
|---|---|
| *No. 1 copper* | 144.00* |

**REFINERS' COPPER SCRAP**

| | |
|---|---|
| No. 1 copper | 137.00* |
| No. 2 copper | 124.00* |
| Light copper | 115.00* |
| *Refinery brass†* | NA |

† Shippers' price for dry copper content assaying a min. 61.3% copper and a max. 5% iron.

**BRASS INGOT MAKERS' SCRAP**
(rev. 12/28/2004)

| *Copper* | East | Midwest |
|---|---|---|
| No. 1 | 133.00* | 132.00* |
| No. 2 | 120.00* | 119.00* |
| Light copper | 111.00* | 110.00* |
| No. 1 comp. solids (...10/04) | 95.00 | 95.00 |
| ..., borings, turnings (rev. 12/10/04) | 94.00 | 94.00 |
| ...llators (rev. 12/10/04) | 75.00 | 75.00 |
| ...w brass solids (rev. 12/10/04) | 70.00 | 70.00 |
| *Turnings (rev. 12/10/04)* | 60.00 | 60.00 |

**SMELTERS' LEAD SCRAP**

Buying prices heavy soft lead (cwt), including delivery to smelter
*(rev.09/14/04)*

| | |
|---|---|
| Scrap lead | $20.00-$21.00 |
| *Remelt lead* | $21.00-$22.00 |
| Whole batteries | $7.50-$8.00 |
| Cable lead | $22.00 |

**SMELTERS' ZINC SCRAP**
(rev. 12/28/04)

| | |
|---|---|
| New zinc clippings | 36.00-37.00 |
| Old zinc (clean) | 34.00-35.00 |
| Die cast slab | 36.00-37.00 |
| Galvanizers' dross | 29.00-30.00 |

**SECONDARY SMELTERS' ALUMINUM SCRAP**

Buying prices delivered to the *smelter in full truck*-loads containing several grades
*(rev 12/28/2004)*

| | |
|---|---|
| Mixed low copper clips | 61.00-62.00 |
| Mixed high copper clips | 59.00-60.00 |
| Mixed high zinc clips | 57.00-58.00 |
| 1-1-3 sows | 62.00-63.00 |
| Siding, painted | 57.00-58.00 |
| *Mixed clips* | 57.00-58.00 |
| Old sheet and cast | 56.00-58.00 |
| Turnings, clean & dry | 54.00-55.00 |
| Aluminum-copper radiators | 79.00-80.00 |
| Nonferrous auto shred (90% alum.) | *62.00-63.00 |

* Unmixed full truckload, "twitch" grade

**DOMESTIC ALUMINUM PRODUCERS**

Buying prices for processed used aluminum cans in carload lots, f.o.b. shipping point (rev. 12/07/04)

| | |
|---|---|
| Used beverage can scrap | *63.00-65.00* |

**MILLS, SPECIALTY CONSUMERS' BUYING PRICES**
(rev.12/28/2004)

| | |
|---|---|
| *Segregated low copper alloy clips* | 80.00-81.00 |
| Mixed low copper alloy clips | 72.00-73.00 |
| Painted siding | 66.00-67.00 |

* Nominal for spot sales.

*Scrap Price Changes Today*
Nonferrous scrap price changes were made for these cities:
None

Prices are subject to the Disclaimer appearing on the "*AMM* Scrap Iron & Steel Prices" page.

AEP Company
Re-sale of Equipment

May 31, 2005

Resalable valve of equipment

The equipment that has re-sale value are as follows:

The coal pulverizers used to pulverize the coal blown into the boiler as fuel.

The Unit 1 cooling tower water pumps and motors used to move the cooling water from the cooling tower to the turbine generator condensers.

The Unit 2 cooling tower pumps and motors used to move the cooling water from the cooling tower to the turbine generator condensers.

The three, Unit 1 step-up transformers, after the generator.

The five, Unit 2 step-up transformers, after the generator.

The four, plant step-down transformers, at the west substation yard.

The amount of money that the equipment is worth is a small amount. Because of the age of the equipment, the transformers will range in price from $2.00 to $4.00 per KVA. The pumps and AC motors will range around $5.00 per horsepower. And the coal pulverizers will range in resale value of $3,500.00 to $5,000.00 each depending on condition and date of rebuild. The total resalable value today for equipment that is resalable is $250,000.00.

# Recommendations

Brandenburg recommends that a detailed asbestos survey be performed to determine the exact volume of asbestos present on the property.

Brandenburg recommends that instead of capping the slurry ash ponds, AEP request a variance from the State of Kentucky to maintain the area as a protected wetland/ wildlife habitat.

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# STEAM PRODUCTION PLANT WORKPAPERS

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Production Plant

This investment consists of two generating units located on the Big Sandy River near Louisa, Kentucky. Unit 1 is rated at 260 MW and was placed in service in 1963. Unit 2 is rated at 800MW and was placed in service in 1969. The estimated final retirement dates for the units were provided by the Asset and Outage Planning Section of AEP's Generating Division.

Life Analysis

Interim retirements for the Big Sandy Plant were determined by analyzing past history for each of the accounts in the production plant function. Interim retirement ratio's were developed based on the period 1975 through 2008. Interim retirements are not usually considered representative of the future until the generating units have experienced a few years of actual operation. Since Unit 2 was placed in-service in 1969, the period beginning in 1975 provided for five years of operational experience.

In addition to the interim retirements experienced to date, the Selective Catalytic Reduction (SCR) system that is installed at Big Sandy Plant will have the SCR Catalysts replaced at future intervals. The AEP Engineering group provided the following details for replacement of the SCR Catalysts:

Layer 1 will be replaced in year 2015
Layer 2 will be replaced in year 2016
Layer 3 will be replaced in year 2011

The original cost of the catalysts are as follows:

| | |
|---|---|
| Layer 1 | $3,259,048 |
| Layer 2 | $3,259,049 |
| Layer 3 | $1,629,524 |

After determining the interim retirments and the retirement of the SCR catalysts, a remaining life was calculated for each of the primary production plant accounts. The surviving plant balances by primary plant account at 12/31/08 were also aged. The age of the surviving balances plus the remaining life were summed to determine the total life of the investments.

Salvage and Cost of Removal

Kentucky Power Company engaged the firm of Brandenburg Industrial Service Company to perform a conceptual demolition cost estimate for the Big Sandy Plant. The demolition cost is estimated to be $32,000,000 in current (2008) dollars. It is appropriate to include the final retirement costs for the Big Sandy plant in depreciation rates in order to ensure that the generation of customers that are receiving service from the plant also share in the final removal costs of the plant.

There are also gross salvage and removal costs associated with the removal/replacement of equipment during the operating life of the plant. An analysis of interim retirements was made for the production plant function and the fifteen year period of 1994-2008 was used as the basis to determing a gross salvage percentage and a gross removal percentage. The estimates of salvage and removal for both the final plant retirement and the interim retirements were combined to calculate a net salvage for each plant account. That calculation is as follows:

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Production Plant

Calculation of Removal and Salvage:

Interim Retirements:

| Account | Interim Retirements (From Remaining Life Workpaper) | Gross Removal Percent | Gross Salvage Percent | Interim Retirement Net Salvage Percent |
|---|---|---|---|---|
| 311 | 1,250,309 | 34% | 6% | -28% |
| 312 | 76,510,548 | 34% | 6% | -28% |
| 314 | 24,276,603 | 34% | 6% | -28% |
| 315 | 1,086,040 | 34% | 6% | -28% |
| 316 | 1,354,889 | 34% | 6% | -28% |
| Total | 104,478,389 | | | |

| Account | Plant In-Service at 12/31/08 | Net Salvage on Interim Retirement | Final Demolition Cost (a) | Total Net Salvage Costs | Net Salvage as Percent of Plant |
|---|---|---|---|---|---|
| 311 | 40,583,921 | -350,087 | -3,342,154 | -3,692,240 | -9% |
| 312 | 355,237,890 | -21,422,953 | -29,254,434 | -50,677,387 | -14% |
| 314 | 104,506,857 | -6,797,449 | -8,606,314 | -15,403,763 | -15% |
| 315 | 15,303,286 | -304,091 | -1,260,251 | -1,564,342 | -10% |
| 316 | 6,518,954 | -379,369 | -536,847 | -916,216 | -14% |
| Total | 522,150,908 | -29,253,949 | -43,000,000 | -72,253,949 | -14% |

Notes: (a) Costs allocated to plant accounts based on Plant-In-Service Balances at 12/31/08

Calculation of Theoretical Reserve and Depreciation Rates

A theoretical reserve was determined based on the above calculations of average age, remaining life and net salvage. The theoretical reserve was used to allocate the actual book reserve to the individual plant accounts.

Based on plant balances at 12/31/08 and the allocated book reserve, remaining life depreciation rates were calculated for each primary plant account.

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# STEAM PRODUCTION PLANT WORKPAPERS

## INTERIM RETIRMENT RATIOS

KENTUCKY POWER COMPANY
CALCULATION OF INTERIM RETIREMENT RATIOS
STEAM PRODUCTION PLANT
ACCOUNT 311.0 STRUCTURES & IMPROVEMENTS

| YEAR | ADDITIONS | RETIREMENTS | BALANCE | AVERAGE BALANCE | RETIREMENT RATIO |
|---|---|---|---|---|---|
| 1963 | 6,127,706 | 0 | 6,127,706 | N. A. | N. A. |
| 1964 | 13,194 | 0 | 6,140,900 | 6,134,303 | 0.0000 |
| 1965 | 18,607 | 255 | 6,159,252 | 6,150,076 | 0.0000 |
| 1966 | 4,255 | 7,338 | 6,156,169 | 6,157,711 | 0.0012 |
| 1967 | 575 | 69,333 | 6,087,411 | 6,121,790 | 0.0113 |
| 1968 | 21,282 | 0 | 6,108,693 | 6,098,052 | 0.0000 |
| 1969 | 15,770,374 | 0 | 21,879,067 | 13,993,880 | 0.0000 |
| 1970 | 803,526 | 7,182 | 22,675,411 | 22,277,239 | 0.0003 |
| 1971 | 163,043 | 37,002 | 22,801,452 | 22,738,432 | 0.0016 |
| 1972 | 56,860 | 0 | 22,858,312 | 22,829,882 | 0.0000 |
| 1973 | 2,605 | 0 | 22,860,917 | 22,859,615 | 0.0000 |
| 1974 | 66,090 | 1,665 | 22,925,342 | 22,893,130 | 0.0001 |
| 1975 | 29,219 | 0 | 22,954,561 | 22,939,952 | 0.0000 |
| 1976 | 65,662 | 0 | 23,020,223 | 22,987,392 | 0.0000 |
| 1977 | 87,499 | 0 | 23,107,722 | 23,063,973 | 0.0000 |
| 1978 | 297,729 | 24,379 | 23,381,072 | 23,244,397 | 0.0010 |
| 1979 | 214,311 | 5,000 | 23,590,383 | 23,485,728 | 0.0002 |
| 1980 | 27,547 | 6,618 | 23,611,312 | 23,600,848 | 0.0003 |
| 1981 | 212,801 | 358 | 23,823,755 | 23,717,534 | 0.0000 |
| 1982 | 716,535 | 44,396 | 24,495,894 | 24,159,825 | 0.0018 |
| 1983 | 389,851 | 307,808 | 24,577,937 | 24,536,916 | 0.0125 |
| 1984 | 81,115 | 469 | 24,658,583 | 24,618,260 | 0.0000 |
| 1985 | 64,741 | 1,605 | 24,721,719 | 24,690,151 | 0.0001 |
| 1986 | 0 | 0 | 24,721,719 | 24,721,719 | 0.0000 |
| 1987 | 34,955 | 966 | 24,755,708 | 24,738,714 | 0.0000 |
| 1988 | 171,684 | 718 | 24,926,674 | 24,841,191 | 0.0000 |
| 1989 | 28,362 | 2,856 | 24,952,180 | 24,939,427 | 0.0001 |
| 1990 | 484,041 | 3,690 | 25,432,531 | 25,192,356 | 0.0001 |
| 1991 | 18,357 | 35,387 | 25,415,501 | 25,424,016 | 0.0014 |
| 1992 | 22,217 | 13,640 | 25,424,078 | 25,419,790 | 0.0005 |
| 1993 | 168,711 | 56,800 | 25,535,989 | 25,480,034 | 0.0022 |
| 1994 | 1,254,912 | 4,050 | 26,786,851 | 26,161,420 | 0.0002 |
| 1995 | 45,725 | 9,070 | 26,823,506 | 26,805,179 | 0.0003 |
| 1996 | 113,294 | 94,931 | 26,841,869 | 26,832,688 | 0.0035 |
| 1997 | 0 | 101,804 | 26,740,065 | 26,790,967 | 0.0038 |
| 1998 | 2,448,051 | 54,548 | 29,133,568 | 27,936,817 | 0.0020 |
| 1999 | 220,173 | 4,000 | 29,349,741 | 29,241,655 | 0.0001 |
| 2000 | 46,629 | 17,282 | 29,379,088 | 29,364,415 | 0.0006 |
| 2001 | 20,444 | 8,355 | 29,391,177 | 29,385,133 | 0.0003 |
| 2002 | 431 | 1,168 | 29,390,440 | 29,390,809 | 0.0000 |
| 2003 | 6,265,695 | 5,061 | 35,651,074 | 32,520,757 | 0.0002 |
| 2004 | 630,676 | 74,097 | 36,207,653 | 35,929,364 | 0.0021 |
| 2005 | 2,005,164 | 60,910 | 38,151,907 | 37,179,780 | 0.0016 |
| 2006 | 484,134 | 118,897 | 38,517,144 | 38,334,526 | 0.0031 |
| 2007 | 1,141,080 | 258,942 | 39,399,282 | 38,958,213 | 0.0066 |
| 2008 | 1,533,583 | 348,944 | 40,583,921 | 39,991,602 | 0.0087 |
| TOTAL 1975-2008 | 14,161,367 | 879,056 | 788,802,573 | 782,161,418 | 0.0537 |

Used 1975 through 2008 interim retirements. Based on retirements five years after in-service date of Unit 2.

AVERAGE INTERIM RATE $\frac{0.0537}{34}$ 0.0016

KENTUCKY POWER COMPANY
CALCULATION OF INTERIM RETIREMENT RATIOS
STEAM PRODUCTION PLANT
ACCOUNT 312.0 BOILER PLANT EQUIPMENT

| YEAR | ADDITIONS | RETIREMENTS | BALANCE | AVERAGE BALANCE | RETIREMENT RATIO |
|---|---|---|---|---|---|
| 1963 | 27,271,786 | 0 | 27,271,786 | N. A. | N. A. |
| 1964 | 119,842 | 8,093 | 27,383,535 | 27,327,661 | 0.0003 |
| 1965 | 33,135 | 7,505 | 27,409,165 | 27,396,350 | 0.0003 |
| 1966 | 176,256 | 19,803 | 27,565,618 | 27,487,392 | 0.0007 |
| 1967 | 7,026 | 3,196 | 27,569,448 | 27,567,533 | 0.0001 |
| 1968 | 39,011 | 127,966 | 27,480,493 | 27,524,971 | 0.0046 |
| 1969 | 57,241,411 | 5,000 | 84,716,904 | 56,098,699 | 0.0001 |
| 1970 | 2,611,299 | 569,493 | 86,758,710 | 85,737,807 | 0.0066 |
| 1971 | 1,703,522 | 87,366 | 88,374,866 | 87,566,788 | 0.0010 |
| 1972 | 773,998 | 23,261 | 89,125,603 | 88,750,235 | 0.0003 |
| 1973 | 124,697 | 24,700 | 89,225,600 | 89,175,602 | 0.0003 |
| 1974 | 795,833 | 128,171 | 89,893,262 | 89,559,431 | 0.0014 |
| 1975 | 1,177,739 | 43,910 | 91,027,091 | 90,460,177 | 0.0005 |
| 1976 | 4,699,081 | 1,136,240 | 94,589,932 | 92,808,512 | 0.0122 |
| 1977 | 1,500,565 | 738,415 | 95,352,082 | 94,971,007 | 0.0078 |
| 1978 | 3,596,304 | 210,933 | 98,737,453 | 97,044,768 | 0.0022 |
| 1979 | 3,702,290 | 690,851 | 101,748,892 | 100,243,173 | 0.0069 |
| 1980 | 1,574,173 | 1,302,708 | 102,020,357 | 101,884,625 | 0.0128 |
| 1981 | 2,710,157 | 1,947,465 | 102,783,049 | 102,401,703 | 0.0190 |
| 1982 | 4,780,741 | 1,372,184 | 106,191,606 | 104,487,328 | 0.0131 |
| 1983 | 2,053,897 | 244,647 | 108,000,856 | 107,096,231 | 0.0023 |
| 1984 | 1,928,226 | 583,176 | 109,345,906 | 108,673,381 | 0.0054 |
| 1985 | 1,775,366 | 79,270 | 111,042,002 | 110,193,954 | 0.0007 |
| 1986 | 1,302,549 | 1,199,650 | 111,144,901 | 111,093,452 | 0.0108 |
| 1987 | 2,870,827 | 941,836 | 113,073,892 | 112,109,397 | 0.0084 |
| 1988 | 2,769,412 | 757,438 | 115,085,866 | 114,079,879 | 0.0066 |
| 1989 | 1,780,224 | 543,698 | 116,322,392 | 115,704,129 | 0.0047 |
| 1990 | 2,114,057 | 841,371 | 117,595,078 | 116,958,735 | 0.0072 |
| 1991 | 1,503,783 | 964,562 | 118,134,299 | 117,864,689 | 0.0082 |
| 1992 | 3,022,972 | 929,688 | 120,227,583 | 119,180,941 | 0.0078 |
| 1993 | 6,037,402 | 2,619,487 | 123,645,498 | 121,936,541 | 0.0215 |
| 1994 | 11,992,454 | 1,471,709 | 134,166,243 | 128,905,871 | 0.0114 |
| 1995 | 10,399,357 | 5,694,627 | 138,870,973 | 136,518,608 | 0.0417 |
| 1996 | 12,608,246 | 12,608,246 | 138,870,973 | 138,870,973 | 0.0908 |
| 1997 | 0 | 3,024,973 | 135,846,000 | 137,358,487 | 0.0220 |
| 1998 | 10,554,688 | 901,600 | 145,499,088 | 140,672,544 | 0.0064 |
| 1999 | 1,940,785 | 263,258 | 147,176,615 | 146,337,852 | 0.0018 |
| 2000 | 2,930,632 | 704,876 | 149,402,371 | 148,289,493 | 0.0048 |
| 2001 | 925,934 | 356,729 | 149,971,576 | 149,686,974 | 0.0024 |
| 2002 | 3,329,584 | 560,581 | 152,740,579 | 151,356,078 | 0.0037 |
| 2003 | 183,221,112 | 15,170,924 | 320,790,767 | 236,765,673 | 0.0641 |
| 2004 | 6,041,203 | 2,293,276 | 324,538,694 | 322,664,731 | 0.0071 |
| 2005 | 6,490,044 | 946,348 | 330,082,390 | 327,310,542 | 0.0029 |
| 2006 | 7,880,638 | 2,730,271 | 335,232,757 | 332,657,574 | 0.0082 |
| 2007 | 4,975,558 | 2,668,838 | 337,539,477 | 336,386,117 | 0.0079 |
| 2008 | 23,004,352 | 5,305,939 | 355,237,890 | 346,388,684 | 0.0153 |
| TOTAL 1975-2008 | 294,843,760 | 60,198,328 | 3,993,942,614 | 3,876,619,898 | 0.4486 |

Used 1975 through 2008 interim retirements. Based on retirements five years after in-service date of Unit 2.

AVERAGE INTERIM RATE $\frac{0.4486}{34}$ 0.0132

KENTUCKY POWER COMPANY
CALCULATION OF INTERIM RETIREMENT RATIOS
STEAM PRODUCTION PLANT
ACCOUNT 314.0 TURBO-GENERATOR UNITS

| YEAR | ADDITIONS | RETIREMENTS | BALANCE | AVERAGE BALANCE | RETIREMENT RATIO |
|---|---|---|---|---|---|
| 1963 | 11,920,700 | 0 | 11,920,700 | N. A. | N. A. |
| 1964 | 19,361 | 0 | 11,940,061 | 11,930,381 | 0.0000 |
| 1965 | 12,601 | 755 | 11,951,907 | 11,945,984 | 0.0001 |
| 1966 | 7,592 | 872 | 11,958,627 | 11,955,267 | 0.0001 |
| 1967 | 7,158 | 0 | 11,965,785 | 11,962,206 | 0.0000 |
| 1968 | 52,378 | 0 | 12,018,163 | 11,991,974 | 0.0000 |
| 1969 | 26,377,737 | 0 | 38,395,900 | 25,207,032 | 0.0000 |
| 1970 | 1,024,372 | 180,383 | 39,239,889 | 38,817,895 | 0.0046 |
| 1971 | 713,082 | 0 | 39,952,971 | 39,596,430 | 0.0000 |
| 1972 | 272,380 | 0 | 40,225,351 | 40,089,161 | 0.0000 |
| 1973 | 63,768 | 0 | 40,289,119 | 40,257,235 | 0.0000 |
| 1974 | 63,140 | 0 | 40,352,259 | 40,320,689 | 0.0000 |
| 1975 | 336,271 | 80,578 | 40,607,952 | 40,480,106 | 0.0020 |
| 1976 | 74,777 | 2,746 | 40,679,983 | 40,643,968 | 0.0001 |
| 1977 | 33,676 | 1,548 | 40,712,111 | 40,696,047 | 0.0000 |
| 1978 | 45,149 | 6,818 | 40,750,442 | 40,731,277 | 0.0002 |
| 1979 | 1,007,454 | 398,443 | 41,359,453 | 41,054,948 | 0.0097 |
| 1980 | 66,913 | 214,355 | 41,212,011 | 41,285,732 | 0.0052 |
| 1981 | 1,916,304 | 618,632 | 42,509,683 | 41,860,847 | 0.0148 |
| 1982 | 1,006,642 | 82,616 | 43,433,709 | 42,971,696 | 0.0019 |
| 1983 | 1,067,481 | 549,626 | 43,951,564 | 43,692,637 | 0.0126 |
| 1984 | 237,266 | 2,944 | 44,185,886 | 44,068,725 | 0.0001 |
| 1985 | 528,415 | 7,819 | 44,706,482 | 44,446,184 | 0.0002 |
| 1986 | 634,657 | 709,776 | 44,631,363 | 44,668,923 | 0.0159 |
| 1987 | 229,683 | 307,098 | 44,553,948 | 44,592,656 | 0.0069 |
| 1988 | 5,606,623 | 58,088 | 50,102,483 | 47,328,216 | 0.0012 |
| 1989 | 3,103,073 | 2,768,504 | 50,437,052 | 50,269,768 | 0.0551 |
| 1990 | 2,320,315 | 1,094,464 | 51,662,903 | 51,049,978 | 0.0214 |
| 1991 | 2,065,521 | 138,353 | 53,590,071 | 52,626,487 | 0.0026 |
| 1992 | 836,989 | 1,593,641 | 52,833,419 | 53,211,745 | 0.0299 |
| 1993 | 2,739,309 | 550,206 | 55,022,522 | 53,927,971 | 0.0102 |
| 1994 | 2,265,960 | 2,354,678 | 54,933,804 | 54,978,163 | 0.0428 |
| 1995 | 1,186,873 | 444,477 | 55,676,200 | 55,305,002 | 0.0080 |
| 1996 | 126,815 | 477,746 | 55,325,269 | 55,500,735 | 0.0086 |
| 1997 | 13,047,841 | 4,684,964 | 63,688,146 | 59,506,708 | 0.0787 |
| 1998 | 0 | 695,946 | 62,992,200 | 63,340,173 | 0.0110 |
| 1999 | 0 | 205,238 | 62,786,962 | 62,889,581 | 0.0033 |
| 2000 | 227,801 | 52,538 | 62,962,225 | 62,874,594 | 0.0008 |
| 2001 | 47,682 | 141,367 | 62,868,540 | 62,915,383 | 0.0022 |
| 2002 | 1,505,312 | 257,582 | 64,116,270 | 63,492,405 | 0.0041 |
| 2003 | 9,648,825 | 1,427,668 | 72,337,427 | 68,226,849 | 0.0209 |
| 2004 | 1,394,539 | 692,983 | 73,038,983 | 72,688,205 | 0.0095 |
| 2005 | 1,257,589 | 333,750 | 73,962,822 | 73,500,903 | 0.0045 |
| 2006 | 1,053,124 | 493,138 | 74,522,808 | 74,242,815 | 0.0066 |
| 2007 | 1,393,818 | 884,733 | 75,031,893 | 74,777,351 | 0.0118 |
| 2008 | 29,686,507 | 211,543 | 104,506,857 | 89,769,375 | 0.0024 |
| TOTAL 1975-2008 | 53,308,166 | 20,621,442 | 1,557,669,063 | 1,541,325,701 | 0.4054 |

Used 1975 through 2008 interim retirements. Based on retirements five years after in-service date of Unit 2.

AVERAGE INTERIM RATE $\frac{0.4054}{34}$ 0.0119

KENTUCKY POWER COMPANY
CALCULATION OF INTERIM RETIREMENT RATIOS
STEAM PRODUCTION PLANT
ACCOUNT 315.0 ACCESSORY ELECTRICAL EQUIPMENT

| YEAR | ADDITIONS | RETIREMENTS | BALANCE | AVERAGE BALANCE | RETIREMENT RATIO |
|---|---|---|---|---|---|
| 1963 | 2,298,368 | 0 | 2,298,368 | N. A. | N. A. |
| 1964 | 9,817 | 2,835 | 2,305,350 | 2,301,859 | 0.0012 |
| 1965 | 2,265 | 0 | 2,307,615 | 2,306,483 | 0.0000 |
| 1966 | 20,284 | 0 | 2,327,899 | 2,317,757 | 0.0000 |
| 1967 | 4,595 | 0 | 2,332,494 | 2,330,197 | 0.0000 |
| 1968 | 947 | 0 | 2,333,441 | 2,332,968 | 0.0000 |
| 1969 | 6,451,294 | 0 | 8,784,735 | 5,559,088 | 0.0000 |
| 1970 | 555,696 | 0 | 9,340,431 | 9,062,583 | 0.0000 |
| 1971 | 356,319 | 0 | 9,696,750 | 9,518,591 | 0.0000 |
| 1972 | 13,318 | 2,910 | 9,707,158 | 9,701,954 | 0.0003 |
| 1973 | 114,131 | 12,654 | 9,808,635 | 9,757,897 | 0.0013 |
| 1974 | 1,489 | 4,680 | 9,805,444 | 9,807,040 | 0.0005 |
| 1975 | 0 | 0 | 9,805,444 | 9,805,444 | 0.0000 |
| 1976 | 425,620 | 0 | 10,231,064 | 10,018,254 | 0.0000 |
| 1977 | 113,934 | 0 | 10,344,998 | 10,288,031 | 0.0000 |
| 1978 | 226,909 | 0 | 10,571,907 | 10,458,453 | 0.0000 |
| 1979 | 40,978 | 0 | 10,612,885 | 10,592,396 | 0.0000 |
| 1980 | 81,148 | 0 | 10,694,033 | 10,653,459 | 0.0000 |
| 1981 | 607,835 | 49,582 | 11,252,286 | 10,973,160 | 0.0045 |
| 1982 | 369,121 | 120,858 | 11,500,549 | 11,376,418 | 0.0106 |
| 1983 | 92,707 | 10,516 | 11,582,740 | 11,541,645 | 0.0009 |
| 1984 | 88,302 | 5,454 | 11,665,588 | 11,624,164 | 0.0005 |
| 1985 | 108,963 | 11,203 | 11,763,348 | 11,714,468 | 0.0010 |
| 1986 | 38,938 | 19,802 | 11,782,484 | 11,772,916 | 0.0017 |
| 1987 | 119,792 | 27,283 | 11,874,993 | 11,828,739 | 0.0023 |
| 1988 | 187,376 | 71,442 | 11,990,927 | 11,932,960 | 0.0060 |
| 1989 | 100,224 | 0 | 12,091,151 | 12,041,039 | 0.0000 |
| 1990 | 286,615 | 24,236 | 12,353,530 | 12,222,341 | 0.0020 |
| 1991 | 106,173 | 12,852 | 12,446,851 | 12,400,191 | 0.0010 |
| 1992 | 38,842 | 10,027 | 12,475,666 | 12,461,259 | 0.0008 |
| 1993 | 115,632 | 9,068 | 12,582,230 | 12,528,948 | 0.0007 |
| 1994 | 79,021 | 1,052 | 12,660,199 | 12,621,215 | 0.0001 |
| 1995 | 35,386 | 91,239 | 12,604,346 | 12,632,273 | 0.0072 |
| 1996 | 12,996 | 0 | 12,617,342 | 12,610,844 | 0.0000 |
| 1997 | 1,139,691 | 324,810 | 13,432,223 | 13,024,783 | 0.0249 |
| 1998 | 363,986 | 24,960 | 13,771,249 | 13,601,736 | 0.0018 |
| 1999 | 8,929 | 1,372 | 13,778,806 | 13,775,028 | 0.0001 |
| 2000 | 368,049 | 80,920 | 14,065,935 | 13,922,371 | 0.0058 |
| 2001 | 46,339 | 32,876 | 14,079,398 | 14,072,667 | 0.0023 |
| 2002 | 7,426 | 2,009 | 14,084,815 | 14,082,107 | 0.0001 |
| 2003 | 244,780 | 587,860 | 13,741,735 | 13,913,275 | 0.0423 |
| 2004 | 4,907 | 4,041 | 13,742,601 | 13,742,168 | 0.0003 |
| 2005 | 1,210,759 | 12,798 | 14,940,562 | 14,341,582 | 0.0009 |
| 2006 | 206,091 | 57,499 | 15,089,154 | 15,014,858 | 0.0038 |
| 2007 | 173,582 | 46,468 | 15,216,268 | 15,152,711 | 0.0031 |
| 2008 | 103,305 | 16,287 | 15,303,286 | 15,259,777 | 0.0011 |
| TOTAL 1975-2008 | 5,460,619 | 1,523,462 | 366,201,323 | 364,232,745 | 0.1259 |

Used 1975 through 2008 interim retirements. Based on retirements five years after in-service date of Unit 2.

AVERAGE INTERIM RATE $\frac{0.1259}{34}$ 0.0037

KENTUCKY POWER COMPANY
CALCULATION OF INTERIM RETIREMENT RATIOS
STEAM PRODUCTION PLANT
ACCOUNT 316.0 MISCELLANEOUS POWER PLANT EQUIPMENT

| YEAR | ADDITIONS | RETIREMENTS | BALANCE | AVERAGE BALANCE | RETIREMENT RATIO |
|---|---|---|---|---|---|
| 1963 | 726,100 | 0 | 726,100 | N. A. | N. A. |
| 1964 | 5,839 | 1,922 | 730,017 | 728,059 | 0.0026 |
| 1965 | 5,676 | 0 | 735,693 | 732,855 | 0.0000 |
| 1966 | 15,702 | 292 | 751,103 | 743,398 | 0.0004 |
| 1967 | 2,344 | 394 | 753,053 | 752,078 | 0.0005 |
| 1968 | 8,129 | 150 | 761,032 | 757,043 | 0.0002 |
| 1969 | 1,686,335 | 1,226 | 2,446,141 | 1,603,587 | 0.0008 |
| 1970 | 204,242 | 8,507 | 2,641,876 | 2,544,009 | 0.0033 |
| 1971 | 88,954 | 1,728 | 2,729,102 | 2,685,489 | 0.0006 |
| 1972 | 58,425 | 83 | 2,787,444 | 2,758,273 | 0.0000 |
| 1973 | 93,582 | 1,700 | 2,879,326 | 2,833,385 | 0.0006 |
| 1974 | 555 | 37,702 | 2,842,179 | 2,860,753 | 0.0132 |
| 1975 | 132,129 | 1,473 | 2,972,835 | 2,907,507 | 0.0005 |
| 1976 | 20,739 | 6,251 | 2,987,323 | 2,980,079 | 0.0021 |
| 1977 | 66,965 | 13,849 | 3,040,439 | 3,013,881 | 0.0046 |
| 1978 | 37,660 | 27,895 | 3,050,204 | 3,045,322 | 0.0092 |
| 1979 | 25,265 | 5,173 | 3,070,296 | 3,060,250 | 0.0017 |
| 1980 | 17,868 | 15,971 | 3,072,193 | 3,071,245 | 0.0052 |
| 1981 | 117,316 | 3,482 | 3,186,027 | 3,129,110 | 0.0011 |
| 1982 | 122,076 | 54,567 | 3,253,536 | 3,219,782 | 0.0169 |
| 1983 | 6,160 | 14,806 | 3,244,890 | 3,249,213 | 0.0046 |
| 1984 | 78,342 | 5,857 | 3,317,375 | 3,281,133 | 0.0018 |
| 1985 | 101,194 | 2,086 | 3,416,483 | 3,366,929 | 0.0006 |
| 1986 | 108,695 | 11,296 | 3,513,882 | 3,465,183 | 0.0033 |
| 1987 | 32,012 | 12,552 | 3,533,342 | 3,523,612 | 0.0036 |
| 1988 | 29,324 | 12,736 | 3,549,930 | 3,541,636 | 0.0036 |
| 1989 | 169,870 | 5,926 | 3,713,874 | 3,631,902 | 0.0016 |
| 1990 | 34,137 | 10,400 | 3,737,611 | 3,725,743 | 0.0028 |
| 1991 | 41,416 | 3,814 | 3,775,213 | 3,756,412 | 0.0010 |
| 1992 | 127,431 | 70,529 | 3,832,115 | 3,803,664 | 0.0185 |
| 1993 | 21,290 | 623 | 3,852,782 | 3,842,449 | 0.0002 |
| 1994 | 803,660 | 136,159 | 4,520,283 | 4,186,533 | 0.0325 |
| 1995 | 91,614 | 104,801 | 4,507,096 | 4,513,690 | 0.0232 |
| 1996 | 39,964 | 9,510 | 4,537,550 | 4,522,323 | 0.0021 |
| 1997 | 865,744 | 31,903 | 5,371,391 | 4,954,471 | 0.0064 |
| 1998 | 6,545 | 51,000 | 5,326,936 | 5,349,164 | 0.0095 |
| 1999 | 31,382 | 805 | 5,357,513 | 5,342,225 | 0.0002 |
| 2000 | 64,253 | 0 | 5,421,766 | 5,389,640 | 0.0000 |
| 2001 | 59,062 | 4,330 | 5,476,498 | 5,449,132 | 0.0008 |
| 2002 | 67,283 | 38,540 | 5,505,241 | 5,490,870 | 0.0070 |
| 2003 | 442,131 | 62,105 | 5,885,267 | 5,695,254 | 0.0109 |
| 2004 | 698,136 | 64,449 | 6,518,954 | 6,202,111 | 0.0104 |
| 2005 | 191,000 | 31,593 | 6,678,361 | 6,598,658 | 0.0048 |
| 2006 | 176,384 | 20,681 | 6,834,064 | 6,756,213 | 0.0031 |
| 2007 | 302,266 | 15,563 | 7,120,767 | 6,977,416 | 0.0022 |
| 2008 | 78,252 | 25,877 | 7,173,142 | 7,146,955 | 0.0036 |
| TOTAL 1975-2008 | 4,459,663 | 782,888 | 122,548,845 | 120,710,458 | 0.1996 |

*Used 1975 through 2008 interim retirements. Based on retirements five years after in-service date of Unit 2.*

AVERAGE INTERIM RATE $\frac{0.1996}{34}$ 0.0059

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# STEAM PRODUCTION PLANT WORKPAPERS

## AVERAGE AGE CALCULATIONS

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE AGE OF SURVIVING PLANT
BIG SANDY GENERATING PLANT 311

| VINTAGE YEAR | SURVIVING BALANCE | AGE (YEARS) | DOLLAR YEARS | AVERAGE AGE (YEARS) |
|---|---|---|---|---|
| 1963 | 5,733,371 | 45.5 | 260,868,402 | |
| 1964 | 13,194 | 44.5 | 587,133 | |
| 1965 | 18,352 | 43.5 | 798,312 | |
| 1966 | 3,636 | 42.5 | 154,530 | |
| 1967 | 217 | 41.5 | 9,006 | |
| 1968 | 21,282 | 40.5 | 861,921 | |
| 1969 | 15,030,655 | 39.5 | 593,710,888 | |
| 1970 | 798,917 | 38.5 | 30,758,305 | |
| 1971 | 162,704 | 37.5 | 6,101,400 | |
| 1972 | 56,780 | 36.5 | 2,072,470 | |
| 1973 | 2,605 | 35.5 | 92,478 | |
| 1974 | 5,005 | 34.5 | 172,673 | |
| 1975 | 28,389 | 33.5 | 951,032 | |
| 1976 | 65,662 | 32.5 | 2,134,015 | |
| 1977 | 76,759 | 31.5 | 2,417,909 | |
| 1978 | 290,514 | 30.5 | 8,860,677 | |
| 1979 | 163,014 | 29.5 | 4,808,925 | |
| 1980 | 23,035 | 28.5 | 656,501 | |
| 1981 | 212,801 | 27.5 | 5,852,028 | |
| 1982 | 659,475 | 26.5 | 17,476,075 | |
| 1983 | 334,415 | 25.5 | 8,527,595 | |
| 1984 | 2,624 | 24.5 | 64,287 | |
| 1985 | -2,666 | 23.5 | -62,648 | |
| 1986 | 0 | 22.5 | 0 | |
| 1987 | 34,955 | 21.5 | 751,533 | |
| 1988 | 171,684 | 20.5 | 3,519,522 | |
| 1989 | 15,604 | 19.5 | 304,278 | |
| 1990 | 452,845 | 18.5 | 8,377,626 | |
| 1991 | 11,250 | 17.5 | 196,875 | |
| 1992 | 20,716 | 16.5 | 341,814 | |
| 1993 | 157,920 | 15.5 | 2,447,760 | |
| 1994 | 1,185,417 | 14.5 | 17,188,551 | |
| 1995 | 21,942 | 13.5 | 296,214 | |
| 1996 | 465,478 | 12.5 | 5,818,479 | |
| 1997 | 719,120 | 11.5 | 8,269,880 | |
| 1998 | 1,341,044 | 10.5 | 14,080,965 | |
| 1999 | 56,378 | 9.5 | 535,594 | |
| 2000 | 202,044 | 8.5 | 1,717,378 | |
| 2001 | 431 | 7.5 | 3,229 | |
| 2002 | 6,208,831 | 6.5 | 40,357,401 | |
| 2003 | 315,933 | 5.5 | 1,737,633 | |
| 2004 | 555,899 | 4.5 | 2,501,544 | |
| 2005 | 1,838,533 | 3.5 | 6,434,866 | |
| 2006 | 864,204 | 2.5 | 2,160,510 | |
| 2007 | 941,391 | 1.5 | 1,412,086 | |
| 2008 | 1,301,560 | 0.5 | 650,780 | |
| TOTALS | 40,583,920 | | 1,066,978,425 | 26.29 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE AGE OF SURVIVING PLANT
BIG SANDY GENERATING PLANT 312

| VINTAGE YEAR | SURVIVING BALANCE | AGE (YEARS) | DOLLAR YEARS | AVERAGE AGE (YEARS) |
|---|---|---|---|---|
| 1963 | 5,221,363 | 45.5 | 237,572,034 | |
| 1964 | 104,317 | 44.5 | 4,642,107 | |
| 1965 | 28,441 | 43.5 | 1,237,184 | |
| 1966 | 31,857 | 42.5 | 1,353,923 | |
| 1967 | 1,203 | 41.5 | 49,925 | |
| 1968 | 35,690 | 40.5 | 1,445,452 | |
| 1969 | 35,005,251 | 39.5 | 1,382,707,404 | |
| 1970 | 2,331,209 | 38.5 | 89,751,554 | |
| 1971 | 1,583,333 | 37.5 | 59,374,988 | |
| 1972 | 650,002 | 36.5 | 23,725,065 | |
| 1973 | 54,734 | 35.5 | 1,943,057 | |
| 1974 | 634,949 | 34.5 | 21,905,735 | |
| 1975 | 927,822 | 33.5 | 31,082,037 | |
| 1976 | 656,789 | 32.5 | 21,345,633 | |
| 1977 | 569,745 | 31.5 | 17,946,956 | |
| 1978 | 3,517,702 | 30.5 | 107,289,911 | |
| 1979 | 2,834,222 | 29.5 | 83,609,546 | |
| 1980 | 1,520,576 | 28.5 | 43,336,409 | |
| 1981 | 2,042,101 | 27.5 | 56,157,778 | |
| 1982 | 3,684,145 | 26.5 | 97,629,838 | |
| 1983 | 1,682,108 | 25.5 | 42,893,758 | |
| 1984 | 1,270,809 | 24.5 | 31,134,815 | |
| 1985 | 1,591,926 | 23.5 | 37,410,250 | |
| 1986 | 1,277,585 | 22.5 | 28,745,664 | |
| 1987 | 2,803,811 | 21.5 | 60,281,934 | |
| 1988 | 2,626,915 | 20.5 | 53,851,762 | |
| 1989 | 1,288,604 | 19.5 | 25,127,785 | |
| 1990 | 1,606,399 | 18.5 | 29,718,378 | |
| 1991 | 1,132,899 | 17.5 | 19,825,725 | |
| 1992 | 2,519,831 | 16.5 | 41,577,219 | |
| 1993 | 2,527,668 | 15.5 | 39,178,861 | |
| 1994 | 11,283,386 | 14.5 | 163,609,095 | |
| 1995 | 10,084,567 | 13.5 | 136,141,654 | |
| 1996 | 7,699,950 | 12.5 | 96,249,369 | |
| 1997 | 6,801,256 | 11.5 | 78,214,444 | |
| 1998 | 6,103,229 | 10.5 | 64,083,902 | |
| 1999 | 180,737 | 9.5 | 1,717,006 | |
| 2000 | 814,117 | 8.5 | 6,919,997 | |
| 2001 | 359,889 | 7.5 | 2,699,167 | |
| 2002 | 33,455,436 | 6.5 | 217,460,335 | |
| 2003 | 152,049,189 | 5.5 | 836,270,539 | |
| 2004 | 5,715,692 | 4.5 | 25,720,613 | |
| 2005 | 4,740,964 | 3.5 | 16,593,373 | |
| 2006 | 7,054,669 | 2.5 | 17,636,672 | |
| 2007 | 4,413,992 | 1.5 | 6,620,989 | |
| 2008 | 22,716,813 | 0.5 | 11,358,406 | |
| TOTALS | 355,237,890 | | 4,375,148,243 | 12.32 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE AGE OF SURVIVING PLANT
BIG SANDY GENERATING PLANT 314

| VINTAGE YEAR | SURVIVING BALANCE | AGE (YEARS) | DOLLAR YEARS | AVERAGE AGE (YEARS) |
|---|---|---|---|---|
| 1963 | 5,378,356 | 45.5 | 244,715,205 | |
| 1964 | 0 | 44.5 | 0 | |
| 1965 | 14 | 43.5 | 619 | |
| 1966 | 59,271 | 42.5 | 2,518,999 | |
| 1967 | -2,274 | 41.5 | -94,366 | |
| 1968 | -30 | 40.5 | -1,199 | |
| 1969 | 20,503,966 | 39.5 | 809,906,637 | |
| 1970 | 905,886 | 38.5 | 34,876,600 | |
| 1971 | 702,552 | 37.5 | 26,345,700 | |
| 1972 | 263,990 | 36.5 | 9,635,635 | |
| 1973 | 59,137 | 35.5 | 2,099,364 | |
| 1974 | 14,534 | 34.5 | 501,419 | |
| 1975 | 240,134 | 33.5 | 8,044,489 | |
| 1976 | 9,309 | 32.5 | 302,543 | |
| 1977 | 19,103 | 31.5 | 601,745 | |
| 1978 | 11,239 | 30.5 | 342,787 | |
| 1979 | 529,416 | 29.5 | 15,617,786 | |
| 1980 | -9,347 | 28.5 | -266,396 | |
| 1981 | 1,893,106 | 27.5 | 52,060,415 | |
| 1982 | 412,999 | 26.5 | 10,944,474 | |
| 1983 | 1,014,327 | 25.5 | 25,865,339 | |
| 1984 | 96,771 | 24.5 | 2,370,878 | |
| 1985 | 353 | 23.5 | 8,304 | |
| 1986 | 182,239 | 22.5 | 4,100,366 | |
| 1987 | 226,283 | 21.5 | 4,865,090 | |
| 1988 | 3,248,362 | 20.5 | 66,591,426 | |
| 1989 | 1,951,999 | 19.5 | 38,063,981 | |
| 1990 | 949,491 | 18.5 | 17,565,589 | |
| 1991 | 1,613,279 | 17.5 | 28,232,379 | |
| 1992 | 0 | 16.5 | 0 | |
| 1993 | 2,630,759 | 15.5 | 40,776,761 | |
| 1994 | 2,166,603 | 14.5 | 31,415,744 | |
| 1995 | 1,138,602 | 13.5 | 15,371,132 | |
| 1996 | 1,599,423 | 12.5 | 19,992,791 | |
| 1997 | 127 | 11.5 | 1,461 | |
| 1998 | 11,093,444 | 10.5 | 116,481,159 | |
| 1999 | 7,235 | 9.5 | 68,737 | |
| 2000 | 79,722 | 8.5 | 677,637 | |
| 2001 | 17,232 | 7.5 | 129,237 | |
| 2002 | 9,082,076 | 6.5 | 59,033,493 | |
| 2003 | 1,861,942 | 5.5 | 10,240,681 | |
| 2004 | 1,510,645 | 4.5 | 6,797,904 | |
| 2005 | 614,020 | 3.5 | 2,149,069 | |
| 2006 | 1,779,841 | 2.5 | 4,449,602 | |
| 2007 | 993,516 | 1.5 | 1,490,273 | |
| 2008 | 29,657,206 | 0.5 | 14,828,603 | |
| TOTALS | 104,506,857 | | 1,729,720,089 | 16.55 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE AGE OF SURVIVING PLANT
BIG SANDY GENERATING PLANT 315

| VINTAGE YEAR | SURVIVING BALANCE | AGE (YEARS) | DOLLAR YEARS | AVERAGE AGE (YEARS) |
|---|---|---|---|---|
| 1963 | 1,461,926 | 45.5 | 66,517,635 | |
| 1964 | 0 | 44.5 | 0 | |
| 1965 | 1,390 | 43.5 | 60,467 | |
| 1966 | 0 | 42.5 | 0 | |
| 1967 | 0 | 41.5 | 0 | |
| 1968 | 0 | 40.5 | 0 | |
| 1969 | 6,089,160 | 39.5 | 240,521,819 | |
| 1970 | 555,061 | 38.5 | 21,369,840 | |
| 1971 | 355,383 | 37.5 | 13,326,863 | |
| 1972 | 13,318 | 36.5 | 486,107 | |
| 1973 | 114,131 | 35.5 | 4,051,651 | |
| 1974 | 1,489 | 34.5 | 51,371 | |
| 1975 | 0 | 33.5 | 0 | |
| 1976 | 289,966 | 32.5 | 9,423,895 | |
| 1977 | 113,934 | 31.5 | 3,588,921 | |
| 1978 | 216,942 | 30.5 | 6,616,731 | |
| 1979 | 40,978 | 29.5 | 1,208,851 | |
| 1980 | 79,680 | 28.5 | 2,270,877 | |
| 1981 | 429,265 | 27.5 | 11,804,776 | |
| 1982 | 353,773 | 26.5 | 9,374,985 | |
| 1983 | 89,002 | 25.5 | 2,269,551 | |
| 1984 | 88,303 | 24.5 | 2,163,424 | |
| 1985 | 87,208 | 23.5 | 2,049,380 | |
| 1986 | 486 | 22.5 | 10,935 | |
| 1987 | 119,792 | 21.5 | 2,575,528 | |
| 1988 | 187,376 | 20.5 | 3,841,208 | |
| 1989 | 100,224 | 19.5 | 1,954,368 | |
| 1990 | 259,710 | 18.5 | 4,804,635 | |
| 1991 | 106,173 | 17.5 | 1,858,028 | |
| 1992 | 38,842 | 16.5 | 640,893 | |
| 1993 | 115,632 | 15.5 | 1,792,296 | |
| 1994 | 29,209 | 14.5 | 423,535 | |
| 1995 | 18,207 | 13.5 | 245,799 | |
| 1996 | 360,098 | 12.5 | 4,501,225 | |
| 1997 | 945,619 | 11.5 | 10,874,619 | |
| 1998 | 405,268 | 10.5 | 4,255,314 | |
| 1999 | 2,861 | 9.5 | 27,180 | |
| 2000 | 228,090 | 8.5 | 1,938,763 | |
| 2001 | 77,560 | 7.5 | 581,698 | |
| 2002 | 548,314 | 6.5 | 3,564,041 | |
| 2003 | 893,356 | 5.5 | 4,913,459 | |
| 2004 | 19,722 | 4.5 | 88,750 | |
| 2005 | 6,829 | 3.5 | 23,902 | |
| 2006 | 182,121 | 2.5 | 455,302 | |
| 2007 | 173,582 | 1.5 | 260,374 | |
| 2008 | 103,306 | 0.5 | 51,653 | |
| TOTALS | 15,303,286 | | 446,840,645 | 29.20 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE AGE OF SURVIVING PLANT
BIG SANDY GENERATING PLANT 316

| VINTAGE YEAR | SURVIVING BALANCE | AGE (YEARS) | DOLLAR YEARS | AVERAGE AGE (YEARS) |
|---|---|---|---|---|
| 1963 | 787,153 | 45.5 | 35,815,443 | |
| 1964 | 4,644 | 44.5 | 206,658 | |
| 1965 | 5,340 | 43.5 | 232,290 | |
| 1966 | 8,383 | 42.5 | 356,278 | |
| 1967 | 2,344 | 41.5 | 97,276 | |
| 1968 | 3,755 | 40.5 | 152,078 | |
| 1969 | 1,535,776 | 39.5 | 60,663,158 | |
| 1970 | 197,493 | 38.5 | 7,603,481 | |
| 1971 | 84,826 | 37.5 | 3,180,975 | |
| 1972 | 48,144 | 36.5 | 1,757,256 | |
| 1973 | 23,088 | 35.5 | 819,624 | |
| 1974 | 94 | 34.5 | 3,243 | |
| 1975 | 124,869 | 33.5 | 4,183,112 | |
| 1976 | 18,611 | 32.5 | 604,858 | |
| 1977 | 8,980 | 31.5 | 282,868 | |
| 1978 | 34,424 | 30.5 | 1,049,932 | |
| 1979 | 25,081 | 29.5 | 739,890 | |
| 1980 | 11,193 | 28.5 | 318,991 | |
| 1981 | 97,226 | 27.5 | 2,673,715 | |
| 1982 | 72,372 | 26.5 | 1,917,863 | |
| 1983 | 0 | 25.5 | 0 | |
| 1984 | 65,241 | 24.5 | 1,598,405 | |
| 1985 | 87,922 | 23.5 | 2,066,167 | |
| 1986 | 96,287 | 22.5 | 2,166,458 | |
| 1987 | 32,012 | 21.5 | 688,258 | |
| 1988 | 29,324 | 20.5 | 601,142 | |
| 1989 | 82,538 | 19.5 | 1,609,491 | |
| 1990 | 17,035 | 18.5 | 315,142 | |
| 1991 | 29,306 | 17.5 | 512,855 | |
| 1992 | 93,344 | 16.5 | 1,540,169 | |
| 1993 | 11,344 | 15.5 | 175,839 | |
| 1994 | 1,249,784 | 14.5 | 18,121,868 | |
| 1995 | 125,591 | 13.5 | 1,695,479 | |
| 1996 | 184,929 | 12.5 | 2,311,613 | |
| 1997 | 217,359 | 11.5 | 2,499,627 | |
| 1998 | 58,674 | 10.5 | 616,077 | |
| 1999 | 42,911 | 9.5 | 407,653 | |
| 2000 | 7,491 | 8.5 | 63,670 | |
| 2001 | 50,660 | 7.5 | 379,952 | |
| 2002 | 73,297 | 6.5 | 476,432 | |
| 2003 | 611,808 | 5.5 | 3,364,943 | |
| 2004 | 195,654 | 4.5 | 880,445 | |
| 2005 | 197,186 | 3.5 | 690,150 | |
| 2006 | 214,203 | 2.5 | 535,508 | |
| 2007 | 264,613 | 1.5 | 396,919 | |
| 2008 | 40,836 | 0.5 | 20,418 | |
| TOTALS | 7,173,143 | | 166,393,664 | 23.20 |

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# STEAM PRODUCTION PLANT WORKPAPERS

## AVERAGE REMAINING LIFE CALCULATIONS

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE REMAINING LIFE
BIG SANDY PLANT ACCOUNT 311
RETIREMENT YEARS - UNIT 1 2023; UNIT 2 2029

ANNUAL INTERIM RETIREMENT RATE 0.0016

| YEAR | AMOUNT RETIRED | REM. LIFE (YEARS) | DOLLAR YEARS | AVERAGE REM. LIFE |
|---|---|---|---|---|
| 2009 | 64,934 | 0.5 | 32,467 | |
| 2010 | 64,934 | 1.5 | 97,401 | |
| 2011 | 64,934 | 2.5 | 162,336 | |
| 2012 | 64,934 | 3.5 | 227,270 | |
| 2013 | 64,934 | 4.5 | 292,204 | |
| 2014 | 64,934 | 5.5 | 357,139 | |
| 2015 | 64,934 | 6.5 | 422,073 | |
| 2016 | 64,934 | 7.5 | 487,007 | |
| 2017 | 64,934 | 8.5 | 551,941 | |
| 2018 | 64,934 | 9.5 | 616,876 | |
| 2019 | 64,934 | 10.5 | 681,810 | |
| 2020 | 64,934 | 11.5 | 746,744 | |
| 2021 | 64,934 | 12.5 | 811,678 | |
| 2022 | 64,934 | 13.5 | 876,613 | |
| 2023 | 6,111,995 | 14.5 | 88,623,931 | |
| 2024 | 55,259 | 15.5 | 856,514 | |
| 2025 | 55,259 | 16.5 | 911,773 | |
| 2026 | 55,259 | 17.5 | 967,032 | |
| 2027 | 55,259 | 18.5 | 1,022,291 | |
| 2028 | 55,259 | 19.5 | 1,077,550 | |
| 2029 | 33,286,551 | 20.5 | 682,374,296 | |
| TOTALS | 40,583,921 | | 782,196,947 | 19.27 |

INTERIM RETIREMENTS:

| | |
|---|---|
| Total Plant at 12/31/08 | 40,583,921 |
| Less Retirement of Unit 1 in 2023 | -6,047,061 |
| Less Final Retirement in year 2029 | -33,286,551 |
| Total Interim Retirements | 1,250,309 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE REMAINING LIFE
BIG SANDY PLANT ACCOUNT 312
RETIREMENT YEARS - UNIT 1 2023; UNIT 2 2029

ANNUAL INTERIM RETIREMENT RATE 0.0132

| YEAR | AMOUNT RETIRED | REM. LIFE (YEARS) | DOLLAR YEARS | AVERAGE REM. LIFE |
|---|---|---|---|---|
| 2009 | 4,689,140 | 0.5 | 2,344,570 | |
| 2010 | 4,689,140 | 1.5 | 7,033,710 | |
| 2011 | 6,318,664 | 2.5 | 15,796,660 | |
| 2012 | 4,667,630 | 3.5 | 16,336,707 | |
| 2013 | 4,667,630 | 4.5 | 21,004,337 | |
| 2014 | 4,667,630 | 5.5 | 25,671,967 | |
| 2015 | 7,926,679 | 6.5 | 51,523,416 | |
| 2016 | 7,883,660 | 7.5 | 59,127,450 | |
| 2017 | 4,581,592 | 8.5 | 38,943,528 | |
| 2018 | 4,581,592 | 9.5 | 43,525,120 | |
| 2019 | 4,581,592 | 10.5 | 48,106,711 | |
| 2020 | 4,581,592 | 11.5 | 52,688,303 | |
| 2021 | 4,581,592 | 12.5 | 57,269,894 | |
| 2022 | 4,581,592 | 13.5 | 61,851,486 | |
| 2023 | 4,581,592 | 14.5 | 66,433,077 | |
| 2024 | 4,581,592 | 15.5 | 71,014,669 | |
| 2025 | 4,581,592 | 16.5 | 75,596,261 | |
| 2026 | 4,581,592 | 17.5 | 80,177,852 | |
| 2027 | 4,581,592 | 18.5 | 84,759,444 | |
| 2028 | 4,581,592 | 19.5 | 89,341,035 | |
| 2029 | 254,748,616 | 20.5 | 5,222,346,633 | |
| TOTALS | 355,237,890 | | 6,190,892,831 | 17.43 |

INTERIM RETIREMENTS:

| | |
|---|---|
| Total Plant at 12/31/08 | 355,237,890 |
| Less Retirement of Unit 1 in 2023 | -22,537,880 |
| Less Final Retirement in year 2029 | -254,748,616 |
| Total Interim Retirements | 77,951,394 |

Retirement of SCR Catalysts

| | |
|---|---|
| Layer 1 2015 | 3,259,048 |
| Layer 2 2016 | 3,259,049 |
| Layer 3 2011 | 1,629,524 |
| | 8,147,621 |

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KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE REMAINING LIFE
BIG SANDY PLANT ACCOUNT 314
RETIREMENT YEARS - UNIT 1 2023; UNIT 2 2029

ANNUAL INTERIM RETIREMENT RATE 0.0119

| YEAR | AMOUNT RETIRED | REM. LIFE (YEARS) | DOLLAR YEARS | AVERAGE REM. LIFE |
|---|---|---|---|---|
| 2009 | 1,243,632 | 0.5 | 621,816 | |
| 2010 | 1,243,632 | 1.5 | 1,865,447 | |
| 2011 | 1,243,632 | 2.5 | 3,109,079 | |
| 2012 | 1,243,632 | 3.5 | 4,352,711 | |
| 2013 | 1,243,632 | 4.5 | 5,596,342 | |
| 2014 | 1,243,632 | 5.5 | 6,839,974 | |
| 2015 | 1,243,632 | 6.5 | 8,083,605 | |
| 2016 | 1,243,632 | 7.5 | 9,327,237 | |
| 2017 | 1,243,632 | 8.5 | 10,570,869 | |
| 2018 | 1,243,632 | 9.5 | 11,814,500 | |
| 2019 | 1,243,632 | 10.5 | 13,058,132 | |
| 2020 | 1,243,632 | 11.5 | 14,301,763 | |
| 2021 | 1,243,632 | 12.5 | 15,545,395 | |
| 2022 | 1,243,632 | 13.5 | 16,789,027 | |
| 2023 | 11,260,925 | 14.5 | 163,283,407 | |
| 2024 | 1,124,426 | 15.5 | 17,428,600 | |
| 2025 | 1,124,426 | 16.5 | 18,553,026 | |
| 2026 | 1,124,426 | 17.5 | 19,677,452 | |
| 2027 | 1,124,426 | 18.5 | 20,801,878 | |
| 2028 | 1,124,426 | 19.5 | 21,926,303 | |
| 2029 | 70,212,961 | 20.5 | 1,439,365,700 | |
| TOTALS | 104,506,857 | | 1,822,912,262 | 17.44 |

INTERIM RETIREMENTS:

| | |
|---|---|
| Total Plant at 12/31/08 | 104,506,857 |
| Less Retirement of Unit 1 in 2023 | -10,017,293 |
| Less Final Retirement in year 2029 | -70,212,961 |
| Total Interim Retirements | 24,276,603 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE REMAINING LIFE
BIG SANDY PLANT ACCOUNT 315
RETIREMENT YEARS - UNIT 1 2023; UNIT 2 2029

ANNUAL INTERIM RETIREMENT RATE 0.0037

| YEAR | AMOUNT RETIRED | REM. LIFE (YEARS) | DOLLAR YEARS | AVERAGE REM. LIFE |
|---|---|---|---|---|
| 2009 | 56,622 | 0.5 | 28,311 | |
| 2010 | 56,622 | 1.5 | 84,933 | |
| 2011 | 56,622 | 2.5 | 141,555 | |
| 2012 | 56,622 | 3.5 | 198,178 | |
| 2013 | 56,622 | 4.5 | 254,800 | |
| 2014 | 56,622 | 5.5 | 311,422 | |
| 2015 | 56,622 | 6.5 | 368,044 | |
| 2016 | 56,622 | 7.5 | 424,666 | |
| 2017 | 56,622 | 8.5 | 481,288 | |
| 2018 | 56,622 | 9.5 | 537,911 | |
| 2019 | 56,622 | 10.5 | 594,533 | |
| 2020 | 56,622 | 11.5 | 651,155 | |
| 2021 | 56,622 | 12.5 | 707,777 | |
| 2022 | 56,622 | 13.5 | 764,399 | |
| 2023 | 2,266,458 | 14.5 | 32,863,639 | |
| 2024 | 48,426 | 15.5 | 750,598 | |
| 2025 | 48,426 | 16.5 | 799,024 | |
| 2026 | 48,426 | 17.5 | 847,450 | |
| 2027 | 48,426 | 18.5 | 895,876 | |
| 2028 | 48,426 | 19.5 | 944,301 | |
| 2029 | 12,001,989 | 20.5 | 246,040,782 | |
| TOTALS | 15,303,286 | | 288,690,642 | 18.86 |

INTERIM RETIREMENTS:

| | |
|---|---|
| Total Plant at 12/31/08 | 15,303,286 |
| Less Retirement of Unit 1 in 2023 | -2,215,257 |
| Less Final Retirement in year 2029 | -12,001,989 |
| Total Interim Retirements | 1,086,040 |

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATION OF AVERAGE REMAINING LIFE
BIG SANDY PLANT ACCOUNT 316
RETIREMENT YEARS - UNIT 1 2023; UNIT 2 2029

ANNUAL INTERIM RETIREMENT RATE 0.0059

| YEAR | AMOUNT RETIRED | REM. LIFE (YEARS) | DOLLAR YEARS | AVERAGE REM. LIFE |
|---|---|---|---|---|
| 2009 | 42,322 | 0.5 | 21,161 | |
| 2010 | 42,322 | 1.5 | 63,482 | |
| 2011 | 42,322 | 2.5 | 105,804 | |
| 2012 | 42,322 | 3.5 | 148,125 | |
| 2013 | 42,322 | 4.5 | 190,447 | |
| 2014 | 42,322 | 5.5 | 232,768 | |
| 2015 | 42,322 | 6.5 | 275,090 | |
| 2016 | 42,322 | 7.5 | 317,412 | |
| 2017 | 42,322 | 8.5 | 359,733 | |
| 2018 | 42,322 | 9.5 | 402,055 | |
| 2019 | 42,322 | 10.5 | 444,376 | |
| 2020 | 42,322 | 11.5 | 486,698 | |
| 2021 | 42,322 | 12.5 | 529,019 | |
| 2022 | 42,322 | 13.5 | 571,341 | |
| 2023 | 743,023 | 14.5 | 10,773,827 | |
| 2024 | 38,187 | 15.5 | 591,905 | |
| 2025 | 38,187 | 16.5 | 630,092 | |
| 2026 | 38,187 | 17.5 | 668,280 | |
| 2027 | 38,187 | 18.5 | 706,467 | |
| 2028 | 38,187 | 19.5 | 744,654 | |
| 2029 | 5,646,681 | 20.5 | 115,756,959 | |
| TOTALS | 7,173,142 | | 134,019,694 | 18.68 |

| INTERIM RETIREMENTS: | |
|---|---|
| Total Plant at 12/31/08 | 7,173,142 |
| Less Retirement of Unit 1 in 2023 | -700,701 |
| Less Final Retirement in year 2029 | -5,646,681 |
| Total Interim Retirements | 825,760 |

**KENTUCKY POWER COMPANY**

Depreciation Study as of December 31, 2008

*Retirement of Big Sandy Unit 1*

| Account | 311 | 312 | 314 | 315 | 316 |
|---|---|---|---|---|---|
| 12/31/08 Vintage 1963-1968 | 6,185,619 | 27,647,056 | 12,019,790 | 2,336,276 | 763,790 |
| Interim Retirement Ratios | 0.0016 | 0.0132 | 0.0119 | 0.0037 | 0.0059 |
| Interim Retirements 2009-2022 | 138,558 | 5,109,176 | 2,002,497 | 121,019 | 63,089 |
| Unit 1 Balance at 2023 | 6,047,061 | 22,537,880 | 10,017,293 | 2,215,257 | 700,701 |

Note: Big Sandy Plant is not identified by unit in the property record. Therefore only plant balances prior to the in-service date of Unit 2 in 1969 were used to determine the amount to retire for Unit 1.

# KENTUCKY POWER COMPANY

## DEPRECIATION STUDY AS OF 12-31-08

## STEAM PRODUCTION PLANT WORKPAPERS

## INTERIM SALVAGE AND REMOVAL ANALYSIS

## KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Analysis of Removal and Salvage Activity from 1994 through 2008
Steam Production Plant

| Year | Original Cost Retired | Gross Cost of Removal | Gross Salvage |
|---|---|---|---|
| 1994 | 3,969,598 | 2,038,522 | 60,472 |
| 1995 | 6,338,609 | 2,274,820 | 1,919,772 |
| 1996 | 2,883,635 | 2,268,116 | -108,297 |
| 1997 | 8,213,501 | 1,652,784 | 1,622,235 |
| 1998 | 1,885,004 | 2,094,579 | -109,746 |
| 1999 | 474,672 | 8,266 | 3,780 |
| 2000 | 855,616 | 203,653 | 1,711 |
| 2001 | 543,659 | -80,513 | 172,103 |
| 2002 | 875,114 | 55,395 | 30,879 |
| 2003 | 17,253,619 | 1,578,174 | -28,698 |
| 2004 | 3,134,846 | 4,362,183 | 39,640 |
| 2005 | 1,385,399 | 712,514 | -561 |
| 2006 | 3,420,486 | 979,945 | -336 |
| 2007 | 3,874,545 | 1,820,214 | 60,127 |
| 2008 | 5,908,590 | 936,547 | 97,941 |
| Total | 61,016,893 | 20,905,199 | 3,761,022 |
| Percent | | **34%** | **6%** |

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# STEAM PRODUCTION PLANT WORKPAPERS

## DEMOLITION REPORT

**American Electric Power Company**
**Big Sandy Power**
**LOUISA, KY**

**Dismantling Information** **October 13, 2009**

**BIG SANDY AEP POWER PLANT**
**CONCEPTUAL DEMOLITION PLAN**

DEFINITIONS:

**ACM**
Asbestos Containing Material

**CFC's**
Chlorofluorocarbons.

**Construction / Demolition Debris**
Any solid waste resulting from the construction, remodeling, repair, or demolition of structures. Such wastes may include, but not limited to, brick, stone, and concrete.

**Contractor**
The individual, partnership or corporation with which AEP Company enters into a contract to perform all of the work described in the Specification.

**Contract**
A purchase order placed by Purchaser and accepted by Contractor, together with this Specification and all other documents referred to in such purchase order, or a formal contract executed by Purchaser and Contractor, together with this Specification and all other documents referred to in such formal contract.

**Engineer**
The Engineer or his authorized representative designated by AEP Company to be assigned to this contract.

**Fill Material**
Material to be used to bring area to grade. Material shall meet the requirements of all applicable Federal and/or State rules and/or regulations. Material shall also meet the requirements of the Engineer.

**Greases**
Any used or unused greases or waste containing grease.

**Hazardous Substance**
This definition shall be the same definition as found in CERCLA Section 101(14), and shall include but limited to any substance or pollutant defined under Sections 311(b)(2)(A) and 307(a) of the Federal Water Pollution Control Act, Section 102 of CERCLA, Section 3001 of the Solid Waste Disposal Act and Section 112 of the Clean Air Act.

**Hazardous Waste**
Hazardous waste as defined in 40 CFR 261.3 or as defined in any applicable state regulation.

**HAZMATs**
Any hazardous, toxic or regulated substance controlled under RCRA, CERCLA or any other Federal, State, or Local law, statute, regulation or ordinance pertaining to the handling, transportation, or disposal of any controlled substance.

**Industrial Process Waste**
Any solid waste generated by manufacturing or industrial process waste that is not a hazardous waste. Such waste may include, but not limited to, refractory brick, fire clay refractory earth brick, and ceramic block.

**Landfill**

River City Disposal
1837 River Cities Drive
Ashland, KY 41102

**MSDS**
Material Safety Data Sheet.

**ODCS**
Ozone Depleting Chemicals as defined under Title VI of the CAA Amendments of 1990

**Oils**
Any used or unused hydraulic, lubrication, rolling, waste or other such oil or oily waste.

**OSHA**
Occupational Safety and Health Act and amendments thereto.

**PCBs**
Polychlorinated By-phenols.

**Process Materials**
Any raw materials, blended raw materials, recyclable process generated dusts (such as flue dust), fly ash, ash slurry and etc.

**RACM**
Regulated Asbestos Containing Material as defined in 40 CFR 61, Subpart M and any other applicable Federal, State, and/or Local rules, regulations and/or ordinances.

**Scrap**
All ferrous scrap designated by the Engineer to be suitable for melting at a steel processing plant.

**Structural Removal**
As in the Specification, shall mean all work of every nature described herein, implied herein, or necessary to complete the work described or implied herein, with the exception of Asbestos Abatement.

**AEP Company**
American Electric Power Company

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American Electric Power Company
Big Sandy Power
LOUISA, KY

**Information Sheets**

**Dismantling Information** **October 13, 2009**

**BIG SANDY POWER**

1. GENERAL SCOPE OF WORK

1.1. The work to be performed under the terms of this specification shall consist of the dismantling and removal of all facilities, machinery, equipment, all associated structures, foundations, debris, asbestos containing materials, hazardous substances and hazardous waste as directed by the Engineer. Upon completion each dismantling site shall be left in a neat, clean, safe condition.

1.2. Work under this specification shall be performed in accordance with the terms and conditions of the Contract, entered into between AEP Company and the Contractor, and in accordance with all EPA, OSHA, Federal, State, County, and Local laws, statutes, ordinances, and regulations.

1.3. The Contractor shall perform all utility disconnection and/or relocation work which is necessary to complete the proposed dismantling and removal work, without disrupting active utilities.

1.4. The Contractor shall perform all excavation, back-filling, construction and closure work which is necessary to complete the proposed dismantling work.

1.5. The Contractor shall provide all labor, materials, equipment, services and pay all necessary taxes, in addition to securing all required permits, to perform the dismantling.

1.6. The Contractor is responsible to clean up and dispose of any and all materials which are generated as a result of a spill caused by the Contractor, or which are generated as a result of the improper handling of any materials by the Contractor. This includes all RACM, Hazardous Substances, Hazardous Waste, Special wastes, Non-process Debris, Demolition Debris, and combustible materials.

2. FACILITY DISMANTLEMENT AND RELATED WORK

2.1. Perform the environment abatement of the following:

2.1.1. Vacuum the inside area of Unit 1 Boiler

2.1.2. Chemical sweep of structures, tanks and pipe in Unit 1 Boiler area

2.1.3. Abate tank insulation in Unit 1 Boiler along with all connected pipes

2.1.4. Abate Unit 1 Boiler, boiler breeching and piping

2.1.5. Abate Unit 1 Boiler building siding, office and turbine building siding, Unit 1 coil conveyor, Unit 1 coil conveyor transfer building, Unit 1 train coal unload station house and miscellaneous outside structures.

2.1.6. Remove Units 1 fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.1.7. Vacuum the inside area of Unit 2 Boiler

2.1.8. Chemical sweep of structures, tanks and pipe in Unit 2 Boiler area

2.1.9. Abate tank insulation in Unit 2 Boiler along with all connected pipes

2.1.10. Abate Unit 2 Boiler, boiler breeching and piping

2.1.11. Abate Unit 2 miscellaneous outside structures.

2.1.12. Remove Unit 2 fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.1.13. Remove storage building fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.1.14. Remove the secondary and primary river water pump house building fluorescent light bulbs, PCB ballast, mercury vapor light, HID vapor lights and mercury containing instruments.

2.2. Perform the building dismantling, equipment removal, concrete removal to surrounding grade elevation of the following.

2.2.1. Unit 1 boiler building, turbine generator building, precipitators, office and maintenance building, coal conveyor.

2.2.2. Unit 2 boiler building, turbine generator building, precipitators, office and maintenance building the chemical lab building, coal conveyor to Unit 2 coal pile the SCR building and the Unit 1 & 2 concrete smoke stack.

2.3. Perform the removal of the following to grade elevation.

2.3.1. Unit 1 water cooling tower structure, adjacent pump structures, adjacent condensate water tank to surround grade elevation. Fill the pits and trenches to surround grade elevation.

2.3.2. The pump house and metal cleaning waste treatment tank located west of Unit 1 boiler building.

2.3.3. The coal train car unload building, adjacent control building, the coal conveyor and coal transfer and sampling building.

2.3.4. The tractor shed and locomotive house building.

2.3.5. The remains of the standby river water make-up equipment, railroad ties and pipes to the Big Sandy River.

2.3.6. The in-service sanitary treatment equipment, trenches and tanks located adjacent to the Big Sandy River.

2.3.7. The secondary and primary river water pump building structures, the two electrical control buildings. Remove building and water intakes to surrounding grade elevation. Install a barricade in the water inlet from the Big Sandy River. Remove the water inlet screens from the river.

2.3.8. The ammonia storage building and chemical manufacturing building structure and ammonia storage tank structures.

2.3.9. The 500,000 gallon fuel oil tank and oil pump station. Remove the oil tank dyke down to surround grade elevation.

2.3.10. The six single story maintenance, storage and office buildings located south of the Unit 2 boiler building.

2.3.11. The Unit 2 water cooling tower structure, adjacent pump structures, adjacent clean condensate water tank, dirty condensate water tank, the fire water control building, the sulfuric acid storage and control building, the chlorine tank and control building to surround grade elevation. Fill the pits and trenches to surround grade elevation.

2.3.12. The Unit 2 coal conveyor from the coil pile to the Unit 2 boiler.

2.3.13. The coal train unload building, coal conveyor from the unload building to the coal transfer building to the coal storage area. Remove all bents and transfer building to surround grade elevation. Remove the coal truck unload equipment from grade elevation to the bottom of the pit. Fill the truck unload pit and the coal train unload pit to surrounding grade elevation. Fill the pit from the coal train station to the coal conveyor exit with fill material to surround grade elevation.

2.3.14. The coal system sample building, trailer and sample equipment to surrounding grade elevation.

2.3.15. The coal system transportation office and maintenance building located east of the coal storage area.

2.3.16. The two truck scales, control building, and coal train car warming structure and equipment down to surrounding grade elevation.

2.3.17. The abandoned 3,400,000 gallon fuel storage tank. Remove the dyke wall surrounding the fuel tank to surrounding grade elevation. Remove all pumps, pipe, wires, and controls from the tank area to the Unit 2 boiler structure.

2.3.18. Remove the maintenance parts storage building located north of the Unit 2 turbine building.

2.3.19. Remove the electrical wire, and electric towers from the transformers located adjacent to Unit 2 boiler building to the 345,000 volt electrical station located north of highway 23.

3. WORK BY CONTRACTOR

The Contractor Shall:

3.1. Furnish all supervision, labor, materials, tools, supplies and equipment necessary to perform the work, including dismantling and removal of all the facilities, equipment, structures, etc. noted herein with the exception of specific structures which are designated in this Specification to remain.

3.2. Furnish on the site, during the performance of the work, an experienced supervisor who shall be duly authorized to represent and act for the Contractor in all matters pertaining to the work covered by this Specification.

3.3. Provide all written instructions, orders, and other communications delivered to the Contractor's construction office shall be considered as having been delivered to the Contractor himself.

3.4. Develop detailed written demolition plans for each area to be dismantled, and submit them to the Engineer for his review prior to the start of work in an area. Such plans shall include, but limited to:

3.4.1. A detailed and complete schedule for the performance of the work.

3.4.2. A survey of each area, identifying all materials to be disposed of other than scrap and equipment.

3.4.3. Identification and protection of demolition areas.

3.4.4. Termination and/or relocation of utilities.

3.4.5. Asbestos abatement and disposal.

3.4.6. Handling and disposal of hazardous wastes and materials.

3.4.7. Handling and disposal of oils and greases.

3.4.8. Handling and disposal of non-hazardous debris and materials.

3.4.9. Handling and disposal of ODC's.

3.4.10. Fire prevention and protection.

3.4.11. Handling and storage locations for ferrous and non-ferrous scrap.

3.4.12. Method of demolition and/or equipment removal.

3.4.13. Clean-out, breaking open, and filling of basements, pits, and tunnels.

3.4.14. Final grading and restoration of demolition site.

3.5. Clear each site of existing equipment, structures, and material designated to be removed. Each site will be left in a neat, clean, safe condition in conformity with all applicable Federal, State, or Local laws, statutes and/or regulations, including but not limited to CAA, OSHA, RCRA, SARA, TSCA, and/or CERCLA. The finished condition of each site will be approved by the Engineer.

3.6. Remove all structures down to final grade except where otherwise noted. Final grade will generally be the adjacent grade surrounding the facility to be removed. The removal of concrete & debris and grading will be done concurrent with the demolition work. As one area is cleared of structures, the required concrete removal work in that area will be done simultaneously with the demolition of structures in the next area of work. If the Contractor breaches the provisions of this section AEP Company reserves the right, in AEP Company's sole opinion, to stop the Contractor from doing further demolition until the concrete and debris removal is current.

3.7. Perform all material removal and asbestos abatement work in accordance with all applicable Federal, State, and/or Local rules, regulations and/or ordinances, which is necessary to complete the proposed removal work.

3.8. Perform all utility, telecommunications and telemetering disconnection and/or relocation work which is necessary to complete the proposed removal work.

3.9. Prior to beginning demolition of any facility, Contractor shall ascertain that no live utilities remain in the facility and identify and locate all underground utilities. It shall be the Contractor's exclusive responsibility to determine that all utility systems in each area remain isolated from active utility systems.

3.10. Perform all excavation, back–filling, construction and closure work which is necessary to complete the proposed dismantling and removal work.

3.11. Remove all debris generated as a result of the proposed removal work.

3.12. Break the floors of all pits, trenches and depressions sufficiently to provide drainage and to prevent the accumulation of water within the underground structure.

3.13. Tunnel and basement roof structures which do not support structures designated to remain and which are located less than 3 feet below finish grade elevation will be broken in. Said tunnel excavations will be filled with fill materials approved by the Site Engineer up to finish grade elevation.

3.14. Properly drain and capture all contents of pipelines prior to dismantling any pipelines.

3.15. Empty and shovel clean all pits, sumps, basements, and depressions to the satisfaction of the Engineer. Areas will be inspected by the Site Engineer prior to filling. Any pits, sumps, basements or depressions in contact with a hazardous waste or PCB shall be decontaminated in accordance with any applicable Federal and/or State rules and/or regulations.

3.16. Back-fill all pits, sumps, and depressions up to existing grade. Each site shall be rough graded and left in a neat, clean, safe condition. Contractor will use fill material approved by the Engineer. The final six inches of fill shall be other select fill material approved by the Engineer.

3.17. Furnish all fill material in accordance with the Specification. If the work activity generates more fill material than needed, the Contractor shall pay for the transportation and disposal off site. If the work activity is fill negative, the Contractor shall pay for the purchase and transportation of required fill to the site. Such purchased material shall be approved by the Site Engineer.

3.18. Furnish portable sanitary facilities and drinking water for Contractor's personnel in areas of removal.

3.19. Furnish electric power and temporary lighting in those areas of removal where active utilities are not available.

3.20. Provide adequate protective barriers for open pits, holes and depressions, as a result of the equipment removal work, until they are properly backfilled. Temporary barricades shall conform to all applicable Federal, State and Local, rules and regulations or standards including, but not limited to OSHA.

3.21. Remove above ground utility support systems such as poles, structural steel towers or guy wires which have been designated to be removed by the Engineer.

3.22. Remove and scrap all tanks, including supporting steel and concrete structures. Prior to removal work Contractor shall remove the contents of each tank, drain each tank and otherwise purge each tank in accordance with all applicable rules or regulations to render them safe for removal. Notify Engineer of any potentially contaminated soils. Remove of these tanks shall conform to all applicable Federal, State, and Local laws, statutes, regulations or ordinances.

3.23. Secure the approval of local Fire Department for the Fire Prevention Plan. Contractor shall meet with representatives of the Fire Department prior to commencement of work on each facility. Prior to the commencement of removal work, Contractor shall inspect all fire hydrants in the work area and shall notify the Engineer of those that are not in good operating condition.

3.24. Provide fire extinguishers and fire hoses as required to immediately control any fires resulting from the work. Implement all fire prevention measures as directed by the Fire Department. Measures required by Fire Department may include, but will not be limited to, the maintenance of pressurized fire hoses at each removal site.

3.25. Attend a safety meeting with AEP Company's representatives prior to starting work in each facility or designed area.

3.26. Furnish all temporary or permanent supports or protective devices which are necessary to preserve active pipes, electrical lines or other structures which AEP Company designates to remain in place.

3.27. Abide by AEP Company Contractor Safety Responsibilities, AEP Company Energy Control-Lockout and Tryout Rules, as well as all Federal, State, and Local regulations.

3.28. Secure the Engineer's approval prior to using any railroad track or mobile crane movements to or from the dismantling site.

3.29. Schedule rail movements, order all railroad cars and be solely responsible for demurrage charges resulting from the Contractor's operations.

3.30. Where Contractor removes railroad track, the Contractor shall remove all wooden and concrete ties, and load and transport them to an approved disposal site approved by the Engineer. Contractor shall be responsible for the cost of all removal, loading, transportation, and disposal of such material.

3.31. ACM ABATEMENT

3.31.1. Contractor shall provide all supervision, labor, consumable materials, tools, equipment, documentation, services and permits required to identify, remove, and dispose of all ACM located on, in, adjacent to or forming a part of each structure designated for removal. RACM removal work shall include but is not necessarily limited to the work described herein.

3.31.2. Prepare a complete, written ACM removal plan for each dismantling site. Contractor shall obtain and analyze all bulk sample analyses of any suspect RACM. Prior to the commencement of work, Contractor shall provide the Engineer with the results of the analyses and Contractor's removal plan.

3.31.3. Provide all respirators, protective clothing and equipment required to protect all personnel associated with the RACM removal work. All respirators, protective clothing and equipment shall conform to all applicable rules, regulations, and standards, including but not limited to OSHA..

3.31.4. Employ only competent persons, trained, knowledgeable and qualified in the techniques of abatement, handling and disposal of RACM and subsequent cleaning of contaminated areas. Employees who perform RACM removal work shall posses current, valid asbestos abatement licenses as required by any governmental agency having jurisdiction over the work.

3.31.5. Perform all RACM removal in strict accordance with all applicable Federal, State, and Local laws, statutes, ordinances and regulations. Contractor shall provide timely and accurate notification in accordance with all Federal, State, and Local laws, statutes, and regulations and ordinances.

3.31.6. Adequately wet all friable RACM prior to removal. Adequately wet RACM debris shall be packaged in bags provided by Contractor. Bags of ACM debris shall promptly placed in dumpster boxes provided by Contractor.

3.31.7. Haul all RACM debris from each RACM removal site to the disposal site approved by AEP Company. Contractor shall unload RACM at the disposal site. All transportation of RACM shall be performed in enclosed dumpster boxes.

3.31.8. Be responsible for any spilling, escape or release of RACM which occurs during the transportation of RACM to the disposal site. AEP Company shall be responsible for any spilling, escape or release of RACM which occurs after the RACM has been unloaded by Contractor at the disposal site approved by AEP Company. Contractor shall immediately report to AEP Company any spilling, escape or release of RACM which occurs during the transportation of RACM. Contractor shall submit copies of reports of spilling, escape or release of RACM to all authorities as required by Federal, State or Local laws, statutes, regulations and ordinances.

3.31.9. Maintain complete and accurate records of all removal, transportation and disposal activities in accordance with all Federal, State and Local laws, statutes, regulations and ordinances. Contractor shall submit copies of all such records to AEP Company on a daily basis.

3.31.10. Perform personal and area air monitoring as necessary to assure the safety of all persons associated with the removal of ACM and as required by Federal, State and Local laws, statutes, regulations and ordinances. Contractor shall perform environmental air monitoring in the area at each location where RACM removal work is performed. Environmental air monitoring shall conform to all applicable Federal, State, and Local laws, statutes, regulations and ordinances.

3.32. HAZARDOUS WASTE HANDLING AND DISPOSAL

3.32.1. Contractor shall provide all supervision, labor, consumable materials, tools, equipment, documentation, services and permits required to identify, remove and load any hazardous waste located in, adjacent to or forming a part of the equipment designated for removal. Contractor shall be responsible to perform all in-plant handling of such materials, including, but not limited to removal, loading, and in-plant transportation. Hazardous waste removal work shall include, but is not necessarily limited to, the work described herein.

3.32.2. Contractor is required to secure samples of all materials, which are suspected of being a hazardous waste, located in the areas defined in this Specification. Samples shall be collected in accordance with all applicable regulations. Contractor shall deliver all samples of suspected hazardous waste to the Engineer. AEP Company shall secure required analyses of all such samples.

3.32.3. Prepare a complete written hazardous waste removal plan for each work site that will be submitted to the Engineer for his review prior to the start of work in an area.

3.32.4. Contractor shall provide all respirators, protective clothing and equipment required to protect all personnel associated with the handling or removal of any Hazardous Wastes. All said respirators, protective clothing and equipment shall conform to all applicable rules, regulations and standards, including but not limited to OSHA.

3.32.5. Employ only competent persons, trained, knowledgeable and qualified in the techniques of handling and disposal of hazardous wastes and subsequent cleaning of contaminated areas. Employees who perform hazardous waste removal work shall possess current, valid licenses as required by any government agency having jurisdiction over the work. Perform all hazardous waste removal in strict accordance with all applicable Federal, State and Local laws, statutes, ordinances and regulations. Contractor shall provide timely and accurate notification in accordance with all Federal, State and Local laws, statutes, regulations and ordinances.

3.32.6. Contractor shall post all appropriate warning signs at each work area, as is required by applicable regulations.

3.32.7. Contractor shall be solely responsible for any spills, releases, escapes or improper handling of hazardous wastes caused by the Contractor (or by their approved subcontractor). Contractor shall pay all penalties, clean up, and disposal costs incurred as a result of improper handling by Contractor. Contractor shall immediately report any spilling, escape or release of any hazardous waste to the Engineer in accordance with Section 6.48 of the Specification.

3.32.8. Maintain complete and accurate records of all removal activities in accordance with all Federal, State, and Local laws, statutes, regulations and ordinances. Contractor shall submit copies of all such records to AEP Company on a weekly basis.

3.32.9. Perform personal monitoring as necessary to assure the safety of all persons associated with the removal of hazardous wastes and as required by Federal, State, and Local laws, statutes, regulations and ordinances. If so required, Contractor shall perform environmental air monitoring in the area of each location where hazardous waste removal work is performed. Environmental air monitoring shall comply with applicable Federal, State, and Local laws, statutes, regulations and ordinances.

3.32.10. AEP Company shall be responsible for disposal, the method of disposal and the disposal site for all identified hazardous waste except asbestos waste. Contractor shall load all such wastes into trucks or containers provided by AEP Company.

3.33. COMBUSTIBLE DEBRIS

3.33.1. Contractor is responsible for identification, (including sampling and testing if required), removal, transportation, and disposal of all combustible debris located in the areas defined in this Specification, or which are generated by the Contractor in the performance of the work defined herein.

3.33.2. Contractor shall dispose of all combustible debris to a licensed off-plant disposal site. Such disposal site shall be approved by the Engineer.

3.34. CONSTRUCTION / DEMOLITION WASTE

3.34.1. Contractor is required to perform the work described herein in a manner that will separate construction / demolition waste from ferrous scrap, combustible waste, non-ferrous scrap, ferrous scrap, process demolition waste, oils and greases, hazardous wastes, and all other materials.

3.34.2. Contractor shall identify all quantities of construction / demolition waste to the Engineer. The Engineer shall positively identify all such materials as being construction / demolition waste.

3.34.3. For all materials which have been positively identified by the Engineer as construction / demolition waste, Contractor shall use such materials as clean fill in locations approved for filling by the Engineer.

3.34.4. Contractor shall be responsible to perform all in-plant handling of such materials, including, but not limited to, screening, separation, from other materials, loading, crushing and transportation.

3.34.5. Contractor shall be responsible for any costs that are incurred as a result of his handling construction / demolition waste, including, but not limited to, sampling, analysis, permit applications, loading, on and off-site transportation, and disposal at an approved disposal site.

3.35. OILS

3.35.1. Contractor is required to secure samples of all oils and oily wastes located in the areas defined in this Specification. Samples shall be collected in accordance with all applicable regulations.

3.35.2. AEP Company shall secure analyses required by the applicable regulations, or by the disposal facility, of all such samples, including, but not limited to, analysis for PCB contamination.

3.35.3. For all oils which have been positively identified as being free of PCB contamination (i.e. less than 50 ppm), Contractor shall be responsible to perform all handling of such materials, including, but not limited to, removal, clean up, loading and transportation.

3.35.4. Contractor shall be responsible to pay for fees to dispose of all oils and oily waste in accordance with all applicable regulations. The Engineer shall approve all methods of disposal and disposal sites for all oils and oily waste.

3.36. GREASES

3.36.1. Contractor is required to secure samples of all greases and wastes containing grease located in the areas defined in this Specification. Samples shall be collected in accordance with all applicable regulations.

3.36.2. AEP Company shall secure analyses required by the applicable regulations, or by the disposal facility, of all such samples.

3.36.3. Contractor shall be responsible to perform all handling of such materials, including, but not limited to, removal, clean up, loading, and transportation.

3.36.4. AEP Company shall be responsible for the disposal of all special and hazardous greases and waste containing

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greases in accordance with all applicable regulations.

3.37. PROCESS MATERIALS

3.37.1. Contractor is required to perform the work described herein in a manner that will separate process demolition debris from ferrous scrap, combustible debris, non-ferrous scrap, construction / demolition waste, oils and greases, hazardous wastes, and all other materials.

3.37.2. Prior to the start of demolition in an area, Contractor shall identify all quantities of process materials to the Engineer. The Engineer shall positively identify all such materials as being process materials.

3.37.3. Contractor is required to secure samples of all process materials located in the areas defined in this Specification. Contractor must provide samples to the Engineer with sufficient lead time so as not to interfere with the dismantling work.

3.38. PCBs AND EQUIPMENT CONTAINING PCBs

3.38.1. Prior to dismantling, Contractor shall conduct a survey of each dismantling area to locate and identify any electrical or hydraulic equipment which has not been clearly identified as being free of PCB contamination and, therefore, may contain PCBs. Contractor shall provide the Engineer with the location and description of any surveyed equipment which may contain PCBs. Where so directed by AEP Company, Contractor shall provide AEP Company with a sample of the oil contained in the piece of equipment. AEP Company will secure analysis and provide Contractor with the written results.

3.38.2. Prior to dismantling the facility, the Contractor shall remove, intact each piece of PCB contaminated equipment. Contractor shall transport said PCB equipment to AEP Company's designated PCB storage facility. Contractor shall schedule and coordinate said deliveries with the Engineer. Alternatively, at the direction of the Engineer, Contractor shall load PCB equipment onto vehicles provided by AEP Company. Contractor shall schedule and coordinate said loading with the Engineer. Contractor shall schedule and coordinate the pumping and removal of PCB dielectric fluid from transformers prior to loading when so directed by the Engineer.

3.38.3. AEP Company shall be responsible for the disposal of all PCB equipment and fluids.

3.38.4. Contractor shall be solely responsible for any spills, releases, escapes, or improper handling of the hazardous substance caused by the Contractor. Contractor shall pay all penalties, clean up, and disposal costs incurred as a result of improper handling by Contractor. Contractor shall immediately report any spilling, escape, or release of any hazardous substance to the Engineer in accordance with Section 6.48 of the Specification.

3.39. ODC's:

3.39.1. Prior to dismantling, Contractor shall conduct a survey to locate and identify any equipment which may contain ODCs, including, but not limited to CFCs. Contractor shall provide the engineer with the location and description of any surveyed equipment which may contain ODCs.

3.39.2. Prior to dismantling the facility, the Contractor shall remove, intact, any piece of equipment which contains ODCs. Contractor shall transport said ODC containing equipment to a designated location.

3.39.3. Contractor shall be responsible for the removal and disposal of ODCs from equipment in accordance with all applicable regulations. Contractor shall provide the Engineer with documentation showing proper removal and disposal.

3.39.4. Contractor shall be responsible for the disposal of all equipment after all ODCs have been properly removed.

3.39.5. Contractor shall be solely responsible for any spills, releases, escapes, or improper handling of ODCs caused by the Contractor (or by their approved subcontractor). Contractor shall pay all penalties, clean up, and disposal costs incurred as a result of improper handling by Contractor. Contractor shall immediately report any spilling, escape, or release of any ODCs to the Engineer in accordance with Section 6.48 of this Specification.

3.40. PIPING SYSTEMS

3.40.1. Prior to the commencement of dismantling work, Contractor shall identify, plan and perform all piping shut offs, disconnections, and relocation work necessary to complete the work specified in a safe, orderly manner.

3.40.2. Piping shall be purged (where necessary) and shall be removed to a point of origin as designated by the Engineer.

3.40.3. Contractor shall submit plans, procedures and working drawings showing design details for all piping work to the Engineer for review. Contractor shall secure the Engineer's review of all designs, plans and procedures prior to the commencement of work. The correctness of the design shall remain the Contractors responsibility.

3.40.4. Contractor shall provide all supervision, labor, materials, tools and equipment necessary to complete all piping work required for the work as specified herein. Contractor shall be responsible for the identification of all piping construction, disconnection and relocation work which will be required to complete all work specified herein.

3.40.5. Contractor shall perform all piping construction, disconnection and relocation work using methods which will not interrupt AEP Company's ongoing operations.

3.40.6. Secure the Engineer's permission prior to any utility outage. In the absence of the Engineer's approval of Contractor's proposed outage, Contractor shall perform the proposed work on live pressurized lines.

3.41. ELECTRICAL SYSTEMS

3.41.1. Prior to the commencement of dismantling work, Contractor shall identify, plan and perform all electrical shut offs, disconnections, and relocation work necessary to complete the work specified in a safe and orderly manner.

3.41.2. Conduit, cable, wireways, and buss shall be removed to a point of origin as designated by the Engineer.

3.41.3. Contractor shall submit plans, procedures and working drawings showing design details for all electrical and related work to the Engineer for review. Contractor shall secure the Engineer's review of all designs prior to the commencement of work. The correctness of design shall remain the Contractor's responsibility.

3.41.4. Contractor shall provide all supervision, labor, materials, tools and equipment necessary to complete all electrical, telecommunication and telemetering work required for the dismantling work specified herein. Contractor shall be responsible for the identification of all electrical, telecommunication and telemetering construction, disconnection and relocation work which will be required to complete all work specified herein.

3.41.5. Contractor shall perform all electrical construction, disconnection and relocation work using methods which will not interrupt AEP Company's ongoing operations.

3.41.6. Contractor shall secure the Engineer's permission prior to any utility outage. In the absence of the Engineer's approval of Contractor's proposed outage, Contractor shall perform the proposed work on live energized lines.

4. WORK BY PURCHASER:

AEP Company Shall:

4.1. Provide Material Safety Data Sheets (MSDS) in accordance with OSHA "Right to Know" regulations for each substance listed under said regulations.

4.2. Provide, where available, utility services such as 460 Volt, 3 phase, 60 Hz power, 250 Volt DC current, potable water, oxygen, compressed air, or natural gas, which are deemed available by AEP Company. Contractor may, at his own expense and approval of the Engineer, make necessary connections provided there is no interruption to normal production operations. AEP Company assumes no responsibility or liability for loss of, or damage to, the equipment or materials of the Contractor or his subcontractors. Contractor will pay charges that may be assessed. The assessment of charges and/or the availability of utilities may change through the course of the contract as determined.

4.3. Provide existing railroad tracks, railroad tracks sidings, and roadways on plant site, if available, for Contractor's use when and where the Engineer may designate. Contractor shall keep traffic lanes free of congestion so as to avoid interference with normal plant operations.

4.4. Provide one copy of all available drawings necessary for the completion of the work specified. These drawings are to be used by the Contractor for reference only in the performance of the work. Said drawings are not to be construed as a complete description of the Scope of Work, nor as fully depicting existing conditions. Additional copies may be purchased by Contractor through the Purchaser.

4.5. Approve the selection of all subcontractors before they will be allowed to enter the job site and perform work. Subcontractors are subject to all applicable terms and conditions contained herein.

4.6. Provide written releases for the demolition of each specific area or facility as identified in the Schedule of Values. Demolition shall not commence without the receipt of said release.

4.7. Assign to Contractor ownership of each facility to be dismantled. The assignment shall include:

4.7.1. All ferrous and non-ferrous scrap resulting from the dismantling work

4.7.2. All ferrous and non-ferrous scrap located within each dismantling area as identified by Engineer during the site visitation.

4.7.3. Spare parts and/or spare equipment.

4.7.4. All railroad track designated for removal.

4.7.5. All vehicles and mobile equipment located within each dismantling area as identified in the Specification.

4.8. AEP Company will maintain ownership of all real estate

5. Pricing

5.1. Environmental Abatement
$4,000,000

5.2. Demolition of Unit 1, 2, cooling towers, stacks, buildings, railroad tracks and tanks
$9,000,000

5.3. Capping of bottom and slurry ash ponds
$30,000,000

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# STEAM PRODUCTION PLANT WORKPAPERS

## CALCULATED ACCUMULATED DEPRECIATION

KENTUCKY POWER COMPANY
DEPRECIATION STUDY AS OF DECEMBER 31, 2008
CALCULATED DEPRECIATION RESERVE
STEAM PRODUCTION PLANT

| ACCOUNT | PLANT BALANCE AT 12-31-08 | AVERAGE AGE | AVERAGE REM. LIFE | AVERAGE LIFE | NET SALVAGE | % REM. LIFE TO AVG. LIFE | CALCULATED RESERVE % | CALCULATED RESERVE W/O NET SALVAGE | CALCULATED RESERVE WITH NET SALVAGE |
|---|---|---|---|---|---|---|---|---|---|
| BIG SANDY | | | | | | | | | |
| 311 | 40,583,921 | 26.29 | 19.27 | 45.56 | -9% | 42.30% | 57.70% | 23,418,597 | 25,526,271 |
| 312 | 355,237,890 | 12.32 | 17.43 | 29.75 | -14% | 58.59% | 41.41% | 147,110,279 | 167,705,718 |
| 314 | 104,506,857 | 16.55 | 17.44 | 33.99 | -15% | 51.31% | 48.69% | 50,885,216 | 58,517,998 |
| 315 | 15,303,286 | 29.20 | 18.86 | 48.06 | -10% | 39.24% | 60.76% | 9,297,877 | 10,227,664 |
| 316 | 6,518,954 | 23.20 | 18.68 | 41.88 | -14% | 44.60% | 55.40% | 3,611,264 | 4,116,841 |
| Total | 522,150,908 | | | | | | | 234,323,233 | 266,094,492 |

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# TRANSMISSION PLANT WORKPAPERS

## LIFE ANALYSIS

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

| | | |
|---|---|---|
| Account | 3502 RIGHTS OF WAY | |
| Depreciable Balance | $23,482,119 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 75 | 75 |
| Iowa Curve | R4.0 | R4.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

**************************************************************************************************

An actuarial analysis was not performed on this account because of the minimal retirements. The recommendation is to continue the current average service and retirement dispersion for this account.

Retirements from this account should not be expected to incur removal costs or receive any salvage.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

Account 352 STRUCTURES & IMPROVEMENTS

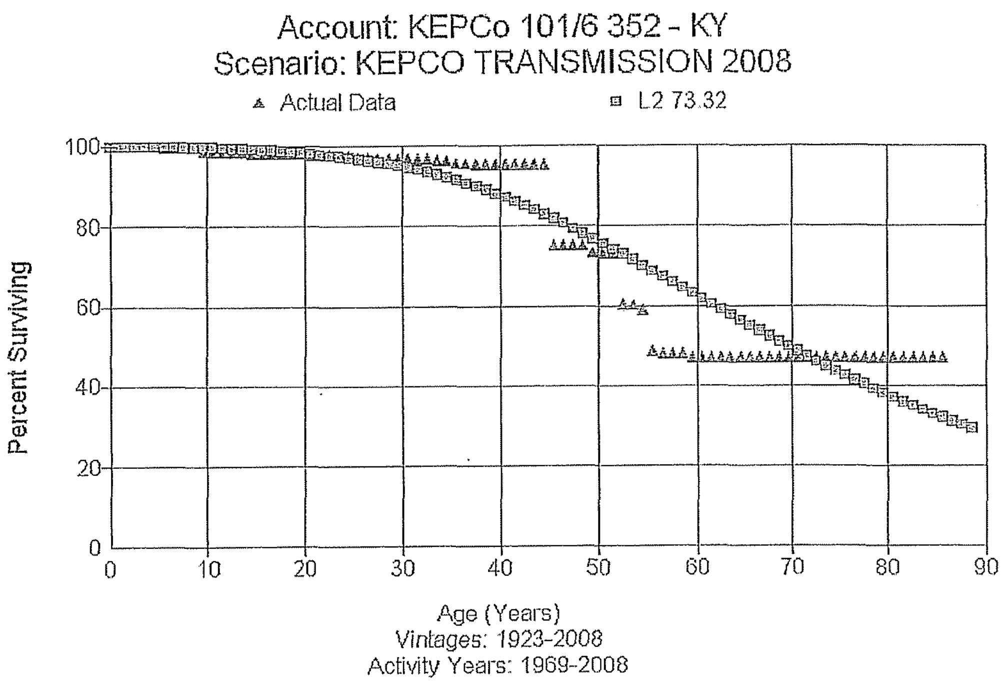
Depreciable Balance $6,369,900

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 55 | 73 |
| Iowa Curve | S1.5 | L2.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 10% |
| Net Salvage % | 0% | 10% |

**************************************************************************************************************

The 40 year band analysis of the account shows the best fit curve is an L2.0 with a 73 year average service life. Due to minimal retirement experience in the 20 year and 10 year bands, the actuarial analyses were not meaningful.

Retirements from the structures account should provide some salvage but no measureable removal costs would be expected.


Account: KEPCo 101/6 352 - KY
Scenario: KEPCO TRANSMISSION 2008
Actual Data
L2 73.32
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
Age (Years)
Vintages: 1923-2008
Activity Years: 1969-2008

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Actuarial Life Analysis

Account: KEPCo 101/6 352 - KY
Scenario: KEPCO TRANSMISSION 2008
Placement Band: 1923 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1969 -2008 | 85.5 | 46.97 | 0.49268125 | L2 | 73.32 |

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Observed Life Table

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 6,292,828.06 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 6,184,874.74 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 1.5 | 6,201,894.40 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 2.5 | 6,237,136.40 | 1,954.00 | 0.00031 | 0.99969 | 100.00 |
| 3.5 | 6,173,534.45 | 1,667.00 | 0.00027 | 0.99973 | 99.97 |
| 4.5 | 6,180,313.45 | 3,388.00 | 0.00055 | 0.99945 | 99.94 |
| 5.5 | 6,197,626.45 | 2,007.00 | 0.00032 | 0.99968 | 99.89 |
| 6.5 | 5,401,409.10 | 1,459.00 | 0.00027 | 0.99973 | 99.86 |
| 7.5 | 5,400,005.93 | 1,986.00 | 0.00037 | 0.99963 | 99.83 |
| 8.5 | 5,316,655.55 | 61,166.00 | 0.01150 | 0.98850 | 99.79 |
| 9.5 | 5,241,108.40 | 5,840.00 | 0.00111 | 0.99889 | 98.64 |
| 10.5 | 5,184,749.40 | 841.00 | 0.00016 | 0.99984 | 98.53 |
| 11.5 | 4,981,474.39 | 271.00 | 0.00005 | 0.99995 | 98.51 |
| 12.5 | 4,859,681.24 | 8,260.00 | 0.00170 | 0.99830 | 98.51 |
| 13.5 | 4,740,203.24 | 9,144.00 | 0.00193 | 0.99807 | 98.34 |
| 14.5 | 4,721,383.24 | 1,281.00 | 0.00027 | 0.99973 | 98.15 |
| 15.5 | 4,351,122.24 | 724.00 | 0.00017 | 0.99983 | 98.12 |
| 16.5 | 4,242,767.24 | 0.00 | 0.00000 | 1.00000 | 98.10 |
| 17.5 | 4,208,519.24 | 684.00 | 0.00016 | 0.99984 | 98.10 |
| 18.5 | 4,142,040.24 | 7,165.00 | 0.00173 | 0.99827 | 98.08 |
| 19.5 | 4,133,365.24 | 9,049.00 | 0.00219 | 0.99781 | 97.91 |
| 20.5 | 4,119,120.24 | 369.00 | 0.00009 | 0.99991 | 97.70 |
| 21.5 | 4,104,291.24 | 318.00 | 0.00008 | 0.99992 | 97.69 |
| 22.5 | 3,947,748.24 | 544.00 | 0.00014 | 0.99986 | 97.68 |
| 23.5 | 3,845,679.24 | 11,644.00 | 0.00303 | 0.99697 | 97.67 |
| 24.5 | 3,720,801.24 | 7,387.00 | 0.00199 | 0.99801 | 97.37 |
| 25.5 | 3,671,314.33 | 2,500.00 | 0.00068 | 0.99932 | 97.18 |
| 26.5 | 3,481,599.33 | 5,102.00 | 0.00147 | 0.99853 | 97.11 |
| 27.5 | 1,834,638.33 | 359.00 | 0.00020 | 0.99980 | 96.97 |
| 28.5 | 1,735,063.33 | 1,237.00 | 0.00071 | 0.99929 | 96.95 |
| 29.5 | 1,730,686.33 | 4,232.00 | 0.00245 | 0.99755 | 96.88 |
| 30.5 | 1,726,668.33 | 0.00 | 0.00000 | 1.00000 | 96.64 |
| 31.5 | 1,568,043.94 | 0.00 | 0.00000 | 1.00000 | 96.64 |
| 32.5 | 1,480,504.94 | 5,298.00 | 0.00358 | 0.99642 | 96.64 |
| 33.5 | 1,464,196.77 | 852.00 | 0.00058 | 0.99942 | 96.29 |
| 34.5 | 308,999.77 | 2,213.00 | 0.00716 | 0.99284 | 96.23 |
| 35.5 | 259,904.00 | 325.00 | 0.00125 | 0.99875 | 95.54 |
| 36.5 | 259,579.00 | 200.00 | 0.00077 | 0.99923 | 95.42 |
| 37.5 | 248,274.00 | 0.00 | 0.00000 | 1.00000 | 95.35 |
| 38.5 | 227,424.00 | 0.00 | 0.00000 | 1.00000 | 95.35 |
| 39.5 | 242,062.00 | 0.00 | 0.00000 | 1.00000 | 95.35 |
| 40.5 | 210,013.00 | 0.00 | 0.00000 | 1.00000 | 95.35 |
| 41.5 | 189,894.09 | 0.00 | 0.00000 | 1.00000 | 95.35 |
| 42.5 | 168,387.09 | 0.00 | 0.00000 | 1.00000 | 95.35 |
| 43.5 | 168,090.09 | 44.00 | 0.00026 | 0.99974 | 95.35 |
| 44.5 | 159,600.09 | 33,904.00 | 0.21243 | 0.78757 | 95.33 |
| 45.5 | 109,107.09 | 0.00 | 0.00000 | 1.00000 | 75.08 |
| 46.5 | 102,135.09 | 0.00 | 0.00000 | 1.00000 | 75.08 |
| 47.5 | 102,014.09 | 0.00 | 0.00000 | 1.00000 | 75.08 |
| 48.5 | 99,097.09 | 2,428.00 | 0.02450 | 0.97550 | 75.08 |
| 49.5 | 94,870.09 | 339.00 | 0.00357 | 0.99643 | 73.24 |
| 50.5 | 90,117.09 | 0.00 | 0.00000 | 1.00000 | 72.98 |
| 51.5 | 89,538.09 | 15,534.00 | 0.17349 | 0.82651 | 72.98 |
| 52.5 | 73,623.09 | 241.00 | 0.00327 | 0.99673 | 60.32 |

Observed Life Table

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008
Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 72,866.09 | 1,476.00 | 0.02026 | 0.97974 | 60.12 |
| 54.5 | 32,596.09 | 5,704.00 | 0.17499 | 0.82501 | 58.90 |
| 55.5 | 26,181.09 | 356.00 | 0.01360 | 0.98640 | 48.59 |
| 56.5 | 25,733.09 | 0.00 | 0.00000 | 1.00000 | 47.93 |
| 57.5 | 17,332.09 | 0.00 | 0.00000 | 1.00000 | 47.93 |
| 58.5 | 17,332.09 | 352.00 | 0.02031 | 0.97969 | 47.93 |
| 59.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 60.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 61.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 62.5 | 16,828.09 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 63.5 | 16,828.09 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 64.5 | 14,691.09 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 65.5 | 8,951.00 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 66.5 | 1,616.00 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 67.5 | 1,616.00 | 0.00 | 0.00000 | 1.00000 | 46.96 |
| 68.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 46.96 |

Surviving Percent Report



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1969 - 2008

| Age | Actual | L2 73.32 |
|---|---|---|
| 0.0 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 |
| 1.5 | 100.00 | 100.00 |
| 2.5 | 100.00 | 100.00 |
| 3.5 | 99.97 | 99.99 |
| 4.5 | 99.94 | 99.98 |
| 5.5 | 99.89 | 99.96 |
| 6.5 | 99.85 | 99.94 |
| 7.5 | 99.83 | 99.89 |
| 8.5 | 99.79 | 99.86 |
| 9.5 | 98.64 | 99.81 |
| 10.5 | 98.53 | 99.71 |
| 11.5 | 98.52 | 99.65 |
| 12.5 | 98.51 | 99.50 |
| 13.5 | 98.34 | 99.41 |
| 14.5 | 98.15 | 99.32 |
| 15.5 | 98.13 | 99.10 |
| 16.5 | 98.11 | 98.97 |
| 17.5 | 98.11 | 98.84 |
| 18.5 | 98.10 | 98.54 |
| 19.5 | 97.93 | 98.38 |
| 20.5 | 97.71 | 98.20 |
| 21.5 | 97.70 | 97.82 |
| 22.5 | 97.70 | 97.62 |
| 23.5 | 97.68 | 97.17 |
| 24.5 | 97.39 | 96.93 |
| 25.5 | 97.19 | 96.68 |
| 26.5 | 97.13 | 96.14 |
| 27.5 | 96.98 | 95.85 |
| 28.5 | 96.97 | 95.54 |
| 29.5 | 96.90 | 94.86 |
| 30.5 | 96.66 | 94.49 |
| 31.5 | 96.66 | 94.10 |
| 32.5 | 96.66 | 93.24 |
| 33.5 | 96.31 | 92.78 |
| 34.5 | 96.26 | 91.78 |
| 35.5 | 95.57 | 91.24 |
| 36.5 | 95.45 | 90.67 |
| 37.5 | 95.37 | 89.46 |
| 38.5 | 95.37 | 88.82 |
| 39.5 | 95.37 | 88.15 |
| 40.5 | 95.37 | 86.73 |
| 41.5 | 95.37 | 85.99 |
| 42.5 | 95.37 | 85.22 |
| 43.5 | 95.37 | 83.62 |
| 44.5 | 95.35 | 82.78 |
| 45.5 | 75.09 | 81.06 |
| 46.5 | 75.09 | 80.17 |
| 47.5 | 75.09 | 79.26 |
| 48.5 | 75.09 | 77.40 |
| 49.5 | 73.25 | 76.45 |
| 50.5 | 72.99 | 75.49 |
| 51.5 | 72.99 | 73.54 |
| 52.5 | 60.33 | 72.55 |
| 53.5 | 60.13 | 71.55 |

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Surviving Percent Report

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1969- 2008

| Age | Actual | L2 73.32 |
|---|---|---|
| 54.5 | 58.91 | 69.53 |
| 55.5 | 48.60 | 68.52 |
| 56.5 | 47.94 | 66.48 |
| 57.5 | 47.94 | 65.46 |
| 58.5 | 47.94 | 64.44 |
| 59.5 | 46.97 | 62.40 |
| 60.5 | 46.97 | 61.39 |
| 61.5 | 46.97 | 60.38 |
| 62.5 | 46.97 | 58.37 |
| 63.5 | 46.97 | 57.37 |
| 64.5 | 46.97 | 56.38 |
| 65.5 | 46.97 | 54.42 |
| 66.5 | 46.97 | 53.45 |
| 67.5 | 46.97 | 51.53 |
| 68.5 | 46.97 | 50.59 |
| 69.5 | 46.97 | 49.66 |
| 70.5 | 46.97 | 47.82 |
| 71.5 | 46.97 | 46.92 |
| 72.5 | 46.97 | 46.03 |
| 73.5 | 46.97 | 44.28 |
| 74.5 | 46.97 | 43.42 |
| 75.5 | 46.97 | 42.57 |
| 76.5 | 46.97 | 40.91 |
| 77.5 | 46.97 | 40.09 |
| 78.5 | 46.97 | 38.50 |
| 79.5 | 46.97 | 37.72 |
| 80.5 | 46.97 | 36.95 |
| 81.5 | 46.97 | 35.45 |
| 82.5 | 46.97 | 34.71 |
| 83.5 | 46.97 | 33.99 |
| 84.5 | 46.97 | 32.57 |
| 85.5 | 46.97 | 31.88 |

Actuarial Life Analysis

Account: KEPCo 101/6 352 - KY
Scenario: KEPCO TRANSMISSION 2008
Placement Band: 1923 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1989 -2008 | 85.5 | 94.05 | 0.00635642 | R1.5 | 251.32 |

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Observed Life Table

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008
Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 2,333,502.73 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 2,197,565.41 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 1.5 | 2,206,020.16 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 2.5 | 2,362,397.16 | 410.00 | 0.00017 | 0.99983 | 100.00 |
| 3.5 | 2,397,622.21 | 119.00 | 0.00005 | 0.99995 | 99.98 |
| 4.5 | 2,513,082.21 | 3,388.00 | 0.00135 | 0.99865 | 99.98 |
| 5.5 | 2,568,898.21 | 270.00 | 0.00011 | 0.99989 | 99.85 |
| 6.5 | 1,957,550.86 | 0.00 | 0.00000 | 1.00000 | 99.84 |
| 7.5 | 3,599,698.69 | 636.00 | 0.00018 | 0.99982 | 99.84 |
| 8.5 | 3,617,687.31 | 61,166.00 | 0.01691 | 0.98309 | 99.82 |
| 9.5 | 3,544,927.16 | 649.00 | 0.00018 | 0.99982 | 98.13 |
| 10.5 | 3,485,743.16 | 0.00 | 0.00000 | 1.00000 | 98.11 |
| 11.5 | 3,441,977.54 | 271.00 | 0.00008 | 0.99992 | 98.11 |
| 12.5 | 3,406,980.39 | 943.00 | 0.00028 | 0.99972 | 98.10 |
| 13.5 | 3,304,785.56 | 7,381.00 | 0.00223 | 0.99777 | 98.07 |
| 14.5 | 4,405,019.56 | 418.00 | 0.00009 | 0.99991 | 97.85 |
| 15.5 | 4,093,432.33 | 89.00 | 0.00002 | 0.99998 | 97.84 |
| 16.5 | 3,979,800.33 | 0.00 | 0.00000 | 1.00000 | 97.84 |
| 17.5 | 3,945,938.33 | 406.00 | 0.00010 | 0.99990 | 97.84 |
| 18.5 | 3,931,311.33 | 0.00 | 0.00000 | 1.00000 | 97.83 |
| 19.5 | 3,931,053.33 | 7,625.00 | 0.00194 | 0.99806 | 97.83 |
| 20.5 | 3,950,281.33 | 79.00 | 0.00002 | 0.99998 | 97.64 |
| 21.5 | 3,958,222.24 | 0.00 | 0.00000 | 1.00000 | 97.64 |
| 22.5 | 3,836,797.24 | 0.00 | 0.00000 | 1.00000 | 97.64 |
| 23.5 | 3,738,355.24 | 3,162.00 | 0.00085 | 0.99915 | 97.64 |
| 24.5 | 3,628,060.24 | 7,217.00 | 0.00199 | 0.99801 | 97.56 |
| 25.5 | 3,585,106.24 | 0.00 | 0.00000 | 1.00000 | 97.37 |
| 26.5 | 3,397,528.24 | 1,293.00 | 0.00038 | 0.99962 | 97.37 |
| 27.5 | 1,754,241.24 | 103.00 | 0.00006 | 0.99994 | 97.33 |
| 28.5 | 1,654,238.24 | 522.00 | 0.00032 | 0.99968 | 97.32 |
| 29.5 | 1,652,375.24 | 3,791.00 | 0.00229 | 0.99771 | 97.29 |
| 30.5 | 1,652,873.24 | 0.00 | 0.00000 | 1.00000 | 97.07 |
| 31.5 | 1,494,827.85 | 0.00 | 0.00000 | 1.00000 | 97.07 |
| 32.5 | 1,407,669.85 | 3,313.00 | 0.00235 | 0.99765 | 97.07 |
| 33.5 | 1,393,862.68 | 852.00 | 0.00061 | 0.99939 | 96.84 |
| 34.5 | 277,459.68 | 2,213.00 | 0.00798 | 0.99202 | 96.78 |
| 35.5 | 229,074.91 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 36.5 | 229,166.91 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 37.5 | 226,468.91 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 38.5 | 175,848.91 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 39.5 | 174,596.91 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 40.5 | 142,547.91 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 41.5 | 120,959.00 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 42.5 | 91,187.00 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 43.5 | 90,890.00 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 44.5 | 84,581.00 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 45.5 | 74,084.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 46.5 | 74,447.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 47.5 | 74,326.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 48.5 | 73,025.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 49.5 | 71,226.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 50.5 | 66,812.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 51.5 | 66,233.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |
| 52.5 | 65,852.09 | 0.00 | 0.00000 | 1.00000 | 96.01 |

Observed Life Table



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 65,336.09 | 6.00 | 0.00009 | 0.99991 | 96.01 |
| 54.5 | 26,536.09 | 0.00 | 0.00000 | 1.00000 | 96.00 |
| 55.5 | 25,825.09 | 0.00 | 0.00000 | 1.00000 | 96.00 |
| 56.5 | 25,733.09 | 0.00 | 0.00000 | 1.00000 | 96.00 |
| 57.5 | 17,332.09 | 0.00 | 0.00000 | 1.00000 | 96.00 |
| 58.5 | 17,332.09 | 352.00 | 0.02031 | 0.97969 | 96.00 |
| 59.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 60.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 61.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 62.5 | 16,828.09 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 63.5 | 16,828.09 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 64.5 | 14,691.09 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 65.5 | 8,951.00 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 66.5 | 1,616.00 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 67.5 | 1,616.00 | 0.00 | 0.00000 | 1.00000 | 94.05 |
| 68.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 94.05 |

Surviving Percent Report

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1989- 2008

| Age | Actual | R1.5 251.32 | L2 73.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 | 100.00 |
| 1.5 | 100.00 | 100.00 | 100.00 |
| 2.5 | 100.00 | 100.00 | 100.00 |
| 3.5 | 99.98 | 99.82 | 99.99 |
| 4.5 | 99.98 | 99.82 | 99.98 |
| 5.5 | 99.84 | 99.64 | 99.96 |
| 6.5 | 99.83 | 99.64 | 99.94 |
| 7.5 | 99.83 | 99.64 | 99.89 |
| 8.5 | 99.81 | 99.46 | 99.86 |
| 9.5 | 98.13 | 99.46 | 99.77 |
| 10.5 | 98.11 | 99.27 | 99.71 |
| 11.5 | 98.11 | 99.27 | 99.65 |
| 12.5 | 98.10 | 99.27 | 99.50 |
| 13.5 | 98.07 | 99.08 | 99.41 |
| 14.5 | 97.86 | 99.08 | 99.32 |
| 15.5 | 97.85 | 98.89 | 99.10 |
| 16.5 | 97.84 | 98.89 | 98.97 |
| 17.5 | 97.84 | 98.89 | 98.84 |
| 18.5 | 97.83 | 98.69 | 98.54 |
| 19.5 | 97.83 | 98.69 | 98.38 |
| 20.5 | 97.64 | 98.49 | 98.02 |
| 21.5 | 97.64 | 98.49 | 97.82 |
| 22.5 | 97.64 | 98.49 | 97.62 |
| 23.5 | 97.64 | 98.28 | 97.17 |
| 24.5 | 97.56 | 98.28 | 96.93 |
| 25.5 | 97.37 | 98.08 | 96.68 |
| 26.5 | 97.37 | 98.08 | 96.14 |
| 27.5 | 97.33 | 98.08 | 95.85 |
| 28.5 | 97.32 | 97.86 | 95.21 |
| 29.5 | 97.29 | 97.86 | 94.86 |
| 30.5 | 97.07 | 97.64 | 94.49 |
| 31.5 | 97.07 | 97.64 | 93.68 |
| 32.5 | 97.07 | 97.64 | 93.24 |
| 33.5 | 96.84 | 97.42 | 92.78 |
| 34.5 | 96.78 | 97.42 | 91.78 |
| 35.5 | 96.01 | 97.20 | 91.24 |
| 36.5 | 96.01 | 97.20 | 90.08 |
| 37.5 | 96.01 | 97.20 | 89.46 |
| 38.5 | 96.01 | 96.97 | 88.82 |
| 39.5 | 96.01 | 96.97 | 87.45 |
| 40.5 | 96.01 | 96.74 | 86.73 |
| 41.5 | 96.01 | 96.74 | 85.99 |
| 42.5 | 96.01 | 96.74 | 84.43 |
| 43.5 | 96.01 | 96.50 | 83.62 |
| 44.5 | 96.01 | 96.50 | 82.78 |
| 45.5 | 96.01 | 96.26 | 81.06 |
| 46.5 | 96.01 | 96.26 | 80.17 |
| 47.5 | 96.01 | 96.26 | 78.34 |
| 48.5 | 96.01 | 96.01 | 77.40 |
| 49.5 | 96.01 | 96.01 | 76.45 |
| 50.5 | 96.01 | 95.76 | 74.52 |
| 51.5 | 96.01 | 95.76 | 73.54 |
| 52.5 | 96.01 | 95.76 | 72.55 |
| 53.5 | 96.01 | 95.51 | 70.54 |

Surviving Percent Report



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1989 - 2008

| Age | Actual | R1.5 251.32 | L2 73.00 |
|---|---|---|---|
| 54.5 | 96.00 | 95.51 | 69.53 |
| 55.5 | 96.00 | 95.25 | 67.50 |
| 56.5 | 96.00 | 95.25 | 66.48 |
| 57.5 | 96.00 | 95.25 | 65.46 |
| 58.5 | 96.00 | 94.99 | 63.42 |
| 59.5 | 94.05 | 94.99 | 62.40 |
| 60.5 | 94.05 | 94.72 | 61.39 |
| 61.5 | 94.05 | 94.72 | 59.37 |
| 62.5 | 94.05 | 94.72 | 58.37 |
| 63.5 | 94.05 | 94.44 | 57.37 |
| 64.5 | 94.05 | 94.44 | 55.39 |
| 65.5 | 94.05 | 94.17 | 54.42 |
| 66.5 | 94.05 | 94.17 | 52.49 |
| 67.5 | 94.05 | 94.17 | 51.53 |
| 68.5 | 94.05 | 93.89 | 50.59 |
| 69.5 | 94.05 | 93.89 | 48.74 |
| 70.5 | 94.05 | 93.60 | 47.82 |
| 71.5 | 94.05 | 93.60 | 46.92 |
| 72.5 | 94.05 | 93.60 | 45.15 |
| 73.5 | 94.05 | 93.31 | 44.28 |
| 74.5 | 94.05 | 93.31 | 42.57 |
| 75.5 | 94.05 | 93.01 | 41.73 |
| 76.5 | 94.05 | 93.01 | 40.91 |
| 77.5 | 94.05 | 93.01 | 39.29 |
| 78.5 | 94.05 | 92.71 | 38.50 |
| 79.5 | 94.05 | 92.71 | 37.72 |
| 80.5 | 94.05 | 92.40 | 36.19 |
| 81.5 | 94.05 | 92.40 | 35.45 |
| 82.5 | 94.05 | 92.40 | 33.99 |
| 83.5 | 94.05 | 92.09 | 33.27 |
| 84.5 | 94.05 | 92.09 | 32.57 |
| 85.5 | 94.05 | 91.78 | 31.20 |

Actuarial Life Analysis

Account: KEPCo 101/6 352 - KY
Scenario: KEPCO TRANSMISSION 2008
Placement Band: 1923 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1999 -2008 | 85.5 | 91.63 | 0.03130360 | R0.5 | 280.35 |

Observed Life Table

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Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008
Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 1,125,852.57 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 1,043,379.25 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 1.5 | 1,239,877.01 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 2.5 | 1,419,991.16 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 3.5 | 1,469,351.21 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 4.5 | 1,518,538.21 | 1,180.00 | 0.00078 | 0.99922 | 100.00 |
| 5.5 | 1,888,743.21 | 270.00 | 0.00014 | 0.99986 | 99.92 |
| 6.5 | 1,196,345.86 | 0.00 | 0.00000 | 1.00000 | 99.91 |
| 7.5 | 1,240,714.69 | 0.00 | 0.00000 | 1.00000 | 99.91 |
| 8.5 | 1,222,228.31 | 60,792.00 | 0.04974 | 0.95026 | 99.91 |
| 9.5 | 1,146,766.16 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 10.5 | 1,093,302.16 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 11.5 | 904,170.15 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 12.5 | 938,203.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 13.5 | 924,478.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 14.5 | 990,870.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 15.5 | 672,081.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 16.5 | 752,713.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 17.5 | 2,349,758.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 18.5 | 2,386,780.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 19.5 | 2,388,410.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 20.5 | 2,383,339.00 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 21.5 | 2,528,705.39 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 22.5 | 2,459,867.39 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 23.5 | 2,372,340.56 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 24.5 | 3,411,106.56 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 25.5 | 3,407,876.33 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 26.5 | 3,213,326.33 | 0.00 | 0.00000 | 1.00000 | 94.94 |
| 27.5 | 1,582,419.33 | 103.00 | 0.00007 | 0.99993 | 94.94 |
| 28.5 | 1,530,119.33 | 0.00 | 0.00000 | 1.00000 | 94.93 |
| 29.5 | 1,528,231.33 | 1,202.00 | 0.00079 | 0.99921 | 94.93 |
| 30.5 | 1,558,953.33 | 0.00 | 0.00000 | 1.00000 | 94.86 |
| 31.5 | 1,422,769.85 | 0.00 | 0.00000 | 1.00000 | 94.86 |
| 32.5 | 1,365,154.85 | 3,313.00 | 0.00243 | 0.99757 | 94.86 |
| 33.5 | 1,351,128.68 | 852.00 | 0.00063 | 0.99937 | 94.63 |
| 34.5 | 204,377.68 | 2,213.00 | 0.01083 | 0.98917 | 94.57 |
| 35.5 | 171,870.91 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 36.5 | 178,842.91 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 37.5 | 167,858.91 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 38.5 | 120,155.91 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 39.5 | 120,702.91 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 40.5 | 93,067.91 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 41.5 | 72,058.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 42.5 | 42,515.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 43.5 | 42,734.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 44.5 | 73,082.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 45.5 | 57,204.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 46.5 | 50,324.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 47.5 | 58,610.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 48.5 | 55,693.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 49.5 | 53,894.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 50.5 | 49,480.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 51.5 | 48,901.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |
| 52.5 | 48,672.00 | 0.00 | 0.00000 | 1.00000 | 93.55 |

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Observed Life Table

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 48,156.00 | 6.00 | 0.00012 | 0.99988 | 93.55 |
| 54.5 | 11,493.00 | 0.00 | 0.00000 | 1.00000 | 93.54 |
| 55.5 | 16,874.09 | 0.00 | 0.00000 | 1.00000 | 93.54 |
| 56.5 | 24,117.09 | 0.00 | 0.00000 | 1.00000 | 93.54 |
| 57.5 | 15,716.09 | 0.00 | 0.00000 | 1.00000 | 93.54 |
| 58.5 | 17,332.09 | 352.00 | 0.02031 | 0.97969 | 93.54 |
| 59.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 60.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 61.5 | 16,980.09 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 62.5 | 16,828.09 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 63.5 | 16,828.09 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 64.5 | 14,691.09 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 65.5 | 8,951.00 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 66.5 | 1,616.00 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 67.5 | 1,616.00 | 0.00 | 0.00000 | 1.00000 | 91.64 |
| 68.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 91.64 |

Surviving Percent Report



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1999 - 2008

| Age | Actual | R0.5 280.35 | L3 73.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 | 100.00 |
| 1.5 | 100.00 | 100.00 | 100.00 |
| 2.5 | 100.00 | 100.00 | 100.00 |
| 3.5 | 100.00 | 99.62 | 100.00 |
| 4.5 | 100.00 | 99.62 | 100.00 |
| 5.5 | 99.92 | 99.62 | 100.00 |
| 6.5 | 99.91 | 99.24 | 100.00 |
| 7.5 | 99.91 | 99.24 | 100.00 |
| 8.5 | 99.91 | 98.86 | 100.00 |
| 9.5 | 94.94 | 98.86 | 100.00 |
| 10.5 | 94.94 | 98.86 | 99.99 |
| 11.5 | 94.94 | 98.47 | 99.99 |
| 12.5 | 94.94 | 98.47 | 99.97 |
| 13.5 | 94.94 | 98.47 | 99.96 |
| 14.5 | 94.94 | 98.09 | 99.94 |
| 15.5 | 94.94 | 98.09 | 99.90 |
| 16.5 | 94.94 | 98.09 | 99.87 |
| 17.5 | 94.94 | 97.70 | 99.84 |
| 18.5 | 94.94 | 97.70 | 99.76 |
| 19.5 | 94.94 | 97.70 | 99.71 |
| 20.5 | 94.94 | 97.31 | 99.59 |
| 21.5 | 94.94 | 97.31 | 99.52 |
| 22.5 | 94.94 | 96.92 | 99.45 |
| 23.5 | 94.94 | 96.92 | 99.28 |
| 24.5 | 94.94 | 96.92 | 99.18 |
| 25.5 | 94.94 | 96.52 | 99.07 |
| 26.5 | 94.94 | 96.52 | 98.83 |
| 27.5 | 94.94 | 96.52 | 98.70 |
| 28.5 | 94.93 | 96.13 | 98.40 |
| 29.5 | 94.93 | 96.13 | 98.23 |
| 30.5 | 94.86 | 96.13 | 98.06 |
| 31.5 | 94.86 | 95.73 | 97.67 |
| 32.5 | 94.86 | 95.73 | 97.45 |
| 33.5 | 94.63 | 95.73 | 97.22 |
| 34.5 | 94.57 | 95.33 | 96.72 |
| 35.5 | 93.54 | 95.33 | 96.44 |
| 36.5 | 93.54 | 94.93 | 95.83 |
| 37.5 | 93.54 | 94.93 | 95.49 |
| 38.5 | 93.54 | 94.93 | 95.13 |
| 39.5 | 93.54 | 94.53 | 94.33 |
| 40.5 | 93.54 | 94.53 | 93.89 |
| 41.5 | 93.54 | 94.53 | 93.42 |
| 42.5 | 93.54 | 94.12 | 92.39 |
| 43.5 | 93.54 | 94.12 | 91.82 |
| 44.5 | 93.54 | 94.12 | 91.21 |
| 45.5 | 93.54 | 93.72 | 89.89 |
| 46.5 | 93.54 | 93.72 | 89.17 |
| 47.5 | 93.54 | 93.72 | 87.60 |
| 48.5 | 93.54 | 93.31 | 86.76 |
| 49.5 | 93.54 | 93.31 | 85.87 |
| 50.5 | 93.54 | 92.90 | 83.98 |
| 51.5 | 93.54 | 92.90 | 82.97 |
| 52.5 | 93.54 | 92.90 | 81.92 |
| 53.5 | 93.54 | 92.49 | 79.70 |

Surviving Percent Report



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 352 - KY
Placement Band: 1923 - 2008 Observation Band: 1999- 2008

| Age | Actual | R0.5 280.35 | L3 73.00 |
|---|---|---|---|
| 54.5 | 93.53 | 92.49 | 78.54 |
| 55.5 | 93.53 | 92.49 | 76.12 |
| 56.5 | 93.53 | 92.08 | 74.86 |
| 57.5 | 93.53 | 92.08 | 73.57 |
| 58.5 | 93.53 | 92.08 | 70.93 |
| 59.5 | 91.63 | 91.66 | 69.58 |
| 60.5 | 91.63 | 91.66 | 68.21 |
| 61.5 | 91.63 | 91.66 | 65.43 |
| 62.5 | 91.63 | 91.24 | 64.03 |
| 63.5 | 91.63 | 91.24 | 62.62 |
| 64.5 | 91.63 | 90.82 | 59.81 |
| 65.5 | 91.63 | 90.82 | 58.40 |
| 66.5 | 91.63 | 90.82 | 55.61 |
| 67.5 | 91.63 | 90.40 | 54.23 |
| 68.5 | 91.63 | 90.40 | 52.87 |
| 69.5 | 91.63 | 90.40 | 50.18 |
| 70.5 | 91.63 | 89.98 | 48.86 |
| 71.5 | 91.63 | 89.98 | 47.57 |
| 72.5 | 91.63 | 89.98 | 45.04 |
| 73.5 | 91.63 | 89.56 | 43.81 |
| 74.5 | 91.63 | 89.56 | 41.43 |
| 75.5 | 91.63 | 89.56 | 40.28 |
| 76.5 | 91.63 | 89.13 | 39.16 |
| 77.5 | 91.63 | 89.13 | 36.99 |
| 78.5 | 91.63 | 88.71 | 35.94 |
| 79.5 | 91.63 | 88.71 | 34.92 |
| 80.5 | 91.63 | 88.71 | 32.96 |
| 81.5 | 91.63 | 88.28 | 32.02 |
| 82.5 | 91.63 | 88.28 | 30.21 |
| 83.5 | 91.63 | 88.28 | 29.35 |
| 84.5 | 91.63 | 87.85 | 28.50 |
| 85.5 | 91.63 | 87.85 | 26.88 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

Account 353 STATION EQUIPMENT

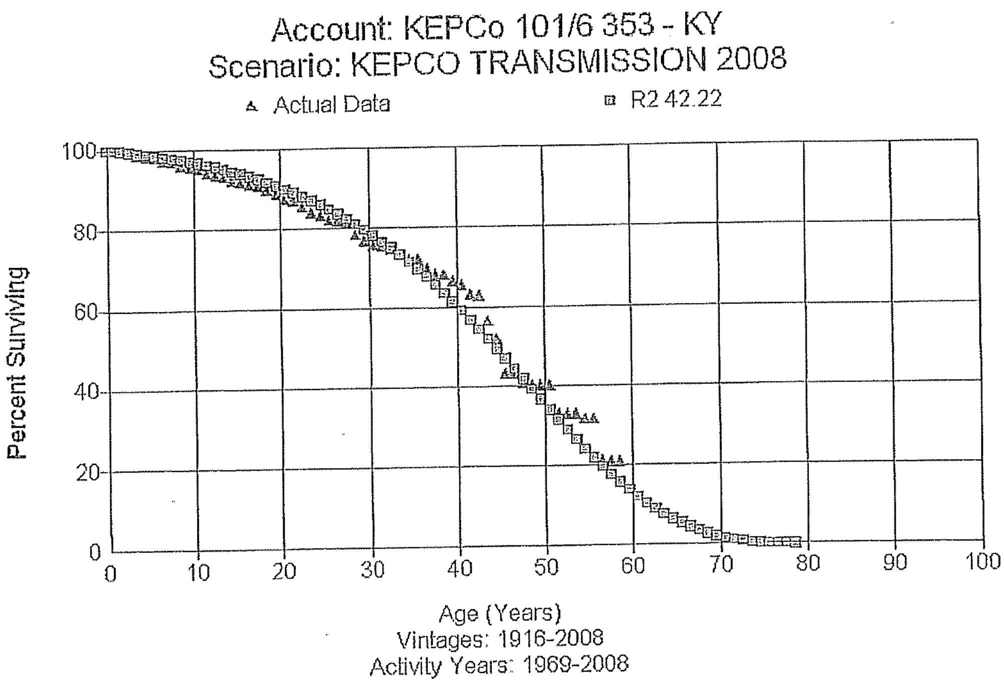
Depreciable Balance $146,458,490

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 50 | 42 |
| Iowa Curve | RO.5 | R2.0 |
| Gross Removal, % | | 20% |
| Gross Salvage, % | | 15% |
| Net Salvage % | 25% | -5% |

************************************************************************************************************************

The actuarial analysis indicate that the current 50 year average service life for this account should be shortened. Based on the analysis of the 40 year band, recommendation is to move to a 42 year average service life following an R2.0 type dispersion.

The removal of station equipment will require labor and equipment costs and some salvage would be expected from the scrap values and reuse of the material.


Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008
Actual Data
R2 42.22
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1916-2008
Activity Years: 1969-2008

Actuarial Life Analysis

Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008
Placement Band: 1916 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1969 -2008 | 92.5 | 0.00 | 0.14609933 | R2 | 42.22 |

Observed Life Table

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 158,770,054.58 | 88,301.00 | 0.00056 | 0.99944 | 100.00 |
| 0.5 | 146,237,516.57 | 161,021.00 | 0.00110 | 0.99890 | 99.94 |
| 1.5 | 144,768,267.99 | 313,688.00 | 0.00217 | 0.99783 | 99.83 |
| 2.5 | 134,563,930.14 | 1,085,702.00 | 0.00807 | 0.99193 | 99.61 |
| 3.5 | 131,727,554.56 | 655,240.00 | 0.00497 | 0.99503 | 98.81 |
| 4.5 | 128,279,079.69 | 516,028.00 | 0.00402 | 0.99598 | 98.32 |
| 5.5 | 124,894,734.49 | 753,720.00 | 0.00603 | 0.99397 | 97.92 |
| 6.5 | 120,507,580.51 | 575,370.00 | 0.00477 | 0.99523 | 97.33 |
| 7.5 | 116,974,854.15 | 944,062.00 | 0.00807 | 0.99193 | 96.87 |
| 8.5 | 113,596,404.96 | 636,873.00 | 0.00561 | 0.99439 | 96.09 |
| 9.5 | 111,658,793.55 | 302,826.00 | 0.00271 | 0.99729 | 95.55 |
| 10.5 | 100,386,632.37 | 1,229,866.00 | 0.01225 | 0.98775 | 95.29 |
| 11.5 | 62,477,651.11 | 362,851.00 | 0.00581 | 0.99419 | 94.12 |
| 12.5 | 59,747,607.67 | 273,968.00 | 0.00459 | 0.99541 | 93.57 |
| 13.5 | 58,654,324.63 | 683,381.00 | 0.01165 | 0.98835 | 93.14 |
| 14.5 | 56,082,909.51 | 196,811.00 | 0.00351 | 0.99649 | 92.05 |
| 15.5 | 50,277,130.40 | 275,537.00 | 0.00548 | 0.99452 | 91.73 |
| 16.5 | 48,182,592.24 | 261,269.00 | 0.00542 | 0.99458 | 91.23 |
| 17.5 | 44,178,678.91 | 409,131.00 | 0.00926 | 0.99074 | 90.74 |
| 18.5 | 40,802,355.30 | 457,121.00 | 0.01120 | 0.98880 | 89.90 |
| 19.5 | 39,267,091.78 | 716,735.00 | 0.01825 | 0.98175 | 88.89 |
| 20.5 | 38,028,239.21 | 89,639.00 | 0.00236 | 0.99764 | 87.27 |
| 21.5 | 35,921,425.59 | 653,577.00 | 0.01819 | 0.98181 | 87.06 |
| 22.5 | 34,773,226.59 | 618,190.00 | 0.01778 | 0.98222 | 85.48 |
| 23.5 | 33,439,336.67 | 237,217.00 | 0.00709 | 0.99291 | 83.96 |
| 24.5 | 31,995,181.67 | 469,737.00 | 0.01468 | 0.98532 | 83.36 |
| 25.5 | 30,321,935.27 | 153,185.00 | 0.00505 | 0.99495 | 82.14 |
| 26.5 | 28,576,586.24 | 43,402.00 | 0.00152 | 0.99848 | 81.73 |
| 27.5 | 21,350,804.22 | 831,854.00 | 0.03896 | 0.96104 | 81.61 |
| 28.5 | 15,242,898.36 | 333,833.00 | 0.02190 | 0.97810 | 78.43 |
| 29.5 | 13,973,393.06 | 171,898.00 | 0.01230 | 0.98770 | 76.71 |
| 30.5 | 13,897,099.27 | 97,331.00 | 0.00700 | 0.99300 | 75.77 |
| 31.5 | 11,809,345.14 | 73,709.00 | 0.00624 | 0.99376 | 75.24 |
| 32.5 | 10,688,901.70 | 182,578.00 | 0.01708 | 0.98292 | 74.77 |
| 33.5 | 9,742,596.70 | 188,855.00 | 0.01938 | 0.98062 | 73.49 |
| 34.5 | 8,524,898.95 | 14,310.00 | 0.00168 | 0.99832 | 72.07 |
| 35.5 | 8,349,277.24 | 259,105.00 | 0.03103 | 0.96897 | 71.95 |
| 36.5 | 7,921,386.16 | 164,869.00 | 0.02081 | 0.97919 | 69.72 |
| 37.5 | 7,555,200.74 | 13,605.00 | 0.00180 | 0.99820 | 68.27 |
| 38.5 | 6,851,704.99 | 152,639.00 | 0.02228 | 0.97772 | 68.15 |
| 39.5 | 1,961,198.63 | 30,716.00 | 0.01566 | 0.98434 | 66.63 |
| 40.5 | 1,871,058.63 | 72,083.00 | 0.03853 | 0.96147 | 65.59 |
| 41.5 | 1,560,051.16 | 5,110.00 | 0.00328 | 0.99672 | 63.06 |
| 42.5 | 1,549,478.16 | 158,998.00 | 0.10261 | 0.89739 | 62.85 |
| 43.5 | 1,294,284.54 | 102,193.00 | 0.07896 | 0.92104 | 56.40 |
| 44.5 | 1,189,747.28 | 199,980.00 | 0.16809 | 0.83191 | 51.95 |
| 45.5 | 428,806.28 | 2,021.00 | 0.00471 | 0.99529 | 43.22 |
| 46.5 | 441,292.28 | 23,804.00 | 0.05394 | 0.94606 | 43.02 |
| 47.5 | 417,141.28 | 6,012.00 | 0.01441 | 0.98559 | 40.70 |
| 48.5 | 385,745.31 | 177.00 | 0.00046 | 0.99954 | 40.11 |
| 49.5 | 333,200.76 | 0.00 | 0.00000 | 1.00000 | 40.09 |
| 50.5 | 332,623.76 | 59,244.00 | 0.17811 | 0.82189 | 40.09 |
| 51.5 | 264,399.25 | 403.00 | 0.00152 | 0.99848 | 32.95 |
| 52.5 | 264,130.25 | 327.00 | 0.00124 | 0.99876 | 32.90 |

Observed Life Table

**Scenario:** KEPCO TRANSMISSION 2008
**Account:** KEPCo 101/6 353 - KY
**Placement Band:** 1916 - 2008 **Observation Band:** 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 262,906.25 | 8,887.00 | 0.03380 | 0.96620 | 32.86 |
| 54.5 | 28,122.00 | 0.00 | 0.00000 | 1.00000 | 31.75 |
| 55.5 | 20,547.00 | 6,860.00 | 0.33387 | 0.66613 | 31.75 |
| 56.5 | 13,687.00 | 134.00 | 0.00979 | 0.99021 | 21.15 |
| 57.5 | 13,553.00 | 0.00 | 0.00000 | 1.00000 | 20.94 |
| 58.5 | 13,553.00 | 13,553.00 | 1.00000 | 0.00000 | 20.94 |
| 59.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 0.00 |

Surviving Percent Report

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1969- 2008

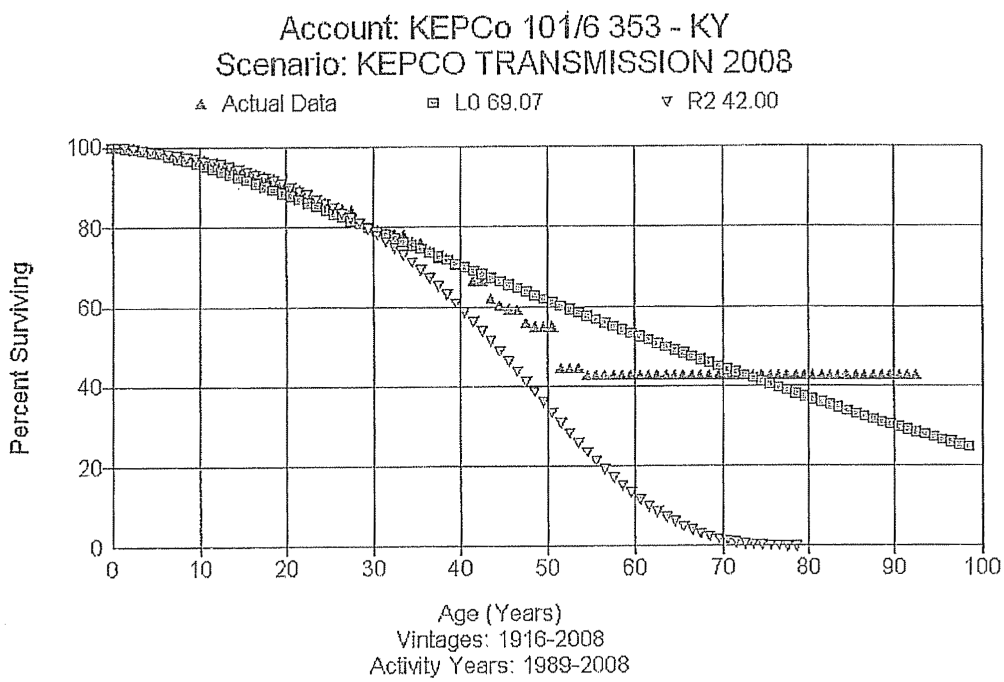
| Age | Actual | R2 42.22 |
|---|---|---|
| 0.0 | 100.00 | 100.00 |
| 0.5 | 99.94 | 99.91 |
| 1.5 | 99.83 | 99.71 |
| 2.5 | 99.62 | 99.49 |
| 3.5 | 98.81 | 99.15 |
| 4.5 | 98.32 | 98.89 |
| 5.5 | 97.93 | 98.49 |
| 6.5 | 97.34 | 98.19 |
| 7.5 | 96.87 | 97.88 |
| 8.5 | 96.09 | 97.37 |
| 9.5 | 95.55 | 97.01 |
| 10.5 | 95.29 | 96.63 |
| 11.5 | 94.12 | 96.01 |
| 12.5 | 93.58 | 95.56 |
| 13.5 | 93.15 | 95.09 |
| 14.5 | 92.06 | 94.34 |
| 15.5 | 91.74 | 93.80 |
| 16.5 | 91.24 | 92.93 |
| 17.5 | 90.74 | 92.32 |
| 18.5 | 89.90 | 91.67 |
| 19.5 | 88.90 | 90.64 |
| 20.5 | 87.27 | 89.90 |
| 21.5 | 87.07 | 89.13 |
| 22.5 | 85.48 | 87.89 |
| 23.5 | 83.96 | 87.02 |
| 24.5 | 83.37 | 85.63 |
| 25.5 | 82.14 | 84.65 |
| 26.5 | 81.73 | 83.62 |
| 27.5 | 81.60 | 81.98 |
| 28.5 | 78.42 | 80.83 |
| 29.5 | 76.71 | 79.63 |
| 30.5 | 75.76 | 77.73 |
| 31.5 | 75.23 | 76.39 |
| 32.5 | 74.76 | 75.00 |
| 33.5 | 73.49 | 72.82 |
| 34.5 | 72.06 | 71.28 |
| 35.5 | 71.94 | 68.88 |
| 36.5 | 69.71 | 67.21 |
| 37.5 | 68.26 | 65.48 |
| 38.5 | 68.13 | 62.79 |
| 39.5 | 66.62 | 60.93 |
| 40.5 | 65.57 | 59.01 |
| 41.5 | 63.05 | 56.05 |
| 42.5 | 62.84 | 54.02 |
| 43.5 | 56.39 | 50.91 |
| 44.5 | 51.94 | 48.79 |
| 45.5 | 43.21 | 46.65 |
| 46.5 | 43.01 | 43.40 |
| 47.5 | 40.69 | 41.21 |
| 48.5 | 40.10 | 39.02 |
| 49.5 | 40.08 | 35.75 |
| 50.5 | 40.08 | 33.59 |
| 51.5 | 32.94 | 31.44 |
| 52.5 | 32.89 | 28.30 |
| 53.5 | 32.85 | 26.25 |

Surviving Percent Report



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1969- 2008

| Age | Actual | R2 42.22 |
|---|---|---|
| 54.5 | 31.74 | 23.28 |
| 55.5 | 31.74 | 21.38 |
| 56.5 | 21.14 | 19.54 |
| 57.5 | 20.94 | 16.93 |
| 58.5 | 20.94 | 15.30 |
| 59.5 | 0 | 13.74 |
| 60.5 | 0 | 11.58 |
| 61.5 | 0 | 10.25 |
| 62.5 | 0 | 8.43 |
| 63.5 | 0 | 7.33 |
| 64.5 | 0 | 6.32 |
| 65.5 | 0 | 4.96 |
| 66.5 | 0 | 4.16 |
| 67.5 | 0 | 3.44 |
| 68.5 | 0 | 2.51 |
| 69.5 | 0 | 1.99 |
| 70.5 | 0 | 1.53 |
| 71.5 | 0 | 0.98 |
| 72.5 | 0 | 0.69 |
| 73.5 | 0 | 0.36 |
| 74.5 | 0 | 0.21 |
| 75.5 | 0 | 0.11 |
| 76.5 | 0 | 0.03 |
| 77.5 | 0 | 0.01 |
| 78.5 | 0 | 0 |
| 79.5 | 0 | 0 |
| 80.5 | 0 | |
| 81.5 | 0 | |
| 82.5 | 0 | |
| 83.5 | 0 | |
| 84.5 | 0 | |
| 85.5 | 0 | |
| 86.5 | 0 | |
| 87.5 | 0 | |
| 88.5 | 0 | |
| 89.5 | 0 | |
| 90.5 | 0 | |
| 91.5 | 0 | |
| 92.5 | 0 | |


Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008
Actual Data
L0 69.07
R2 42.00
100
80
60
40
20
0
Percent Surviving
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1916-2008
Activity Years: 1989-2008

Actuarial Life Analysis

Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008
Placement Band: 1916 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1989 -2008 | 92.5 | 42.70 | 0.39718772 | L0 | 69.07 |

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Observed Life Table

*Scenario:* KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 115,554,490.43 | 6,132.00 | 0.00005 | 0.99995 | 100.00 |
| 0.5 | 103,556,584.99 | 41,737.00 | 0.00040 | 0.99960 | 100.00 |
| 1.5 | 104,287,231.56 | 207,662.00 | 0.00199 | 0.99801 | 99.96 |
| 2.5 | 94,469,559.71 | 429,862.00 | 0.00455 | 0.99545 | 99.76 |
| 3.5 | 92,738,977.43 | 493,160.00 | 0.00532 | 0.99468 | 99.31 |
| 4.5 | 90,644,141.30 | 153,844.00 | 0.00170 | 0.99830 | 98.78 |
| 5.5 | 88,533,672.50 | 694,506.00 | 0.00784 | 0.99216 | 98.61 |
| 6.5 | 85,991,728.55 | 131,698.00 | 0.00153 | 0.99847 | 97.84 |
| 7.5 | 91,995,174.21 | 325,680.00 | 0.00354 | 0.99646 | 97.69 |
| 8.5 | 95,261,679.91 | 300,469.00 | 0.00315 | 0.99685 | 97.34 |
| 9.5 | 94,523,591.25 | 153,218.00 | 0.00162 | 0.99838 | 97.03 |
| 10.5 | 83,689,694.86 | 962,618.00 | 0.01150 | 0.98850 | 96.87 |
| 11.5 | 48,209,037.22 | 150,774.00 | 0.00313 | 0.99687 | 95.76 |
| 12.5 | 46,727,918.22 | 155,095.00 | 0.00332 | 0.99668 | 95.46 |
| 13.5 | 46,493,103.18 | 576,403.00 | 0.01240 | 0.98760 | 95.14 |
| 14.5 | 44,862,485.56 | 77,616.00 | 0.00173 | 0.99827 | 93.96 |
| 15.5 | 39,510,742.16 | 149,478.00 | 0.00378 | 0.99622 | 93.80 |
| 16.5 | 37,443,890.08 | 250,921.00 | 0.00670 | 0.99330 | 93.45 |
| 17.5 | 33,670,268.17 | 332,352 00 | 0.00987 | 0.99013 | 92.82 |
| 18.5 | 31,090,390.31 | 266,591.00 | 0.00857 | 0.99143 | 91.90 |
| 19.5 | 36,713,988.15 | 649,282.00 | 0.01768 | 0.98232 | 91.11 |
| 20.5 | 35,629,931.58 | 65,030.00 | 0.00183 | 0.99817 | 89.50 |
| 21.5 | 33,869,878.43 | 639,232.00 | 0.01887 | 0.98113 | 89.34 |
| 22.5 | 32,780,230.43 | 507,975.00 | 0.01550 | 0.98450 | 87.65 |
| 23.5 | 31,684,108.13 | 97,460.00 | 0.00308 | 0.99692 | 86.29 |
| 24.5 | 30,450,428.39 | 465,455.00 | 0.01529 | 0.98471 | 86.02 |
| 25.5 | 29,188,835.99 | 152,166.00 | 0.00521 | 0.99479 | 84.70 |
| 26.5 | 27,453,651.96 | 28,241.00 | 0.00103 | 0.99897 | 84.26 |
| 27.5 | 20,198,547.94 | 800,841.00 | 0.03965 | 0.96035 | 84.17 |
| 28.5 | 14,154,315.05 | 168,119.00 | 0.01188 | 0.98812 | 80.83 |
| 29.5 | 13,145,034.30 | 123,396.00 | 0.00939 | 0.99061 | 79.87 |
| 30.5 | 12,968,856.51 | 88,497.00 | 0.00682 | 0.99318 | 79.12 |
| 31.5 | 10,900,981 89 | 40,033.00 | 0.00367 | 0.99633 | 78.58 |
| 32.5 | 9,769,519.45 | 63,477.00 | 0.00650 | 0.99350 | 78.29 |
| 33.5 | 8,943,341.45 | 188,744.00 | 0.02110 | 0.97890 | 77.78 |
| 34.5 | 8,131,209.95 | 14,310.00 | 0.00176 | 0.99824 | 76.14 |
| 35.5 | 7,963,163.24 | 233,376.00 | 0.02931 | 0.97069 | 76.01 |
| 36.5 | 7,561,001.16 | 163,760.00 | 0.02166 | 0.97834 | 73.78 |
| 37.5 | 7,195,924 74 | 11,618 00 | 0.00161 | 0.99839 | 72.18 |
| 38.5 | 6,494,729.99 | 152,065.00 | 0.02341 | 0.97659 | 72.06 |
| 39.5 | 1,604,797.63 | 11,504.00 | 0.00717 | 0.99283 | 70.37 |
| 40.5 | 1,533,869.63 | 72,076.00 | 0.04699 | 0.95301 | 69.87 |
| 41.5 | 1,222,869.16 | 5,110.00 | 0.00418 | 0.99582 | 66.59 |
| 42.5 | 1,211,916.16 | 80,090.00 | 0.06609 | 0.93391 | 66.31 |
| 43.5 | 1,035,630.54 | 30,513.00 | 0.02946 | 0.97054 | 61.93 |
| 44.5 | 1,002,773.28 | 13,293.00 | 0.01326 | 0.98674 | 60.11 |
| 45.5 | 428,519.28 | 1,734.00 | 0.00405 | 0.99595 | 59.31 |
| 46.5 | 420,879.28 | 23,804.00 | 0.05656 | 0.94344 | 59.07 |
| 47.5 | 396,728.28 | 6,012.00 | 0.01515 | 0.98485 | 55.73 |
| 48.5 | 365,332.31 | 177.00 | 0.00048 | 0.99952 | 54.89 |
| 49.5 | 312,787.76 | 0.00 | 0.00000 | 1.00000 | 54.86 |
| 50.5 | 312,210.76 | 59,244.00 | 0.18976 | 0.81024 | 54.86 |
| 51.5 | 243,986.25 | 403.00 | 0.00165 | 0.99835 | 44.45 |
| 52.5 | 243,583.25 | 327 00 | 0.00134 | 0.99866 | 44.38 |

Observed Life Table



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 242,359.25 | 8,887.00 | 0.03667 | 0.96333 | 44.32 |
| 54.5 | 7,575.00 | 0.00 | 0.00000 | 1.00000 | 42.69 |
| 55.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 42.69 |

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Surviving Percent Report

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1989- 2008

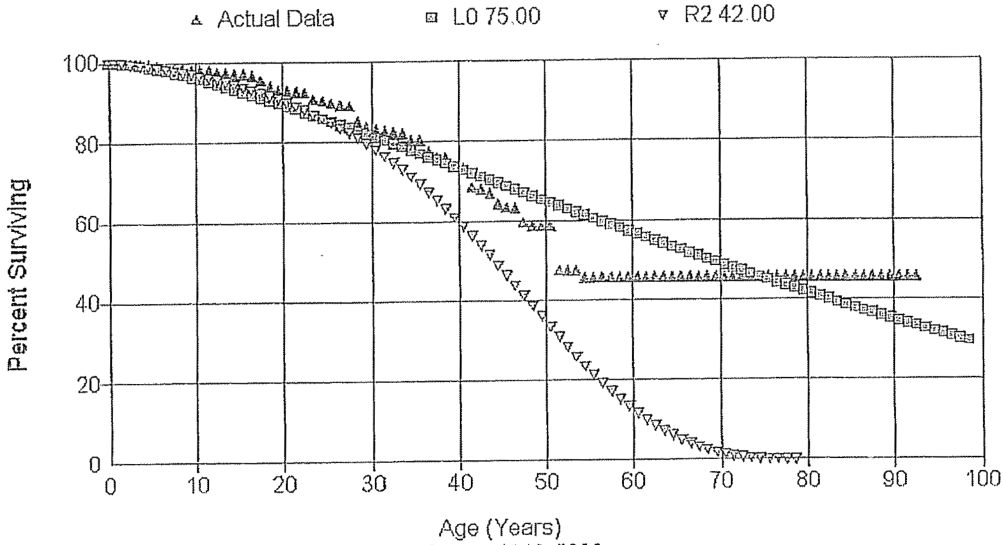
| Age | Actual | L0 69.07 | R2 42.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 99.99 | 100.00 | 99.91 |
| 1.5 | 99.95 | 99.68 | 99.71 |
| 2.5 | 99.76 | 99.45 | 99.49 |
| 3.5 | 99.30 | 98.89 | 99.15 |
| 4.5 | 98.77 | 98.58 | 98.89 |
| 5.5 | 98.61 | 98.24 | 98.49 |
| 6.5 | 97.83 | 97.50 | 98.19 |
| 7.5 | 97.68 | 97.11 | 97.88 |
| 8.5 | 97.34 | 96.27 | 97.37 |
| 9.5 | 97.03 | 95.83 | 97.01 |
| 10.5 | 96.87 | 94.92 | 96.43 |
| 11.5 | 95.76 | 94.45 | 96.01 |
| 12.5 | 95.46 | 93.47 | 95.56 |
| 13.5 | 95.14 | 92.97 | 94.85 |
| 14.5 | 93.96 | 92.46 | 94.34 |
| 15.5 | 93.80 | 91.41 | 93.80 |
| 16.5 | 93.44 | 90.88 | 92.93 |
| 17.5 | 92.82 | 89.78 | 92.32 |
| 18.5 | 91.90 | 89.23 | 91.34 |
| 19.5 | 91.11 | 88.10 | 90.64 |
| 20.5 | 89.50 | 87.53 | 89.90 |
| 21.5 | 89.34 | 86.37 | 88.73 |
| 22.5 | 87.65 | 85.78 | 87.89 |
| 23.5 | 86.30 | 84.59 | 87.02 |
| 24.5 | 86.03 | 83.99 | 85.63 |
| 25.5 | 84.71 | 83.39 | 84.65 |
| 26.5 | 84.27 | 82.18 | 83.09 |
| 27.5 | 84.19 | 81.57 | 81.98 |
| 28.5 | 80.85 | 80.34 | 80.83 |
| 29.5 | 79.89 | 79.72 | 79.01 |
| 30.5 | 79.14 | 78.48 | 77.73 |
| 31.5 | 78.60 | 77.86 | 76.39 |
| 32.5 | 78.31 | 76.62 | 74.29 |
| 33.5 | 77.80 | 75.99 | 72.82 |
| 34.5 | 76.16 | 75.37 | 70.60 |
| 35.5 | 76.02 | 74.12 | 68.88 |
| 36.5 | 73.80 | 73.50 | 67.21 |
| 37.5 | 72.20 | 72.25 | 64.60 |
| 38.5 | 72.08 | 71.62 | 62.79 |
| 39.5 | 70.39 | 70.38 | 59.97 |
| 40.5 | 69.89 | 69.76 | 58.04 |
| 41.5 | 66.61 | 68.51 | 56.05 |
| 42.5 | 66.33 | 67.89 | 53.00 |
| 43.5 | 61.94 | 67.27 | 50.91 |
| 44.5 | 60.12 | 66.04 | 48.79 |
| 45.5 | 59.32 | 65.42 | 45.57 |
| 46.5 | 59.08 | 64.19 | 43.40 |
| 47.5 | 55.74 | 63.57 | 40.12 |
| 48.5 | 54.90 | 62.35 | 37.93 |
| 49.5 | 54.87 | 61.74 | 35.75 |
| 50.5 | 54.87 | 60.52 | 32.51 |
| 51.5 | 44.46 | 59.91 | 30.39 |
| 52.5 | 44.38 | 58.70 | 27.27 |
| 53.5 | 44.32 | 58.10 | 25.25 |

**Surviving Percent Report**

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1989- 2008

| Age | Actual | L0 69.07 | R2 42.00 |
|---|---|---|---|
| 54.5 | 42.70 | 57.50 | 23.28 |
| 55.5 | 42.70 | 56.31 | 20.45 |
| 56.5 | 42.70 | 55.71 | 18.65 |
| 57.5 | 42.70 | 54.53 | 16.93 |
| 58.5 | 42.70 | 53.94 | 14.51 |
| 59.5 | 42.70 | 52.77 | 13.00 |
| 60.5 | 42.70 | 52.18 | 10.91 |
| 61.5 | 42.70 | 51.02 | 9.62 |
| 62.5 | 42.70 | 50.45 | 8.43 |
| 63.5 | 42.70 | 49.87 | 6.81 |
| 64.5 | 42.70 | 48.73 | 5.84 |
| 65.5 | 42.70 | 48.17 | 4.96 |
| 66.5 | 42.70 | 47.04 | 3.79 |
| 67.5 | 42.70 | 46.48 | 3.12 |
| 68.5 | 42.70 | 45.37 | 2.24 |
| 69.5 | 42.70 | 44.82 | 1.75 |
| 70.5 | 42.70 | 43.73 | 1.33 |
| 71.5 | 42.70 | 43.18 | 0.82 |
| 72.5 | 42.70 | 42.64 | 0.56 |
| 73.5 | 42.70 | 41.57 | 0.28 |
| 74.5 | 42.70 | 41.04 | 0.16 |
| 75.5 | 42.70 | 39.99 | 0.07 |
| 76.5 | 42.70 | 39.47 | 0.01 |
| 77.5 | 42.70 | 38.44 | 0 |
| 78.5 | 42.70 | 37.93 | 0 |
| 79.5 | 42.70 | 36.91 | 0 |
| 80.5 | 42.70 | 36.41 | |
| 81.5 | 42.70 | 35.92 | |
| 82.5 | 42.70 | 34.93 | |
| 83.5 | 42.70 | 34.44 | |
| 84.5 | 42.70 | 33.48 | |
| 85.5 | 42.70 | 33.00 | |
| 86.5 | 42.70 | 32.06 | |
| 87.5 | 42.70 | 31.59 | |
| 88.5 | 42.70 | 30.67 | |
| 89.5 | 42.70 | 30.21 | |
| 90.5 | 42.70 | 29.31 | |
| 91.5 | 42.70 | 28.87 | |
| 92.5 | 42.70 | 28.43 | |

Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008




Vintages: 1916-2008
Activity Years: 1999-2008

Actuarial Life Analysis

Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008
Placement Band: 1916 - 2008
unction: Survivorship Annual Rate Method
/eighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1999 -2008 | 92.5 | 45.55 | 0.41200720 | L0 | 75.00 |

Observed Life Table



Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 44,599,905.90 | 3,244.00 | 0.00007 | 0.99993 | 100.00 |
| 0.5 | 43,170,970.07 | 9,526.00 | 0.00022 | 0.99978 | 99.99 |
| 1.5 | 78,371,483.79 | 12,591.00 | 0.00016 | 0.99984 | 99.97 |
| 2.5 | 70,703,385.38 | 307,249.00 | 0.00435 | 0.99565 | 99.95 |
| 3.5 | 69,143,420.22 | 19,460.00 | 0.00028 | 0.99972 | 99.52 |
| 4.5 | 68,569,086.46 | 120,453.00 | 0.00176 | 0.99824 | 99.49 |
| 5.5 | 70,669,612.37 | 480,898.00 | 0.00680 | 0.99320 | 99.31 |
| 6.5 | 68,692,544.55 | 25,042.00 | 0.00036 | 0.99964 | 98.63 |
| 7.5 | 69,424,688.52 | 24,865.00 | 0.00036 | 0.99964 | 98.59 |
| 8.5 | 69,936,940.97 | 198,466.00 | 0.00284 | 0.99716 | 98.55 |
| 9.5 | 69,602,838.53 | 76,596.00 | 0.00110 | 0.99890 | 98.27 |
| 10.5 | 58,933,874.92 | 34,320.00 | 0.00058 | 0.99942 | 98.16 |
| 11.5 | 24,482,929.77 | 112,016.00 | 0.00458 | 0.99542 | 98.10 |
| 12.5 | 22,410,921.33 | 73,392.00 | 0.00327 | 0.99673 | 97.65 |
| 13.5 | 22,287,451.21 | 49,097.00 | 0.00220 | 0.99780 | 97.33 |
| 14.5 | 21,166,695.84 | 7,252.00 | 0.00034 | 0.99966 | 97.12 |
| 15.5 | 17,030,286.13 | 52,243.00 | 0.00307 | 0.99693 | 97.09 |
| 16.5 | 16,636,893.00 | 227,186.00 | 0.01366 | 0.98634 | 96.79 |
| 17.5 | 20,531,430.69 | 325,948.00 | 0.01588 | 0.98412 | 95.47 |
| 18.5 | 23,262,944.94 | 214,296.00 | 0.00921 | 0.99079 | 93.95 |
| 19.5 | 22,842,095.72 | 64,297.00 | 0.00281 | 0.99719 | 93.08 |
| 20.5 | 22,351,801.94 | 44,522.00 | 0.00199 | 0.99801 | 92.82 |
| 21.5 | 22,414,758.45 | 61,935.00 | 0.00276 | 0.99724 | 92.64 |
| 22.5 | 22,963,782.89 | 438,930.00 | 0.01911 | 0.98089 | 92.38 |
| 23.5 | 22,546,287.97 | 65,904.00 | 0.00292 | 0.99708 | 90.61 |
| 24.5 | 22,386,670.72 | 175,539.00 | 0.00784 | 0.99216 | 90.35 |
| 25.5 | 21,085,004.03 | 127,912.00 | 0.00607 | 0.99393 | 89.64 |
| 26.5 | 19,537,947.08 | 20,927.00 | 0.00107 | 0.99893 | 89.10 |
| 27.5 | 12,503,582.48 | 528,416.00 | 0.04226 | 0.95774 | 89.00 |
| 28.5 | 7,397,338.37 | 131,193.00 | 0.01774 | 0.98226 | 85.24 |
| 29.5 | 11,837,909.43 | 80,115.00 | 0.00677 | 0.99323 | 83.73 |
| 30.5 | 11,764,986.64 | 83,958.00 | 0.00714 | 0.99286 | 83.16 |
| 31.5 | 10,004,284.98 | 27,160.00 | 0.00271 | 0.99729 | 82.57 |
| 32.5 | 8,891,538.54 | 35,081.00 | 0.00395 | 0.99605 | 82.35 |
| 33.5 | 8,198,407.16 | 168,446.00 | 0.02055 | 0.97945 | 82.02 |
| 34.5 | 7,013,328.67 | 14,245.00 | 0.00203 | 0.99797 | 80.33 |
| 35.5 | 7,398,732.96 | 233,206.00 | 0.03152 | 0.96848 | 80.17 |
| 36.5 | 7,002,646.88 | 161,806.00 | 0.02311 | 0.97689 | 77.64 |
| 37.5 | 6,642,923.46 | 4,463.00 | 0.00067 | 0.99933 | 75.85 |
| 38.5 | 5,974,378.68 | 151,509.00 | 0.02536 | 0.97464 | 75.80 |
| 39.5 | 1,179,474.87 | 11,504.00 | 0.00975 | 0.99025 | 73.88 |
| 40.5 | 1,109,123.87 | 72,076.00 | 0.06498 | 0.93502 | 73.16 |
| 41.5 | 809,168.91 | 5,110.00 | 0.00632 | 0.99368 | 68.41 |
| 42.5 | 798,215.91 | 13,107.00 | 0.01642 | 0.98358 | 67.98 |
| 43.5 | 689,810.29 | 28,247.00 | 0.04095 | 0.95905 | 66.86 |
| 44.5 | 995,198.28 | 13,293.00 | 0.01336 | 0.98664 | 64.12 |
| 45.5 | 428,519.28 | 1,734.00 | 0.00405 | 0.99595 | 63.26 |
| 46.5 | 420,879.28 | 23,804.00 | 0.05656 | 0.94344 | 63.00 |
| 47.5 | 396,728.28 | 6,012.00 | 0.01515 | 0.98485 | 59.44 |
| 48.5 | 365,332.31 | 177.00 | 0.00048 | 0.99952 | 58.54 |
| 49.5 | 312,787.76 | 0.00 | 0.00000 | 1.00000 | 58.51 |
| 50.5 | 312,210.76 | 59,244.00 | 0.18976 | 0.81024 | 58.51 |
| 51.5 | 243,986.25 | 403.00 | 0.00165 | 0.99835 | 47.41 |
| 52.5 | 243,583.25 | 327.00 | 0.00134 | 0.99866 | 47.33 |

Observed Life Table

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 242,359.25 | 8,887.00 | 0.03667 | 0.96333 | 47.27 |
| 54.5 | 7,575.00 | 0.00 | 0.00000 | 1.00000 | 45.54 |
| 55.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 45.54 |

Surviving Percent Report

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Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1999- 2008

| Age | Actual | L0 75.00 | R2 42.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 99.99 | 100.00 | 99.91 |
| 1.5 | 99.97 | 99.68 | 99.71 |
| 2.5 | 99.95 | 99.45 | 99.49 |
| 3.5 | 99.52 | 99.19 | 99.15 |
| 4.5 | 99.49 | 98.89 | 98.89 |
| 5.5 | 99.32 | 98.24 | 98.49 |
| 6.5 | 98.64 | 97.88 | 98.19 |
| 7.5 | 98.61 | 97.11 | 97.88 |
| 8.5 | 98.57 | 96.70 | 97.37 |
| 9.5 | 98.29 | 96.27 | 97.01 |
| 10.5 | 98.18 | 95.38 | 96.43 |
| 11.5 | 98.13 | 94.92 | 96.01 |
| 12.5 | 97.68 | 94.45 | 95.56 |
| 13.5 | 97.36 | 93.47 | 94.85 |
| 14.5 | 97.14 | 92.97 | 94.34 |
| 15.5 | 97.11 | 92.46 | 93.80 |
| 16.5 | 96.81 | 91.41 | 92.93 |
| 17.5 | 95.49 | 90.88 | 92.32 |
| 18.5 | 93.97 | 90.33 | 91.34 |
| 19.5 | 93.11 | 89.78 | 90.64 |
| 20.5 | 92.85 | 88.67 | 89.90 |
| 21.5 | 92.66 | 88.10 | 88.73 |
| 22.5 | 92.40 | 87.53 | 87.89 |
| 23.5 | 90.64 | 86.37 | 87.02 |
| 24.5 | 90.37 | 85.78 | 85.63 |
| 25.5 | 89.66 | 85.19 | 84.65 |
| 26.5 | 89.12 | 83.99 | 83.09 |
| 27.5 | 89.02 | 83.39 | 81.98 |
| 28.5 | 85.26 | 82.79 | 80.83 |
| 29.5 | 83.75 | 81.57 | 79.01 |
| 30.5 | 83.18 | 80.95 | 77.73 |
| 31.5 | 82.59 | 80.34 | 76.39 |
| 32.5 | 82.37 | 79.10 | 74.29 |
| 33.5 | 82.04 | 78.48 | 72.82 |
| 34.5 | 80.36 | 77.86 | 70.50 |
| 35.5 | 80.19 | 76.62 | 68.88 |
| 36.5 | 77.66 | 75.99 | 67.21 |
| 37.5 | 75.87 | 75.37 | 64.60 |
| 38.5 | 75.82 | 74.12 | 62.79 |
| 39.5 | 73.90 | 73.50 | 59.97 |
| 40.5 | 73.18 | 72.87 | 58.04 |
| 41.5 | 68.42 | 71.62 | 56.05 |
| 42.5 | 67.99 | 71.00 | 53.00 |
| 43.5 | 66.87 | 70.38 | 50.91 |
| 44.5 | 64.13 | 69.13 | 48.79 |
| 45.5 | 63.28 | 68.51 | 45.57 |
| 46.5 | 63.02 | 67.89 | 43.40 |
| 47.5 | 59.46 | 66.65 | 40.12 |
| 48.5 | 58.56 | 66.04 | 37.93 |
| 49.5 | 58.53 | 65.42 | 35.75 |
| 50.5 | 58.53 | 64.19 | 32.51 |
| 51.5 | 47.42 | 63.57 | 30.39 |
| 52.5 | 47.34 | 62.96 | 27.27 |
| 53.5 | 47.28 | 61.74 | 25.25 |

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Surviving Percent Report

Scenario: KEPCO TRANSMISSION 2008
Account: KEPCo 101/6 353 - KY
Placement Band: 1916 - 2008 Observation Band: 1999- 2008

| Age | Actual | L0 75.00 | R2 42.00 |
|---|---|---|---|
| 54.5 | 45.55 | 61.13 | 23.28 |
| 55.5 | 45.55 | 60.52 | 20.45 |
| 56.5 | 45.55 | 59.31 | 18.65 |
| 57.5 | 45.55 | 58.70 | 16.93 |
| 58.5 | 45.55 | 58.10 | 14.51 |
| 59.5 | 45.55 | 56.90 | 13.00 |
| 60.5 | 45.55 | 56.31 | 10.91 |
| 61.5 | 45.55 | 55.71 | 9.62 |
| 62.5 | 45.55 | 54.53 | 8.43 |
| 63.5 | 45.55 | 53.94 | 6.81 |
| 64.5 | 45.55 | 53.35 | 5.84 |
| 65.5 | 45.55 | 52.18 | 4.96 |
| 66.5 | 45.55 | 51.60 | 3.79 |
| 67.5 | 45.55 | 51.02 | 3.12 |
| 68.5 | 45.55 | 49.87 | 2.24 |
| 69.5 | 45.55 | 49.30 | 1.75 |
| 70.5 | 45.55 | 48.17 | 1.33 |
| 71.5 | 45.55 | 47.60 | 0.82 |
| 72.5 | 45.55 | 47.04 | 0.56 |
| 73.5 | 45.55 | 45.92 | 0.28 |
| 74.5 | 45.55 | 45.37 | 0.16 |
| 75.5 | 45.55 | 44.82 | 0.07 |
| 76.5 | 45.55 | 43.73 | 0.01 |
| 77.5 | 45.55 | 43.18 | 0 |
| 78.5 | 45.55 | 42.64 | 0 |
| 79.5 | 45.55 | 41.57 | 0 |
| 80.5 | 45.55 | 41.04 | |
| 81.5 | 45.55 | 40.52 | |
| 82.5 | 45.55 | 39.47 | |
| 83.5 | 45.55 | 38.95 | |
| 84.5 | 45.55 | 38.44 | |
| 85.5 | 45.55 | 37.42 | |
| 86.5 | 45.55 | 36.91 | |
| 87.5 | 45.55 | 36.41 | |
| 88.5 | 45.55 | 35.42 | |
| 89.5 | 45.55 | 34.93 | |
| 90.5 | 45.55 | 34.44 | |
| 91.5 | 45.55 | 33.48 | |
| 92.5 | 45.55 | 33.00 | |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

| | | |
|---|---|---|
| Account | 354 TOWERS & FIXTURES | |
| Depreciable Balance | $94,722,543 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 45 | 50 |
| Iowa Curve | R3.0 | R3.0 |
| Gross Removal, % | | 75% |
| Gross Salvage, % | | 10% |
| Net Salvage % | 0% | -65% |

************************************************************************************************************************************

This account has experienced minimal retirements. The simulation analyses of all bands do not provide meaningful results. Based on the limited retirements and the age of the investments in this account, the recommendation is to retain the current average service life of 45 years following an R3.0 type dispersion.

The cost of removing the towers will be labor and equipment intensive. Scrap salvage should be expected from the sale of the towers.

Simulated Plant Record Analysis

Kentucky Power - Transm

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Account: KEPCo 101/6 354 - KY
Version: KEPCO TRANSMISSION 2008
Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 1243.0 | 4.80E+11 | 1.9546 | 511.61 | 2.52 |
| R1 | 852.1 | 4.86E+11 | 1.9662 | 508.60 | 2.62 |
| R1.5 | 593.5 | 4.94E+11 | 1.9836 | 504.13 | 2.74 |
| S-.5 | 891.5 | 5.01E+11 | 1.9980 | 500.50 | 2.78 |
| R2 | 344.9 | 5.26E+11 | 2.0470 | 488.52 | 3.30 |
| R2.5 | 225.0 | 5.73E+11 | 2.1351 | 468.36 | 4.35 |
| L0.5 | 478.9 | 6.58E+11 | 2.2896 | 436.76 | 4.14 |
| L1 | 289.7 | 6.62E+11 | 2.2951 | 435.71 | 5.79 |
| L0 | 641.4 | 6.68E+11 | 2.3064 | 433.58 | 4.04 |
| L1.5 | 201.7 | 7.98E+11 | 2.5207 | 396.72 | 8.64 |
| R3 | 121.3 | 8.38E+11 | 2.5837 | 387.04 | 12.84 |
| S0 | 312.1 | 8.78E+11 | 2.6445 | 378.14 | 5.98 |
| S0.5 | 226.2 | 9.28E+11 | 2.7176 | 367.97 | 7.57 |
| SQ | 47.0 | 1.10E+12 | 2.9531 | 338.63 | 100.00 |
| S6 | 48.2 | 1.14E+12 | 3.0183 | 331.31 | 100.00 |
| S1 | 141.8 | 1.27E+12 | 3.1741 | 315.05 | 15.45 |
| L2 | 127.7 | 1.30E+12 | 3.2114 | 311.39 | 20.57 |
| S1.5 | 116.5 | 1.31E+12 | 3.2281 | 309.78 | 21.07 |
| S5 | 51.0 | 1.39E+12 | 3.3252 | 300.73 | 100.00 |
| R4 | 70.5 | 1.47E+12 | 3.4223 | 292.20 | 77.15 |
| S2 | 88.7 | 1.59E+12 | 3.5549 | 281.30 | 40.39 |
| R5 | 53.5 | 1.60E+12 | 3.5720 | 279.96 | 100.00 |
| L3 | 83.3 | 1.61E+12 | 3.5765 | 279.60 | 53.49 |
| L5 | 54.3 | 1.63E+12 | 3.6002 | 277.76 | 99.49 |
| S4 | 56.4 | 1.71E+12 | 3.6940 | 270.71 | 99.62 |
| S3 | 68.0 | 1.76E+12 | 3.7425 | 267.20 | 78.42 |
| L4 | 63.8 | 1.78E+12 | 3.7653 | 265.58 | 87.60 |

Simulated Plant Record Analysis

Kentucky Power - Transm

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Account: KEPCo 101/6 354 - KY
'ersion: KEPCO TRANSMISSION 2008
.Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 1279.3 | 3.20E+11 | 1.4803 | 675.54 | 2.45 |
| R1 | 877.0 | 3.24E+11 | 1.4904 | 670.96 | 2.54 |
| R1.5 | 610.8 | 3.31E+11 | 1.5056 | 664.19 | 2.65 |
| S-.5 | 918.8 | 3.36E+11 | 1.5188 | 658.41 | 2.69 |
| R2 | 351.5 | 3.55E+11 | 1.5605 | 640.82 | 3.22 |
| R2.5 | 229.3 | 3.90E+11 | 1.6359 | 611.28 | 4.21 |
| L0.5 | 486.0 | 4.58E+11 | 1.7727 | 564.11 | 4.06 |
| L1 | 293.9 | 4.60E+11 | 1.7759 | 563.09 | 5.63 |
| L0 | 657.3 | 4.68E+11 | 1.7919 | 558.07 | 3.90 |
| L1.5 | 204.7 | 5.69E+11 | 1.9753 | 506.25 | 8.36 |
| R3 | 123.6 | 6.01E+11 | 2.0305 | 492.49 | 12.13 |
| S0 | 315.3 | 6.30E+11 | 2.0785 | 481.12 | 5.88 |
| S0.5 | 230.8 | 6.70E+11 | 2.1432 | 466.59 | 7.28 |
| SQ | 46.3 | 7.20E+11 | 2.2227 | 449.90 | 100.00 |
| .6 | 48.4 | 8.64E+11 | 2.4342 | 410.81 | 100.00 |
| S1 | 142.4 | 9.53E+11 | 2.5562 | 391.21 | 15.29 |
| L2 | 129.6 | 9.77E+11 | 2.5888 | 386.28 | 19.73 |
| S1.5 | 118.2 | 9.89E+11 | 2.6042 | 384.00 | 20.27 |
| S5 | 51.2 | 1.09E+12 | 2.7288 | 366.46 | 100.00 |
| R4 | 71.1 | 1.13E+12 | 2.7884 | 358.63 | 75.26 |
| S2 | 89.1 | 1.23E+12 | 2.9048 | 344.26 | 39.92 |
| L3 | 83.7 | 1.25E+12 | 2.9223 | 342.20 | 52.92 |
| R5 | 54.2 | 1.27E+12 | 2.9460 | 339.44 | 100.00 |
| L5 | 54.8 | 1.29E+12 | 2.9790 | 335.68 | 99.39 |
| S4 | 56.6 | 1.37E+12 | 3.0657 | 326.19 | 99.57 |
| S3 | 68.3 | 1.39E+12 | 3.0891 | 323.72 | 77.79 |
| L4 | 63.8 | 1.41E+12 | 3.1109 | 321.45 | 87.71 |

Simulated Plant Record Analysis

Kentucky Power - Transm



Account: KEPCo 101/6 354 - KY
'ersion: KEPCO TRANSMISSION 2008
Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 1462.1 | 2.08E+10 | 0.4941 | 2023.88 | 2.14 |
| R1 | 1002.3 | 2.12E+10 | 0.4988 | 2004.81 | 2.20 |
| R1.5 | 698.1 | 2.19E+10 | 0.5071 | 1972.00 | 2.29 |
| S-.5 | 1046.7 | 2.24E+10 | 0.5125 | 1951.22 | 2.33 |
| R2 | 401.7 | 2.47E+10 | 0.5386 | 1856.67 | 2.68 |
| R2.5 | 256.9 | 2.88E+10 | 0.5811 | 1720.87 | 3.44 |
| L0.5 | 542.2 | 3.61E+10 | 0.6511 | 1535.86 | 3.45 |
| L0 | 726.1 | 3.75E+10 | 0.6632 | 1507.84 | 3.40 |
| L1 | 324.7 | 3.76E+10 | 0.6646 | 1504.66 | 4.63 |
| L1.5 | 222.6 | 5.39E+10 | 0.7954 | 1257.23 | 6.93 |
| S0 | 343.2 | 5.92E+10 | 0.8340 | 1199.04 | 5.10 |
| R3 | 133.0 | 5.94E+10 | 0.8351 | 1197.46 | 9.77 |
| S0.5 | 248.7 | 6.60E+10 | 0.8805 | 1135.72 | 6.29 |
| S1 | 151.9 | 1.22E+11 | 1.1981 | 834.65 | 13.12 |
| :2 | 136.0 | 1.28E+11 | 1.2258 | 815.79 | 17.17 |
| S1.5 | 123.6 | 1.32E+11 | 1.2427 | 804.70 | 17.96 |
| R4 | 73.1 | 1.77E+11 | 1.4429 | 693.05 | 68.99 |
| S2 | 92.3 | 2.01E+11 | 1.5373 | 650.49 | 36.32 |
| L3 | 86.9 | 2.08E+11 | 1.5641 | 639.35 | 48.14 |
| S6 | 49.4 | 2.24E+11 | 1.6227 | 616.26 | 100.00 |
| S5 | 52.2 | 2.36E+11 | 1.6634 | 601.18 | 100.00 |
| R5 | 55.2 | 2.46E+11 | 1.7012 | 587.82 | 100.00 |
| S3 | 69.6 | 2.61E+11 | 1.7494 | 571.62 | 75.00 |
| L4 | 65.6 | 2.61E+11 | 1.7518 | 570.84 | 85.27 |
| L5 | 55.8 | 2.74E+11 | 1.7947 | 557.20 | 99.13 |
| S4 | 57.7 | 2.90E+11 | 1.8437 | 542.39 | 99.26 |
| SQ | 49.1 | 3.95E+11 | 2.1547 | 464.10 | 100.00 |

10/20/2009

| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $2,400,232 | $646 | $94,722,543 | $0 | $0 |
| 2007 | $0 | $0 | $92,322,958 | $0 | $0 |
| 2006 | $0 | $20,749 | $92,322,958 | $0 | $0 |
| 2005 | $16,026 | $36,676 | $92,343,707 | $0 | $0 |
| 2004 | $5,437 | $0 | $92,364,357 | $0 | $0 |
| 2003 | $27,463 | $2,124 | $92,358,920 | $0 | $0 |
| 2002 | $96,142 | $4,473 | $92,333,581 | $0 | $0 |
| 2001 | $994,594 | $405 | $92,241,911 | $0 | $0 |
| 2000 | $657,177 | $0 | $91,247,723 | $0 | $0 |
| 1999 | $4,771,185 | $0 | $90,590,545 | $0 | $0 |
| 1998 | $6,759,532 | $0 | $85,819,360 | $0 | $0 |
| 1997 | $860,276 | $9,923 | $79,059,828 | $0 | $0 |
| 1996 | $363,575 | $894 | $78,209,475 | $0 | $0 |
| 1995 | $315,635 | $0 | $77,846,794 | $0 | $0 |
| 1994 | $0 | $0 | $77,531,159 | $0 | $0 |
| 1993 | $182,665 | $5,820 | $77,531,159 | $0 | $0 |
| 1992 | $41,132 | $2,222 | $77,354,314 | $0 | $0 |
| 1991 | $15 | $1,436 | $77,315,404 | $0 | $0 |
| 1990 | $427,812 | $68,846 | $77,316,825 | $0 | $0 |
| 1989 | $0 | $14,276 | $76,957,859 | $0 | $0 |
| 1988 | $0 | $0 | $76,972,135 | $0 | $0 |
| 1987 | $0 | $0 | $76,972,135 | $0 | $0 |
| 1986 | $783,128 | $193,909 | $76,972,135 | $0 | $0 |
| 1985 | $59,889,883 | $0 | $76,382,916 | $0 | $0 |
| 1984 | $177,806 | $43,412 | $16,493,033 | $0 | $0 |
| 1983 | $0 | $11,161 | $16,358,639 | $0 | $0 |
| 1982 | $273,723 | $17,051 | $16,369,800 | $0 | $0 |
| 1981 | $0 | $0 | $16,113,128 | $0 | $0 |
| 1980 | $0 | $15,975 | $16,113,128 | $0 | $0 |
| 1979 | $0 | $0 | $16,129,103 | $0 | $0 |
| 1978 | $81,431 | $0 | $16,129,103 | $0 | $0 |
| 1977 | $28,623 | $0 | $16,047,672 | $0 | $0 |
| 1976 | $158,516 | $9,324 | $16,019,049 | $0 | $0 |
| 1975 | $72,763 | $3,317 | $15,869,857 | $0 | $0 |
| 1974 | $20,383 | $2,557 | $15,800,411 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $112,943 | $0 | $15,782,585 | $0 | $0 |
| 1972 | $8,467,428 | $8,796 | $15,669,642 | $0 | $0 |
| 1971 | $26,158 | $0 | $7,211,010 | $0 | $0 |
| 1970 | $4,036,456 | $0 | $7,184,852 | $0 | $0 |
| 1969 | $0 | $0 | $3,148,396 | $0 | $0 |
| 1968 | $768,389 | $0 | $3,148,396 | $0 | $0 |
| 1967 | $370,618 | $33,709 | $2,380,007 | $0 | $0 |
| 1966 | $19,067 | $0 | $2,043,098 | $0 | $0 |
| 1965 | $450,200 | $259 | $2,024,031 | $0 | $0 |
| 1964 | $97,303 | $0 | $1,574,091 | $0 | $0 |
| 1963 | $681,030 | $5,906 | $1,476,788 | $0 | $0 |
| 1962 | $115,749 | $0 | $801,663 | $0 | $0 |
| 1961 | $227 | $0 | $685,914 | $0 | $0 |
| 1960 | $0 | $0 | $685,687 | $0 | $0 |
| 1959 | $376,337 | $0 | $685,687 | $0 | $0 |
| 1958 | $9,324 | $0 | $309,350 | $0 | $0 |
| 1957 | $0 | $0 | $300,026 | $0 | $0 |
| 1956 | $8,760 | $0 | $300,026 | $0 | $0 |
| 1955 | $0 | $0 | $291,266 | $0 | $0 |
| 1954 | $65,848 | $0 | $291,266 | $0 | $0 |
| 1953 | $0 | $0 | $225,418 | $0 | $0 |
| 1952 | $0 | $0 | $225,418 | $0 | $0 |
| 1951 | $0 | $0 | $225,418 | $0 | $0 |
| 1950 | $0 | $0 | $225,418 | $0 | $0 |
| 1949 | $0 | $0 | $225,418 | $0 | $0 |
| 1948 | $0 | $0 | $225,418 | $0 | $0 |
| 1947 | $0 | $0 | $225,418 | $0 | $0 |
| 1946 | $0 | $0 | $225,418 | $0 | $0 |
| 1945 | $0 | $0 | $225,418 | $0 | $0 |
| 1944 | $1,370 | $0 | $225,418 | $0 | $0 |
| 1943 | $0 | $0 | $224,048 | $0 | $0 |
| 1942 | $184,841 | $0 | $224,048 | $0 | $0 |
| 1941 | $0 | $0 | $39,207 | $0 | $0 |
| 1940 | $2,636 | $0 | $39,207 | $0 | $0 |
| 1939 | $848 | $0 | $36,571 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $7,093 | $0 | $35,723 | $0 | $0 |
| 1937 | $0 | $0 | $28,630 | $0 | $0 |
| 1936 | $462 | $0 | $28,630 | $0 | $0 |
| 1935 | $0 | $0 | $28,168 | $0 | $0 |
| 1934 | $0 | $0 | $28,168 | $0 | $0 |
| 1933 | $45 | $0 | $28,168 | $0 | $0 |
| 1932 | $539 | $0 | $28,123 | $0 | $0 |
| 1931 | $0 | $0 | $27,584 | $0 | $0 |
| 1930 | $2,645 | $0 | $27,584 | $0 | $0 |
| 1929 | $18,867 | $0 | $24,939 | $0 | $0 |
| 1928 | $5,349 | $0 | $6,072 | $0 | $0 |
| 1927 | $723 | $0 | $723 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

| | | |
|---|---|---|
| Account | 355 POLES & FIXTURES | |
| Depreciable Balance | $48,384,844 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 43 | 38 |
| Iowa Curve | R3.0 | S4.0 |
| Gross Removal, % | | 55% |
| Gross Salvage, % | | 2% |
| Net Salvage % | 0% | -53% |

*****************************************************************************************************

Both the 40 year and 20 year simulation band analyses indicate that the average service life for this account is 38 years following an S4.0 type retirement dispersion pattern.

The removal cost for poles involves significant labor, equipment and transportation costs since the poles must be transported back to the storeroom for disposal. There could be some reuse salvage of insulators and crossarms.

Simulated Plant Record Analysis

Kentucky Power - Transm

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Account: KEPCo 101/6 355 - KY
'ersion: KEPCO TRANSMISSION 2008
Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| S4 | 37.6 | 7.87E+11 | 8.2291 | 121.52 | 100.00 |
| L4 | 39.0 | 7.95E+11 | 8.2697 | 120.92 | 99.90 |
| L5 | 37.3 | 8.11E+11 | 8.3571 | 119.66 | 100.00 |
| S3 | 39.7 | 8.96E+11 | 8.7819 | 113.87 | 99.99 |
| S5 | 36.6 | 9.34E+11 | 8.9655 | 111.54 | 100.00 |
| L3 | 42.3 | 9.37E+11 | 8.9812 | 111.34 | 95.73 |
| R5 | 36.9 | 1.00E+12 | 9.3005 | 107.52 | 100.00 |
| R4 | 38.6 | 1.05E+12 | 9.5136 | 105.11 | 100.00 |
| S2 | 42.6 | 1.11E+12 | 9.7532 | 102.53 | 98.72 |
| R3 | 41.9 | 1.22E+12 | 10.2399 | 97.66 | 100.00 |
| L2 | 48.3 | 1.25E+12 | 10.3932 | 96.22 | 84.53 |
| S1.5 | 45.3 | 1.27E+12 | 10.4616 | 95.59 | 94.09 |
| R2.5 | 45.4 | 1.36E+12 | 10.8139 | 92.47 | 97.29 |
| S6 | 36.4 | 1.40E+12 | 10.9634 | 91.21 | 100.00 |
| ;1 | 48.2 | 1.43E+12 | 11.0913 | 90.16 | 86.81 |
| L1.5 | 53.9 | 1.48E+12 | 11.2712 | 88.72 | 74.94 |
| R2 | 50.3 | 1.52E+12 | 11.4235 | 87.54 | 86.45 |
| S0.5 | 53.9 | 1.62E+12 | 11.8173 | 84.62 | 73.68 |
| L1 | 60.9 | 1.63E+12 | 11.8496 | 84.39 | 64.37 |
| R1.5 | 58.5 | 1.75E+12 | 12.2889 | 81.37 | 65.55 |
| S0 | 61.4 | 1.79E+12 | 12.3998 | 80.65 | 60.21 |
| L0.5 | 72.7 | 1.82E+12 | 12.5164 | 79.90 | 52.95 |
| R1 | 69.8 | 1.93E+12 | 12.8958 | 77.54 | 47.89 |
| L0 | 86.7 | 1.96E+12 | 12.9760 | 77.07 | 44.46 |
| S-.5 | 80.6 | 1.97E+12 | 13.0146 | 76.84 | 42.50 |
| R0.5 | 88.4 | 2.04E+12 | 13.2631 | 75.40 | 36.55 |
| SQ | 38.1 | 5.71E+12 | 22.1617 | 45.12 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Transm

Page 87 of 350

Account: KEPCo 101/6 355 - KY
'ersion: KEPCO TRANSMISSION 2008
.lethod: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| S4 | 37.5 | 6.29E+11 | 6.4535 | 154.95 | 100.00 |
| L4 | 39.0 | 6.33E+11 | 6.4752 | 154.44 | 99.91 |
| L5 | 37.3 | 6.60E+11 | 6.6129 | 151.22 | 100.00 |
| S3 | 39.7 | 7.32E+11 | 6.9601 | 143.68 | 99.99 |
| S5 | 36.6 | 7.67E+11 | 7.1272 | 140.31 | 100.00 |
| L3 | 42.3 | 7.67E+11 | 7.1273 | 140.31 | 95.74 |
| R5 | 36.9 | 8.26E+11 | 7.3934 | 135.26 | 100.00 |
| R4 | 38.6 | 8.42E+11 | 7.4682 | 133.90 | 100.00 |
| S2 | 42.2 | 9.16E+11 | 7.7896 | 128.38 | 98.95 |
| R3 | 41.9 | 1.00E+12 | 8.1355 | 122.92 | 100.00 |
| L2 | 48.3 | 1.04E+12 | 8.3083 | 120.36 | 84.55 |
| S1.5 | 44.9 | 1.06E+12 | 8.3759 | 119.39 | 94.68 |
| R2.5 | 45.4 | 1.11E+12 | 8.5565 | 116.87 | 97.31 |
| S1 | 48.2 | 1.18E+12 | 8.8448 | 113.06 | 86.82 |
| .1.5 | 53.9 | 1.21E+12 | 8.9514 | 111.71 | 74.96 |
| S6 | 36.4 | 1.22E+12 | 8.9698 | 111.49 | 100.00 |
| R2 | 49.7 | 1.22E+12 | 8.9728 | 111.45 | 87.52 |
| S0.5 | 53.9 | 1.31E+12 | 9.3257 | 107.23 | 73.69 |
| L1 | 60.9 | 1.33E+12 | 9.3763 | 106.65 | 64.38 |
| R1.5 | 57.9 | 1.36E+12 | 9.4958 | 105.31 | 66.71 |
| S0 | 60.8 | 1.43E+12 | 9.7159 | 102.92 | 61.00 |
| L0.5 | 71.9 | 1.43E+12 | 9.7381 | 102.69 | 53.56 |
| R1 | 69.0 | 1.47E+12 | 9.8537 | 101.48 | 48.68 |
| S-.5 | 79.8 | 1.50E+12 | 9.9688 | 100.31 | 43.02 |
| L0 | 85.8 | 1.52E+12 | 10.0271 | 99.73 | 44.95 |
| R0.5 | 86.6 | 1.53E+12 | 10.0605 | 99.40 | 37.47 |
| SQ | 38.1 | 5.40E+12 | 18.9172 | 52.86 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Transm



Account: KEPCo 101/6 355 - KY
'ersion: KEPCO TRANSMISSION 2008
.Aethod: Simulated Balances
No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 82.4 | 7.15E+10 | 2.2592 | 442.63 | 39.85 |
| R1 | 66.4 | 7.94E+10 | 2.3800 | 420.17 | 51.80 |
| S-.5 | 76.3 | 8.00E+10 | 2.3901 | 418.39 | 45.45 |
| L0 | 82.1 | 9.09E+10 | 2.5465 | 392.70 | 47.14 |
| R1.5 | 56.2 | 9.10E+10 | 2.5486 | 392.37 | 70.04 |
| L0.5 | 69.5 | 9.72E+10 | 2.6343 | 379.61 | 55.64 |
| L1 | 58.8 | 9.87E+10 | 2.6545 | 376.72 | 66.77 |
| S0 | 59.1 | 1.07E+11 | 2.7665 | 361.47 | 63.34 |
| R2 | 48.8 | 1.14E+11 | 2.8476 | 351.17 | 89.44 |
| S0.5 | 52.3 | 1.15E+11 | 2.8636 | 349.21 | 76.36 |
| L1.5 | 52.6 | 1.16E+11 | 2.8726 | 348.12 | 76.64 |
| S1 | 47.3 | 1.28E+11 | 3.0212 | 330.99 | 88.43 |
| R2.5 | 44.5 | 1.36E+11 | 3.1117 | 321.37 | 98.05 |
| L2 | 47.6 | 1.39E+11 | 3.1527 | 317.19 | 85.43 |
| ;1.5 | 44.5 | 1.46E+11 | 3.2285 | 309.74 | 95.19 |
| S2 | 41.8 | 1.52E+11 | 3.2899 | 303.96 | 99.15 |
| R3 | 41.0 | 1.84E+11 | 3.6274 | 275.68 | 100.00 |
| L3 | 41.7 | 1.88E+11 | 3.6645 | 272.89 | 96.25 |
| S3 | 38.9 | 2.38E+11 | 4.1173 | 242.88 | 100.00 |
| L4 | 38.8 | 3.05E+11 | 4.6655 | 214.34 | 99.92 |
| R4 | 38.2 | 3.52E+11 | 5.0137 | 199.45 | 100.00 |
| S4 | 37.6 | 3.99E+11 | 5.3398 | 187.27 | 100.00 |
| L5 | 37.1 | 5.00E+11 | 5.9767 | 167.32 | 100.00 |
| S5 | 36.6 | 6.15E+11 | 6.6230 | 150.99 | 100.00 |
| R5 | 36.9 | 6.46E+11 | 6.7913 | 147.25 | 100.00 |
| S6 | 36.4 | 1.02E+12 | 8.5424 | 117.06 | 100.00 |
| SQ | 38.9 | 7.67E+12 | 23.4019 | 42.73 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $7,821,843 | $331,274 | $48,384,844 | $0 | $0 |
| 2007 | $547,335 | $147,838 | $40,894,275 | $0 | $0 |
| 2006 | $1,905,268 | $267,008 | $40,494,778 | $0 | $0 |
| 2005 | $1,400,727 | $45,454 | $38,856,517 | $0 | $0 |
| 2004 | $1,450,694 | $358,451 | $37,501,245 | $0 | $0 |
| 2003 | $725,788 | $23,421 | $36,409,002 | $0 | $0 |
| 2002 | $1,374,086 | $169,001 | $35,706,635 | $0 | $0 |
| 2001 | $3,034,077 | $129,176 | $34,501,550 | $0 | $0 |
| 2000 | $2,016,921 | $380,242 | $31,596,649 | $0 | $0 |
| 1999 | $7,276,249 | $459,086 | $29,959,970 | $0 | $0 |
| 1998 | $246,198 | $70,017 | $23,142,807 | $0 | $0 |
| 1997 | $2,200,205 | $189,108 | $22,966,626 | $0 | $0 |
| 1996 | $966,627 | $46,630 | $20,955,529 | $0 | $0 |
| 1995 | $502,094 | $39,055 | $20,035,533 | $0 | $0 |
| 1994 | $2,853,695 | $49,130 | $19,572,494 | $0 | $0 |
| 1993 | $2,024,333 | $250,034 | $16,767,929 | $0 | $0 |
| 1992 | $1,980,376 | $164,329 | $14,993,630 | $0 | $0 |
| 1991 | $1,225,759 | $71,533 | $13,177,583 | $0 | $0 |
| 1990 | $379,655 | $23,776 | $12,023,357 | $0 | $0 |
| 1989 | $526,772 | $0 | $11,667,478 | $0 | $0 |
| 1988 | $501,638 | $3,739 | $11,140,706 | $0 | $0 |
| 1987 | $208,776 | $6,838 | $10,642,807 | $0 | $0 |
| 1986 | $743,795 | $0 | $10,440,869 | $0 | $0 |
| 1985 | $286,320 | $11,886 | $9,697,074 | $0 | $0 |
| 1984 | $129,011 | $5,073 | $9,422,640 | $0 | $0 |
| 1983 | $472,313 | $207 | $9,298,701 | $0 | $0 |
| 1982 | $1,190,640 | $14,204 | $8,826,595 | $0 | $0 |
| 1981 | $831,647 | $661 | $7,650,160 | $0 | $0 |
| 1980 | $971,067 | $6,242 | $6,819,174 | $0 | $0 |
| 1979 | $163,523 | $2,975 | $5,854,349 | $0 | $0 |
| 1978 | $400,964 | $0 | $5,693,801 | $0 | $0 |
| 1977 | $372,518 | $0 | $5,292,837 | $0 | $0 |
| 1976 | $465,135 | $91,810 | $4,920,319 | $0 | $0 |
| 1975 | $413,882 | $1,856 | $4,546,994 | $0 | $0 |
| 1974 | $343,018 | $34,862 | $4,134,968 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $125,643 | $5,370 | $3,826,812 | $0 | $0 |
| 1972 | $154,289 | $5,093 | $3,706,539 | $0 | $0 |
| 1971 | $241,075 | $2,120 | $3,557,343 | $0 | $0 |
| 1970 | $5,279 | $1,424 | $3,318,387 | $0 | $0 |
| 1969 | $331,595 | $1,640 | $3,314,532 | $0 | $0 |
| 1968 | $245,351 | $245 | $2,984,577 | $0 | $0 |
| 1967 | $434,577 | $110,772 | $2;739,471 | $0 | $0 |
| 1966 | $672,143 | $0 | $2,415,666 | $0 | $0 |
| 1965 | $586,942 | $818 | $1,743,523 | $0 | $0 |
| 1964 | $116,699 | $3,754 | $1,157,398 | $0 | $0 |
| 1963 | $40,074 | $3,221 | $1,044,453 | $0 | $0 |
| 1962 | $83,740 | $461 | $1,007,600 | $0 | $0 |
| 1961 | $53,310 | $91 | $924,321 | $0 | $0 |
| 1960 | $80,558 | $330 | $871,102 | $0 | $0 |
| 1959 | $72,589 | $1,163 | $790,873 | $0 | $0 |
| 1958 | $31,500 | $2,062 | $719,448 | $0 | $0 |
| 1957 | $12,111 | $1,344 | $690,009 | $0 | $0 |
| 1956 | $52,891 | $1,662 | $679,242 | $0 | $0 |
| 1955 | $11,248 | $2,462 | $628,013 | $0 | $0 |
| 1954 | $159,582 | $5,534 | $619,227 | $0 | $0 |
| 1953 | $59,562 | $0 | $465,179 | $0 | $0 |
| 1952 | $9,029 | $0 | $405,617 | $0 | $0 |
| 1951 | $4,317 | $0 | $396,588 | $0 | $0 |
| 1950 | $2,849 | $0 | $392,271 | $0 | $0 |
| 1949 | $16,466 | $0 | $389,422 | $0 | $0 |
| 1948 | $2,881 | $0 | $372,956 | $0 | $0 |
| 1947 | $802 | $0 | $370,075 | $0 | $0 |
| 1946 | $1,398 | $0 | $369,273 | $0 | $0 |
| 1945 | $11,786 | $0 | $367,875 | $0 | $0 |
| 1944 | $76,227 | $0 | $356,089 | $0 | $0 |
| 1943 | $0 | $0 | $279,862 | $0 | $0 |
| 1942 | $164,194 | $0 | $279,862 | $0 | $0 |
| 1941 | $2,006 | $0 | $115,668 | $0 | $0 |
| 1940 | $0 | $0 | $113,662 | $0 | $0 |
| 1939 | $0 | $0 | $113,662 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $113,662 | $0 | $113,662 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

| | | |
|---|---|---|
| Account | 356 OVERHEAD CONDUCTOR & DEVICES | |
| Depreciable Balance | $109,075,670 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 50 | 50 |
| Iowa Curve | R3.0 | R3.0 |
| Gross Removal, % | | 25% |
| Gross Salvage, % | | 15% |
| Net Salvage % | 10% | -10% |

*****************************************************************************************************************

The simulation analyses for all bands do not provide meaningful guidance since the retirements from this account have been minimal. The recommendation is to continue the current 50 year average service life following an R3.0 type retirement dispersion.

Removal costs should be expected from the labor and transportation costs involved in removing the conductor. Salvage costs would be expected from the sale of the conductor and the reuse of circuit breakers, insulators and switches.

Simulated Plant Record Analysis

Kentucky Power - Transm



Account: KEPCo 101/6 356 - KY
'ersion: KEPCO TRANSMISSION 2008
Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 302.1 | 3.09E+11 | 1.5234 | 656.43 | 12.26 |
| L0.5 | 225.6 | 3.13E+11 | 1.5344 | 651.72 | 14.39 |
| R2 | 146.7 | 3.16E+11 | 1.5424 | 648.34 | 14.83 |
| R2.5 | 106.3 | 3.27E+11 | 1.5688 | 637.43 | 26.08 |
| S-.5 | 343.7 | 3.42E+11 | 1.6042 | 623.36 | 9.10 |
| R1.5 | 227.2 | 3.48E+11 | 1.6167 | 618.54 | 9.57 |
| R1 | 316.6 | 3.63E+11 | 1.6533 | 604.85 | 8.35 |
| L1 | 151.6 | 3.72E+11 | 1.6736 | 597.51 | 23.41 |
| R0.5 | 450.1 | 3.78E+11 | 1.6856 | 593.26 | 7.60 |
| S0 | 170.1 | 4.07E+11 | 1.7484 | 571.95 | 17.94 |
| S0.5 | 131.6 | 4.88E+11 | 1.9149 | 522.22 | 23.96 |
| L1.5 | 118.5 | 5.06E+11 | 1.9508 | 512.61 | 32.35 |
| R3 | 77.1 | 6.43E+11 | 2.1992 | 454.71 | 63.83 |
| S1 | 96.3 | 9.19E+11 | 2.6286 | 380.43 | 40.79 |
| _2 | 90.3 | 1.00E+12 | 2.7471 | 364.02 | 52.03 |
| S1.5 | 82.8 | 1.06E+12 | 2.8200 | 354.61 | 54.64 |
| S6 | 46.8 | 1.11E+12 | 2.8876 | 346.31 | 100.00 |
| S5 | 48.9 | 1.36E+12 | 3.1945 | 313.04 | 100.00 |
| R5 | 50.5 | 1.41E+12 | 3.2519 | 307.51 | 100.00 |
| S2 | 70.1 | 1.53E+12 | 3.3870 | 295.25 | 76.06 |
| L3 | 67.4 | 1.55E+12 | 3.4159 | 292.75 | 80.86 |
| R4 | 58.1 | 1.57E+12 | 3.4329 | 291.30 | 99.99 |
| L5 | 51.0 | 1.59E+12 | 3.4589 | 289.11 | 99.99 |
| L4 | 56.5 | 1.66E+12 | 3.5322 | 283.11 | 97.73 |
| SQ | 47.0 | 1.74E+12 | 3.6178 | 276.41 | 100.00 |
| S4 | 52.0 | 1.77E+12 | 3.6480 | 274.12 | 100.00 |
| S3 | 58.7 | 1.83E+12 | 3.7096 | 269.57 | 97.54 |

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Simulated Plant Record Analysis

Kentucky Power - Transm

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Account: KEPCo 101/6 356 - KY

Version: KEPCO TRANSMISSION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 302.2 | 1.81E+11 | 1.0805 | 925.50 | 12.26 |
| L0.5 | 227.9 | 1.85E+11 | 1.0916 | 916.09 | 14.16 |
| R2.5 | 107.4 | 1.99E+11 | 1.1327 | 882.85 | 25.40 |
| R2 | 146.7 | 2.10E+11 | 1.1637 | 859.33 | 14.83 |
| L1 | 151.6 | 2.21E+11 | 1.1936 | 837.80 | 23.40 |
| S0 | 170.1 | 2.27E+11 | 1.2103 | 826.24 | 17.94 |
| S-.5 | 347.2 | 2.50E+11 | 1.2688 | 788.15 | 8.99 |
| R1.5 | 227.2 | 2.56E+11 | 1.2840 | 778.82 | 9.57 |
| R1 | 316.6 | 2.75E+11 | 1.3306 | 751.54 | 8.35 |
| S0.5 | 131.6 | 2.85E+11 | 1.3557 | 737.63 | 23.95 |
| R0.5 | 450.1 | 2.91E+11 | 1.3685 | 730.73 | 7.60 |
| L1.5 | 119.7 | 3.10E+11 | 1.4134 | 707.51 | 31.72 |
| R3 | 77.1 | 4.14E+11 | 1.6335 | 612.18 | 63.82 |
| S1 | 97.3 | 6.26E+11 | 2.0083 | 497.93 | 39.99 |
| L2 | 90.3 | 6.87E+11 | 2.1047 | 475.13 | 52.02 |
| S6 | 47.2 | 7.18E+11 | 2.1516 | 464.77 | 100.00 |
| S1.5 | 83.7 | 7.41E+11 | 2.1847 | 457.73 | 53.55 |
| S5 | 48.9 | 9.50E+11 | 2.4741 | 404.19 | 100.00 |
| R5 | 50.5 | 9.56E+11 | 2.4818 | 402.93 | 100.00 |
| S2 | 70.1 | 1.14E+12 | 2.7078 | 369.30 | 76.04 |
| L3 | 67.4 | 1.15E+12 | 2.7175 | 367.99 | 80.85 |
| R4 | 58.7 | 1.16E+12 | 2.7285 | 366.50 | 99.98 |
| L5 | 51.0 | 1.17E+12 | 2.7404 | 364.91 | 99.99 |
| SQ | 47.0 | 1.17E+12 | 2.7500 | 363.64 | 100.00 |
| L4 | 56.5 | 1.21E+12 | 2.7895 | 358.49 | 97.73 |
| S4 | 52.0 | 1.36E+12 | 2.9563 | 338.26 | 100.00 |
| S3 | 58.8 | 1.41E+12 | 3.0115 | 332.06 | 97.54 |

Simulated Plant Record Analysis

Kentucky Power - Transm

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Account: KEPCo 101/6 356 - KY
Version: KEPCO TRANSMISSION 2008
Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 432.6 | 3.30E+10 | 0.5700 | 1754.39 | 7.92 |
| R1 | 307.3 | 3.89E+10 | 0.6191 | 1615.25 | 8.64 |
| R1.5 | 220.5 | 4.62E+10 | 0.6744 | 1482.80 | 9.97 |
| S-.5 | 333.5 | 4.75E+10 | 0.6841 | 1461.77 | 9.44 |
| R2 | 143.8 | 8.03E+10 | 0.8892 | 1124.61 | 15.42 |
| L0 | 297.8 | 1.08E+11 | 1.0332 | 967.87 | 12.50 |
| L0.5 | 224.6 | 1.16E+11 | 1.0704 | 934.23 | 14.50 |
| R2.5 | 106.3 | 1.36E+11 | 1.1578 | 863.71 | 26.08 |
| L1 | 159.9 | 1.91E+11 | 1.3716 | 729.08 | 23.60 |
| S0 | 169.3 | 2.04E+11 | 1.4163 | 706.07 | 18.06 |
| S0.5 | 132.3 | 2.63E+11 | 1.6081 | 621.85 | 23.71 |
| L1.5 | 119.1 | 2.88E+11 | 1.6836 | 593.97 | 32.01 |
| SQ | 45.4 | 3.73E+11 | 1.9164 | 521.81 | 100.00 |
| R3 | 77.1 | 3.77E+11 | 1.9262 | 519.16 | 63.82 |
| S1 | 97.8 | 5.06E+11 | 2.2321 | 448.01 | 39.56 |
| L2 | 90.7 | 5.52E+11 | 2.3319 | 428.83 | 51.56 |
| S1.5 | 84.1 | 5.85E+11 | 2.4004 | 416.60 | 52.96 |
| S6 | 47.0 | 6.58E+11 | 2.5457 | 392.82 | 100.00 |
| R5 | 50.5 | 8.23E+11 | 2.8478 | 351.15 | 100.00 |
| S2 | 70.5 | 8.54E+11 | 2.9011 | 344.70 | 75.39 |
| R4 | 58.7 | 8.55E+11 | 2.9021 | 344.58 | 99.98 |
| L3 | 67.8 | 8.71E+11 | 2.9288 | 341.44 | 80.45 |
| L4 | 56.8 | 9.03E+11 | 2.9822 | 335.32 | 97.57 |
| S5 | 49.2 | 9.07E+11 | 2.9886 | 334.60 | 100.00 |
| L5 | 51.3 | 1.01E+12 | 3.1493 | 317.53 | 99.98 |
| S3 | 59.1 | 1.04E+12 | 3.2072 | 311.80 | 97.31 |
| S4 | 52.3 | 1.09E+12 | 3.2804 | 304.84 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $7,615,245 | $149,255 | $109,075,670 | $0 | $0 |
| 2007 | $388,254 | $2,896 | $101,609,681 | $0 | $0 |
| 2006 | $278,653 | $126,720 | $101,224,323 | $0 | $0 |
| 2005 | $743,703 | $35,213 | $101,072,390 | $0 | $0 |
| 2004 | $244,995 | $55,180 | $100,363,900 | $0 | $0 |
| 2003 | $653,965 | $102,595 | $100,174,085 | $0 | $0 |
| 2002 | $203,910 | $107,844 | $99,622,715 | $0 | $0 |
| 2001 | $1,212,538 | $8,636 | $99,526,649 | $0 | $0 |
| 2000 | $1,907,562 | $112,146 | $98,322,748 | $0 | $0 |
| 1999 | $11,988,969 | $315,114 | $96,527,332 | $0 | $0 |
| 1998 | $4,941,738 | $140,443 | $84,853,476 | $0 | $0 |
| 1997 | $712,207 | $85,900 | $80,052,182 | $0 | $0 |
| 1996 | $1,377,965 | $34,379 | $79,425,875 | $0 | $0 |
| 1995 | $1,023,703 | $0 | $78,082,289 | $0 | $0 |
| 1994 | $3,258,062 | $17,616 | $77,058,586 | $0 | $0 |
| 1993 | $1,695,513 | $152,787 | $73,818,140 | $0 | $0 |
| 1992 | $2,241,118 | $80,152 | $72,275,414 | $0 | $0 |
| 1991 | $704,245 | $62,359 | $70,114,448 | $0 | $0 |
| 1990 | $430,845 | $3,248 | $69,472,562 | $0 | $0 |
| 1989 | $273,872 | $28,688 | $69,044,965 | $0 | $0 |
| 1988 | $187,297 | $71 | $68,799,781 | $0 | $0 |
| 1987 | $131,020 | $0 | $68,612,555 | $0 | $0 |
| 1986 | $838,491 | $73,842 | $68,481,535 | $0 | $0 |
| 1985 | $46,009,402 | $6,075 | $67,716,886 | $0 | $0 |
| 1984 | $171,899 | $26,128 | $21,713,559 | $0 | $0 |
| 1983 | $42,428 | $0 | $21,567,788 | $0 | $0 |
| 1982 | $1,827,109 | $78,806 | $21,525,360 | $0 | $0 |
| 1981 | $694,030 | $489 | $19,777,057 | $0 | $0 |
| 1980 | $452,258 | $31,345 | $19,083,516 | $0 | $0 |
| 1979 | $91,746 | $28 | $18,662,604 | $0 | $0 |
| 1978 | $2,009,798 | $0 | $18,570,886 | $0 | $0 |
| 1977 | $512,195 | $0 | $16,561,088 | $0 | $0 |
| 1976 | $229,904 | $0 | $16,048,893 | $0 | $0 |
| 1975 | $299,105 | $2,437 | $15,818,989 | $0 | $0 |
| 1974 | $44,958 | $22 | $15,522,321 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $72,762 | $8,297 | $15,477,385 | $0 | $0 |
| 1972 | $158,182 | $4,566 | $15,412,920 | $0 | $0 |
| 1971 | $1,144,132 | $44 | $15,259,304 | $0 | $0 |
| 1970 | $8,258,593 | $0 | $14,115,216 | $0 | $0 |
| 1969 | $306,367 | $29,269 | $5,856,623 | $0 | $0 |
| 1968 | $1,214,668 | $124 | $5,579,525 | $0 | $0 |
| 1967 | $622,934 | $134,776 | $4,364,981 | $0 | $0 |
| 1966 | $235,126 | $0 | $3,876,823 | $0 | $0 |
| 1965 | $750,175 | $0 | $3,641,697 | $0 | $0 |
| 1964 | $332,032 | $1,576 | $2,891,522 | $0 | $0 |
| 1963 | $516,316 | $0 | $2,561,066 | $0 | $0 |
| 1962 | $116,770 | $0 | $2,044,750 | $0 | $0 |
| 1961 | $35,760 | $0 | $1,927,980 | $0 | $0 |
| 1960 | $34,230 | $0 | $1,892,220 | $0 | $0 |
| 1959 | $203,931 | $17 | $1,857,990 | $0 | $0 |
| 1958 | $363,538 | $101 | $1,654,076 | $0 | $0 |
| 1957 | $9,636 | $0 | $1,290,639 | $0 | $0 |
| 1956 | $41,375 | $0 | $1,281,003 | $0 | $0 |
| 1955 | $4,298 | $17 | $1,239,627 | $0 | $0 |
| 1954 | $318,755 | $489 | $1,235,346 | $0 | $0 |
| 1953 | $63,843 | $0 | $917,080 | $0 | $0 |
| 1952 | $15,004 | $0 | $853,237 | $0 | $0 |
| 1951 | $13,420 | $0 | $838,233 | $0 | $0 |
| 1950 | $4,533 | $0 | $824,813 | $0 | $0 |
| 1949 | $63,341 | $0 | $820,280 | $0 | $0 |
| 1948 | $14,823 | $0 | $756,939 | $0 | $0 |
| 1947 | $11,563 | $0 | $742,116 | $0 | $0 |
| 1946 | $5,928 | $0 | $730,553 | $0 | $0 |
| 1945 | $27,493 | $0 | $724,625 | $0 | $0 |
| 1944 | $5,349 | $0 | $697,132 | $0 | $0 |
| 1943 | $5,002 | $0 | $691,783 | $0 | $0 |
| 1942 | $378,305 | $0 | $686,781 | $0 | $0 |
| 1941 | $6,577 | $0 | $308,476 | $0 | $0 |
| 1940 | $101,822 | $0 | $301,899 | $0 | $0 |
| 1939 | $476 | $0 | $200,077 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $129,975 | $0 | $199,601 | $0 | $0 |
| 1937 | $8,842 | $0 | $69,626 | $0 | $0 |
| 1936 | $9,973 | $0 | $60,784 | $0 | $0 |
| 1935 | $1,327 | $0 | $50,811 | $0 | $0 |
| 1934 | $2,159 | $0 | $49,484 | $0 | $0 |
| 1933 | $1,642 | $0 | $47,325 | $0 | $0 |
| 1932 | $2,108 | $0 | $45,683 | $0 | $0 |
| 1931 | $2,112 | $0 | $43,575 | $0 | $0 |
| 1930 | $4,553 | $0 | $41,463 | $0 | $0 |
| 1929 | $15,583 | $0 | $36,910 | $0 | $0 |
| 1928 | $3,395 | $0 | $21,327 | $0 | $0 |
| 1927 | $4,792 | $0 | $17,932 | $0 | $0 |
| 1926 | $8,395 | $0 | $13,140 | $0 | $0 |
| 1925 | $1,862 | $0 | $4,745 | $0 | $0 |
| 1924 | $369 | $0 | $2,883 | $0 | $0 |
| 1923 | $1,121 | $0 | $2,514 | $0 | $0 |
| 1922 | $1,393 | $0 | $1,393 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Transmission Plant

| | | |
|---|---|---|
| Account | 356 UNDERGROUND CONDUIT | |
| Depreciable Balance | $11,590 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 37 | 37 |
| Iowa Curve | R2.0 | R2.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

****************************************

No life analysis was performed for this account since there have been no retirements. The recommendation is to continue the current average service life of 37 years following an R2.0 type dispersion.

The underground conduit will likely be retired in place. Therefore the investment is not anticipated to incure removal or salvage cost.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
*Transmission Plant*

| | | |
|---|---|---|
| Account | 358 UNDERGROUND CONDUCTOR & DEVICES | |
| Depreciable Balance | $106,066 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 44 | 44 |
| Iowa Curve | R1.0 | R1.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

************************************************************************************************************************

As in account 357, there have been no retirements from this account. No life analyis was performed. The recommendation is to continue the current 44 year average service life following an R1.0 dispersion.

Do the minimal investment, neither removal or salvage is expected from the investment in this account.

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# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# TRANSMISSION PLANT WORKPAPERS

## SALVAGE AND REMOVAL ANALYSIS

KENTUCKY POWER COMPANY
Transmission Plant Net Salvage Test

21-Oct-09

Original Cost Retired by Plant Account

| Year | 352 | 353 | 354.0 | 355.0 | 356.0 | 357 | 358 | Total | Removal % | Net Salvage |
|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 522 | 807,484 | 0 | 51,836 | 12,669 | 0 | 0 | 872,511 | 12% | 101,360 |
| 1995 | 2,589 | 143,408 | 0 | 50,733 | 0 | 0 | 0 | 196,730 | -55% | -109,112 |
| 1996 | 11,283 | 32,475 | 894 | 58,862 | 40,165 | 0 | 0 | 143,679 | -8% | -11,869 |
| 1997 | 6,190 | 1,056,611 | 9,923 | 205,721 | 85,900 | 0 | 0 | 1,364,345 | 1% | 12,548 |
| 1998 | 373 | 165,269 | 0 | 126,426 | 170,083 | 0 | 0 | 462,151 | 15% | 68,230 |
| 1999 | 852 | 357,124 | 0 | 459,086 | 315,114 | 0 | 0 | 1,132,176 | 18% | 198,240 |
| 2000 | 0 | 308,529 | 0 | 307,215 | 112,148 | 0 | 0 | 727,892 | -4% | -29,822 |
| 2001 | 852 | 104,157 | 405 | 129,175 | 8,636 | 0 | 0 | 243,225 | -281% | -683,524 |
| 2002 | 352 | 167,185 | 4,473 | 169,000 | 107,845 | 0 | 0 | 448,855 | -4% | -17,372 |
| 2003 | 0 | 462,374 | 2,124 | 23,422 | 102,595 | 0 | 0 | 590,515 | -103% | -606,791 |
| 2004 | 0 | 699,507 | 0 | 358,451 | 55,179 | 0 | 0 | 1,113,137 | -9% | -95,408 |
| 2005 | 57,776 | 687,089 | 36,676 | 45,455 | 35,212 | 0 | 0 | 862,208 | -21% | -176,866 |
| 2006 | 0 | 783,966 | 20,749 | 267,008 | 126,720 | 0 | 0 | 1,198,443 | 0% | 4,099 |
| 2007 | 2,382 | 298,345 | 0 | 147,839 | 2,897 | 0 | 0 | 451,463 | -92% | -417,573 |
| 2008 | 8458 | 1369350 | 646 | 331275 | 149255 | 0 | 0 | 1,858,984 | -10% | -186,146 |
| TOTAL | 91,629 | 7,442,873 | 75,890 | 2,731,504 | 1,324,418 | 0 | 0 | 11,666,314 | -17% | -1,950,006 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 352 | 353 | 354.1 | 355.1 | 356.1 | 357 | 358 | Total |
|---|---|---|---|---|---|---|---|---|
| Total Retmts | 91,629 | 7,442,873 | 75,890 | 2,731,504 | 1,324,418 | 0 | 0 | 11,666,314 |
| Gross Removal % | 0 | -5 | -65 | -53 | -10 | 0 | 0 | -17 |
| Gross Removal $ | 0 | -372,144 | -49,329 | -1,447,697 | -132,442 | 0 | 0 | -2,001,611 |



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KENTUCKY POWER COMPANY
Transmission Plant Gross Removal Test

21-Oct-09

Original Cost Retired by Plant Account

| Year | 352 | 353 | 354.0 | 355.0 | 356.0 | 357 | 358 | Total | Removal % | Functional Gross Removal |
|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 522 | 807,484 | 0 | 51,836 | 12,669 | 0 | 0 | 872,511 | 11% | 92,692 |
| 1995 | 2,589 | 143,408 | 0 | 50,733 | 0 | 0 | 0 | 196,730 | 77% | 151,723 |
| 1996 | 11,283 | 32,475 | 894 | 58,862 | 40,165 | 0 | 0 | 143,679 | -4% | -6,225 |
| 1997 | 6,190 | 1,056,611 | 9,923 | 205,721 | 85,900 | 0 | 0 | 1,364,345 | 3% | 39,136 |
| 1998 | 373 | 165,269 | 0 | 126,426 | 170,083 | 0 | 0 | 462,151 | 47% | 215,982 |
| 1999 | 852 | 357,124 | 0 | 459,086 | 315,114 | 0 | 0 | 1,132,176 | 3% | 33,535 |
| 2000 | 0 | 308,529 | 0 | 307,215 | 112,148 | 0 | 0 | 727,892 | 7% | 53,562 |
| 2001 | 852 | 104,157 | 405 | 129,175 | 8,636 | 0 | 0 | 243,225 | 323% | 785,132 |
| 2002 | 352 | 167,185 | 4,473 | 169,000 | 107,845 | 0 | 0 | 448,855 | 11% | 48,654 |
| 2003 | 0 | 462,374 | 2,124 | 23,422 | 102,595 | 0 | 0 | 590,515 | 155% | 912,736 |
| 2004 | 0 | 699,507 | 0 | 358,451 | 55,179 | 0 | 0 | 1,113,137 | 20% | 224,657 |
| 2005 | 57,776 | 687,089 | 36,676 | 45,455 | 35,212 | 0 | 0 | 862,208 | 21% | 176,975 |
| 2006 | 0 | 783,966 | 20,749 | 267,008 | 126,720 | 0 | 0 | 1,198,443 | 12% | 141,984 |
| 2007 | 2,382 | 298,345 | 0 | 147,839 | 2,897 | 0 | 0 | 451,463 | 65% | 292,847 |
| 2008 | 8458 | 1369350 | 646 | 331275 | 149255 | 0 | 0 | 1,858,984 | 9% | 176,513 |
| TOTAL | 91,629 | 7,442,873 | 75,890 | 2,731,504 | 1,324,418 | 0 | 0 | 11,666,314 | 29% | 3,339,903 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 352 | 353 | 354 | 355 | 356 | 357 | 358 | Total |
|---|---|---|---|---|---|---|---|---|
| Total Retmts | 91,629 | 7,442,873 | 75,890 | 2,731,504 | 1,324,418 | 0 | 0 | 11,666,314 |
| Gross Removal % | 10 | 20 | 75 | 55 | 25 | 0 | 0 | 29 |
| Gross Removal $ | 9,163 | 1,488,575 | 56,918 | 1,502,327 | 331,105 | 0 | 0 | 3,388;087 |

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KENTUCKY POWER COMPANY
Transmission Plant Gross Salvage Test

21-Oct-09

| | Retirements | | | | | | | | | Functional |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | 352 | 353 | 354.0 | 355.0 | 356.0 | 357 | 358 | Total | Salvage % | Gross Salvage |
| 1994 | 522 | 807,484 | 0 | 51,836 | 12,669 | 0 | 0 | 872,511 | 22% | 194,052 |
| 1995 | 2,589 | 143,408 | 0 | 50,733 | 0 | 0 | 0 | 196,730 | 22% | 42,611 |
| 1996 | 11,283 | 32,475 | 894 | 58,862 | 40,165 | 0 | 0 | 143,679 | -4% | -5,644 |
| 1997 | 6,190 | 1,056,611 | 9,923 | 205,721 | 85,900 | 0 | 0 | 1,364,345 | 4% | 51,684 |
| 1998 | 373 | 165,269 | 0 | 126,426 | 170,083 | 0 | 0 | 462,151 | 61% | 284,212 |
| 1999 | 852 | 357,124 | 0 | 459,086 | 315,114 | 0 | 0 | 1,132,176 | 20% | 231,775 |
| 2000 | 0 | 308,529 | 0 | 307,215 | 112,148 | 0 | 0 | 727,892 | 3% | 23,740 |
| 2001 | 852 | 104,157 | 405 | 129,175 | 8,636 | 0 | 0 | 243,225 | 42% | 101,608 |
| 2002 | 352 | 167,185 | 4,473 | 169,000 | 107,845 | 0 | 0 | 448,855 | 7% | 31,282 |
| 2003 | 0 | 462,374 | 2,124 | 23,422 | 102,595 | 0 | 0 | 590,515 | 52% | 305,945 |
| 2004 | 0 | 699,507 | 0 | 358,451 | 55,179 | 0 | 0 | 1,113,137 | 12% | 129,249 |
| 2005 | 57,776 | 687,089 | 36,676 | 45,455 | 35,212 | 0 | 0 | 862,208 | 0% | 109 |
| 2006 | 0 | 783,966 | 20,749 | 267,008 | 126,720 | 0 | 0 | 1,198,443 | 12% | 146,083 |
| 2007 | 2,382 | 298,345 | 0 | 147,839 | 2,897 | 0 | 0 | 451,463 | -28% | -124,726 |
| 2008 | 8458 | 1369350 | 646 | 331275 | 149255 | 0 | 0 | 1,858,984 | -1% | -9,633 |
| TOTAL | 91,629 | 7,442,873 | 75,890 | 2,731,504 | 1,324,418 | 0 | 0 | 11,666,314 | 12% | 1,402,347 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 352 | 353 | 354 | 355 | 356 | 357 | 358 | Total |
|---|---|---|---|---|---|---|---|---|
| Total Retmts | 91,629 | 7,442,873 | 75,890 | 2,731,504 | 1,324,418 | 0 | 0 | 11,666,314 |
| Gross Salvage % | 10 | 15 | 10 | 2 | 15 | 0 | 0 | 12 |
| Gross Salvage $ | 9,163 | 1,116,431 | 7,589 | 54,630 | 198,663 | 0 | 0 | 1,386,476 |

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# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# TRANSMISSION PLANT WORKPAPERS

## CALCULATION OF AGE OF SIMULATED PLANT BALANCES

Computed Age Distribution Report



Account: KEPCo 101/6 354 - KY

Version: KEPCO TRANSMISSION 2008

'spersion: 50 - R3

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 2,400,231 | 0.5 | 99.99 | 2,399,871 | 100.00 | 2,400,232 | 0.50 |
| 2005 | 16,025 | 3.5 | 99.86 | 16,003 | 100.00 | 16,026 | 3.50 |
| 2004 | 5,437 | 4.5 | 99.80 | 5,426 | 100.01 | 5,438 | 4.50 |
| 2003 | 27,462 | 5.5 | 99.74 | 27,390 | 100.00 | 27,463 | 5.50 |
| 2002 | 96,142 | 6.5 | 99.66 | 95,817 | 100.00 | 96,143 | 6.50 |
| 2001 | 994,593 | 7.5 | 99.58 | 990,366 | 100.00 | 994,594 | 7.50 |
| 2000 | 657,177 | 8.5 | 99.48 | 653,727 | 100.00 | 657,178 | 8.50 |
| 1999 | 4,771,185 | 9.5 | 99.36 | 4,740,697 | 100.00 | 4,771,186 | 9.50 |
| 1998 | 6,759,531 | 10.5 | 99.23 | 6,707,618 | 100.00 | 6,759,532 | 10.50 |
| 1997 | 860,276 | 11.5 | 99.09 | 852,413 | 100.00 | 860,277 | 11.50 |
| 1996 | 363,575 | 12.5 | 98.92 | 359,652 | 100.00 | 363,576 | 12.50 |
| 1995 | 315,635 | 13.5 | 98.74 | 311,642 | 100.00 | 315,636 | 13.50 |
| 1993 | 182,665 | 15.5 | 98.30 | 179,551 | 100.00 | 182,666 | 15.50 |
| 1992 | 41,132 | 16.5 | 98.04 | 40,325 | 100.00 | 41,133 | 16.50 |
| 1991 | 15 | 17.5 | 97.75 | 15 | 103.33 | 16 | 17.79 |
| 1990 | 427,812 | 18.5 | 97.43 | 416,830 | 100.00 | 427,813 | 18.50 |
| 1986 | 783,128 | 22.5 | 95.81 | 750,338 | 100.00 | 783,129 | 22.50 |
| 1985 | 59,889,883 | 23.5 | 95.31 | 57,079,850 | 100.00 | 59,889,884 | 23.50 |
| 1984 | 177,806 | 24.5 | 94.76 | 168,485 | 100.00 | 177,807 | 24.50 |
| 1982 | 273,723 | 26.5 | 93.51 | 255,964 | 100.00 | 273,724 | 26.50 |
| 1978 | 81,431 | 30.5 | 90.35 | 73,572 | 100.00 | 81,432 | 30.50 |
| 1977 | 28,623 | 31.5 | 89.40 | 25,589 | 100.00 | 28,624 | 31.50 |
| 1976 | 158,516 | 32.5 | 88.38 | 140,096 | 100.00 | 158,517 | 32.50 |
| 1975 | 72,763 | 33.5 | 87.29 | 63,511 | 100.00 | 72,764 | 33.50 |
| 1974 | 20,383 | 34.5 | 86.11 | 17,552 | 100.00 | 20,384 | 34.50 |
| 1973 | 112,943 | 35.5 | 84.85 | 95,834 | 100.00 | 112,944 | 35.50 |
| 1972 | 8,467,428 | 36.5 | 83.51 | 7,070,810 | 100.00 | 8,467,429 | 36.50 |
| 1971 | 26,158 | 37.5 | 82.07 | 21,467 | 100.00 | 26,159 | 37.50 |
| 1970 | 4,036,456 | 38.5 | 80.53 | 3,250,477 | 100.00 | 4,036,457 | 38.50 |
| 1968 | 768,389 | 40.5 | 77.14 | 592,728 | 99.70 | 766,108 | 40.44 |
| 1967 | 370,618 | 41.5 | 75.28 | 278,998 | 97.30 | 360,608 | 40.94 |
| 1966 | 19,067 | 42.5 | 73.30 | 13,977 | 94.75 | 18,066 | 41.38 |
| 1965 | 450,199 | 43.5 | 71.21 | 320,582 | 92.04 | 414,357 | 41.77 |
| 1964 | 97,303 | 44.5 | 69.00 | 67,134 | 89.18 | 86,772 | 42.09 |
| 1963 | 681,030 | 45.5 | 66.66 | 453,975 | 86.16 | 586,767 | 42.35 |
| 1962 | 115,749 | 46.5 | 64.21 | 74,317 | 82.99 | 96,055 | 42.54 |
| 1961 | 227 | 47.5 | 61.64 | 140 | 79.88 | 181 | 42.72 |
| 1959 | 376,337 | 49.5 | 56.17 | 211,365 | 72.60 | 273,216 | 42.72 |
| 1958 | 9,324 | 50.5 | 53.29 | 4,969 | 68.89 | 6,423 | 42.64 |
| 1956 | 8,760 | 52.5 | 47.32 | 4,145 | 61.16 | 5,358 | 42.31 |
| 1954 | 65,848 | 54.5 | 41.16 | 27,106 | 53.20 | 35,034 | 41.75 |
| 1944 | 1,370 | 64.5 | 13.92 | 191 | 18.03 | 247 | 38.07 |
| 1942 | 184,841 | 66.5 | 10.20 | 18,850 | 13.18 | 24,363 | 37.63 |
| 1940 | 2,636 | 68.5 | 7.17 | 189 | 9.28 | 245 | 37.43 |
| 1939 | 848 | 69.5 | 5.91 | 50 | 7.68 | 65 | 37.42 |



10/22/2009

Computed Age Distribution Report

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**Account:** KEPCo 101/6 354 - KY

**Version:** KEPCO TRANSMISSION 2008

'spersion: 50 - R3

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1938 | 7,093 | 70.5 | 4.80 | 340 | 6.19 | 439 | 37.43 |
| 1936 | 462 | 72.5 | 3.01 | 14 | 3.97 | 18 | 37.69 |
| 1933 | 45 | 75.5 | 1.24 | 1 | 2.69 | 1 | 38.77 |
| 1932 | 539 | 76.5 | 0.86 | 5 | 1.18 | 6 | 38.70 |
| 1930 | 2,645 | 78.5 | 0.35 | 9 | 0.45 | 12 | 39.43 |
| 1929 | 18,866 | 79.5 | 0.19 | 36 | 0.24 | 46 | 39.85 |
| 1928 | 5,349 | 80.5 | 0.09 | 5 | 0.12 | 6 | 40.30 |
| 1927 | 722 | 81.5 | 0.04 | | 0.04 | | 40.77 |
| | 95,236,401 | | | 88,880,032 | | 94,722,544 * | |

* Recorded Balance January 1, 2009: 94,722,544

Computed Age Distribution Report

Page 109 of 350

Account: KEPCo 101/6 355 - KY

Version: KEPCO TRANSMISSION 2008

Dispersion: 38 - S4

| tage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 7,821,842 | 0.5 | 100.00 | 7,821,842 | 100.00 | 7,821,843 | 0.50 |
| 2007 | 547,335 | 1.5 | 100.00 | 547,335 | 100.00 | 547,336 | 1.50 |
| 2006 | 1,905,268 | 2.5 | 100.00 | 1,905,268 | 100.00 | 1,905,269 | 2.50 |
| 2005 | 1,400,726 | 3.5 | 100.00 | 1,400,726 | 100.00 | 1,400,727 | 3.50 |
| 2004 | 1,450,693 | 4.5 | 100.00 | 1,450,693 | 100.00 | 1,450,694 | 4.50 |
| 2003 | 725,787 | 5.5 | 100.00 | 725,787 | 100.00 | 725,788 | 5.50 |
| 2002 | 1,374,086 | 6.5 | 100.00 | 1,374,086 | 100.00 | 1,374,087 | 6.50 |
| 2001 | 3,034,077 | 7.5 | 100.00 | 3,034,077 | 100.00 | 3,034,078 | 7.50 |
| 2000 | 2,016,920 | 8.5 | 100.00 | 2,016,920 | 100.00 | 2,016,921 | 8.50 |
| 1999 | 7,276,249 | 9.5 | 100.00 | 7,276,249 | 100.00 | 7,276,250 | 9.50 |
| 1998 | 246,197 | 10.5 | 100.00 | 246,197 | 100.00 | 246,198 | 10.50 |
| 1997 | 2,200,205 | 11.5 | 100.00 | 2,200,205 | 100.00 | 2,200,206 | 11.50 |
| 1996 | 966,626 | 12.5 | 100.00 | 966,626 | 100.00 | 966,627 | 12.50 |
| 1995 | 502,094 | 13.5 | 100.00 | 502,089 | 100.00 | 502,095 | 13.50 |
| 1994 | 2,853,694 | 14.5 | 100.00 | 2,853,604 | 100.00 | 2,853,695 | 14.50 |
| 1993 | 2,024,333 | 15.5 | 99.99 | 2,024,180 | 100.00 | 2,024,334 | 15.50 |
| 1992 | 1,980,376 | 16.5 | 99.98 | 1,980,029 | 100.00 | 1,980,377 | 16.50 |
| 1991 | 1,225,759 | 17.5 | 99.96 | 1,225,285 | 100.00 | 1,225,760 | 17.50 |
| 1990 | 379,655 | 18.5 | 99.92 | 379,352 | 100.00 | 379,656 | 18.50 |
| 989 | 526,772 | 19.5 | 99.85 | 525,968 | 100.00 | 526,773 | 19.50 |
| 88 | 501,637 | 20.5 | 99.72 | 500,257 | 100.00 | 501,638 | 20.50 |
| 1987 | 208,776 | 21.5 | 99.52 | 207,780 | 100.00 | 208,777 | 21.50 |
| 1986 | 743,795 | 22.5 | 99.21 | 737,944 | 100.00 | 743,796 | 22.50 |
| 1985 | 286,320 | 23.5 | 98.75 | 282,748 | 99.69 | 285,437 | 23.46 |
| 1984 | 129,011 | 24.5 | 98.09 | 126,546 | 99.02 | 127,749 | 24.38 |
| 1983 | 472,313 | 25.5 | 97.18 | 458,978 | 98.10 | 463,342 | 25.26 |
| 1982 | 1,190,639 | 26.5 | 95.95 | 1,142,372 | 96.86 | 1,153,232 | 26.08 |
| 1981 | 831,647 | 27.5 | 94.35 | 784,623 | 95.24 | 792,082 | 26.85 |
| 1980 | 971,066 | 28.5 | 92.33 | 896,576 | 93.21 | 905,099 | 27.53 |
| 1979 | 163,523 | 29.5 | 89.82 | 146,883 | 90.68 | 148,280 | 28.13 |
| 1978 | 400,964 | 30.5 | 86.82 | 348,129 | 87.65 | 351,438 | 28.62 |
| 1977 | 372,517 | 31.5 | 83.30 | 310,308 | 84.09 | 313,258 | 28.99 |
| 1976 | 465,134 | 32.5 | 79.25 | 368,619 | 80.00 | 372,123 | 29.25 |
| 1975 | 413,881 | 33.5 | 74.72 | 309,237 | 75.43 | 312,177 | 29.38 |
| 1974 | 343,018 | 34.5 | 69.73 | 239,201 | 70.40 | 241,475 | 29.39 |
| 1973 | 125,643 | 35.5 | 64.38 | 80,887 | 64.99 | 81,656 | 29.29 |
| 1972 | 154,289 | 36.5 | 58.75 | 90,640 | 59.31 | 91,501 | 29.07 |
| 1971 | 241,075 | 37.5 | 52.93 | 127,612 | 53.44 | 128,825 | 28.77 |
| 1970 | 5,279 | 38.5 | 47.07 | 2,485 | 47.52 | 2,509 | 28.40 |
| 1969 | 331,594 | 39.5 | 41.25 | 136,794 | 41.65 | 138,094 | 27.98 |
| 1968 | 245,350 | 40.5 | 35.62 | 87,397 | 35.96 | 88,228 | 27.53 |
| 67 | 434,577 | 41.5 | 30.27 | 131,528 | 30.55 | 132,778 | 27.09 |
| 1966 | 672,143 | 42.5 | 25.28 | 169,942 | 25.52 | 171,556 | 26.67 |
| 1965 | 586,942 | 43.5 | 20.75 | 121,790 | 20.95 | 122,947 | 26.31 |
| 1964 | 116,699 | 44.5 | 16.70 | 19,488 | 16.86 | 19,674 | 26.00 |

Computed Age Distribution Report

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Account: KEPCo 101/6 355 - KY

Version: KEPCO TRANSMISSION 2008

Dispersion: 38 - S4

| ıage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 40,074 | 45.5 | 13.18 | 5,281 | 13.30 | 5,331 | 25.78 |
| 1962 | 83,740 | 46.5 | 10.18 | 8,521 | 10.27 | 8,602 | 25.64 |
| 1961 | 53,310 | 47.5 | 7.67 | 4,089 | 7.74 | 4,128 | 25.59 |
| 1960 | 80,558 | 48.5 | 5.65 | 4,555 | 5.71 | 4,598 | 25.63 |
| 1959 | 72,588 | 49.5 | 4.05 | 2,942 | 4.09 | 2,970 | 25.76 |
| 1958 | 31,500 | 50.5 | 2.82 | 889 | 2.85 | 898 | 25.97 |
| 1957 | 12,111 | 51.5 | 1.91 | 231 | 1.93 | 234 | 26.25 |
| 1956 | 52,890 | 52.5 | 1.25 | 660 | 1.26 | 666 | 26.58 |
| 1955 | 11,248 | 53.5 | 0.79 | 88 | 0.80 | 90 | 26.96 |
| 1954 | 159,581 | 54.5 | 0.48 | 761 | 0.48 | 767 | 27.38 |
| 1953 | 59,562 | 55.5 | 0.28 | 164 | 0.28 | 165 | 27.83 |
| 1952 | 9,028 | 56.5 | 0.15 | 14 | 0.16 | 14 | 28.29 |
| 1951 | 4,317 | 57.5 | 0.08 | 3 | 0.08 | 4 | 28.77 |
| 1950 | 2,849 | 58.5 | 0.04 | 1 | 0.05 | 1 | 29.26 |
| 1949 | 16,466 | 59.5 | 0.02 | 3 | 0.01 | 2 | 29.75 |
| 1948 | 2,881 | 60.5 | 0.01 | | 0.01 | | 30.25 |
| 1947 | 802 | 61.5 | 0.00 | | 0.02 | | 30.76 |
| 1946 | 1,398 | 62.5 | 0.00 | | -0.02 | () | 31.25 |
| 1945 | 11,785 | 63.5 | 0.00 | | -0.00 | (1) | 31.75 |
| 1944 | 76,227 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| ;42 | 164,194 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 2,006 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 113,662 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| | 51,929,303 | | | 48,313,486 | | 48,384,844 * | |

* Recorded Balance January 1, 2009: 48,384,844



10/22/2009

Computed Age Distribution Report

Page 111 of 350

Account: KEPCo 101/6 356 - KY

Version: KEPCO TRANSMISSION 2008

Dispersion: 50 - R3

| tage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 7,615,244 | 0.5 | 99.99 | 7,614,102 | 100.00 | 7,615,245 | 0.50 |
| 2007 | 388,254 | 1.5 | 99.95 | 388,056 | 100.00 | 388,255 | 1.50 |
| 2006 | 278,652 | 2.5 | 99.91 | 278,396 | 100.00 | 278,653 | 2.50 |
| 2005 | 743,702 | 3.5 | 99.86 | 742,661 | 100.00 | 743,703 | 3.50 |
| 2004 | 244,994 | 4.5 | 99.80 | 244,511 | 100.00 | 244,995 | 4.50 |
| 2003 | 653,964 | 5.5 | 99.74 | 652,251 | 100.00 | 653,965 | 5.50 |
| 2002 | 203,909 | 6.5 | 99.66 | 203,220 | 100.00 | 203,910 | 6.50 |
| 2001 | 1,212,537 | 7.5 | 99.58 | 1,207,384 | 100.00 | 1,212,538 | 7.50 |
| 2000 | 1,907,562 | 8.5 | 99.48 | 1,897,547 | 100.00 | 1,907,563 | 8.50 |
| 1999 | 11,988,969 | 9.5 | 99.36 | 11,912,359 | 100.00 | 11,988,970 | 9.50 |
| 1998 | 4,941,737 | 10.5 | 99.23 | 4,903,784 | 100.00 | 4,941,738 | 10.50 |
| 1997 | 712,207 | 11.5 | 99.09 | 705,697 | 100.00 | 712,208 | 11.50 |
| 1996 | 1,377,964 | 12.5 | 98.92 | 1,363,096 | 100.00 | 1,377,965 | 12.50 |
| 1995 | 1,023,703 | 13.5 | 98.74 | 1,010,753 | 100.00 | 1,023,704 | 13.50 |
| 1994 | 3,258,061 | 14.5 | 98.53 | 3,210,070 | 100.00 | 3,258,062 | 14.50 |
| 1993 | 1,695,512 | 15.5 | 98.30 | 1,666,604 | 100.00 | 1,695,513 | 15.50 |
| 1992 | 2,241,118 | 16.5 | 98.04 | 2,197,125 | 100.00 | 2,241,119 | 16.50 |
| 1991 | 704,245 | 17.5 | 97.75 | 688,399 | 100.00 | 704,246 | 17.50 |
| 1990 | 430,845 | 18.5 | 97.43 | 419,785 | 100.00 | 430,846 | 18.50 |
| 1989 | 273,872 | 19.5 | 97.08 | 265,883 | 100.00 | 273,873 | 19.50 |
| 1988 | 187,297 | 20.5 | 96.70 | 181,112 | 100.00 | 187,298 | 20.50 |
| 1987 | 131,020 | 21.5 | 96.28 | 126,141 | 100.00 | 131,021 | 21.50 |
| 1986 | 838,491 | 22.5 | 95.81 | 803,383 | 100.00 | 838,492 | 22.50 |
| 1985 | 46,009,402 | 23.5 | 95.31 | 43,850,641 | 100.00 | 46,009,403 | 23.50 |
| 1984 | 171,899 | 24.5 | 94.76 | 162,888 | 100.00 | 171,900 | 24.50 |
| 1983 | 42,428 | 25.5 | 94.16 | 39,950 | 100.00 | 42,429 | 25.50 |
| 1982 | 1,827,109 | 26.5 | 93.51 | 1,708,566 | 100.00 | 1,827,110 | 26.50 |
| 1981 | 694,030 | 27.5 | 92.81 | 644,129 | 100.00 | 694,031 | 27.50 |
| 1980 | 452,257 | 28.5 | 92.05 | 416,307 | 100.00 | 452,258 | 28.50 |
| 1979 | 91,746 | 29.5 | 91.23 | 83,702 | 100.00 | 91,747 | 29.50 |
| 1978 | 2,009,798 | 30.5 | 90.35 | 1,815,832 | 100.00 | 2,009,799 | 30.50 |
| 1977 | 512,195 | 31.5 | 89.40 | 457,902 | 100.00 | 512,196 | 31.50 |
| 1976 | 229,904 | 32.5 | 88.38 | 203,189 | 100.00 | 229,905 | 32.50 |
| 1975 | 299,105 | 33.5 | 87.29 | 261,074 | 100.00 | 299,106 | 33.50 |
| 1974 | 44,958 | 34.5 | 86.11 | 38,713 | 100.00 | 44,959 | 34.50 |
| 1973 | 72,762 | 35.5 | 84.85 | 61,740 | 100.00 | 72,763 | 35.50 |
| 1972 | 158,182 | 36.5 | 83.51 | 132,091 | 99.80 | 157,862 | 36.46 |
| 1971 | 1,144,131 | 37.5 | 82.07 | 938,943 | 98.08 | 1,122,122 | 37.14 |
| 1970 | 8,258,592 | 38.5 | 80.53 | 6,650,479 | 96.24 | 7,947,927 | 37.78 |
| 1969 | 306,367 | 39.5 | 78.89 | 241,684 | 94.28 | 288,835 | 38.37 |
| 1968 | 1,214,668 | 40.5 | 77.14 | 936,983 | 92.19 | 1,119,780 | 38.92 |
| 1967 | 622,934 | 41.5 | 75.28 | 468,938 | 89.97 | 560,424 | 39.42 |
| 1966 | 235,126 | 42.5 | 73.30 | 172,354 | 87.60 | 205,980 | 39.87 |
| 1965 | 750,174 | 43.5 | 71.21 | 534,191 | 85.10 | 638,407 | 40.26 |
| 1964 | 332,032 | 44.5 | 69.00 | 229,085 | 82.46 | 273,778 | 40.60 |



10/22/2009

Computed Age Distribution Report



Account: KEPCo 101/6 356 - KY
Version: KEPCO TRANSMISSION 2008
Dispersion: 50 - R3

| ıage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 516,316 | 45.5 | 66.66 | 344,176 | 79.66 | 411,322 | 40.87 |
| 1962 | 116,770 | 46.5 | 64.21 | 74,972 | 76.73 | 89,599 | 41.09 |
| 1961 | 35,760 | 47.5 | 61.64 | 22,041 | 73.66 | 26,341 | 41.24 |
| 1960 | 34,229 | 48.5 | 58.95 | 20,179 | 70.46 | 24,116 | 41.34 |
| 1959 | 203,931 | 49.5 | 56.17 | 114,546 | 67.13 | 136,893 | 41.36 |
| 1958 | 363,538 | 50.5 | 53.29 | 193,737 | 63.69 | 231,532 | 41.33 |
| 1957 | 9,636 | 51.5 | 50.34 | 4,850 | 60.16 | 5,797 | 41.24 |
| 1956 | 41,375 | 52.5 | 47.32 | 19,577 | 56.55 | 23,397 | 41.09 |
| 1955 | 4,298 | 53.5 | 44.25 | 1,902 | 52.90 | 2,274 | 40.90 |
| 1954 | 318,755 | 54.5 | 41.16 | 131,212 | 49.19 | 156,809 | 40.66 |
| 1953 | 63,843 | 55.5 | 38.07 | 24,308 | 45.50 | 29,050 | 40.38 |
| 1952 | 15,004 | 56.5 | 35.01 | 5,252 | 41.84 | 6,277 | 40.07 |
| 1951 | 13,420 | 57.5 | 31.98 | 4,292 | 38.22 | 5,130 | 39.74 |
| 1950 | 4,533 | 58.5 | 29.03 | 1,316 | 34.70 | 1,573 | 39.40 |
| 1949 | 63,340 | 59.5 | 26.17 | 16,576 | 31.28 | 19,810 | 39.05 |
| 1948 | 14,823 | 60.5 | 23.42 | 3,472 | 28.00 | 4,150 | 38.72 |
| 1947 | 11,563 | 61.5 | 20.81 | 2,407 | 24.88 | 2,876 | 38.40 |
| 1946 | 5,928 | 62.5 | 18.35 | 1,088 | 21.94 | 1,301 | 38.11 |
| 1945 | 27,492 | 63.5 | 16.05 | 4,413 | 19.18 | 5,274 | 37.84 |
| 1944 | 5,349 | 64.5 | 13.92 | 745 | 16.65 | 891 | 37.62 |
| ,43 | 5,002 | 65.5 | 11.97 | 599 | 14.32 | 716 | 37.44 |
| 1942 | 378,305 | 66.5 | 10.20 | 38,580 | 12.19 | 46,103 | 37.30 |
| 1941 | 6,577 | 67.5 | 8.60 | 566 | 10.28 | 676 | 37.22 |
| 1940 | 101,822 | 68.5 | 7.17 | 7,302 | 8.57 | 8,726 | 37.19 |
| 1939 | 476 | 69.5 | 5.91 | 28 | 7.16 | 34 | 37.24 |
| 1938 | 129,975 | 70.5 | 4.80 | 6,238 | 5.73 | 7,453 | 37.27 |
| 1937 | 8,842 | 71.5 | 3.84 | 339 | 4.59 | 406 | 37.39 |
| 1936 | 9,973 | 72.5 | 3.01 | 300 | 3.59 | 358 | 37.56 |
| 1935 | 1,327 | 73.5 | 2.31 | 31 | 2.78 | 37 | 37.77 |
| 1934 | 2,159 | 74.5 | 1.72 | 37 | 2.07 | 45 | 38.02 |
| 1933 | 1,642 | 75.5 | 1.24 | 20 | 1.50 | 25 | 38.32 |
| 1932 | 2,108 | 76.5 | 0.86 | 18 | 1.03 | 22 | 38.65 |
| 1931 | 2,112 | 77.5 | 0.56 | 12 | 0.68 | 14 | 39.01 |
| 1930 | 4,553 | 78.5 | 0.35 | 16 | 0.41 | 19 | 39.41 |
| 1929 | 15,583 | 79.5 | 0.19 | 30 | 0.22 | 35 | 39.84 |
| 1928 | 3,395 | 80.5 | 0.09 | 3 | 0.11 | 4 | 40.30 |
| 1927 | 4,792 | 81.5 | 0.04 | 2 | 0.04 | 2 | 40.77 |
| 1926 | 8,394 | 82.5 | 0.01 | 1 | 0.01 | 1 | 41.25 |
| 1925 | 1,862 | 83.5 | 0.00 | | 0.00 | | 41.75 |
| 1924 | 369 | 84.5 | 0.00 | | -0.14 | (1) | 42.19 |
| 1923 | 1,121 | 85.5 | 0.00 | | 0.00 | | 0.00 |
| 22 | 1,393 | 86.5 | 0.00 | | 0.00 | | 0.00 |
| | 111,095,343 | | | 103,776,885 | | 109,075,670 * | |

* Recorded Balance January 1, 2009: 109,075,670

Computed Age Distribution Report

Page 113 of 350

Account: KEPCo 101/6 357 - KY

Version: KEPCO TRANSMISSION 2008

Dispersion: 37 - R2

| .tage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1997 | 11,590 | 11.5 | 95.07 | 11,019 | 100.00 | 11,591 | 11.50 |
| | 11,590 | | | 11,019 | | 11,591 * | |

* Recorded Balance January 1, 2009: 11,591

Computed Age Distribution Report



Account: KEPCo 101/6 358 - KY

Version: KEPCO TRANSMISSION 2008

Dispersion: 44 - R1

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1983 | 106,066 | 25.5 | 78.95 | 83,738 | 100.00 | 106,067 | 25.50 |
| | 106,066 | | | 83,738 | | 106,067 * | |

* Recorded Balance January 1, 2009: 106,067

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# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# TRANSMISSION PLANT WORKPAPERS

## CALCULATED RESERVE

Page 116 of 350

Depreciation Reserve Summary

**Account:** KEPCo 101/6 350 Land Rights
**Scenario:** KEPCO TRANSMISSION 2008 NEW
**Dispersion:** 75 - R4

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | Plant Amt | Depreciation Reserve Amount | Depreciation Reserve Ratio | Net Plant Amount | Net Plant Ratio |
|---|---|---|---|---|---|
| Recorded | $23,482,119.13 | $4,193,440.40 | 0.1786 | $19,288,678.73 | 0.8214 |
| Computed | $23,482,119.13 | $6,833,405.81 | 0.2910 | $16,648,713.32 | 0.7090 |
| Difference | | ($2,639,965.41) | -0.1124 | $2,639,965.41 | 0.1124 |

Generation Arrangement Report

Page 117 of 350

Account: KEPCo 101/6 350 Land Rights
Dispersion: 75.00 - R4

erage Net Salvage Rate: 0.00%
uture Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $7,611.97 | 75.00 | 74.50 | 0.9933 | 1.0000 | $7,561.27 | $101.49 |
| 2007 | 1.50 | $2,274.15 | 75.00 | 73.50 | 0.9800 | 1.0000 | $2,228.71 | $30.32 |
| 2006 | 2.50 | $103,998.38 | 75.00 | 72.50 | 0.9667 | 1.0000 | $100,535.18 | $1,386.65 |
| 2005 | 3.50 | $92,305.72 | 75.00 | 71.50 | 0.9534 | 1.0000 | $88,003.21 | $1,230.74 |
| 2004 | 4.50 | $33,991.00 | 75.00 | 70.51 | 0.9401 | 1.0000 | $31,953.84 | $453.21 |
| 2003 | 5.50 | ($9,734.24) | 75.00 | 69.51 | 0.9268 | 1.0000 | ($9,021.33) | ($129.79) |
| 2002 | 6.50 | ($200,238.00) | 75.00 | 68.51 | 0.9135 | 1.0000 | ($182,908.75) | ($2,669.84) |
| 2001 | 7.50 | $480,775.90 | 75.00 | 67.51 | 0.9002 | 1.0000 | $432,775.09 | $6,410.35 |
| 2000 | 8.50 | $321,568.93 | 75.00 | 66.51 | 0.8869 | 1.0000 | $285,188.26 | $4,287.59 |
| 1999 | 9.50 | $966,674.32 | 75.00 | 65.52 | 0.8736 | 1.0000 | $844,471.77 | $12,888.99 |
| 1998 | 10.50 | $1,280,236.00 | 75.00 | 64.52 | 0.8603 | 1.0000 | $1,101,398.63 | $17,069.81 |
| 1997 | 11.50 | $580,453.00 | 75.00 | 63.53 | 0.8470 | 1.0000 | $491,664.30 | $7,739.37 |
| 1996 | 12.50 | $126,373.00 | 75.00 | 62.53 | 0.8338 | 1.0000 | $105,366.30 | $1,684.97 |
| 1995 | 13.50 | $339,788.00 | 75.00 | 61.54 | 0.8205 | 1.0000 | $278,805.29 | $4,530.51 |
| 1994 | 14.50 | $321,828.00 | 75.00 | 60.55 | 0.8073 | 1.0000 | $259,809.91 | $4,291.04 |
| 1993 | 15.50 | $316,776.00 | 75.00 | 59.56 | 0.7941 | 1.0000 | $251,545.01 | $4,223.68 |
| 1992 | 16.50 | $75,805.00 | 75.00 | 58.57 | 0.7809 | 1.0000 | $59,193.95 | $1,010.73 |
| 1991 | 17.50 | $325,286.00 | 75.00 | 57.58 | 0.7677 | 1.0000 | $249,718.09 | $4,337.15 |
| 1990 | 18.50 | $104,145.00 | 75.00 | 56.59 | 0.7545 | 1.0000 | $78,578.91 | $1,388.60 |
| 1989 | 19.50 | $15,874.00 | 75.00 | 55.60 | 0.7414 | 1.0000 | $11,768.68 | $211.65 |
| 1988 | 20.50 | $3,265.00 | 75.00 | 54.62 | 0.7283 | 1.0000 | $2,377.77 | $43.53 |
| 1987 | 21.50 | $1,327.00 | 75.00 | 53.64 | 0.7152 | 1.0000 | $949.02 | $17.69 |
| 1986 | 22.50 | $82,584.00 | 75.00 | 52.66 | 0.7021 | 1.0000 | $57,983.06 | $1,101.12 |
| 1985 | 23.50 | $12,474,189.00 | 75.00 | 51.68 | 0.6891 | 1.0000 | $8,595,731.04 | $166,322.52 |
| 1984 | 24.50 | $294,262.00 | 75.00 | 50.71 | 0.6761 | 1.0000 | $198,943.70 | $3,923.49 |
| 1983 | 25.50 | $502,031.00 | 75.00 | 49.73 | 0.6631 | 1.0000 | $332,911.24 | $6,693.75 |
| 1982 | 26.50 | $148,856.00 | 75.00 | 48.77 | 0.6502 | 1.0000 | $96,789.13 | $1,984.75 |
| 1981 | 27.50 | $154,641.00 | 75.00 | 47.80 | 0.6373 | 1.0000 | $98,558.83 | $2,061.88 |
| 1980 | 28.50 | $259,692.00 | 75.00 | 46.84 | 0.6245 | 1.0000 | $162,185.69 | $3,462.56 |
| 1979 | 29.50 | $4,236,751.00 | 75.00 | 45.88 | 0.6118 | 1.0000 | $2,591,909.23 | $56,490.01 |
| 1975 | 33.50 | $38,729.00 | 75.00 | 42.10 | 0.5613 | 1.0000 | $21,738.31 | $516.39 |
| | | $23,482,119.13 | 75.00 | 53.17 | 0.7090 | 1.0000 | $16,648,713.32 | $313,094.92 |



10/26/2009

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Depreciation Reserve Summary

Account: KEPCo 101/6 352 - KY
Scenario: KEPCO TRANSMISSION 2008 NEW
Dispersion: 73 - L2

,rage Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $6,369,901.06 | $1,008,870.00 | 0.1584 | $4,724,040.95 | 0.7416 |
| Computed | $6,369,901.06 | $1,644,000.50 | 0.2581 | $4,088,910.45 | 0.6419 |
| Difference | | ($635,130.50) | -0.0997 | $635,130.50 | 0.0997 |

Generation Arrangement Report

Page 119 of 350

Account: KEPCo 101/6 352 - KY
Dispersion: 73.00 - L2

Average Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $141,133.32 | 73.00 | 72.50 | 0.8938 | 1.0000 | $126,149.59 | $1,740.00 |
| 2007 | 1.50 | $7,094.25 | 73.00 | 71.50 | 0.8815 | 1.0000 | $6,253.70 | $87.46 |
| 2005 | 3.50 | $66,214.95 | 73.00 | 69.51 | 0.8570 | 1.0000 | $56,742.99 | $816.35 |
| 2002 | 6.50 | $806,045.35 | 73.00 | 66.55 | 0.8205 | 1.0000 | $661,376.97 | $9,937.55 |
| 2001 | 7.50 | $701.17 | 73.00 | 65.58 | 0.8085 | 1.0000 | $566.92 | $8.64 |
| 2000 | 8.50 | $84,281.38 | 73.00 | 64.61 | 0.7966 | 1.0000 | $67,138.29 | $1,039.09 |
| 1999 | 9.50 | $16,180.15 | 73.00 | 63.66 | 0.7848 | 1.0000 | $12,698.02 | $199.48 |
| 1998 | 10.50 | $58,660.00 | 73.00 | 62.70 | 0.7731 | 1.0000 | $45,348.49 | $723.21 |
| 1997 | 11.50 | $203,592.01 | 73.00 | 61.76 | 0.7614 | 1.0000 | $155,021.64 | $2,510.04 |
| 1996 | 12.50 | $122,344.15 | 73.00 | 60.83 | 0.7499 | 1.0000 | $91,749.93 | $1,508.35 |
| 1995 | 13.50 | $115,575.00 | 73.00 | 59.90 | 0.7385 | 1.0000 | $85,355.56 | $1,424.90 |
| 1994 | 14.50 | $49,187.00 | 73.00 | 58.99 | 0.7272 | 1.0000 | $35,770.12 | $606.42 |
| 1993 | 15.50 | $371,115.00 | 73.00 | 58.08 | 0.7161 | 1.0000 | $265,737.61 | $4,575.39 |
| 1992 | 16.50 | $113,918.00 | 73.00 | 57.18 | 0.7050 | 1.0000 | $80,307.64 | $1,404.47 |
| 1991 | 17.50 | $45,070.00 | 73.00 | 56.29 | 0.6940 | 1.0000 | $31,279.31 | $555.66 |
| 1990 | 18.50 | $65,795.00 | 73.00 | 55.41 | 0.6832 | 1.0000 | $44,950.13 | $811.17 |
| 1989 | 19.50 | $1,510.00 | 73.00 | 54.54 | 0.6724 | 1.0000 | $1,015.37 | $18.62 |
| 1988 | 20.50 | $5,196.00 | 73.00 | 53.68 | 0.6618 | 1.0000 | $3,438.87 | $64.06 |
| 1987 | 21.50 | $14,460.00 | 73.00 | 52.83 | 0.6513 | 1.0000 | $9,418.20 | $178.27 |
| 1986 | 22.50 | $156,377.00 | 73.00 | 51.99 | 0.6409 | 1.0000 | $100,224.41 | $1,927.94 |
| 1985 | 23.50 | $101,850.00 | 73.00 | 51.15 | 0.6306 | 1.0000 | $64,230.05 | $1,255.68 |
| 1984 | 24.50 | $115,579.00 | 73.00 | 50.32 | 0.6204 | 1.0000 | $71,708.29 | $1,424.95 |
| 1983 | 25.50 | $52,326.00 | 73.00 | 49.51 | 0.6104 | 1.0000 | $31,939.06 | $645.12 |
| 1982 | 26.50 | $194,550.00 | 73.00 | 48.71 | 0.6005 | 1.0000 | $116,824.01 | $2,398.56 |
| 1981 | 27.50 | $1,642,115.00 | 73.00 | 47.91 | 0.5907 | 1.0000 | $969,982.75 | $20,245.25 |
| 1980 | 28.50 | $102,817.00 | 73.00 | 47.14 | 0.5811 | 1.0000 | $59,750.53 | $1,267.61 |
| 1979 | 29.50 | $3,140.00 | 73.00 | 46.38 | 0.5718 | 1.0000 | $1,795.33 | $38.71 |
| 1978 | 30.50 | $125.00 | 73.00 | 45.63 | 0.5625 | 1.0000 | $70.32 | $1.54 |
| 1977 | 31.50 | $158,624.39 | 73.00 | 44.90 | 0.5536 | 1.0000 | $87,816.70 | $1,955.64 |
| 1976 | 32.50 | $87,539.00 | 73.00 | 44.19 | 0.5448 | 1.0000 | $47,693.67 | $1,079.25 |
| 1975 | 33.50 | $11,010.17 | 73.00 | 43.51 | 0.5364 | 1.0000 | $5,905.65 | $135.74 |
| 1974 | 34.50 | $1,154,345.00 | 73.00 | 42.84 | 0.5282 | 1.0000 | $609,685.70 | $14,231.65 |
| 1973 | 35.50 | $46,882.77 | 73.00 | 42.19 | 0.5201 | 1.0000 | $24,384.77 | $578.01 |

Generation Arrangement Report



Account: KEPCo 101/6 352 - KY
Dispersion: 73.00 - L2

rage Net Salvage Rate: 10.00%
..ure Net Salvage Rate: 10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1971 | 37.50 | $11,105.00 | 73.00 | 40.96 | 0.5050 | 1.0000 | $5,607.58 | $136.91 |
| 1970 | 38.50 | $50,620.00 | 73.00 | 40.37 | 0.4977 | 1.0000 | $25,192.98 | $624.08 |
| 1969 | 39.50 | $1,252.00 | 73.00 | 39.80 | 0.4907 | 1.0000 | $614.40 | $15.44 |
| 1968 | 40.50 | $32,049.00 | 73.00 | 39.26 | 0.4840 | 1.0000 | $15,511.89 | $395.12 |
| 1967 | 41.50 | $21,588.91 | 73.00 | 38.73 | 0.4775 | 1.0000 | $10,308.25 | $266.16 |
| 1966 | 42.50 | $29,924.00 | 73.00 | 38.22 | 0.4712 | 1.0000 | $14,101.16 | $368.93 |
| 1965 | 43.50 | $297.00 | 73.00 | 37.73 | 0.4652 | 1.0000 | $138.15 | $3.66 |
| 1964 | 44.50 | $8,446.00 | 73.00 | 37.26 | 0.4594 | 1.0000 | $3,879.79 | $104.13 |
| 1963 | 45.50 | $16,589.00 | 73.00 | 36.81 | 0.4538 | 1.0000 | $7,527.58 | $204.52 |
| 1962 | 46.50 | $6,972.00 | 73.00 | 36.37 | 0.4483 | 1.0000 | $3,125.82 | $85.96 |
| 1961 | 47.50 | $121.00 | 73.00 | 35.94 | 0.4432 | 1.0000 | $53.62 | $1.49 |
| 1960 | 48.50 | $2,917.00 | 73.00 | 35.54 | 0.4381 | 1.0000 | $1,278.04 | $35.96 |
| 1959 | 49.50 | $1,799.00 | 73.00 | 35.14 | 0.4333 | 1.0000 | $779.47 | $22.18 |
| 1958 | 50.50 | $4,414.00 | 73.00 | 34.77 | 0.4286 | 1.0000 | $1,891.88 | $54.42 |
| 1957 | 51.50 | $579.00 | 73.00 | 34.40 | 0.4241 | 1.0000 | $245.54 | $7.14 |
| 1956 | 52.50 | $381.00 | 73.00 | 34.04 | 0.4197 | 1.0000 | $159.92 | $4.70 |
| 1955 | 53.50 | $516.00 | 73.00 | 33.70 | 0.4155 | 1.0000 | $214.40 | $6.36 |
| 1954 | 54.50 | $38,794.00 | 73.00 | 33.37 | 0.4114 | 1.0000 | $15,960.63 | $478.28 |
| 1953 | 55.50 | $711.00 | 73.00 | 33.05 | 0.4075 | 1.0000 | $289.70 | $8.77 |
| 1952 | 56.50 | $92.00 | 73.00 | 32.74 | 0.4036 | 1.0000 | $37.13 | $1.13 |
| 1951 | 57.50 | $8,401.00 | 73.00 | 32.43 | 0.3999 | 1.0000 | $3,359.34 | $103.57 |
| 1946 | 62.50 | $152.00 | 73.00 | 31.03 | 0.3825 | 1.0000 | $58.15 | $1.87 |
| 1944 | 64.50 | $2,137.00 | 73.00 | 30.50 | 0.3761 | 1.0000 | $803.63 | $26.35 |
| 1943 | 65.50 | $5,740.09 | 73.00 | 30.25 | 0.3729 | 1.0000 | $2,140.60 | $70.77 |
| 1942 | 66.50 | $7,335.00 | 73.00 | 29.99 | 0.3698 | 1.0000 | $2,712.49 | $90.43 |
| 1940 | 68.50 | $1,616.00 | 73.00 | 29.50 | 0.3637 | 1.0000 | $587.72 | $19.92 |
| | | $6,369,901.06 | 73.00 | 52.07 | 0.6419 | 1.0000 | $4,088,910.45 | $78,533.03 |

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Depreciation Reserve Summary

Account: KEPCo 101/6 353 - KY
Scenario: KEPCO TRANSMISSION 2008 NEW
Dispersion: 42 - R2
/age Net Salvage Rate: -5.00%
Future Net Salvage Rate: -5.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $146,458,490.21 | $25,983,249.06 | 0.1774 | $127,798,165.66 | 0.8726 |
| Computed | $146,458,490.21 | $42,340,910.64 | 0.2891 | $111,440,504.08 | 0.7609 |
| Difference | | ($16,357,661.58) | -0.1117 | $16,357,661.58 | 0.1117 |

Generation Arrangement Report

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Account: KEPCo 101/6 353 - KY
Dispersion: 42.00 - R2

erage Net Salvage Rate: -5.00%
uture Net Salvage Rate: -5.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $12,624,818.01 | 42.00 | 41.55 | 1.0387 | 1.0000 | $13,113,243.81 | $315,620.45 |
| 2007 | 1.50 | $1,708,499.05 | 42.00 | 40.65 | 1.0161 | 1.0000 | $1,736,082.91 | $42,712.48 |
| 2006 | 2.50 | $10,134,361.85 | 42.00 | 39.75 | 0.9938 | 1.0000 | $10,071,455.97 | $253,359.05 |
| 2005 | 3.50 | $2,121,353.20 | 42.00 | 38.86 | 0.9716 | 1.0000 | $2,061,072.13 | $53,033.83 |
| 2004 | 4.50 | $2,898,108.13 | 42.00 | 37.98 | 0.9495 | 1.0000 | $2,751,820.68 | $72,452.70 |
| 2003 | 5.50 | $3,593,864.20 | 42.00 | 37.11 | 0.9277 | 1.0000 | $3,333,850.25 | $89,846.61 |
| 2002 | 6.50 | $3,657,236.98 | 42.00 | 36.24 | 0.9059 | 1.0000 | $3,313,266.14 | $91,430.92 |
| 2001 | 7.50 | $3,023,907.36 | 42.00 | 35.38 | 0.8844 | 1.0000 | $2,674,367.88 | $75,597.68 |
| 2000 | 8.50 | $2,475,078.16 | 42.00 | 34.52 | 0.8631 | 1.0000 | $2,136,165.10 | $61,876.95 |
| 1999 | 9.50 | $1,485,510.96 | 42.00 | 33.68 | 0.8419 | 1.0000 | $1,250,648.56 | $37,137.77 |
| 1998 | 10.50 | $11,131,808.18 | 42.00 | 32.84 | 0.8209 | 1.0000 | $9,138,580.73 | $278,295.20 |
| 1997 | 11.50 | $36,704,773.77 | 42.00 | 32.01 | 0.8002 | 1.0000 | $29,370,648.11 | $917,619.34 |
| 1996 | 12.50 | $2,459,852.44 | 42.00 | 31.18 | 0.7796 | 1.0000 | $1,917,729.27 | $61,496.31 |
| 1995 | 13.50 | $843,447.04 | 42.00 | 30.37 | 0.7593 | 1.0000 | $640,402.43 | $21,086.18 |
| 1994 | 14.50 | $2,295,811.37 | 42.00 | 29.56 | 0.7391 | 1.0000 | $1,696,827.34 | $57,395.28 |
| 1993 | 15.50 | $5,624,959.11 | 42.00 | 28.77 | 0.7192 | 1.0000 | $4,045,453.03 | $140,623.98 |
| 1992 | 16.50 | $2,112,501.16 | 42.00 | 27.98 | 0.6995 | 1.0000 | $1,477,703.46 | $52,812.53 |
| 1991 | 17.50 | $3,780,305.33 | 42.00 | 27.20 | 0.6800 | 1.0000 | $2,570,663.40 | $94,507.63 |
| 1990 | 18.50 | $2,980,615.61 | 42.00 | 26.43 | 0.6608 | 1.0000 | $1,969,555.23 | $74,515.39 |
| 1989 | 19.50 | $1,181,931.52 | 42.00 | 25.67 | 0.6418 | 1.0000 | $758,563.92 | $29,548.29 |
| 1988 | 20.50 | $525,646.57 | 42.00 | 24.92 | 0.6230 | 1.0000 | $327,492.99 | $13,141.16 |
| 1987 | 21.50 | $2,020,844.62 | 42.00 | 24.18 | 0.6045 | 1.0000 | $1,221,689.24 | $50,521.12 |
| 1986 | 22.50 | $499,860.00 | 42.00 | 23.45 | 0.5863 | 1.0000 | $293,051.21 | $12,496.50 |
| 1985 | 23.50 | $742,291.92 | 42.00 | 22.73 | 0.5683 | 1.0000 | $421,849.16 | $18,557.30 |
| 1984 | 24.50 | $1,222,337.00 | 42.00 | 22.02 | 0.5506 | 1.0000 | $673,019.96 | $30,558.43 |
| 1983 | 25.50 | $1,385,202.40 | 42.00 | 21.33 | 0.5331 | 1.0000 | $738,505.73 | $34,630.06 |
| 1982 | 26.50 | $1,592,738.03 | 42.00 | 20.64 | 0.5160 | 1.0000 | $821,850.07 | $39,818.45 |
| 1981 | 27.50 | $7,233,381.02 | 42.00 | 19.97 | 0.4991 | 1.0000 | $3,610,417.34 | $180,834.53 |
| 1980 | 28.50 | $5,281,891.86 | 42.00 | 19.30 | 0.4825 | 1.0000 | $2,548,706.77 | $132,047.30 |
| 1979 | 29.50 | $935,672.30 | 42.00 | 18.65 | 0.4663 | 1.0000 | $436,279.26 | $23,391.81 |
| 1978 | 30.50 | $54,420.79 | 42.00 | 18.01 | 0.4503 | 1.0000 | $24,504.32 | $1,360.52 |
| 1977 | 31.50 | $1,990,423.13 | 42.00 | 17.39 | 0.4346 | 1.0000 | $865,124.87 | $49,760.58 |
| 1976 | 32.50 | $1,091,429.44 | 42.00 | 16.77 | 0.4193 | 1.0000 | $457,653.68 | $27,285.74 |



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Generation Arrangement Report

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Account: KEPCo 101/6 353 - KY
Dispersion: 42.00 - R2

rage Net Salvage Rate: -5.00%
ture Net Salvage Rate: -5.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $763,727.00 | 42.00 | 16.17 | 0.4043 | 1.0000 | $308,764.37 | $19,093.18 |
| 1974 | 34.50 | $1,028,842.75 | 42.00 | 15.58 | 0.3896 | 1.0000 | $400,856.74 | $25,721.07 |
| 1973 | 35.50 | $161,311.71 | 42.00 | 15.01 | 0.3752 | 1.0000 | $60,531.72 | $4,032.79 |
| 1972 | 36.50 | $168,786.08 | 42.00 | 14.45 | 0.3613 | 1.0000 | $60,977.02 | $4,219.65 |
| 1971 | 37.50 | $201,316.42 | 42.00 | 13.91 | 0.3476 | 1.0000 | $69,983.09 | $5,032.91 |
| 1970 | 38.50 | $690,132.75 | 42.00 | 13.37 | 0.3343 | 1.0000 | $230,713.43 | $17,253.32 |
| 1969 | 39.50 | $4,737,867.36 | 42.00 | 12.85 | 0.3214 | 1.0000 | $1,522,583.50 | $118,446.68 |
| 1968 | 40.50 | $59,424.00 | 42.00 | 12.35 | 0.3088 | 1.0000 | $18,348.59 | $1,485.60 |
| 1967 | 41.50 | $238,924.47 | 42.00 | 11.86 | 0.2965 | 1.0000 | $70,845.91 | $5,973.11 |
| 1966 | 42.50 | $5,843.00 | 42.00 | 11.39 | 0.2846 | 1.0000 | $1,663.18 | $146.08 |
| 1965 | 43.50 | $96,195.62 | 42.00 | 10.92 | 0.2731 | 1.0000 | $26,270.94 | $2,404.89 |
| 1964 | 44.50 | $2,344.26 | 42.00 | 10.48 | 0.2619 | 1.0000 | $614.02 | $58.61 |
| 1963 | 45.50 | $560,961.00 | 42.00 | 10.04 | 0.2511 | 1.0000 | $140,856.61 | $14,024.03 |
| 1962 | 46.50 | $5,906.00 | 42.00 | 9.62 | 0.2406 | 1.0000 | $1,421.00 | $147.65 |
| 1961 | 47.50 | $347.00 | 42.00 | 9.22 | 0.2304 | 1.0000 | $79.96 | $8.68 |
| 1960 | 48.50 | $25,383.97 | 42.00 | 8.82 | 0.2206 | 1.0000 | $5,599.99 | $634.60 |
| 1959 | 49.50 | $52,367.55 | 42.00 | 8.44 | 0.2111 | 1.0000 | $11,054.41 | $1,309.19 |
| 1958 | 50.50 | $577.00 | 42.00 | 8.07 | 0.2019 | 1.0000 | $116.48 | $14.43 |
| 1957 | 51.50 | $8,980.51 | 42.00 | 7.72 | 0.1930 | 1.0000 | $1,732.85 | $224.51 |
| 1955 | 53.50 | $897.00 | 42.00 | 7.03 | 0.1758 | 1.0000 | $157.73 | $22.42 |
| 1954 | 54.50 | $225,897.25 | 42.00 | 6.71 | 0.1677 | 1.0000 | $37,878.20 | $5,647.43 |
| 1953 | 55.50 | $7,575.00 | 42.00 | 6.39 | 0.1597 | 1.0000 | $1,209.41 | $189.38 |
| | | $146,458,490.21 | 42.00 | 30.44 | 0.7609 | 1.0000 | $111,440,504.09 | $3,661,462.26 |

Depreciation Reserve Summary

Account: KEPCo 101/6 354 - KY
Scenario: KEPCO TRANSMISSION 2008 NEW
Dispersion: 50 - R3

rage Net Salvage Rate: -65.00%
Future Net Salvage Rate: -65.00%

Broad Group Procedure

January 1 , 2009

| | Plant Amt | Depreciation Reserve Amount | Depreciation Reserve Ratio | Net Plant Amount | Net Plant Ratio |
|---|---|---|---|---|---|
| Recorded | $94,722,543.90 | $40,691,154.00 | 0.4296 | $115,601,043.44 | 1.2204 |
| Computed | $94,722,543.90 | $66,308,124.56 | 0.7000 | $89,984,072.88 | 0.9500 |
| Difference | | ($25,616,970.56) | -0.2704 | $25,616,970.56 | 0.2704 |

Generation Arrangement Report

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Account: KEPCo 101/6 354 - KY
Dispersion: 50.00 - R3

'rage Net Salvage Rate: -65.00%
..ture Net Salvage Rate: -65.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $2,400,231.50 | 50.00 | 49.51 | 1.6337 | 1.0000 | $3,921,369.33 | $79,207.64 |
| 2005 | 3.50 | $16,025.50 | 50.00 | 46.57 | 1.5367 | 1.0000 | $24,626.79 | $528.84 |
| 2004 | 4.50 | $5,437.50 | 50.00 | 45.59 | 1.5046 | 1.0000 | $8,181.23 | $179.44 |
| 2003 | 5.50 | $27,462.50 | 50.00 | 44.62 | 1.4726 | 1.0000 | $40,440.27 | $906.26 |
| 2002 | 6.50 | $96,142.50 | 50.00 | 43.66 | 1.4407 | 1.0000 | $138,509.98 | $3,172.70 |
| 2001 | 7.50 | $994,593.50 | 50.00 | 42.69 | 1.4089 | 1.0000 | $1,401,300.82 | $32,821.59 |
| 2000 | 8.50 | $657,177.50 | 50.00 | 41.74 | 1.3773 | 1.0000 | $905,142.34 | $21,686.86 |
| 1999 | 9.50 | $4,771,185.50 | 50.00 | 40.78 | 1.3459 | 1.0000 | $6,421,439.40 | $157,449.12 |
| 1998 | 10.50 | $6,759,531.50 | 50.00 | 39.84 | 1.3146 | 1.0000 | $8,886,130.04 | $223,064.54 |
| 1997 | 11.50 | $860,276.50 | 50.00 | 38.89 | 1.2835 | 1.0000 | $1,104,182.18 | $28,389.12 |
| 1996 | 12.50 | $363,575.50 | 50.00 | 37.96 | 1.2526 | 1.0000 | $455,426.85 | $11,997.99 |
| 1995 | 13.50 | $315,635.50 | 50.00 | 37.03 | 1.2220 | 1.0000 | $385,694.64 | $10,415.97 |
| 1993 | 15.50 | $182,665.50 | 50.00 | 35.19 | 1.1613 | 1.0000 | $212,125.85 | $6,027.96 |
| 1992 | 16.50 | $41,132.50 | 50.00 | 34.28 | 1.1313 | 1.0000 | $46,532.91 | $1,357.37 |
| 1991 | 17.50 | $15.50 | 50.00 | 33.38 | 1.1016 | 1.0000 | $17.07 | $0.51 |
| 1990 | 18.50 | $427,812.50 | 50.00 | 32.49 | 1.0721 | 1.0000 | $458,656.22 | $14,117.81 |
| 1986 | 22.50 | $783,128.50 | 50.00 | 29.00 | 0.9570 | 1.0000 | $749,487.35 | $25,843.24 |
| 1985 | 23.50 | $59,889,883.50 | 50.00 | 28.15 | 0.9290 | 1.0000 | $55,639,270.15 | $1,976,366.16 |
| 1984 | 24.50 | $177,806.50 | 50.00 | 27.31 | 0.9013 | 1.0000 | $160,261.04 | $5,867.61 |
| 1982 | 26.50 | $273,723.50 | 50.00 | 25.66 | 0.8469 | 1.0000 | $231,812.01 | $9,032.88 |
| 1978 | 30.50 | $81,431.50 | 50.00 | 22.49 | 0.7421 | 1.0000 | $60,431.26 | $2,687.24 |
| 1977 | 31.50 | $28,623.50 | 50.00 | 21.72 | 0.7168 | 1.0000 | $20,517.72 | $944.58 |
| 1976 | 32.50 | $158,516.50 | 50.00 | 20.97 | 0.6919 | 1.0000 | $109,676.99 | $5,231.04 |
| 1975 | 33.50 | $72,763.50 | 50.00 | 20.22 | 0.6674 | 1.0000 | $48,560.12 | $2,401.20 |
| 1974 | 34.50 | $20,383.50 | 50.00 | 19.49 | 0.6433 | 1.0000 | $13,111.70 | $672.66 |
| 1973 | 35.50 | $112,943.50 | 50.00 | 18.77 | 0.6195 | 1.0000 | $69,973.32 | $3,727.14 |
| 1972 | 36.50 | $8,467,428.50 | 50.00 | 18.07 | 0.5963 | 1.0000 | $5,048,813.32 | $279,426.14 |
| 1971 | 37.50 | $26,158.50 | 50.00 | 17.38 | 0.5734 | 1.0000 | $15,000.22 | $863.23 |
| 1970 | 38.50 | $4,036,456.50 | 50.00 | 16.70 | 0.5511 | 1.0000 | $2,224,381.30 | $133,203.06 |
| 1968 | 40.50 | $766,108.49 | 50.00 | 15.39 | 0.5078 | 1.0000 | $389,038.11 | $25,281.58 |
| 1967 | 41.50 | $360,608.27 | 50.00 | 14.76 | 0.4870 | 1.0000 | $175,598.22 | $11,900.07 |
| 1966 | 42.50 | $18,065.53 | 50.00 | 14.14 | 0.4666 | 1.0000 | $8,429.95 | $596.16 |
| 1965 | 43.50 | $414,356.72 | 50.00 | 13.54 | 0.4469 | 1.0000 | $185,162.99 | $13,673.77 |



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Generation Arrangement Report

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Account: KEPCo 101/6 354 - KY
Dispersion: 50.00 - R3

›rage Net Salvage Rate: -65.00%
. ›ture Net Salvage Rate: -65.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1964 | 44.50 | $86,772.20 | 50.00 | 12.96 | 0.4277 | 1.0000 | $37,110.63 | $2,863.48 |
| 1963 | 45.50 | $586,767.39 | 50.00 | 12.40 | 0.4091 | 1.0000 | $240,035.82 | $19,363.32 |
| 1962 | 46.50 | $96,055.43 | 50.00 | 11.85 | 0.3911 | 1.0000 | $37,566.59 | $3,169.83 |
| 1961 | 47.50 | $181.34 | 50.00 | 11.32 | 0.3737 | 1.0000 | $67.77 | $5.98 |
| 1959 | 49.50 | $273,216.36 | 50.00 | 10.33 | 0.3408 | 1.0000 | $93,122.56 | $9,016.14 |
| 1958 | 50.50 | $6,422.84 | 50.00 | 9.86 | 0.3253 | 1.0000 | $2,089.66 | $211.95 |
| 1956 | 52.50 | $5,357.82 | 50.00 | 8.98 | 0.2962 | 1.0000 | $1,587.21 | $176.81 |
| 1954 | 54.50 | $35,033.92 | 50.00 | 8.17 | 0.2696 | 1.0000 | $9,444.46 | $1,156.12 |
| 1944 | 64.50 | $247.05 | 50.00 | 5.01 | 0.1655 | 1.0000 | $40.89 | $8.15 |
| 1942 | 66.50 | $24,362.82 | 50.00 | 4.49 | 0.1482 | 1.0000 | $3,610.36 | $803.97 |
| 1940 | 68.50 | $244.68 | 50.00 | 3.98 | 0.1312 | 1.0000 | $32.10 | $8.07 |
| 1939 | 69.50 | $65.15 | 50.00 | 3.72 | 0.1227 | 1.0000 | $8.00 | $2.15 |
| 1938 | 70.50 | $439.39 | 50.00 | 3.46 | 0.1143 | 1.0000 | $50.21 | $14.50 |
| 1936 | 72.50 | $18.32 | 50.00 | 2.95 | 0.0974 | 1.0000 | $1.78 | $0.60 |
| 1933 | 75.50 | $1.21 | 50.00 | 2.19 | 0.0724 | 1.0000 | $0.09 | $0.04 |
| 1932 | 76.50 | $6.36 | 50.00 | 1.95 | 0.0642 | 1.0000 | $0.41 | $0.21 |
| 1930 | 78.50 | $11.96 | 50.00 | 1.47 | 0.0485 | 1.0000 | $0.58 | $0.39 |
| 1929 | 79.50 | $45.59 | 50.00 | 1.24 | 0.0409 | 1.0000 | $1.86 | $1.50 |
| 1928 | 80.50 | $6.25 | 50.00 | 1.02 | 0.0336 | 1.0000 | $0.21 | $0.21 |
| 1927 | 81.50 | $0.31 | 50.00 | 0.81 | 0.0266 | 1.0000 | $0.01 | $0.01 |
| | | $94,722,543.90 | 50.00 | 28.79 | 0.9500 | 1.0000 | $89,984,072.88 | $3,125,843.95 |

Depreciation Reserve Summary

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**Account:** KEPCo 101/6 355 - KY
**Scenario:** KEPCO TRANSMISSION 2008 NEW
**Dispersion:** 38 - S4

:age Net Salvage Rate: -53.00%
Future Net Salvage Rate: -53.00%

Broad Group Procedure

January 1 , 2009

| | Plant Amt | Depreciation Reserve Amount | Depreciation Reserve Ratio | Net Plant Amount | Net Plant Ratio |
|---|---|---|---|---|---|
| Recorded | $48,384,843.88 | $13,536,317.96 | 0.2798 | $60,492,493.18 | 1.2502 |
| Computed | $48,384,843.88 | $22,058,058.55 | 0.4559 | $51,970,752.59 | 1.0741 |
| Difference | | ($8,521,740.59) | -0.1761 | $8,521,740.59 | 0.1761 |

Generation Arrangement Report

Page 128 of 350

Account: KEPCo 101/6 355 - KY
Dispersion: 38.00 - S4

rage Net Salvage Rate: -53.00%
. ..ure Net Salvage Rate: -53.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $7,821,842.50 | 38.00 | 37.50 | 1.5099 | 1.0000 | $11,809,952.91 | $314,932.08 |
| 2007 | 1.50 | $547,335.50 | 38.00 | 36.50 | 1.4696 | 1.0000 | $804,367.13 | $22,037.46 |
| 2006 | 2.50 | $1,905,268.50 | 38.00 | 35.50 | 1.4293 | 1.0000 | $2,723,280.47 | $76,712.13 |
| 2005 | 3.50 | $1,400,726.50 | 38.00 | 34.50 | 1.3891 | 1.0000 | $1,945,719.68 | $56,397.67 |
| 2004 | 4.50 | $1,450,693.50 | 38.00 | 33.50 | 1.3488 | 1.0000 | $1,956,718.29 | $58,409.50 |
| 2003 | 5.50 | $725,787.50 | 38.00 | 32.50 | 1.3086 | 1.0000 | $949,731.14 | $29,222.50 |
| 2002 | 6.50 | $1,374,086.50 | 38.00 | 31.50 | 1.2683 | 1.0000 | $1,742,739.43 | $55,325.06 |
| 2001 | 7.50 | $3,034,077.50 | 38.00 | 30.50 | 1.2280 | 1.0000 | $3,725,926.99 | $122,161.54 |
| 2000 | 8.50 | $2,016,920.50 | 38.00 | 29.50 | 1.1878 | 1.0000 | $2,395,623.84 | $81,207.59 |
| 1999 | 9.50 | $7,276,249.50 | 38.00 | 28.50 | 1.1475 | 1.0000 | $8,349,496.24 | $292,964.78 |
| 1998 | 10.50 | $246,197.50 | 38.00 | 27.50 | 1.1072 | 1.0000 | $272,598.94 | $9,912.69 |
| 1997 | 11.50 | $2,200,205.50 | 38.00 | 26.50 | 1.0670 | 1.0000 | $2,347,561.35 | $88,587.22 |
| 1996 | 12.50 | $966,626.50 | 38.00 | 25.50 | 1.0267 | 1.0000 | $992,445.59 | $38,919.44 |
| 1995 | 13.50 | $502,094.50 | 38.00 | 24.50 | 0.9865 | 1.0000 | $495,292.45 | $20,215.91 |
| 1994 | 14.50 | $2,853,694.50 | 38.00 | 23.50 | 0.9462 | 1.0000 | $2,700,208.34 | $114,898.75 |
| 1993 | 15.50 | $2,024,333.50 | 38.00 | 22.50 | 0.9060 | 1.0000 | $1,834,027.45 | $81,506.06 |
| 1992 | 16.50 | $1,980,376.50 | 38.00 | 21.50 | 0.8658 | 1.0000 | $1,714,644.84 | $79,736.21 |
| 1991 | 17.50 | $1,225,759.50 | 38.00 | 20.51 | 0.8257 | 1.0000 | $1,012,150.08 | $49,352.95 |
| 1990 | 18.50 | $379,655.50 | 38.00 | 19.52 | 0.7858 | 1.0000 | $298,329.74 | $15,286.13 |
| 1989 | 19.50 | $526,772.50 | 38.00 | 18.53 | 0.7461 | 1.0000 | $393,023.36 | $21,209.52 |
| 1988 | 20.50 | $501,637.50 | 38.00 | 17.55 | 0.7067 | 1.0000 | $354,517.64 | $20,197.51 |
| 1987 | 21.50 | $208,776.50 | 38.00 | 16.59 | 0.6678 | 1.0000 | $139,421.75 | $8,406.00 |
| 1986 | 22.50 | $743,795.50 | 38.00 | 15.64 | 0.6296 | 1.0000 | $468,300.66 | $29,947.56 |
| 1985 | 23.50 | $285,436.75 | 38.00 | 14.71 | 0.5922 | 1.0000 | $169,024.55 | $11,492.58 |
| 1984 | 24.50 | $127,749.47 | 38.00 | 13.80 | 0.5558 | 1.0000 | $71,002.33 | $5,143.60 |
| 1983 | 25.50 | $463,341.68 | 38.00 | 12.93 | 0.5206 | 1.0000 | $241,197.64 | $18,655.60 |
| 1982 | 26.50 | $1,153,231.59 | 38.00 | 12.09 | 0.4866 | 1.0000 | $561,210.07 | $46,432.75 |
| 1981 | 27.50 | $792,082.06 | 38.00 | 11.28 | 0.4544 | 1.0000 | $359,891.97 | $31,891.73 |
| 1980 | 28.50 | $905,098.61 | 38.00 | 10.52 | 0.4236 | 1.0000 | $383,384.82 | $36,442.13 |
| 1979 | 29.50 | $148,279.51 | 38.00 | 9.80 | 0.3944 | 1.0000 | $58,488.54 | $5,970.20 |
| 1978 | 30.50 | $351,438.34 | 38.00 | 9.12 | 0.3672 | 1.0000 | $129,061.82 | $14,150.02 |
| 1977 | 31.50 | $313,258.24 | 38.00 | 8.48 | 0.3416 | 1.0000 | $107,015.31 | $12,612.77 |
| 1976 | 32.50 | $372,123.11 | 38.00 | 7.89 | 0.3177 | 1.0000 | $118,216.15 | $14,982.85 |

 10/26/2009

Generation Arrangement Report

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Account: KEPCo 101/6 355 - KY
Dispersion: 38.00 - S4

ṛage Net Salvage Rate: -53.00%
. uture Net Salvage Rate: -53.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $312,176.72 | 38.00 | 7.34 | 0.2956 | 1.0000 | $92,280.05 | $12,569.22 |
| 1974 | 34.50 | $241,474.61 | 38.00 | 6.83 | 0.2750 | 1.0000 | $66,398.82 | $9,722.53 |
| 1973 | 35.50 | $81,656.47 | 38.00 | 6.36 | 0.2560 | 1.0000 | $20,900.30 | $3,287.75 |
| 1972 | 36.50 | $91,501.36 | 38.00 | 5.92 | 0.2383 | 1.0000 | $21,804.72 | $3,684.13 |
| 1971 | 37.50 | $128,825.29 | 38.00 | 5.51 | 0.2220 | 1.0000 | $28,596.66 | $5,186.91 |
| 1970 | 38.50 | $2,508.69 | 38.00 | 5.14 | 0.2069 | 1.0000 | $519.04 | $101.01 |
| 1969 | 39.50 | $138,094.05 | 38.00 | 4.79 | 0.1930 | 1.0000 | $26,645.94 | $5,560.10 |
| 1968 | 40.50 | $88,227.81 | 38.00 | 4.47 | 0.1801 | 1.0000 | $15,891.13 | $3,552.33 |
| 1967 | 41.50 | $132,778.29 | 38.00 | 4.17 | 0.1681 | 1.0000 | $22,315.13 | $5,346.07 |
| 1966 | 42.50 | $171,556.34 | 38.00 | 3.90 | 0.1570 | 1.0000 | $26,938.13 | $6,907.40 |
| 1965 | 43.50 | $122,947.01 | 38.00 | 3.64 | 0.1466 | 1.0000 | $18,024.27 | $4,950.23 |
| 1964 | 44.50 | $19,673.57 | 38.00 | 3.40 | 0.1370 | 1.0000 | $2,695.56 | $792.12 |
| 1963 | 45.50 | $5,331.06 | 38.00 | 3.18 | 0.1282 | 1.0000 | $683.56 | $214.65 |
| 1962 | 46.50 | $8,602.44 | 38.00 | 2.97 | 0.1196 | 1.0000 | $1,029.06 | $346.36 |
| 1961 | 47.50 | $4,128.34 | 38.00 | 2.78 | 0.1119 | 1.0000 | $461.77 | $166.22 |
| 1960 | 48.50 | $4,597.83 | 38.00 | 2.60 | 0.1048 | 1.0000 | $481.88 | $185.12 |
| 1959 | 49.50 | $2,970.18 | 38.00 | 2.42 | 0.0975 | 1.0000 | $289.62 | $119.59 |
| 1958 | 50.50 | $897.89 | 38.00 | 2.26 | 0.0912 | 1.0000 | $81.85 | $36.15 |
| 1957 | 51.50 | $233.96 | 38.00 | 2.12 | 0.0856 | 1.0000 | $20.02 | $9.42 |
| 1956 | 52.50 | $665.93 | 38.00 | 1.97 | 0.0792 | 1.0000 | $52.75 | $26.81 |
| 1955 | 53.50 | $89.69 | 38.00 | 1.84 | 0.0741 | 1.0000 | $6.65 | $3.61 |
| 1954 | 54.50 | $767.23 | 38.00 | 1.70 | 0.0684 | 1.0000 | $52.46 | $30.89 |
| 1953 | 55.50 | $165.21 | 38.00 | 1.58 | 0.0635 | 1.0000 | $10.49 | $6.65 |
| 1952 | 56.50 | $13.99 | 38.00 | 1.47 | 0.0593 | 1.0000 | $0.83 | $0.56 |
| 1951 | 57.50 | $3.64 | 38.00 | 1.34 | 0.0540 | 1.0000 | $0.20 | $0.15 |
| 1950 | 58.50 | $1.38 | 38.00 | 1.23 | 0.0495 | 1.0000 | $0.07 | $0.06 |
| 1949 | 59.50 | $2.38 | 38.00 | 1.14 | 0.0457 | 1.0000 | $0.11 | $0.10 |
| 1948 | 60.50 | $0.21 | 38.00 | 0.98 | 0.0393 | 1.0000 | $0.01 | $0.01 |
| 1947 | 61.50 | $0.16 | 38.00 | 0.79 | 0.0319 | 1.0000 | $0.01 | $0.01 |
| 1946 | 62.50 | ($0.21) | 38.00 | 0.29 | 0.0117 | 1.0000 | $0.00 | ($0.01) |
| 1945 | 63.50 | ($0.50) | 38.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| | | $48,384,843.88 | 38.00 | 26.68 | 1.0741 | 1.0000 | $51,970,752.59 | $1,948,126.63 |

Depreciation Reserve Summary



Account: KEPCo 101/6 356 - KY
Scenario: KEPCO TRANSMISSION 2008 NEW
Dispersion: 50 - R3

rage Net Salvage Rate: -10.00%
Future Net Salvage Rate: -10.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $109,075,670.29 | $27,414,811.52 | 0.2513 | $92,568,425.80 | 0.8487 |
| Computed | $109,075,670.29 | $44,673,708.12 | 0.4096 | $75,309,529.20 | 0.6904 |
| Difference | | ($17,258,896.60) | -0.1582 | $17,258,896.60 | 0.1582 |

Generation Arrangement Report

Page 131 of 350

Account: KEPCo 101/6 356 - KY
Dispersion: 50.00 - R3

›rage Net Salvage Rate: -10.00%
.ture Net Salvage Rate: -10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $7,615,244.50 | 50.00 | 49.51 | 1.0892 | 1.0000 | $8,294,251.68 | $167,535.38 |
| 2007 | 1.50 | $388,254.50 | 50.00 | 48.53 | 1.0676 | 1.0000 | $414,482.08 | $8,541.60 |
| 2006 | 2.50 | $278,652.50 | 50.00 | 47.54 | 1.0460 | 1.0000 | $291,466.65 | $6,130.36 |
| 2005 | 3.50 | $743,702.50 | 50.00 | 46.57 | 1.0245 | 1.0000 | $761,911.02 | $16,361.46 |
| 2004 | 4.50 | $244,994.50 | 50.00 | 45.59 | 1.0031 | 1.0000 | $245,744.78 | $5,389.88 |
| 2003 | 5.50 | $653,964.50 | 50.00 | 44.62 | 0.9817 | 1.0000 | $642,002.82 | $14,387.22 |
| 2002 | 6.50 | $203,909.50 | 50.00 | 43.66 | 0.9604 | 1.0000 | $195,844.72 | $4,486.01 |
| 2001 | 7.50 | $1,212,537.50 | 50.00 | 42.69 | 0.9393 | 1.0000 | $1,138,910.72 | $26,675.83 |
| 2000 | 8.50 | $1,907,562.50 | 50.00 | 41.74 | 0.9182 | 1.0000 | $1,751,546.66 | $41,966.38 |
| 1999 | 9.50 | $11,988,969.50 | 50.00 | 40.78 | 0.8973 | 1.0000 | $10,757,136.58 | $263,757.33 |
| 1998 | 10.50 | $4,941,737.50 | 50.00 | 39.84 | 0.8764 | 1.0000 | $4,330,963.08 | $108,718.23 |
| 1997 | 11.50 | $712,207.50 | 50.00 | 38.89 | 0.8557 | 1.0000 | $609,421.76 | $15,668.57 |
| 1996 | 12.50 | $1,377,964.50 | 50.00 | 37.96 | 0.8351 | 1.0000 | $1,150,722.99 | $30,315.22 |
| 1995 | 13.50 | $1,023,703.50 | 50.00 | 37.03 | 0.8146 | 1.0000 | $833,951.29 | $22,521.48 |
| 1994 | 14.50 | $3,258,061.50 | 50.00 | 36.11 | 0.7943 | 1.0000 | $2,588,002.07 | $71,677.35 |
| 1993 | 15.50 | $1,695,512.50 | 50.00 | 35.19 | 0.7742 | 1.0000 | $1,312,643.52 | $37,301.28 |
| 1992 | 16.50 | $2,241,118.50 | 50.00 | 34.28 | 0.7542 | 1.0000 | $1,690,241.08 | $49,304.61 |
| 1991 | 17.50 | $704,245.50 | 50.00 | 33.38 | 0.7344 | 1.0000 | $517,181.97 | $15,493.40 |
| 1990 | 18.50 | $430,845.50 | 50.00 | 32.49 | 0.7147 | 1.0000 | $307,938.59 | $9,478.60 |
| 1989 | 19.50 | $273,872.50 | 50.00 | 31.60 | 0.6953 | 1.0000 | $190,414.78 | $6,025.20 |
| 1988 | 20.50 | $187,297.50 | 50.00 | 30.73 | 0.6760 | 1.0000 | $126,611.68 | $4,120.55 |
| 1987 | 21.50 | $131,020.50 | 50.00 | 29.86 | 0.6569 | 1.0000 | $86,068.31 | $2,882.45 |
| 1986 | 22.50 | $838,491.50 | 50.00 | 29.00 | 0.6380 | 1.0000 | $534,981.40 | $18,446.81 |
| 1985 | 23.50 | $46,009,402.50 | 50.00 | 28.15 | 0.6194 | 1.0000 | $28,495,959.87 | $1,012,206.86 |
| 1984 | 24.50 | $171,899.50 | 50.00 | 27.31 | 0.6009 | 1.0000 | $103,291.28 | $3,781.79 |
| 1983 | 25.50 | $42,428.50 | 50.00 | 26.48 | 0.5826 | 1.0000 | $24,720.04 | $933.43 |
| 1982 | 26.50 | $1,827,109.50 | 50.00 | 25.66 | 0.5646 | 1.0000 | $1,031,566.37 | $40,196.41 |
| 1981 | 27.50 | $694,030.50 | 50.00 | 24.85 | 0.5468 | 1.0000 | $379,479.57 | $15,268.67 |
| 1980 | 28.50 | $452,257.50 | 50.00 | 24.05 | 0.5292 | 1.0000 | $239,332.05 | $9,949.67 |
| 1979 | 29.50 | $91,746.50 | 50.00 | 23.27 | 0.5118 | 1.0000 | $46,960.09 | $2,018.42 |
| ,978 | 30.50 | $2,009,798.50 | 50.00 | 22.49 | 0.4947 | 1.0000 | $994,329.66 | $44,215.57 |
| 1977 | 31.50 | $512,195.50 | 50.00 | 21.72 | 0.4779 | 1.0000 | $244,765.93 | $11,268.30 |
| 1976 | 32.50 | $229,904.50 | 50.00 | 20.97 | 0.4613 | 1.0000 | $106,046.72 | $5,057.90 |

Generation Arrangement Report

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Account: KEPCo 101/6 356 - KY
Dispersion: 50.00 - R3
›rage Net Salvage Rate: -10.00%
..ure Net Salvage Rate: -10.00%
Broad Group Procedure
January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $299,105.50 | 50.00 | 20.22 | 0.4449 | 1.0000 | $133,075.88 | $6,580.32 |
| 1974 | 34.50 | $44,958.50 | 50.00 | 19.49 | 0.4288 | 1.0000 | $19,279.72 | $989.09 |
| 1973 | 35.50 | $72,762.50 | 50.00 | 18.77 | 0.4130 | 1.0000 | $30,052.98 | $1,600.78 |
| 1972 | 36.50 | $157,861.81 | 50.00 | 18.07 | 0.3975 | 1.0000 | $62,751.43 | $3,472.96 |
| 1971 | 37.50 | $1,122,122.22 | 50.00 | 17.38 | 0.3823 | 1.0000 | $428,976.77 | $24,686.69 |
| 1970 | 38.50 | $7,947,927.28 | 50.00 | 16.70 | 0.3674 | 1.0000 | $2,919,924.24 | $174,854.40 |
| 1969 | 39.50 | $288,834.50 | 50.00 | 16.04 | 0.3528 | 1.0000 | $101,899.45 | $6,354.36 |
| 1968 | 40.50 | $1,119,779.77 | 50.00 | 15.39 | 0.3385 | 1.0000 | $379,090.79 | $24,635.15 |
| 1967 | 41.50 | $560,424.38 | 50.00 | 14.76 | 0.3246 | 1.0000 | $181,932.46 | $12,329.34 |
| 1966 | 42.50 | $205,979.56 | 50.00 | 14.14 | 0.3111 | 1.0000 | $64,077.74 | $4,531.55 |
| 1965 | 43.50 | $638,407.23 | 50.00 | 13.54 | 0.2979 | 1.0000 | $190,189.41 | $14,044.96 |
| 1964 | 44.50 | $273,778.14 | 50.00 | 12.96 | 0.2851 | 1.0000 | $78,059.40 | $6,023.12 |
| 1963 | 45.50 | $411,321.74 | 50.00 | 12.40 | 0.2727 | 1.0000 | $112,176.14 | $9,049.08 |
| 1962 | 46.50 | $89,598.87 | 50.00 | 11.85 | 0.2607 | 1.0000 | $23,360.98 | $1,971.18 |
| 1961 | 47.50 | $26,341.04 | 50.00 | 11.32 | 0.2491 | 1.0000 | $6,562.65 | $579.50 |
| 1960 | 48.50 | $24,116.18 | 50.00 | 10.82 | 0.2380 | 1.0000 | $5,739.06 | $530.56 |
| 1959 | 49.50 | $136,892.80 | 50.00 | 10.33 | 0.2272 | 1.0000 | $31,105.53 | $3,011.64 |
| 1958 | 50.50 | $231,532.24 | 50.00 | 9.86 | 0.2169 | 1.0000 | $50,218.99 | $5,093.71 |
| 1957 | 51.50 | $5,797.10 | 50.00 | 9.41 | 0.2070 | 1.0000 | $1,199.94 | $127.54 |
| 1956 | 52.50 | $23,397.09 | 50.00 | 8.98 | 0.1975 | 1.0000 | $4,620.80 | $514.74 |
| 1955 | 53.50 | $2,273.53 | 50.00 | 8.56 | 0.1884 | 1.0000 | $428.35 | $50.02 |
| 1954 | 54.50 | $156,809.32 | 50.00 | 8.17 | 0.1797 | 1.0000 | $28,181.81 | $3,449.81 |
| 1953 | 55.50 | $29,049.83 | 50.00 | 7.79 | 0.1714 | 1.0000 | $4,979.52 | $639.10 |
| 1952 | 56.50 | $6,277.17 | 50.00 | 7.43 | 0.1635 | 1.0000 | $1,026.17 | $138.10 |
| 1951 | 57.50 | $5,129.69 | 50.00 | 7.09 | 0.1559 | 1.0000 | $799.66 | $112.85 |
| 1950 | 58.50 | $1,573.06 | 50.00 | 6.76 | 0.1486 | 1.0000 | $233.80 | $34.61 |
| 1949 | 59.50 | $19,809.74 | 50.00 | 6.44 | 0.1417 | 1.0000 | $2,806.33 | $435.81 |
| 1948 | 60.50 | $4,149.85 | 50.00 | 6.14 | 0.1350 | 1.0000 | $560.15 | $91.30 |
| 1947 | 61.50 | $2,876.48 | 50.00 | 5.84 | 0.1285 | 1.0000 | $369.73 | $63.28 |
| 1946 | 62.50 | $1,300.51 | 50.00 | 5.56 | 0.1223 | 1.0000 | $159.06 | $28.61 |
| 1945 | 63.50 | $5,274.13 | 50.00 | 5.28 | 0.1162 | 1.0000 | $613.09 | $116.03 |
| 1944 | 64.50 | $890.54 | 50.00 | 5.01 | 0.1103 | 1.0000 | $98.25 | $19.59 |
| 1943 | 65.50 | $716.11 | 50.00 | 4.75 | 0.1045 | 1.0000 | $74.85 | $15.75 |

Generation Arrangement Report



Account: KEPCo 101/6 356 - KY

Dispersion: 50.00 - R3

rage Net Salvage Rate: -10.00%

ure Net Salvage Rate: -10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1942 | 66.50 | $46,102.67 | 50.00 | 4.49 | 0.0988 | 1.0000 | $4,554.68 | $1,014.26 |
| 1941 | 67.50 | $676.35 | 50.00 | 4.23 | 0.0931 | 1.0000 | $62.98 | $14.88 |
| 1940 | 68.50 | $8,726.26 | 50.00 | 3.98 | 0.0875 | 1.0000 | $763.21 | $191.98 |
| 1939 | 69.50 | $34.10 | 50.00 | 3.72 | 0.0818 | 1.0000 | $2.79 | $0.75 |
| 1938 | 70.50 | $7,452.94 | 50.00 | 3.46 | 0.0762 | 1.0000 | $567.79 | $163.96 |
| 1937 | 71.50 | $405.52 | 50.00 | 3.21 | 0.0705 | 1.0000 | $28.61 | $8.92 |
| 1936 | 72.50 | $358.49 | 50.00 | 2.95 | 0.0649 | 1.0000 | $23.27 | $7.89 |
| 1935 | 73.50 | $36.94 | 50.00 | 2.70 | 0.0593 | 1.0000 | $2.19 | $0.81 |
| 1934 | 74.50 | $44.60 | 50.00 | 2.44 | 0.0538 | 1.0000 | $2.40 | $0.98 |
| 1933 | 75.50 | $24.60 | 50.00 | 2.19 | 0.0483 | 1.0000 | $1.19 | $0.54 |
| 1932 | 76.50 | $21.80 | 50.00 | 1.95 | 0.0428 | 1.0000 | $0.93 | $0.48 |
| 1931 | 77.50 | $14.41 | 50.00 | 1.71 | 0.0375 | 1.0000 | $0.54 | $0.32 |
| 1930 | 78.50 | $18.70 | 50.00 | 1.47 | 0.0323 | 1.0000 | $0.60 | $0.41 |
| 1929 | 79.50 | $34.80 | 50.00 | 1.24 | 0.0273 | 1.0000 | $0.95 | $0.77 |
| 1928 | 80.50 | $3.87 | 50.00 | 1.02 | 0.0224 | 1.0000 | $0.09 | $0.09 |
| 1927 | 81.50 | $2.05 | 50.00 | 0.81 | 0.0177 | 1.0000 | $0.04 | $0.05 |
| 1926 | 82.50 | $0.77 | 50.00 | 0.60 | 0.0132 | 1.0000 | $0.01 | $0.02 |
| 1925 | 83.50 | $0.01 | 50.00 | 0.25 | 0.0055 | 1.0000 | $0.00 | $0.00 |
| 1924 | 84.50 | ($0.50) | 50.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| | | $109,075,670.29 | 50.00 | 31.38 | 0.6904 | 1.0000 | $75,309,529.20 | $2,399,664.76 |

Depreciation Reserve Summary



Account: KEPCo 101/6 357 - KY
Scenario: KEPCO TRANSMISSION 2008 NEW
Dispersion: 37 - R2

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $11,590.50 | $1,908.11 | 0.1646 | $9,682.39 | 0.8354 |
| Computed | $11,590.50 | $3,109.35 | 0.2683 | $8,481.15 | 0.7317 |
| Difference | | ($1,201.24) | -0.1036 | $1,201.24 | 0.1036 |

 10/26/2009

Generation Arrangement Report

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Account: KEPCo 101/6 357 - KY
Dispersion: 37.00 - R2

'erage Net Salvage Rate: 0.00%
.iture Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1997 | 11.50 | $11,590.50 | 37.00 | 27.07 | 0.7317 | 1.0000 | $8,481.15 | $313.26 |
| | | $11,590.50 | 37.00 | 27.07 | 0.7317 | 1.0000 | $8,481.15 | $313.26 |

Depreciation Reserve Summary

Account: KEPCo 101/6 358 - KY
Scenario: KEPCO TRANSMISSION 2008 NEW
Dispersion: 44 - R1

.rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $106,066.50 | $25,908.95 | 0.2443 | $80,157.55 | 0.7557 |
| Computed | $106,066.50 | $42,219.85 | 0.3981 | $63,846.65 | 0.6019 |
| Difference | | ($16,310.90) | -0.1538 | $16,310.90 | 0.1538 |

 

Generation Arrangement Report



Account: KEPCo 101/6 358 - KY
Dispersion: 44.00 - R1

erage Net Salvage Rate: 0.00%
.ture Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1983 | 25.50 | $106,066.50 | 44.00 | 26.49 | 0.6019 | 1.0000 | $63,846.65 | $2,410.60 |
| | | $106,066.50 | 44.00 | 26.49 | 0.6019 | 1.0000 | $63,846.65 | $2,410.60 |

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# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# DISTRIBUTION PLANT WORKPAPERS

## LIFE ANALYSIS

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 3602 LAND RIGHTS | |
| Depreciable Balance | $4,178,635 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 75 | 75 |
| Iowa Curve | R4.0 | R4.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

************************************************************************************************************

No actuarial analysis was performed for the investment in this account due to the minimal retirement history. The recommendation is to continue the current current average service life and dispersion.

No removal cost or salvage is expected from retirements from this account.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

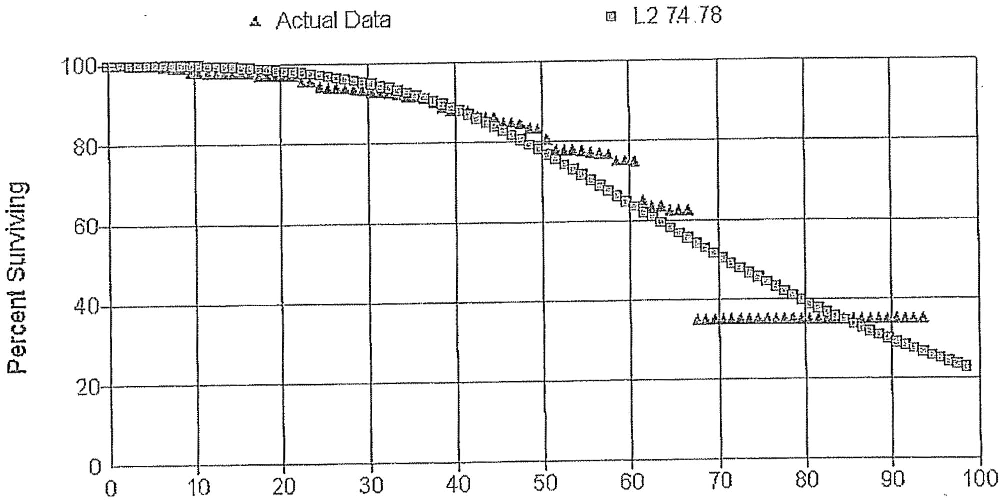
| | | |
|---|---|---|
| Account | 361 STRUCTURES & IMPROVEMENTS | |
| Depreciable Balance | $4,273,118 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 65 | 75 |
| Iowa Curve | LO.5 | L2.0 |
| Gross Removal, % | | 5% |
| Gross Salvage, % | | 15% |
| Net Salvage % | 0% | 10% |

************************************************************************************************

The actuarial analyses indicated the average service life for the investment in this account is increasing. Based on the analysis of the 40 year band, the recommendation is to move to a 75 year average service life following an L2.0 type retirement dispersion.

Removal costs would be expected from the removal and replacement of retirment units in this account. Salvage would likely be received from the scrap materials removed or replaced.

Account: KEPCo 101/6 361 - KY
Scenario: KEPCO DISTRIBUTION 2008




Age (Years)
Vintages: 1915-2008
Activity Years: 1969-2008

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Actuarial Life Analysis

Account: KEPCo 101/6 361 - KY
Scenario: KEPCO DISTRIBUTION 2008
Placement Band: 1915 - 2008
'unction: Survivorship Annual Rate Method
Neighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1969 -2008 | 93.5 | 35.02 | 0.32561113 | L2 | 74.78 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1969 - 2008

| Age | Actual | L2 74.78 |
|---|---|---|
| 0.0 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 |
| 1.5 | 99.96 | 100.00 |
| 2.5 | 99.93 | 100.00 |
| 3.5 | 99.85 | 99.99 |
| 4.5 | 99.77 | 99.98 |
| 5.5 | 99.72 | 99.96 |
| 6.5 | 99.48 | 99.94 |
| 7.5 | 99.02 | 99.89 |
| 8.5 | 99.00 | 99.86 |
| 9.5 | 97.91 | 99.81 |
| 10.5 | 97.86 | 99.71 |
| 11.5 | 97.81 | 99.65 |
| 12.5 | 97.77 | 99.58 |
| 13.5 | 97.73 | 99.41 |
| 14.5 | 97.65 | 99.32 |
| 15.5 | 97.63 | 99.21 |
| 16.5 | 97.53 | 98.97 |
| 17.5 | 97.09 | 98.84 |
| 18.5 | 97.07 | 98.70 |
| 19.5 | 97.00 | 98.38 |
| 20.5 | 96.99 | 98.20 |
| 21.5 | 96.85 | 98.02 |
| 22.5 | 95.44 | 97.62 |
| 23.5 | 95.43 | 97.40 |
| 24.5 | 94.37 | 97.17 |
| 25.5 | 93.98 | 96.68 |
| 26.5 | 93.96 | 96.42 |
| 27.5 | 93.84 | 96.14 |
| 28.5 | 93.53 | 95.54 |
| 29.5 | 93.15 | 95.21 |
| 30.5 | 93.04 | 94.86 |
| 31.5 | 92.96 | 94.10 |
| 32.5 | 92.60 | 93.68 |
| 33.5 | 92.10 | 93.24 |
| 34.5 | 91.61 | 92.29 |
| 35.5 | 91.40 | 91.78 |
| 36.5 | 91.14 | 91.24 |
| 37.5 | 90.09 | 90.08 |
| 38.5 | 88.63 | 89.46 |
| 39.5 | 88.06 | 88.82 |
| 40.5 | 87.95 | 87.45 |
| 41.5 | 87.92 | 86.73 |
| 42.5 | 86.57 | 85.99 |
| 43.5 | 86.31 | 84.43 |
| 44.5 | 86.31 | 83.62 |
| 45.5 | 84.87 | 82.78 |
| 46.5 | 84.87 | 81.06 |
| 47.5 | 84.52 | 80.17 |
| 48.5 | 83.34 | 79.26 |
| 49.5 | 83.15 | 77.40 |
| 50.5 | 80.57 | 76.45 |
| 51.5 | 77.94 | 75.49 |
| 52.5 | 77.94 | 73.54 |
| 53.5 | 77.94 | 72.55 |

Surviving Percent Report

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Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1969- 2008

| Age | Actual | L2 74.78 |
|---|---|---|
| 54.5 | 77.57 | 71.55 |
| 55.5 | 77.06 | 69.53 |
| 56.5 | 76.75 | 68.52 |
| 57.5 | 76.60 | 67.50 |
| 58.5 | 74.89 | 65.46 |
| 59.5 | 74.89 | 64.44 |
| 60.5 | 74.75 | 63.42 |
| 61.5 | 65.02 | 61.39 |
| 62.5 | 63.39 | 60.38 |
| 63.5 | 63.39 | 59.37 |
| 64.5 | 62.33 | 57.37 |
| 65.5 | 62.33 | 56.38 |
| 66.5 | 62.33 | 55.39 |
| 67.5 | 35.02 | 53.45 |
| 68.5 | 35.02 | 52.49 |
| 69.5 | 35.02 | 51.53 |
| 70.5 | 35.02 | 49.66 |
| 71.5 | 35.02 | 48.74 |
| 72.5 | 35.02 | 47.82 |
| 73.5 | 35.02 | 46.03 |
| 74.5 | 35.02 | 45.15 |
| 75.5 | 35.02 | 44.28 |
| 76.5 | 35.02 | 42.57 |
| 77.5 | 35.02 | 41.73 |
| 78.5 | 35.02 | 40.91 |
| 79.5 | 35.02 | 39.29 |
| 80.5 | 35.02 | 38.50 |
| 81.5 | 35.02 | 37.72 |
| 82.5 | 35.02 | 36.19 |
| 83.5 | 35.02 | 35.45 |
| 84.5 | 35.02 | 34.71 |
| 85.5 | 35.02 | 33.27 |
| 86.5 | 35.02 | 32.57 |
| 87.5 | 35.02 | 31.20 |
| 88.5 | 35.02 | 30.53 |
| 89.5 | 35.02 | 29.87 |
| 90.5 | 35.02 | 28.58 |
| 91.5 | 35.02 | 27.95 |
| 92.5 | 35.02 | 27.33 |
| 93.5 | 35.02 | 26.12 |

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Observed Life Table

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008
Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 4,246,979.32 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 4,151,022.10 | 1,747.00 | 0.00042 | 0.99958 | 100.00 |
| 1.5 | 4,170,137.10 | 1,155.00 | 0.00028 | 0.99972 | 99.96 |
| 2.5 | 4,200,776.10 | 3,479.00 | 0.00083 | 0.99917 | 99.93 |
| 3.5 | 4,190,894.95 | 3,444.00 | 0.00082 | 0.99918 | 99.85 |
| 4.5 | 4,193,737.95 | 1,793.00 | 0.00043 | 0.99957 | 99.77 |
| 5.5 | 3,801,487.04 | 9,431.00 | 0.00248 | 0.99752 | 99.73 |
| 6.5 | 3,753,732.32 | 17,098.00 | 0.00455 | 0.99545 | 99.48 |
| 7.5 | 3,732,107.78 | 853.00 | 0.00023 | 0.99977 | 99.03 |
| 8.5 | 3,630,793.58 | 40,022.00 | 0.01102 | 0.98898 | 99.01 |
| 9.5 | 3,203,761.73 | 1,662.00 | 0.00052 | 0.99948 | 97.92 |
| 10.5 | 3,175,203.70 | 1,676.00 | 0.00053 | 0.99947 | 97.87 |
| 11.5 | 3,114,285.70 | 1,008.00 | 0.00032 | 0.99968 | 97.82 |
| 12.5 | 3,087,145.70 | 1,550.00 | 0.00050 | 0.99950 | 97.79 |
| 13.5 | 2,481,939.70 | 1,888.00 | 0.00076 | 0.99924 | 97.74 |
| 14.5 | 2,381,075.70 | 402.00 | 0.00017 | 0.99983 | 97.67 |
| 15.5 | 2,135,258.70 | 2,252.00 | 0.00105 | 0.99895 | 97.65 |
| 16.5 | 2,029,772.70 | 9,268.00 | 0.00457 | 0.99543 | 97.55 |
| 17.5 | 1,680,469.70 | 193.00 | 0.00011 | 0.99989 | 97.10 |
| 18.5 | 1,651,785.70 | 1,357.00 | 0.00082 | 0.99918 | 97.09 |
| 19.5 | 1,621,326.70 | 106.00 | 0.00007 | 0.99993 | 97.01 |
| 20.5 | 1,591,956.70 | 2,211.00 | 0.00139 | 0.99861 | 97.00 |
| 21.5 | 1,464,363.70 | 21,325.00 | 0.01456 | 0.98544 | 96.87 |
| 22.5 | 1,295,002.70 | 158.00 | 0.00012 | 0.99988 | 95.46 |
| 23.5 | 1,176,707.70 | 13,130.00 | 0.01116 | 0.98884 | 95.45 |
| 24.5 | 1,153,074.70 | 4,779.00 | 0.00414 | 0.99586 | 94.38 |
| 25.5 | 1,142,914.70 | 244.00 | 0.00021 | 0.99979 | 93.99 |
| 26.5 | 1,081,255.70 | 1,363.00 | 0.00126 | 0.99874 | 93.97 |
| 27.5 | 987,192.70 | 3,194.00 | 0.00324 | 0.99676 | 93.85 |
| 28.5 | 616,734.70 | 2,550.00 | 0.00413 | 0.99587 | 93.55 |
| 29.5 | 609,393.70 | 726.00 | 0.00119 | 0.99881 | 93.16 |
| 30.5 | 601,390.74 | 491.00 | 0.00082 | 0.99918 | 93.05 |
| 31.5 | 517,234.74 | 1,985.00 | 0.00384 | 0.99616 | 92.97 |
| 32.5 | 491,388.74 | 2,658.00 | 0.00541 | 0.99459 | 92.61 |
| 33.5 | 416,026.74 | 2,247.00 | 0.00540 | 0.99460 | 92.11 |
| 34.5 | 350,914.74 | 787.00 | 0.00224 | 0.99776 | 91.61 |
| 35.5 | 306,309.74 | 873.00 | 0.00285 | 0.99715 | 91.40 |
| 36.5 | 255,642.74 | 2,945.00 | 0.01152 | 0.98848 | 91.14 |
| 37.5 | 193,004.74 | 3,124.00 | 0.01619 | 0.98381 | 90.09 |
| 38.5 | 176,623.74 | 1,141.00 | 0.00646 | 0.99354 | 88.63 |
| 39.5 | 169,469.74 | 200.00 | 0.00118 | 0.99882 | 88.06 |
| 40.5 | 149,621.74 | 53.00 | 0.00035 | 0.99965 | 87.96 |
| 41.5 | 136,485.74 | 2,100.00 | 0.01539 | 0.98461 | 87.93 |
| 42.5 | 103,289.74 | 306.00 | 0.00296 | 0.99704 | 86.58 |
| 43.5 | 101,171.04 | 0.00 | 0.00000 | 1.00000 | 86.32 |
| 44.5 | 100,676.04 | 1,679.00 | 0.01668 | 0.98332 | 86.32 |
| 45.5 | 100,216.04 | 0.00 | 0.00000 | 1.00000 | 84.88 |
| 46.5 | 100,026.04 | 423.00 | 0.00423 | 0.99577 | 84.88 |
| 47.5 | 98,018.04 | 1,362.00 | 0.01390 | 0.98610 | 84.52 |
| 48.5 | 96,365.04 | 225.00 | 0.00233 | 0.99767 | 83.35 |
| 49.5 | 96,383.04 | 2,991.00 | 0.03103 | 0.96897 | 83.16 |
| 50.5 | 94,244.04 | 3,077.00 | 0.03265 | 0.96735 | 80.58 |
| 51.5 | 84,811.04 | 0.00 | 0.00000 | 1.00000 | 77.95 |
| 52.5 | 79,657.04 | 0.00 | 0.00000 | 1.00000 | 77.95 |

Observed Life Table

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 79,039.04 | 370.37 | 0.00468 | 0.99532 | 77.95 |
| 54.5 | 73,762.67 | 483.00 | 0.00655 | 0.99345 | 77.59 |
| 55.5 | 63,964.67 | 261.00 | 0.00408 | 0.99592 | 77.08 |
| 56.5 | 59,221.67 | 111.00 | 0.00187 | 0.99813 | 76.77 |
| 57.5 | 56,244.67 | 1,262.00 | 0.02244 | 0.97756 | 76.63 |
| 58.5 | 51,211.04 | 0.00 | 0.00000 | 1.00000 | 74.91 |
| 59.5 | 47,349.04 | 83.00 | 0.00175 | 0.99825 | 74.91 |
| 60.5 | 42,092.04 | 5,484.00 | 0.13029 | 0.86971 | 74.78 |
| 61.5 | 34,100.04 | 852.00 | 0.02499 | 0.97501 | 65.04 |
| 62.5 | 33,206.04 | 0.00 | 0.00000 | 1.00000 | 63.41 |
| 63.5 | 32,260.04 | 540.00 | 0.01674 | 0.98326 | 63.41 |
| 64.5 | 31,720.04 | 0.00 | 0.00000 | 1.00000 | 62.35 |
| 65.5 | 30,048.04 | 0.00 | 0.00000 | 1.00000 | 62.35 |
| 66.5 | 29,071.04 | 12,737.00 | 0.43813 | 0.56187 | 62.35 |
| 67.5 | 16,194.04 | 0.00 | 0.00000 | 1.00000 | 35.03 |
| 68.5 | 12,655.04 | 0.00 | 0.00000 | 1.00000 | 35.03 |
| 69.5 | 12,655.04 | 0.00 | 0.00000 | 1.00000 | 35.03 |
| 70.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 35.03 |

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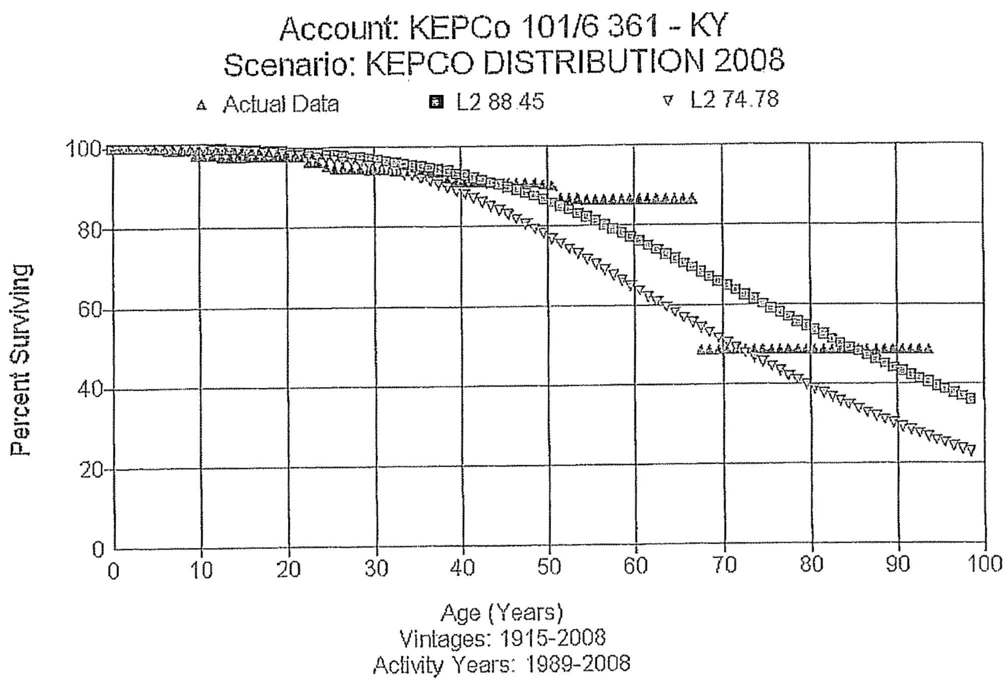


Actuarial Life Analysis

Account: KEPCo 101/6 361 - KY
Scenario: KEPCO DISTRIBUTION 2008
Placement Band: 1915 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1989 -2008 | 93.5 | 48.54 | 0.45063600 | L2 | 88.45 |

Observed Life Table



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 2,737,953.32 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 2,653,484.10 | 234.00 | 0.00009 | 0.99991 | 100.00 |
| 1.5 | 2,781,948.10 | 448.00 | 0.00016 | 0.99984 | 99.99 |
| 2.5 | 2,929,705.10 | 829.00 | 0.00028 | 0.99972 | 99.97 |
| 3.5 | 3,040,132.25 | 2,497.00 | 0.00082 | 0.99918 | 99.94 |
| 4.5 | 3,048,138.25 | 1,793.00 | 0.00059 | 0.99941 | 99.86 |
| 5.5 | 2,657,614.34 | 7,015.00 | 0.00264 | 0.99736 | 99.80 |
| 6.5 | 2,674,550.62 | 6,923.00 | 0.00259 | 0.99741 | 99.54 |
| 7.5 | 2,754,921.08 | 408.00 | 0.00015 | 0.99985 | 99.28 |
| 8.5 | 3,031,509.88 | 40,011.00 | 0.01320 | 0.98680 | 99.27 |
| 9.5 | 2,611,749.03 | 837.00 | 0.00032 | 0.99968 | 97.96 |
| 10.5 | 2,624,916.00 | 1,563.00 | 0.00060 | 0.99940 | 97.93 |
| 11.5 | 2,639,490.00 | 808.00 | 0.00031 | 0.99969 | 97.87 |
| 12.5 | 2,628,438.00 | 156.00 | 0.00006 | 0.99994 | 97.84 |
| 13.5 | 2,096,381.00 | 0.00 | 0.00000 | 1.00000 | 97.83 |
| 14.5 | 2,063,729.00 | 0.00 | 0.00000 | 1.00000 | 97.83 |
| 15.5 | 1,854,687.00 | 1,792.00 | 0.00097 | 0.99903 | 97.83 |
| 16.5 | 1,810,935.00 | 432.00 | 0.00024 | 0.99976 | 97.74 |
| 17.5 | 1,526,962.00 | 193.00 | 0.00013 | 0.99987 | 97.72 |
| 18.5 | 1,507,912.00 | 127.00 | 0.00008 | 0.99992 | 97.71 |
| 19.5 | 1,481,479.00 | 106.00 | 0.00007 | 0.99993 | 97.70 |
| 20.5 | 1,468,035.00 | 462.00 | 0.00031 | 0.99969 | 97.69 |
| 21.5 | 1,359,260.00 | 20,039.00 | 0.01474 | 0.98526 | 97.66 |
| 22.5 | 1,222,603.00 | 80.00 | 0.00007 | 0.99993 | 96.22 |
| 23.5 | 1,105,672.70 | 12,591.00 | 0.01139 | 0.98861 | 96.21 |
| 24.5 | 1,085,045.70 | 4,779.00 | 0.00440 | 0.99560 | 95.11 |
| 25.5 | 1,078,539.70 | 158.00 | 0.00015 | 0.99985 | 94.69 |
| 26.5 | 1,016,106.70 | 1,314.00 | 0.00129 | 0.99871 | 94.68 |
| 27.5 | 924,428.70 | 916.00 | 0.00099 | 0.99901 | 94.56 |
| 28.5 | 550,326.70 | 351.00 | 0.00064 | 0.99936 | 94.47 |
| 29.5 | 544,218.70 | 726.00 | 0.00133 | 0.99867 | 94.41 |
| 30.5 | 501,659.70 | 491.00 | 0.00098 | 0.99902 | 94.28 |
| 31.5 | 424,059.70 | 1,972.00 | 0.00465 | 0.99535 | 94.19 |
| 32.5 | 403,696.70 | 0.00 | 0.00000 | 1.00000 | 93.75 |
| 33.5 | 331,855.70 | 0.00 | 0.00000 | 1.00000 | 93.75 |
| 34.5 | 273,996.70 | 49.00 | 0.00018 | 0.99982 | 93.75 |
| 35.5 | 238,571.70 | 0.00 | 0.00000 | 1.00000 | 93.73 |
| 36.5 | 193,259.70 | 0.00 | 0.00000 | 1.00000 | 93.73 |
| 37.5 | 135,949.70 | 3,058.00 | 0.02249 | 0.97751 | 93.73 |
| 38.5 | 123,776.70 | 350.00 | 0.00283 | 0.99717 | 91.62 |
| 39.5 | 120,318.70 | 200.00 | 0.00166 | 0.99834 | 91.36 |
| 40.5 | 104,499.70 | 0.00 | 0.00000 | 1.00000 | 91.21 |
| 41.5 | 91,899.70 | 75.00 | 0.00082 | 0.99918 | 91.21 |
| 42.5 | 60,770.70 | 306.00 | 0.00504 | 0.99496 | 91.14 |
| 43.5 | 59,598.00 | 0.00 | 0.00000 | 1.00000 | 90.68 |
| 44.5 | 59,103.00 | 0.00 | 0.00000 | 1.00000 | 90.68 |
| 45.5 | 55,573.00 | 0.00 | 0.00000 | 1.00000 | 90.68 |
| 46.5 | 56,360.00 | 0.00 | 0.00000 | 1.00000 | 90.68 |
| 47.5 | 54,915.00 | 0.00 | 0.00000 | 1.00000 | 90.68 |
| 48.5 | 58,163.00 | 225.00 | 0.00387 | 0.99613 | 90.68 |
| 49.5 | 57,745.00 | 162.00 | 0.00281 | 0.99719 | 90.33 |
| 50.5 | 86,052.04 | 3,077.00 | 0.03576 | 0.96424 | 90.08 |
| 51.5 | 76,619.04 | 0.00 | 0.00000 | 1.00000 | 86.86 |
| 52.5 | 70,664.04 | 0.00 | 0.00000 | 1.00000 | 86.86 |

Observed Life Table

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 69,963.04 | 370.37 | 0.00529 | 0.99471 | 86.86 |
| 54.5 | 64,686.67 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 55.5 | 55,371.67 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 56.5 | 50,889.67 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 57.5 | 48,023.67 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 58.5 | 44,252.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 59.5 | 40,390.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 60.5 | 35,216.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 61.5 | 32,708.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 62.5 | 32,666.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 63.5 | 31,720.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 64.5 | 31,720.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 65.5 | 30,048.04 | 0.00 | 0.00000 | 1.00000 | 86.40 |
| 66.5 | 29,071.04 | 12,737.00 | 0.43813 | 0.56187 | 86.40 |
| 67.5 | 16,194.04 | 0.00 | 0.00000 | 1.00000 | 48.55 |
| 68.5 | 12,655.04 | 0.00 | 0.00000 | 1.00000 | 48.55 |
| 69.5 | 12,655.04 | 0.00 | 0.00000 | 1.00000 | 48.55 |
| 70.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 48.55 |

Surviving Percent Report

Scenario: KEPCO DISTRIBUTION 2008

Account: KEPCo 101/6 361 - KY

Placement Band: 1915 - 2008



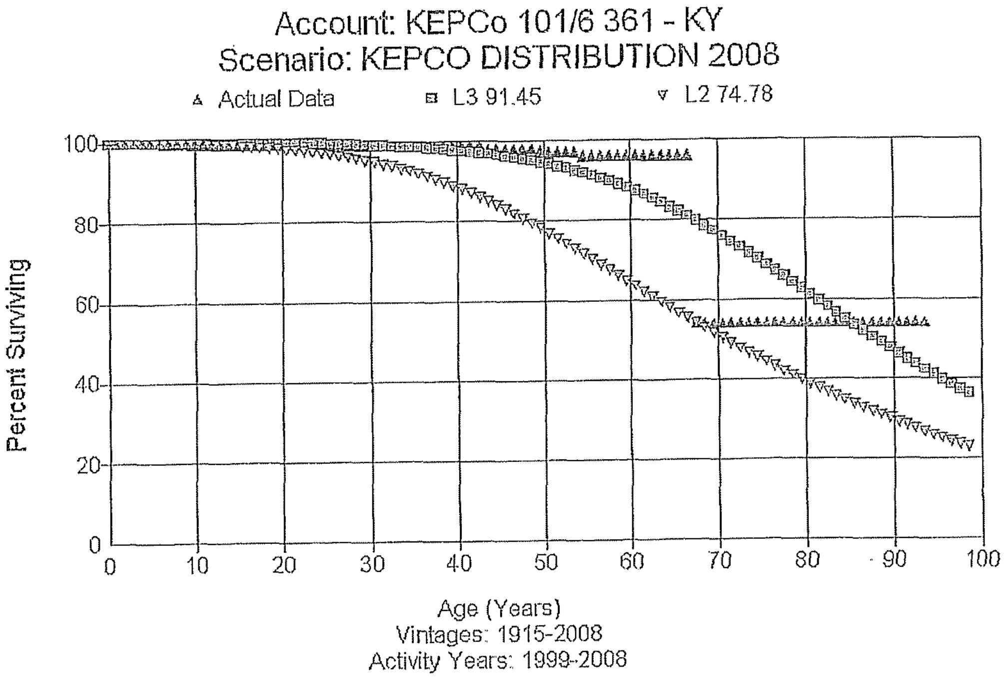
Observation Band: 1989- 2008

| Age | Actual | L2 88.45 | L2 75.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 | 100.00 |
| 1.5 | 99.99 | 100.00 | 100.00 |
| 2.5 | 99.98 | 100.00 | 100.00 |
| 3.5 | 99.95 | 100.00 | 99.99 |
| 4.5 | 99.86 | 99.99 | 99.99 |
| 5.5 | 99.81 | 99.98 | 99.96 |
| 6.5 | 99.54 | 99.96 | 99.94 |
| 7.5 | 99.28 | 99.94 | 99.89 |
| 8.5 | 99.27 | 99.92 | 99.86 |
| 9.5 | 97.96 | 99.89 | 99.81 |
| 10.5 | 97.93 | 99.86 | 99.71 |
| 11.5 | 97.87 | 99.77 | 99.65 |
| 12.5 | 97.84 | 99.71 | 99.58 |
| 13.5 | 97.83 | 99.65 | 99.41 |
| 14.5 | 97.83 | 99.58 | 99.32 |
| 15.5 | 97.83 | 99.50 | 99.21 |
| 16.5 | 97.74 | 99.41 | 98.97 |
| 17.5 | 97.72 | 99.32 | 98.84 |
| 18.5 | 97.70 | 99.21 | 98.70 |
| 19.5 | 97.70 | 98.97 | 98.54 |
| 20.5 | 97.69 | 98.84 | 98.20 |
| 21.5 | 97.66 | 98.70 | 98.02 |
| 22.5 | 96.22 | 98.54 | 97.82 |
| 23.5 | 96.21 | 98.38 | 97.40 |
| 24.5 | 95.12 | 98.20 | 97.17 |
| 25.5 | 94.70 | 98.02 | 96.93 |
| 26.5 | 94.68 | 97.82 | 96.42 |
| 27.5 | 94.56 | 97.40 | 96.14 |
| 28.5 | 94.47 | 97.17 | 95.85 |
| 29.5 | 94.41 | 96.93 | 95.21 |
| 30.5 | 94.28 | 96.68 | 94.86 |
| 31.5 | 94.19 | 96.42 | 94.49 |
| 32.5 | 93.75 | 96.14 | 93.68 |
| 33.5 | 93.75 | 95.85 | 93.24 |
| 34.5 | 93.75 | 95.21 | 92.78 |
| 35.5 | 93.73 | 94.86 | 91.78 |
| 36.5 | 93.73 | 94.49 | 91.24 |
| 37.5 | 93.73 | 94.10 | 90.67 |
| 38.5 | 91.63 | 93.68 | 89.46 |
| 39.5 | 91.37 | 93.24 | 88.82 |
| 40.5 | 91.22 | 92.78 | 88.15 |
| 41.5 | 91.22 | 92.29 | 86.73 |
| 42.5 | 91.14 | 91.24 | 85.99 |
| 43.5 | 90.68 | 90.67 | 85.22 |
| 44.5 | 90.68 | 90.08 | 83.62 |
| 45.5 | 90.68 | 89.46 | 82.78 |
| 46.5 | 90.68 | 88.82 | 81.93 |
| 47.5 | 90.68 | 88.15 | 80.17 |
| 48.5 | 90.68 | 87.45 | 79.26 |
| 49.5 | 90.33 | 86.73 | 78.34 |
| 50.5 | 90.08 | 85.22 | 76.45 |
| 51.5 | 86.86 | 84.43 | 75.49 |
| 52.5 | 86.86 | 83.62 | 74.52 |
| 53.5 | 86.86 | 82.78 | 72.55 |

Surviving Percent Report

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1989- 2008

| Age | Actual | L2 88.45 | L2 75.00 |
|---|---|---|---|
| 54.5 | 86.40 | 81.93 | 71.55 |
| 55.5 | 86.40 | 81.06 | 70.54 |
| 56.5 | 86.40 | 80.17 | 68.52 |
| 57.5 | 86.40 | 78.34 | 67.50 |
| 58.5 | 86.40 | 77.40 | 66.48 |
| 59.5 | 86.40 | 76.45 | 64.44 |
| 60.5 | 86.40 | 75.49 | 63.42 |
| 61.5 | 86.40 | 74.52 | 62.40 |
| 62.5 | 86.40 | 73.54 | 60.38 |
| 63.5 | 86.40 | 72.55 | 59.37 |
| 64.5 | 86.40 | 71.55 | 58.37 |
| 65.5 | 86.40 | 69.53 | 56.38 |
| 66.5 | 86.40 | 68.52 | 55.39 |
| 67.5 | 48.54 | 67.50 | 54.42 |
| 68.5 | 48.54 | 66.48 | 52.49 |
| 69.5 | 48.54 | 65.46 | 51.53 |
| 70.5 | 48.54 | 64.44 | 49.66 |
| 71.5 | 48.54 | 63.42 | 48.74 |
| 72.5 | 48.54 | 62.40 | 47.82 |
| 73.5 | 48.54 | 60.38 | 46.03 |
| 74.5 | 48.54 | 59.37 | 45.15 |
| 75.5 | 48.54 | 58.37 | 44.28 |
| 76.5 | 48.54 | 57.37 | 42.57 |
| 77.5 | 48.54 | 56.38 | 41.73 |
| 78.5 | 48.54 | 55.39 | 40.91 |
| 79.5 | 48.54 | 54.42 | 39.29 |
| 80.5 | 48.54 | 52.49 | 38.50 |
| 81.5 | 48.54 | 51.53 | 37.72 |
| 82.5 | 48.54 | 50.59 | 36.19 |
| 83.5 | 48.54 | 49.66 | 35.45 |
| 84.5 | 48.54 | 48.74 | 34.71 |
| 85.5 | 48.54 | 47.82 | 33.27 |
| 86.5 | 48.54 | 46.92 | 32.57 |
| 87.5 | 48.54 | 46.03 | 31.88 |
| 88.5 | 48.54 | 44.28 | 30.53 |
| 89.5 | 48.54 | 43.42 | 29.87 |
| 90.5 | 48.54 | 42.57 | 29.22 |
| 91.5 | 48.54 | 41.73 | 27.95 |
| 92.5 | 48.54 | 40.91 | 27.33 |
| 93.5 | 48.54 | 40.09 | 26.72 |


Account: KEPCo 101/6 361 - KY
Scenario: KEPCO DISTRIBUTION 2008
Actual Data
L3 91.45
L2 74.78
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1915-2008
Activity Years: 1999-2008

Actuarial Life Analysis

Account: KEPCo 101/6 361 - KY
Scenario: KEPCO DISTRIBUTION 2008
Placement Band: 1915 - 2008
'unction: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1999 -2008 | 93.5 | 53.99 | 0.60583962 | L3 | 91.45 |

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Observed Life Table

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 1,064,766.29 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 974,413.10 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 1.5 | 1,042,350.10 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 2.5 | 1,079,786.10 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 3.5 | 1,676,279.25 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 4.5 | 1,780,340.25 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 5.5 | 1,639,286.34 | 5,551.00 | 0.00339 | 0.99661 | 100.00 |
| 6.5 | 1,707,240.62 | 0.00 | 0.00000 | 1.00000 | 99.66 |
| 7.5 | 2,044,400.08 | 45.00 | 0.00002 | 0.99998 | 99.66 |
| 8.5 | 1,976,313.88 | 1,858.00 | 0.00094 | 0.99906 | 99.66 |
| 9.5 | 1,620,567.03 | 523.00 | 0.00032 | 0.99968 | 99.57 |
| 10.5 | 1,624,956.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 11.5 | 1,684,954.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 12.5 | 1,797,581.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 13.5 | 1,312,059.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 14.5 | 1,218,501.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 15.5 | 970,824.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 16.5 | 921,270.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 17.5 | 669,948.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 18.5 | 1,014,554.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 19.5 | 987,130.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 20.5 | 996,222.00 | 0.00 | 0.00000 | 1.00000 | 99.54 |
| 21.5 | 952,361.00 | 364.00 | 0.00038 | 0.99962 | 99.54 |
| 22.5 | 828,713.00 | 0.00 | 0.00000 | 1.00000 | 99.50 |
| 23.5 | 782,334.00 | 0.00 | 0.00000 | 1.00000 | 99.50 |
| 24.5 | 834,696.00 | 3,840.00 | 0.00460 | 0.99540 | 99.50 |
| 25.5 | 868,494.00 | 0.00 | 0.00000 | 1.00000 | 99.04 |
| 26.5 | 855,823.00 | 0.00 | 0.00000 | 1.00000 | 99.04 |
| 27.5 | 823,134.00 | 0.00 | 0.00000 | 1.00000 | 99.04 |
| 28.5 | 462,914.00 | 0.00 | 0.00000 | 1.00000 | 99.04 |
| 29.5 | 464,032.00 | 98.00 | 0.00021 | 0.99979 | 99.04 |
| 30.5 | 439,836.00 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 31.5 | 371,279.00 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 32.5 | 377,454.00 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 33.5 | 306,768.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 34.5 | 244,398.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 35.5 | 204,984.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 36.5 | 155,380.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 37.5 | 96,789.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 38.5 | 83,823.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 39.5 | 77,046.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 40.5 | 56,253.70 | 0.00 | 0.00000 | 1.00000 | 99.02 |
| 41.5 | 47,501.70 | 75.00 | 0.00158 | 0.99842 | 99.02 |
| 42.5 | 22,510.70 | 206.00 | 0.00915 | 0.99085 | 98.86 |
| 43.5 | 21,355.00 | 0.00 | 0.00000 | 1.00000 | 97.96 |
| 44.5 | 25,766.00 | 0.00 | 0.00000 | 1.00000 | 97.96 |
| 45.5 | 29,879.00 | 0.00 | 0.00000 | 1.00000 | 97.96 |
| 46.5 | 34,171.00 | 0.00 | 0.00000 | 1.00000 | 97.96 |
| 47.5 | 35,452.00 | 0.00 | 0.00000 | 1.00000 | 97.96 |
| 48.5 | 39,303.00 | 225.00 | 0.00572 | 0.99428 | 97.96 |
| 49.5 | 42,747.00 | 162.00 | 0.00379 | 0.99621 | 97.40 |
| 50.5 | 47,759.00 | 0.00 | 0.00000 | 1.00000 | 97.03 |
| 51.5 | 43,911.00 | 0.00 | 0.00000 | 1.00000 | 97.03 |
| 52.5 | 37,998.00 | 0.00 | 0.00000 | 1.00000 | 97.03 |

Observed Life Table



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 38,243.00 | 370.37 | 0.00967 | 0.99033 | 97.03 |
| 54.5 | 32,966.63 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 55.5 | 25,323.63 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 56.5 | 21,818.63 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 57.5 | 19,092.63 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 58.5 | 18,860.00 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 59.5 | 14,998.00 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 60.5 | 35,216.04 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 61.5 | 32,708.04 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 62.5 | 32,666.04 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 63.5 | 31,720.04 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 64.5 | 31,720.04 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 65.5 | 30,048.04 | 0.00 | 0.00000 | 1.00000 | 96.09 |
| 66.5 | 29,071.04 | 12,737.00 | 0.43813 | 0.56187 | 96.09 |
| 67.5 | 16,194.04 | 0.00 | 0.00000 | 1.00000 | 53.99 |
| 68.5 | 12,655.04 | 0.00 | 0.00000 | 1.00000 | 53.99 |
| 69.5 | 12,655.04 | 0.00 | 0.00000 | 1.00000 | 53.99 |
| 70.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 53.99 |

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Surviving Percent Report

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008
Observation Band: 1999- 2008

| Age | Actual | L3 91.45 | L2 75.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 | 100.00 |
| 1.5 | 100.00 | 100.00 | 100.00 |
| 2.5 | 100.00 | 100.00 | 100.00 |
| 3.5 | 100.00 | 100.00 | 99.99 |
| 4.5 | 100.00 | 100.00 | 99.99 |
| 5.5 | 100.00 | 100.00 | 99.96 |
| 6.5 | 99.66 | 100.00 | 99.94 |
| 7.5 | 99.66 | 100.00 | 99.89 |
| 8.5 | 99.66 | 100.00 | 99.86 |
| 9.5 | 99.57 | 100.00 | 99.81 |
| 10.5 | 99.53 | 100.00 | 99.71 |
| 11.5 | 99.53 | 100.00 | 99.65 |
| 12.5 | 99.53 | 100.00 | 99.58 |
| 13.5 | 99.53 | 99.99 | 99.41 |
| 14.5 | 99.53 | 99.99 | 99.32 |
| 15.5 | 99.53 | 99.98 | 99.21 |
| 16.5 | 99.53 | 99.96 | 98.97 |
| 17.5 | 99.53 | 99.94 | 98.84 |
| 18.5 | 99.53 | 99.92 | 98.70 |
| 19.5 | 99.53 | 99.90 | 98.54 |
| 20.5 | 99.53 | 99.87 | 98.20 |
| 21.5 | 99.53 | 99.84 | 98.02 |
| 22.5 | 99.50 | 99.80 | 97.82 |
| 23.5 | 99.50 | 99.76 | 97.40 |
| 24.5 | 99.50 | 99.71 | 97.17 |
| 25.5 | 99.04 | 99.65 | 96.93 |
| 26.5 | 99.04 | 99.59 | 96.42 |
| 27.5 | 99.04 | 99.45 | 96.14 |
| 28.5 | 99.04 | 99.37 | 95.85 |
| 29.5 | 99.04 | 99.28 | 95.21 |
| 30.5 | 99.02 | 99.18 | 94.86 |
| 31.5 | 99.02 | 99.07 | 94.49 |
| 32.5 | 99.02 | 98.95 | 93.68 |
| 33.5 | 99.02 | 98.83 | 93.24 |
| 34.5 | 99.02 | 98.70 | 92.78 |
| 35.5 | 99.02 | 98.55 | 91.78 |
| 36.5 | 99.02 | 98.40 | 91.24 |
| 37.5 | 99.02 | 98.06 | 90.67 |
| 38.5 | 99.02 | 97.87 | 89.46 |
| 39.5 | 99.02 | 97.67 | 88.82 |
| 40.5 | 99.02 | 97.45 | 88.15 |
| 41.5 | 99.02 | 97.22 | 86.73 |
| 42.5 | 98.86 | 96.98 | 85.99 |
| 43.5 | 97.96 | 96.72 | 85.22 |
| 44.5 | 97.96 | 96.44 | 83.62 |
| 45.5 | 97.96 | 96.15 | 82.78 |
| 46.5 | 97.96 | 95.83 | 81.93 |
| 47.5 | 97.96 | 95.49 | 80.17 |
| 48.5 | 97.96 | 94.75 | 79.26 |
| 49.5 | 97.39 | 94.33 | 78.34 |
| 50.5 | 97.03 | 93.89 | 76.45 |
| 51.5 | 97.03 | 93.42 | 75.49 |
| 52.5 | 97.03 | 92.92 | 74.52 |
| 53.5 | 97.03 | 92.39 | 72.55 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 361 - KY
Placement Band: 1915 - 2008 Observation Band: 1999- 2008

| Age | Actual | L3 91.45 | L2 75.00 |
|---|---|---|---|
| 54.5 | 96.09 | 91.82 | 71.55 |
| 55.5 | 96.09 | 91.21 | 70.54 |
| 56.5 | 96.09 | 90.57 | 68.52 |
| 57.5 | 96.09 | 89.89 | 67.50 |
| 58.5 | 96.09 | 89.17 | 66.48 |
| 59.5 | 96.09 | 87.60 | 64.44 |
| 60.5 | 96.09 | 86.76 | 63.42 |
| 61.5 | 96.09 | 85.87 | 62.40 |
| 62.5 | 96.09 | 84.94 | 60.38 |
| 63.5 | 96.09 | 83.98 | 59.37 |
| 64.5 | 96.09 | 82.97 | 58.37 |
| 65.5 | 96.09 | 81.92 | 56.38 |
| 66.5 | 96.09 | 80.83 | 55.39 |
| 67.5 | 53.99 | 79.70 | 54.42 |
| 68.5 | 53.99 | 78.54 | 52.49 |
| 69.5 | 53.99 | 77.34 | 51.53 |
| 70.5 | 53.99 | 74.86 | 49.66 |
| 71.5 | 53.99 | 73.57 | 48.74 |
| 72.5 | 53.99 | 72.26 | 47.82 |
| 73.5 | 53.99 | 70.93 | 46.03 |
| 74.5 | 53.99 | 69.58 | 45.15 |
| 75.5 | 53.99 | 68.21 | 44.28 |
| 76.5 | 53.99 | 66.83 | 42.57 |
| 77.5 | 53.99 | 65.43 | 41.73 |
| 78.5 | 53.99 | 64.03 | 40.91 |
| 79.5 | 53.99 | 62.62 | 39.29 |
| 80.5 | 53.99 | 59.81 | 38.50 |
| 81.5 | 53.99 | 58.40 | 37.72 |
| 82.5 | 53.99 | 57.00 | 36.19 |
| 83.5 | 53.99 | 55.61 | 35.45 |
| 84.5 | 53.99 | 54.23 | 34.71 |
| 85.5 | 53.99 | 52.87 | 33.27 |
| 86.5 | 53.99 | 51.51 | 32.57 |
| 87.5 | 53.99 | 50.18 | 31.88 |
| 88.5 | 53.99 | 48.86 | 30.53 |
| 89.5 | 53.99 | 47.57 | 29.87 |
| 90.5 | 53.99 | 46.29 | 29.22 |
| 91.5 | 53.99 | 43.81 | 27.95 |
| 92.5 | 53.99 | 42.61 | 27.33 |
| 93.5 | 53.99 | 41.43 | 26.72 |

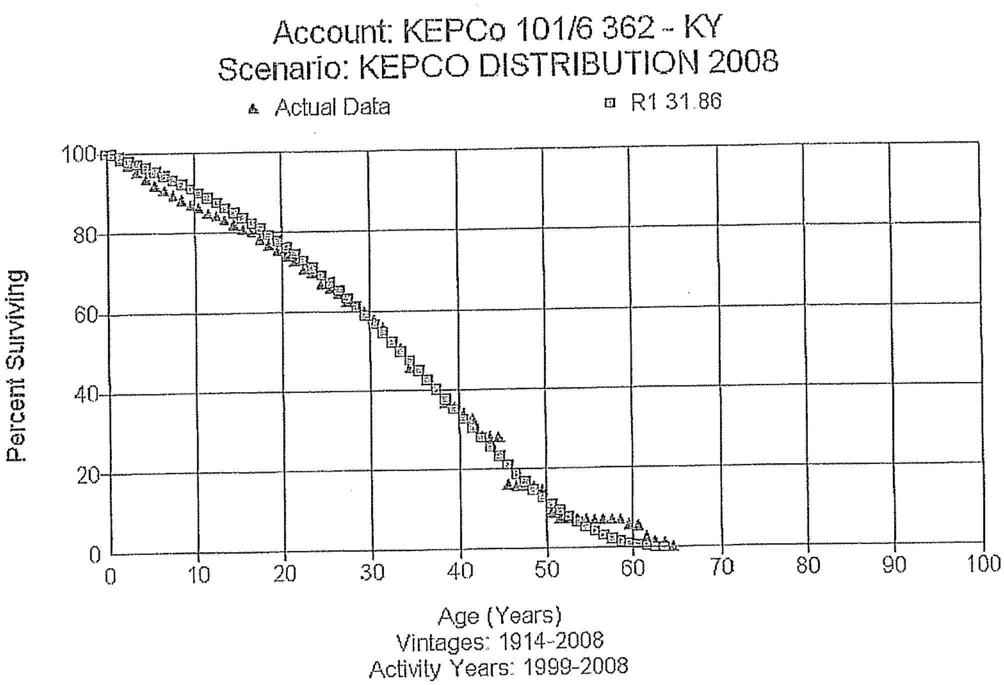
KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 362 STATION EQUIPMENT | |
| Depreciable Balance | $48,811,224 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 25 | 32 |
| Iowa Curve | LO.O | R1.0 |
| Gross Removal, % | | 25% |
| Gross Salvage, % | | 35% |
| Net Salvage % | 25% | 10% |

****************************************************************************************************

The actuarial analysis of the 40 year band indicated the investment has experienced a complete life cycle. Based on the analysis of the 40 year band, the recommendation is to move to a 32 year average service life following an R1.0 type retirement dispersion.

Removal costs would be expected from labor, machine and transportation cost incurred in the retirement and replacement of equipment. Salvage could be received from the sale of equipment.


Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008
Actual Data
R1 31.86
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1914-2008
Activity Years: 1999-2008

Actuarial Life Analysis

Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008
Placement Band: 1914 - 2008
unction: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1969 -2008 | 94.5 | 0.00 | 0.03943455 | R1 | 31.86 |

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Observed Life Table

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008
Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 59,985,742.89 | 95,997.00 | 0.00160 | 0.99840 | 100.00 |
| 0.5 | 59,323,302.21 | 787,640.82 | 0.01328 | 0.98672 | 99.84 |
| 1.5 | 56,260,881.34 | 961,667.23 | 0.01709 | 0.98291 | 98.51 |
| 2.5 | 52,496,365.06 | 787,381.07 | 0.01500 | 0.98500 | 96.83 |
| 3.5 | 48,262,548.88 | 883,989.43 | 0.01832 | 0.98168 | 95.38 |
| 4.5 | 46,863,612.93 | 870,467.55 | 0.01857 | 0.98143 | 93.63 |
| 5.5 | 45,040,509.33 | 564,357.53 | 0.01253 | 0.98747 | 91.89 |
| 6.5 | 43,870,474.71 | 590,977.03 | 0.01347 | 0.98653 | 90.74 |
| 7.5 | 41,310,178.14 | 608,387.84 | 0.01473 | 0.98527 | 89.52 |
| 8.5 | 39,025,002.34 | 509,696.24 | 0.01306 | 0.98694 | 88.20 |
| 9.5 | 37,488,552.39 | 375,115.70 | 0.01001 | 0.98999 | 87.05 |
| 10.5 | 36,399,250.11 | 516,939.35 | 0.01420 | 0.98580 | 86.18 |
| 11.5 | 34,269,086.91 | 340,545.36 | 0.00994 | 0.99006 | 84.96 |
| 12.5 | 32,265,407.49 | 380,919.42 | 0.01181 | 0.98819 | 84.12 |
| 13.5 | 27,506,410.48 | 353,632.11 | 0.01286 | 0.98714 | 83.13 |
| 14.5 | 25,870,415.65 | 379,032.58 | 0.01465 | 0.98535 | 82.06 |
| 15.5 | 22,316,533.76 | 223,168.02 | 0.01000 | 0.99000 | 80.86 |
| 16.5 | 21,122,946.21 | 479,248.43 | 0.02269 | 0.97731 | 80.05 |
| 17.5 | 19,283,088.40 | 326,077.46 | 0.01691 | 0.98309 | 78.23 |
| 18.5 | 18,638,065.72 | 392,058.95 | 0.02104 | 0.97896 | 76.91 |
| 19.5 | 17,924,689.42 | 295,941.08 | 0.01651 | 0.98349 | 75.29 |
| 20.5 | 17,446,790.83 | 322,228.18 | 0.01847 | 0.98153 | 74.05 |
| 21.5 | 15,461,836.06 | 458,812.55 | 0.02967 | 0.97033 | 72.68 |
| 22.5 | 13,817,901.14 | 219,271.18 | 0.01587 | 0.98413 | 70.52 |
| 23.5 | 12,968,924.12 | 506,496.37 | 0.03905 | 0.96095 | 69.40 |
| 24.5 | 11,819,895.00 | 166,890.39 | 0.01412 | 0.98588 | 66.69 |
| 25.5 | 10,947,470.25 | 210,003.59 | 0.01918 | 0.98082 | 65.75 |
| 26.5 | 9,762,598.13 | 344,075.32 | 0.03524 | 0.96476 | 64.49 |
| 27.5 | 8,734,296.39 | 140,671.46 | 0.01611 | 0.98389 | 62.22 |
| 28.5 | 6,162,356.68 | 163,183.85 | 0.02648 | 0.97352 | 61.22 |
| 29.5 | 5,571,673.14 | 182,596.92 | 0.03277 | 0.96723 | 59.60 |
| 30.5 | 4,565,331.66 | 170,685.72 | 0.03739 | 0.96261 | 57.65 |
| 31.5 | 3,697,547.84 | 220,582.40 | 0.05966 | 0.94034 | 55.49 |
| 32.5 | 3,338,844.77 | 107,673.01 | 0.03225 | 0.96775 | 52.18 |
| 33.5 | 2,899,794.83 | 292,997.95 | 0.10104 | 0.89896 | 50.50 |
| 34.5 | 2,322,768.13 | 35,180.41 | 0.01515 | 0.98485 | 45.40 |
| 35.5 | 1,863,045.96 | 94,900.00 | 0.05094 | 0.94906 | 44.71 |
| 36.5 | 1,260,741.63 | 70,970.12 | 0.05629 | 0.94371 | 42.43 |
| 37.5 | 921,418.79 | 79,953.11 | 0.08677 | 0.91323 | 40.04 |
| 38.5 | 765,507.98 | 19,569.00 | 0.02556 | 0.97444 | 36.57 |
| 39.5 | 728,441.97 | 34,540.43 | 0.04742 | 0.95258 | 35.64 |
| 40.5 | 572,590.96 | 23,938.39 | 0.04181 | 0.95819 | 33.95 |
| 41.5 | 437,736.97 | 56,689.84 | 0.12951 | 0.87049 | 32.53 |
| 42.5 | 329,186.59 | 2,981.00 | 0.00906 | 0.99094 | 28.32 |
| 43.5 | 325,218.59 | 1,312.00 | 0.00403 | 0.99597 | 28.06 |
| 44.5 | 304,618.57 | 129,889.59 | 0.42640 | 0.57360 | 27.95 |
| 45.5 | 107,889.15 | 1,647.00 | 0.01527 | 0.98473 | 16.03 |
| 46.5 | 111,031.21 | 823.00 | 0.00741 | 0.99259 | 15.79 |
| 47.5 | 83,649.55 | 409.00 | 0.00489 | 0.99511 | 15.67 |
| 48.5 | 93,364.55 | 5,126.00 | 0.05490 | 0.94510 | 15.59 |
| 49.5 | 93,290.55 | 36,688.00 | 0.39326 | 0.60674 | 14.73 |
| 50.5 | 61,392.55 | 10,337.00 | 0.16837 | 0.83163 | 8.94 |
| 51.5 | 35,019.00 | 0.00 | 0.00000 | 1.00000 | 7.43 |
| 52.5 | 40,616.00 | 954.00 | 0.02349 | 0.97651 | 7.43 |

Observed Life Table



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 41,790.00 | 906.00 | 0.02168 | 0.97832 | 7.26 |
| 54.5 | 41,960.00 | 870.00 | 0.02073 | 0.97927 | 7.10 |
| 55.5 | 41,090.00 | 379.00 | 0.00922 | 0.99078 | 6.95 |
| 56.5 | 40,711.00 | 0.00 | 0.00000 | 1.00000 | 6.89 |
| 57.5 | 40,711.00 | 0.00 | 0.00000 | 1.00000 | 6.89 |
| 58.5 | 40,711.00 | 6,534.00 | 0.16050 | 0.83950 | 6.89 |
| 59.5 | 34,177.00 | 2,128.00 | 0.06226 | 0.93774 | 5.78 |
| 60.5 | 32,049.00 | 16,211.00 | 0.50582 | 0.49418 | 5.42 |
| 61.5 | 15,838.00 | 7,606.00 | 0.48024 | 0.51976 | 2.68 |
| 62.5 | 8,232.00 | 3,014.00 | 0.36613 | 0.63387 | 1.39 |
| 63.5 | 5,218.00 | 4,350.00 | 0.83365 | 0.16635 | 0.88 |
| 64.5 | 868.00 | 868.00 | 1.00000 | 0.00000 | 0.15 |
| 65.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 0.00 |

Surviving Percent Report

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Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1969 - 2008

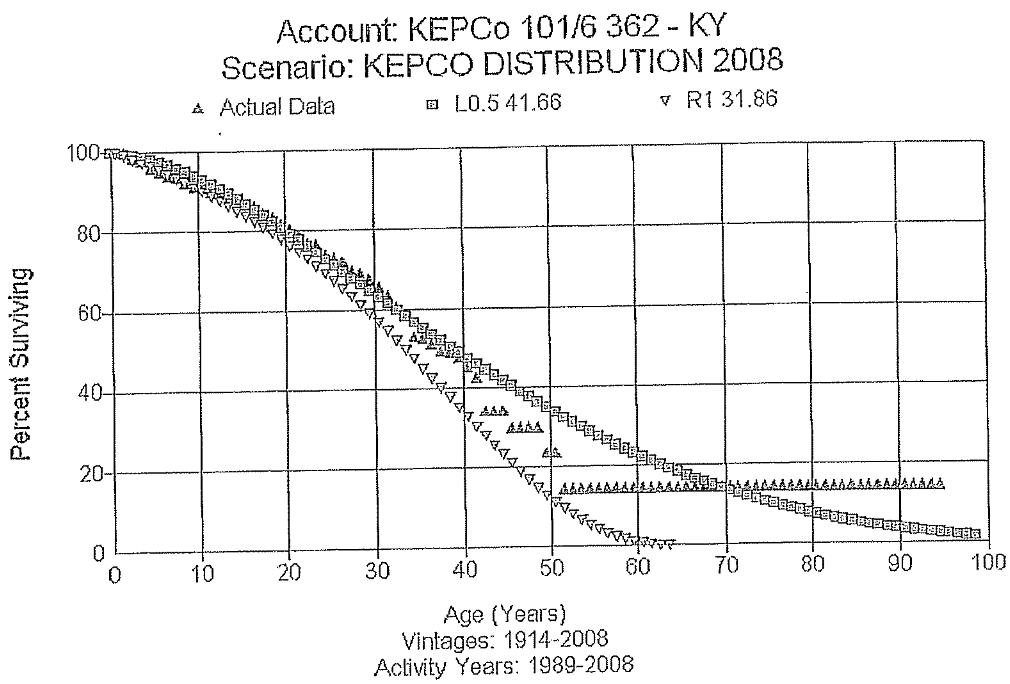
| Age | Actual | R1 31.86 |
|---|---|---|
| 0.0 | 100.00 | 100.00 |
| 0.5 | 99.84 | 99.74 |
| 1.5 | 98.51 | 98.95 |
| 2.5 | 96.83 | 98.12 |
| 3.5 | 95.38 | 97.26 |
| 4.5 | 93.63 | 96.06 |
| 5.5 | 91.89 | 95.12 |
| 6.5 | 90.74 | 94.15 |
| 7.5 | 89.52 | 93.15 |
| 8.5 | 88.20 | 92.12 |
| 9.5 | 87.05 | 91.05 |
| 10.5 | 86.18 | 89.96 |
| 11.5 | 84.95 | 88.45 |
| 12.5 | 84.11 | 87.28 |
| 13.5 | 83.12 | 86.08 |
| 14.5 | 82.05 | 84.83 |
| 15.5 | 80.85 | 83.55 |
| 16.5 | 80.04 | 82.22 |
| 17.5 | 78.22 | 80.84 |
| 18.5 | 76.90 | 78.93 |
| 19.5 | 75.28 | 77.43 |
| 20.5 | 74.04 | 75.88 |
| 21.5 | 72.67 | 74.28 |
| 22.5 | 70.51 | 72.61 |
| 23.5 | 69.39 | 70.89 |
| 24.5 | 66.68 | 69.11 |
| 25.5 | 65.74 | 66.65 |
| 26.5 | 64.48 | 64.74 |
| 27.5 | 62.21 | 62.77 |
| 28.5 | 61.21 | 60.74 |
| 29.5 | 59.59 | 58.66 |
| 30.5 | 57.63 | 56.54 |
| 31.5 | 55.48 | 54.36 |
| 32.5 | 52.17 | 51.40 |
| 33.5 | 50.49 | 49.14 |
| 34.5 | 45.39 | 46.85 |
| 35.5 | 44.70 | 44.53 |
| 36.5 | 42.42 | 42.20 |
| 37.5 | 40.03 | 39.85 |
| 38.5 | 36.56 | 37.50 |
| 39.5 | 35.63 | 35.15 |
| 40.5 | 33.94 | 32.04 |
| 41.5 | 32.52 | 29.73 |
| 42.5 | 28.31 | 27.45 |
| 43.5 | 28.05 | 25.21 |
| 44.5 | 27.94 | 23.02 |
| 45.5 | 16.02 | 20.89 |
| 46.5 | 15.78 | 18.83 |
| 47.5 | 15.66 | 16.19 |
| 48.5 | 15.59 | 14.31 |
| 49.5 | 14.73 | 12.53 |
| 50.5 | 8.94 | 10.86 |
| 51.5 | 7.43 | 9.29 |
| 52.5 | 7.43 | 7.84 |
| 53.5 | 7.26 | 6.52 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1969 - 2008

| Age | Actual | R1 31.86 |
|---|---|---|
| 54.5 | 7.10 | 4.95 |
| 55.5 | 6.95 | 3.93 |
| 56.5 | 6.89 | 3.04 |
| 57.5 | 6.89 | 2.28 |
| 58.5 | 6.89 | 1.65 |
| 59.5 | 5.78 | 1.14 |
| 60.5 | 5.42 | 0.73 |
| 61.5 | 2.68 | 0.33 |
| 62.5 | 1.39 | 0.13 |
| 63.5 | 0.88 | 0.03 |
| 64.5 | 0.15 | 0 |
| 65.5 | 0 | 0 |
| 66.5 | 0 | |
| 67.5 | 0 | |
| 68.5 | 0 | |
| 69.5 | 0 | |
| 70.5 | 0 | |
| 71.5 | 0 | |
| 72.5 | 0 | |
| 73.5 | 0 | |
| 74.5 | 0 | |
| 75.5 | 0 | |
| 76.5 | 0 | |
| 77.5 | 0 | |
| 78.5 | 0 | |
| 79.5 | 0 | |
| 80.5 | 0 | |
| 81.5 | 0 | |
| 82.5 | 0 | |
| 83.5 | 0 | |
| 84.5 | 0 | |
| 85.5 | 0 | |
| 86.5 | 0 | |
| 87.5 | 0 | |
| 88.5 | 0 | |
| 89.5 | 0 | |
| 90.5 | 0 | |
| 91.5 | 0 | |
| 92.5 | 0 | |
| 93.5 | 0 | |
| 94.5 | 0 | |


Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008
Actual Data
L0.5 41.66
R1 31.86
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1914-2008
Activity Years: 1989-2008

Actuarial Life Analysis

Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008
Placement Band: 1914 - 2008
'unction: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1989 -2008 | 94.5 | 14.28 | 0.54205905 | L0.5 | 41.66 |

Observed Life Table

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Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 37,957,986.01 | 16,504.00 | 0.00043 | 0.99957 | 100.00 |
| 0.5 | 37,300,146.32 | 51,511.82 | 0.00138 | 0.99862 | 99.96 |
| 1.5 | 36,461,883.03 | 498,479.23 | 0.01367 | 0.98633 | 99.82 |
| 2.5 | 34,689,274.60 | 267,113.07 | 0.00770 | 0.99230 | 98.46 |
| 3.5 | 31,755,382.20 | 562,794.43 | 0.01772 | 0.98228 | 97.70 |
| 4.5 | 31,189,687.75 | 334,487.55 | 0.01072 | 0.98928 | 95.97 |
| 5.5 | 30,735,830.39 | 322,047.53 | 0.01048 | 0.98952 | 94.94 |
| 6.5 | 30,865,836.23 | 88,848.03 | 0.00288 | 0.99712 | 93.95 |
| 7.5 | 29,727,140.51 | 420,317.84 | 0.01414 | 0.98586 | 93.68 |
| 8.5 | 30,367,823.90 | 403,059.24 | 0.01327 | 0.98673 | 92.36 |
| 9.5 | 29,380,405.09 | 152,391.70 | 0.00519 | 0.99481 | 91.13 |
| 10.5 | 29,986,166.96 | 301,335.35 | 0.01005 | 0.98995 | 90.66 |
| 11.5 | 28,933,244.35 | 139,100.36 | 0.00481 | 0.99519 | 89.75 |
| 12.5 | 27,274,422.60 | 237,548.42 | 0.00871 | 0.99129 | 89.32 |
| 13.5 | 23,040,336.16 | 146,148.11 | 0.00634 | 0.99366 | 88.54 |
| 14.5 | 22,099,722.38 | 299,057.58 | 0.01353 | 0.98647 | 87.98 |
| 15.5 | 19,156,963.00 | 116,162.02 | 0.00606 | 0.99394 | 86.79 |
| 16.5 | 18,918,290.84 | 378,903.43 | 0.02003 | 0.97997 | 86.26 |
| 17.5 | 17,415,568.57 | 251,522.46 | 0.01444 | 0.98556 | 84.53 |
| 18.5 | 17,010,660.06 | 330,036.95 | 0.01940 | 0.98060 | 83.31 |
| 19.5 | 16,263,927.76 | 246,577.08 | 0.01516 | 0.98484 | 81.69 |
| 20.5 | 15,934,437.04 | 305,586.18 | 0.01918 | 0.98082 | 80.45 |
| 21.5 | 14,082,897.88 | 355,474.55 | 0.02524 | 0.97476 | 78.91 |
| 22.5 | 12,707,922.78 | 71,642.18 | 0.00564 | 0.99436 | 76.92 |
| 23.5 | 12,003,443.76 | 421,134.37 | 0.03508 | 0.96492 | 76.49 |
| 24.5 | 11,005,971.60 | 96,852.39 | 0.00880 | 0.99120 | 73.81 |
| 25.5 | 10,315,144.85 | 130,060.59 | 0.01261 | 0.98739 | 73.16 |
| 26.5 | 9,246,955.73 | 326,467.32 | 0.03531 | 0.96469 | 72.24 |
| 27.5 | 8,266,777.25 | 64,674.46 | 0.00782 | 0.99218 | 69.69 |
| 28.5 | 5,762,620.54 | 138,862.85 | 0.02410 | 0.97590 | 69.15 |
| 29.5 | 5,195,648.00 | 138,480.92 | 0.02665 | 0.97335 | 67.48 |
| 30.5 | 4,152,656.52 | 145,231.72 | 0.03497 | 0.96503 | 65.68 |
| 31.5 | 3,332,000.84 | 157,259.40 | 0.04720 | 0.95280 | 63.38 |
| 32.5 | 3,033,410.77 | 78,033.01 | 0.02572 | 0.97428 | 60.39 |
| 33.5 | 2,625,717.83 | 263,309.95 | 0.10028 | 0.89972 | 58.84 |
| 34.5 | 2,078,826.13 | 17,202.41 | 0.00827 | 0.99173 | 52.94 |
| 35.5 | 1,632,459.96 | 42,392.00 | 0.02597 | 0.97403 | 52.50 |
| 36.5 | 1,083,256.63 | 40,515.12 | 0.03740 | 0.96260 | 51.14 |
| 37.5 | 774,364.79 | 6,744.11 | 0.00871 | 0.99129 | 49.23 |
| 38.5 | 594,709.98 | 15,499.00 | 0.02606 | 0.97394 | 48.80 |
| 39.5 | 558,988.97 | 28,997.43 | 0.05187 | 0.94813 | 47.53 |
| 40.5 | 404,996.96 | 23,426.39 | 0.05784 | 0.94216 | 45.06 |
| 41.5 | 270,245.97 | 53,032.84 | 0.19624 | 0.80376 | 42.45 |
| 42.5 | 163,531.59 | 0.00 | 0.00000 | 1.00000 | 34.12 |
| 43.5 | 162,544.59 | 0.00 | 0.00000 | 1.00000 | 34.12 |
| 44.5 | 143,256.57 | 17,999.59 | 0.12565 | 0.87435 | 34.12 |
| 45.5 | 57,184.15 | 0.00 | 0.00000 | 1.00000 | 29.83 |
| 46.5 | 46,920.21 | 0.00 | 0.00000 | 1.00000 | 29.83 |
| 47.5 | 20,361.55 | 0.00 | 0.00000 | 1.00000 | 29.83 |
| 48.5 | 20,361.55 | 4,325.00 | 0.21241 | 0.78759 | 29.83 |
| 49.5 | 16,036.55 | 0.00 | 0.00000 | 1.00000 | 23.49 |
| 50.5 | 26,373.55 | 10,337.00 | 0.39194 | 0.60806 | 23.49 |
| 51.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 14.28 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1989 - 2008

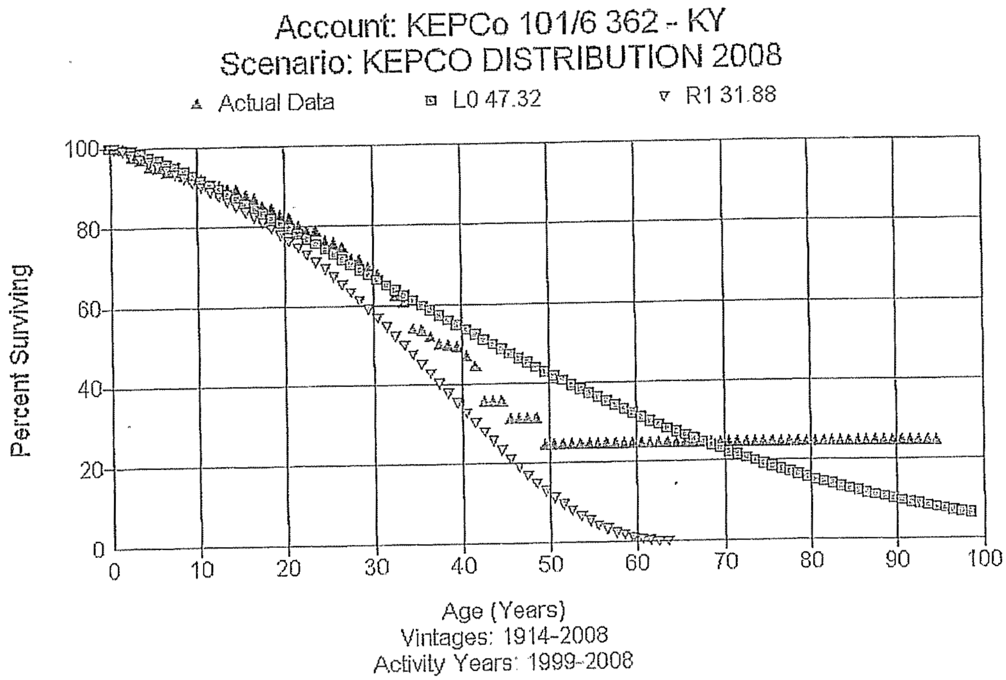
| Age | Actual | L0.5 41.66 | R1 32.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 99.96 | 99.91 | 99.74 |
| 1.5 | 99.82 | 99.63 | 98.95 |
| 2.5 | 98.45 | 99.06 | 98.12 |
| 3.5 | 97.70 | 98.60 | 97.26 |
| 4.5 | 95.96 | 98.08 | 96.06 |
| 5.5 | 94.94 | 97.21 | 95.12 |
| 6.5 | 93.94 | 96.56 | 94.15 |
| 7.5 | 93.67 | 95.50 | 93.15 |
| 8.5 | 92.35 | 94.73 | 92.12 |
| 9.5 | 91.12 | 93.92 | 91.05 |
| 10.5 | 90.65 | 92.61 | 89.96 |
| 11.5 | 89.74 | 91.66 | 88.84 |
| 12.5 | 89.30 | 90.20 | 87.28 |
| 13.5 | 88.53 | 89.16 | 86.08 |
| 14.5 | 87.97 | 88.08 | 84.83 |
| 15.5 | 86.78 | 86.39 | 83.55 |
| 16.5 | 86.25 | 85.22 | 82.22 |
| 17.5 | 84.52 | 83.40 | 80.84 |
| 18.5 | 83.30 | 82.15 | 79.41 |
| 19.5 | 81.68 | 80.87 | 77.94 |
| 20.5 | 80.45 | 78.92 | 75.88 |
| 21.5 | 78.90 | 77.56 | 74.28 |
| 22.5 | 76.91 | 75.52 | 72.61 |
| 23.5 | 76.48 | 74.15 | 70.89 |
| 24.5 | 73.80 | 72.78 | 69.11 |
| 25.5 | 73.15 | 70.74 | 67.28 |
| 26.5 | 72.22 | 69.37 | 65.38 |
| 27.5 | 69.67 | 67.33 | 63.43 |
| 28.5 | 69.13 | 65.98 | 60.74 |
| 29.5 | 67.46 | 64.63 | 58.66 |
| 30.5 | 65.66 | 62.61 | 56.54 |
| 31.5 | 63.37 | 61.27 | 54.36 |
| 32.5 | 60.38 | 59.27 | 52.15 |
| 33.5 | 58.82 | 57.95 | 49.90 |
| 34.5 | 52.93 | 56.63 | 47.62 |
| 35.5 | 52.49 | 54.67 | 45.31 |
| 36.5 | 51.12 | 53.38 | 42.20 |
| 37.5 | 49.21 | 51.45 | 39.85 |
| 38.5 | 48.78 | 50.18 | 37.50 |
| 39.5 | 47.51 | 48.93 | 35.15 |
| 40.5 | 45.05 | 47.06 | 32.81 |
| 41.5 | 42.44 | 45.83 | 30.50 |
| 42.5 | 34.11 | 44.01 | 28.21 |
| 43.5 | 34.11 | 42.82 | 25.95 |
| 44.5 | 34.11 | 41.63 | 23.02 |
| 45.5 | 29.83 | 39.89 | 20.89 |
| 46.5 | 29.83 | 38.74 | 18.83 |
| 47.5 | 29.83 | 37.05 | 16.84 |
| 48.5 | 29.83 | 35.95 | 14.93 |
| 49.5 | 23.49 | 34.86 | 13.12 |
| 50.5 | 23.49 | 33.26 | 11.40 |
| 51.5 | 14.28 | 32.21 | 9.80 |
| 52.5 | 14.28 | 30.67 | 7.84 |
| 53.5 | 14.28 | 29.66 | 6.52 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1989 - 2008

| Age | Actual | L0.5 41.66 | R1 32.00 |
|---|---|---|---|
| 54.5 | 14.28 | 28.68 | 5.32 |
| 55.5 | 14.28 | 27.23 | 4.25 |
| 56.5 | 14.28 | 26.29 | 3.32 |
| 57.5 | 14.28 | 24.92 | 2.52 |
| 58.5 | 14.28 | 24.03 | 1.84 |
| 59.5 | 14.28 | 23.15 | 1.30 |
| 60.5 | 14.28 | 21.88 | 0.73 |
| 61.5 | 14.28 | 21.05 | 0.41 |
| 62.5 | 14.28 | 19.85 | 0.19 |
| 63.5 | 14.28 | 19.07 | 0.05 |
| 64.5 | 14.28 | 18.32 | 0 |
| 65.5 | 14.28 | 17.22 | 0 |
| 66.5 | 14.28 | 16.51 | |
| 67.5 | 14.28 | 15.48 | |
| 68.5 | 14.28 | 14.82 | |
| 69.5 | 14.28 | 14.17 | |
| 70.5 | 14.28 | 13.25 | |
| 71.5 | 14.28 | 12.65 | |
| 72.5 | 14.28 | 11.79 | |
| 73.5 | 14.28 | 11.24 | |
| 74.5 | 14.28 | 10.71 | |
| 75.5 | 14.28 | 9.95 | |
| 76.5 | 14.28 | 9.46 | |
| 77.5 | 14.28 | 8.76 | |
| 78.5 | 14.28 | 8.32 | |
| 79.5 | 14.28 | 7.69 | |
| 80.5 | 14.28 | 7.28 | |
| 81.5 | 14.28 | 6.89 | |
| 82.5 | 14.28 | 6.34 | |
| 83.5 | 14.28 | 5.99 | |
| 84.5 | 14.28 | 5.65 | |
| 85.5 | 14.28 | 5.18 | |
| 86.5 | 14.28 | 4.88 | |
| 87.5 | 14.28 | 4.45 | |
| 88.5 | 14.28 | 4.19 | |
| 89.5 | 14.28 | 3.93 | |
| 90.5 | 14.28 | 3.57 | |
| 91.5 | 14.28 | 3.35 | |
| 92.5 | 14.28 | 3.04 | |
| 93.5 | 14.28 | 2.84 | |
| 94.5 | 14.28 | 2.65 | |


Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008
Actual Data
L0 47.32
R1 31.88
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1914-2008
Activity Years: 1999-2008

Actuarial Life Analysis



Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008
Placement Band: 1914 - 2008
unction: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1999 -2008 | 94.5 | 24.55 | 0.72537950 | L0 | 47.32 |

Observed Life Table

Page 173 of 350

Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 18,620,137.60 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 18,484,500.18 | 12,446.82 | 0.00067 | 0.99933 | 100.00 |
| 1.5 | 17,769,316.42 | 412,437.23 | 0.02321 | 0.97679 | 99.93 |
| 2.5 | 16,114,584.22 | 111,518.07 | 0.00692 | 0.99308 | 97.61 |
| 3.5 | 16,989,947.79 | 303,627.43 | 0.01787 | 0.98213 | 96.93 |
| 4.5 | 17,515,445.34 | 30,509.55 | 0.00174 | 0.99826 | 95.20 |
| 5.5 | 19,878,524.35 | 224,615.53 | 0.01130 | 0.98870 | 95.03 |
| 6.5 | 20,163,669.69 | 34,778.03 | 0.00172 | 0.99828 | 93.96 |
| 7.5 | 19,738,975.08 | 210,394.84 | 0.01066 | 0.98934 | 93.80 |
| 8.5 | 18,182,056.50 | 109,542.24 | 0.00602 | 0.99398 | 92.80 |
| 9.5 | 17,523,694.99 | 70,593.70 | 0.00403 | 0.99597 | 92.24 |
| 10.5 | 16,953,099.57 | 232,867.35 | 0.01374 | 0.98626 | 91.87 |
| 11.5 | 16,870,723.42 | 74,533.36 | 0.00442 | 0.99558 | 90.61 |
| 12.5 | 16,746,953.67 | 107,773.42 | 0.00644 | 0.99356 | 90.21 |
| 13.5 | 12,910,001.44 | 50,175.11 | 0.00389 | 0.99611 | 89.63 |
| 14.5 | 12,207,607.07 | 204,400.58 | 0.01674 | 0.98326 | 89.28 |
| 15.5 | 9,521,461.42 | 67,920.02 | 0.00713 | 0.99287 | 87.79 |
| 16.5 | 9,544,610.33 | 213,636.43 | 0.02238 | 0.97762 | 87.16 |
| 17.5 | 8,762,174.63 | 62,887.46 | 0.00718 | 0.99282 | 85.21 |
| 18.5 | 10,949,283.14 | 209,011.95 | 0.01909 | 0.98091 | 84.60 |
| 19.5 | 10,721,353.98 | 138,259.08 | 0.01290 | 0.98710 | 82.98 |
| 20.5 | 11,543,816.54 | 269,998.18 | 0.02339 | 0.97661 | 81.91 |
| 21.5 | 10,435,816.50 | 116,508.55 | 0.01116 | 0.98884 | 79.99 |
| 22.5 | 9,280,736.25 | 36,453.18 | 0.00393 | 0.99607 | 79.10 |
| 23.5 | 8,994,976.80 | 291,755.37 | 0.03244 | 0.96756 | 78.79 |
| 24.5 | 8,495,720.73 | 56,832.39 | 0.00669 | 0.99331 | 76.23 |
| 25.5 | 8,347,695.49 | 117,823.59 | 0.01411 | 0.98589 | 75.72 |
| 26.5 | 8,026,414.76 | 299,542.32 | 0.03732 | 0.96268 | 74.65 |
| 27.5 | 7,364,494.56 | 37,844.46 | 0.00514 | 0.99486 | 71.86 |
| 28.5 | 5,093,262.02 | 131,311.85 | 0.02578 | 0.97422 | 71.49 |
| 29.5 | 4,586,363.48 | 136,865.92 | 0.02984 | 0.97016 | 69.65 |
| 30.5 | 3,679,398.87 | 141,708.72 | 0.03851 | 0.96149 | 67.57 |
| 31.5 | 2,960,403.66 | 119,092.40 | 0.04023 | 0.95977 | 64.97 |
| 32.5 | 2,762,042.41 | 74,820.01 | 0.02709 | 0.97291 | 62.36 |
| 33.5 | 2,357,051.47 | 261,784.95 | 0.11106 | 0.88894 | 60.67 |
| 34.5 | 1,834,546.73 | 16,711.41 | 0.00911 | 0.99089 | 53.93 |
| 35.5 | 1,497,139.56 | 42,196.00 | 0.02818 | 0.97182 | 53.44 |
| 36.5 | 1,004,343.23 | 35,488.12 | 0.03533 | 0.96467 | 51.93 |
| 37.5 | 732,916.65 | 6,744.11 | 0.00920 | 0.99080 | 50.10 |
| 38.5 | 556,478.84 | 2,760.00 | 0.00496 | 0.99504 | 49.64 |
| 39.5 | 533,444.83 | 25,750.43 | 0.04827 | 0.95173 | 49.39 |
| 40.5 | 382,699.82 | 21,662.39 | 0.05660 | 0.94340 | 47.01 |
| 41.5 | 270,245.97 | 53,032.84 | 0.19624 | 0.80376 | 44.35 |
| 42.5 | 163,531.59 | 0.00 | 0.00000 | 1.00000 | 35.65 |
| 43.5 | 162,544.59 | 0.00 | 0.00000 | 1.00000 | 35.65 |
| 44.5 | 143,256.57 | 17,999.59 | 0.12565 | 0.87435 | 35.65 |
| 45.5 | 57,184.15 | 0.00 | 0.00000 | 1.00000 | 31.17 |
| 46.5 | 46,920.21 | 0.00 | 0.00000 | 1.00000 | 31.17 |
| 47.5 | 20,361.55 | 0.00 | 0.00000 | 1.00000 | 31.17 |
| 48.5 | 20,361.55 | 4,325.00 | 0.21241 | 0.78759 | 31.17 |
| 49.5 | 16,036.55 | 0.00 | 0.00000 | 1.00000 | 24.55 |
| 50.5 | 16,036.55 | 0.00 | 0.00000 | 1.00000 | 24.55 |
| 51.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 24.55 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1999- 2008

| Age | Actual | L0 47.32 | R1 32.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 99.87 | 99.74 |
| 1.5 | 99.93 | 99.45 | 98.95 |
| 2.5 | 97.61 | 98.89 | 98.12 |
| 3.5 | 96.94 | 98.24 | 97.26 |
| 4.5 | 95.21 | 97.50 | 96.06 |
| 5.5 | 95.04 | 96.70 | 95.12 |
| 6.5 | 93.97 | 95.83 | 94.15 |
| 7.5 | 93.80 | 94.92 | 93.15 |
| 8.5 | 92.80 | 93.97 | 92.12 |
| 9.5 | 92.24 | 92.46 | 91.05 |
| 10.5 | 91.87 | 91.41 | 89.96 |
| 11.5 | 90.61 | 90.33 | 88.84 |
| 12.5 | 90.21 | 89.23 | 87.28 |
| 13.5 | 89.63 | 88.10 | 86.08 |
| 14.5 | 89.28 | 86.95 | 84.83 |
| 15.5 | 87.79 | 85.78 | 83.55 |
| 16.5 | 87.16 | 84.59 | 82.22 |
| 17.5 | 85.21 | 83.39 | 80.84 |
| 18.5 | 84.60 | 81.57 | 79.41 |
| 19.5 | 82.98 | 80.34 | 77.94 |
| 20.5 | 81.91 | 79.10 | 75.88 |
| 21.5 | 80.00 | 77.86 | 74.28 |
| 22.5 | 79.10 | 76.62 | 72.61 |
| 23.5 | 78.79 | 75.37 | 70.89 |
| 24.5 | 76.24 | 74.12 | 69.11 |
| 25.5 | 75.73 | 72.87 | 67.28 |
| 26.5 | 74.66 | 71.00 | 65.38 |
| 27.5 | 71.87 | 69.76 | 63.43 |
| 28.5 | 71.50 | 68.51 | 60.74 |
| 29.5 | 69.66 | 67.27 | 58.66 |
| 30.5 | 67.58 | 66.04 | 56.54 |
| 31.5 | 64.98 | 64.80 | 54.36 |
| 32.5 | 62.36 | 63.57 | 52.15 |
| 33.5 | 60.67 | 62.35 | 49.90 |
| 34.5 | 53.94 | 61.13 | 47.62 |
| 35.5 | 53.44 | 59.31 | 45.31 |
| 36.5 | 51.94 | 58.10 | 42.20 |
| 37.5 | 50.10 | 56.90 | 39.85 |
| 38.5 | 49.64 | 55.71 | 37.50 |
| 39.5 | 49.40 | 54.53 | 35.15 |
| 40.5 | 47.01 | 53.35 | 32.81 |
| 41.5 | 44.35 | 52.18 | 30.50 |
| 42.5 | 35.65 | 51.02 | 28.21 |
| 43.5 | 35.65 | 49.87 | 25.95 |
| 44.5 | 35.65 | 48.17 | 23.02 |
| 45.5 | 31.17 | 47.04 | 20.89 |
| 46.5 | 31.17 | 45.92 | 18.83 |
| 47.5 | 31.17 | 44.82 | 16.84 |
| 48.5 | 31.17 | 43.73 | 14.93 |
| 49.5 | 24.55 | 42.64 | 13.12 |
| 50.5 | 24.55 | 41.57 | 11.40 |
| 51.5 | 24.55 | 40.52 | 9.80 |
| 52.5 | 24.55 | 39.47 | 7.84 |
| 53.5 | 24.55 | 37.93 | 6.52 |

Surviving Percent Report



Scenario: KEPCO DISTRIBUTION 2008
Account: KEPCo 101/6 362 - KY
Placement Band: 1914 - 2008 Observation Band: 1999- 2008

| Age | Actual | L0 47.32 | R1 32.00 |
|---|---|---|---|
| 54.5 | 24.55 | 36.91 | 5.32 |
| 55.5 | 24.55 | 35.92 | 4.25 |
| 56.5 | 24.55 | 34.93 | 3.32 |
| 57.5 | 24.55 | 33.96 | 2.52 |
| 58.5 | 24.55 | 33.00 | 1.84 |
| 59.5 | 24.55 | 32.06 | 1.30 |
| 60.5 | 24.55 | 31.13 | 0.73 |
| 61.5 | 24.55 | 30.21 | 0.41 |
| 62.5 | 24.55 | 28.87 | 0.19 |
| 63.5 | 24.55 | 27.99 | 0.05 |
| 64.5 | 24.55 | 27.13 | 0 |
| 65.5 | 24.55 | 26.28 | 0 |
| 66.5 | 24.55 | 25.45 | |
| 67.5 | 24.55 | 24.64 | |
| 68.5 | 24.55 | 23.84 | |
| 69.5 | 24.55 | 23.06 | |
| 70.5 | 24.55 | 22.29 | |
| 71.5 | 24.55 | 21.17 | |
| 72.5 | 24.55 | 20.44 | |
| 73.5 | 24.55 | 19.72 | |
| 74.5 | 24.55 | 19.03 | |
| 75.5 | 24.55 | 18.35 | |
| 76.5 | 24.55 | 17.68 | |
| 77.5 | 24.55 | 17.03 | |
| 78.5 | 24.55 | 16.40 | |
| 79.5 | 24.55 | 15.48 | |
| 80.5 | 24.55 | 14.88 | |
| 81.5 | 24.55 | 14.30 | |
| 82.5 | 24.55 | 13.74 | |
| 83.5 | 24.55 | 13.19 | |
| 84.5 | 24.55 | 12.66 | |
| 85.5 | 24.55 | 12.14 | |
| 86.5 | 24.55 | 11.63 | |
| 87.5 | 24.55 | 11.14 | |
| 88.5 | 24.55 | 10.44 | |
| 89.5 | 24.55 | 9.98 | |
| 90.5 | 24.55 | 9.54 | |
| 91.5 | 24.55 | 9.12 | |
| 92.5 | 24.55 | 8.71 | |
| 93.5 | 24.55 | 8.31 | |
| 94.5 | 24.55 | 7.92 | |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 364 POLES, TOWERS & FIXTURES | |
| Depreciable Balance | $147,634,354 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 28 | 30 |
| Iowa Curve | LO.O | R0.5 |
| Gross Removal, % | | 65% |
| Gross Salvage, % | | 12% |
| Net Salvage % | 25% | -53% |

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The simulation analyses for all bands indicate a retirement dispersion of an R0.5 type curve with an average service life of 30 years is appropriate for the investments in this account.

Extensive labor, equipment and transporation costs will be incurred in removing and replacing the equipment in this account. Some salvage could be experienced from the sale of scrap and the reuse of material.

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 364 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.4 | 6.04E+14 | 57.2584 | 17.46 | 100.00 |
| R1 | 28.3 | 6.64E+14 | 60.0226 | 16.66 | 100.00 |
| S-.5 | 30.5 | 6.73E+14 | 60.4641 | 16.54 | 100.00 |
| L0 | 33.4 | 6.93E+14 | 61.3421 | 16.30 | 94.97 |
| R1.5 | 27.0 | 7.60E+14 | 64.2570 | 15.56 | 100.00 |
| L0.5 | 31.1 | 7.93E+14 | 65.6179 | 15.24 | 97.92 |
| S0 | 28.4 | 8.12E+14 | 66.4026 | 15.06 | 100.00 |
| S0.5 | 27.1 | 9.06E+14 | 70.1271 | 14.26 | 100.00 |
| R2 | 25.8 | 9.10E+14 | 70.2920 | 14.23 | 100.00 |
| L1 | 29.3 | 9.18E+14 | 70.6170 | 14.16 | 99.60 |
| L1.5 | 28.0 | 1.03E+15 | 74.9007 | 13.35 | 99.91 |
| S1 | 26.2 | 1.04E+15 | 75.0362 | 13.33 | 100.00 |
| R2.5 | 25.2 | 1.07E+15 | 76.2524 | 13.11 | 100.00 |
| S1.5 | 25.5 | 1.15E+15 | 79.0789 | 12.65 | 100.00 |
| L2 | 26.7 | 1.19E+15 | 80.2815 | 12.46 | 100.00 |
| R3 | 24.6 | 1.27E+15 | 83.1635 | 12.02 | 100.00 |
| S2 | 24.9 | 1.30E+15 | 83.9522 | 11.91 | 100.00 |
| L3 | 25.1 | 1.43E+15 | 88.0319 | 11.36 | 100.00 |
| S3 | 24.3 | 1.55E+15 | 91.6566 | 10.91 | 100.00 |
| R4 | 23.9 | 1.61E+15 | 93.5496 | 10.69 | 100.00 |
| L4 | 24.0 | 1.67E+15 | 95.1517 | 10.51 | 100.00 |
| S4 | 23.7 | 1.82E+15 | 99.3129 | 10.07 | 100.00 |
| L5 | 23.6 | 1.89E+15 | 101.4303 | 9.86 | 100.00 |
| R5 | 23.6 | 1.94E+15 | 102.7345 | 9.73 | 100.00 |
| S5 | 23.3 | 2.02E+15 | 104.6839 | 9.55 | 100.00 |
| S6 | 23.2 | 2.14E+15 | 107.8984 | 9.27 | 100.00 |
| SQ | 25.2 | 2.77E+15 | 122.6529 | 8.15 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 364 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.7 | 5.62E+14 | 50.7187 | 19.72 | 100.00 |
| R1 | 28.6 | 6.24E+14 | 53.4006 | 18.73 | 100.00 |
| S-.5 | 30.8 | 6.25E+14 | 53.4478 | 18.71 | 100.00 |
| L0 | 33.8 | 6.40E+14 | 54.1176 | 18.48 | 94.67 |
| R1.5 | 27.3 | 7.22E+14 | 57.4521 | 17.41 | 100.00 |
| L0.5 | 31.4 | 7.34E+14 | 57.9397 | 17.26 | 97.74 |
| S0 | 28.7 | 7.54E+14 | 58.7326 | 17.03 | 100.00 |
| S0.5 | 27.4 | 8.47E+14 | 62.2338 | 16.07 | 100.00 |
| L1 | 29.6 | 8.51E+14 | 62.3731 | 16.03 | 99.53 |
| R2 | 26.1 | 8.68E+14 | 62.9960 | 15.87 | 100.00 |
| L1.5 | 28.0 | 9.64E+14 | 66.3926 | 15.06 | 99.91 |
| S1 | 26.4 | 9.75E+14 | 66.7782 | 14.97 | 100.00 |
| R2.5 | 25.4 | 1.03E+15 | 68.5536 | 14.59 | 100.00 |
| S1.5 | 25.8 | 1.09E+15 | 70.6360 | 14.16 | 100.00 |
| L2 | 27.0 | 1.11E+15 | 71.3435 | 14.02 | 100.00 |
| R3 | 24.6 | 1.22E+15 | 74.8219 | 13.37 | 100.00 |
| S2 | 25.1 | 1.23E+15 | 75.1512 | 13.31 | 100.00 |
| L3 | 25.4 | 1.36E+15 | 78.7368 | 12.70 | 100.00 |
| S3 | 24.3 | 1.48E+15 | 82.3208 | 12.15 | 100.00 |
| R4 | 23.9 | 1.55E+15 | 84.1745 | 11.88 | 100.00 |
| L4 | 24.3 | 1.60E+15 | 85.5041 | 11.70 | 100.00 |
| S4 | 23.7 | 1.75E+15 | 89.4260 | 11.18 | 100.00 |
| L5 | 23.6 | 1.82E+15 | 91.3354 | 10.95 | 100.00 |
| R5 | 23.6 | 1.87E+15 | 92.5067 | 10.81 | 100.00 |
| S5 | 23.5 | 1.94E+15 | 94.2925 | 10.61 | 100.00 |
| S6 | 23.4 | 2.07E+15 | 97.2606 | 10.28 | 100.00 |
| SQ | 25.2 | 2.66E+15 | 110.0287 | 9.09 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 364 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 32.9 | 9.24E+13 | 24.1807 | 41.36 | 100.00 |
| L0 | 36.0 | 1.04E+14 | 25.6438 | 39.00 | 92.49 |
| S-.5 | 32.7 | 1.04E+14 | 25.6576 | 38.97 | 100.00 |
| R1 | 30.3 | 1.12E+14 | 26.5624 | 37.65 | 100.00 |
| L0.5 | 33.5 | 1.26E+14 | 28.2749 | 35.37 | 96.32 |
| S0 | 30.4 | 1.36E+14 | 29.2973 | 34.13 | 100.00 |
| R1.5 | 28.8 | 1.41E+14 | 29.8738 | 33.47 | 100.00 |
| L1 | 31.5 | 1.55E+14 | 31.2700 | 31.98 | 98.86 |
| S0.5 | 29.1 | 1.62E+14 | 31.9889 | 31.26 | 100.00 |
| R2 | 27.5 | 1.84E+14 | 34.1625 | 29.27 | 100.00 |
| L1.5 | 30.0 | 1.86E+14 | 34.3339 | 29.13 | 99.67 |
| S1 | 27.8 | 1.98E+14 | 35.3557 | 28.28 | 100.00 |
| L2 | 28.6 | 2.26E+14 | 37.8498 | 26.42 | 99.98 |
| R2.5 | 26.6 | 2.32E+14 | 38.3185 | 26.10 | 100.00 |
| S1.5 | 27.1 | 2.33E+14 | 38.4052 | 26.04 | 100.00 |
| S2 | 26.4 | 2.77E+14 | 41.8588 | 23.89 | 100.00 |
| R3 | 25.6 | 2.92E+14 | 43.0057 | 23.25 | 100.00 |
| L3 | 26.7 | 3.06E+14 | 43.9842 | 22.74 | 100.00 |
| S3 | 25.5 | 3.59E+14 | 47.6864 | 20.97 | 100.00 |
| R4 | 25.0 | 4.01E+14 | 50.3591 | 19.86 | 100.00 |
| L4 | 25.2 | 4.04E+14 | 50.5587 | 19.78 | 100.00 |
| S4 | 24.6 | 4.63E+14 | 54.1358 | 18.47 | 100.00 |
| L5 | 24.6 | 5.00E+14 | 56.2499 | 17.78 | 100.00 |
| R5 | 24.4 | 5.30E+14 | 57.8986 | 17.27 | 100.00 |
| S5 | 24.5 | 5.62E+14 | 59.6024 | 16.78 | 100.00 |
| S6 | 24.1 | 6.39E+14 | 63.5673 | 15.73 | 100.00 |
| SQ | 26.0 | 1.18E+15 | 86.5088 | 11.56 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $7,948,638 | $1,315,032 | $147,624,353 | $0 | $0 |
| 2007 | $8,178,275 | $1,283,667 | $140,990,747 | $0 | $0 |
| 2006 | $6,214,520 | $839,957 | $134,096,139 | $0 | $0 |
| 2005 | $4,777,960 | $728,627 | $128,721,576 | $0 | $0 |
| 2004 | $4,606,829 | $3,264,700 | $124,672,243 | $0 | $0 |
| 2003 | $3,549,389 | $770,546 | $123,330,114 | $0 | $0 |
| 2002 | $4,243,760 | $1,100,199 | $120,551,271 | $0 | $0 |
| 2001 | $6,491,237 | $1,402,184 | $117,407,710 | $0 | $0 |
| 2000 | $6,193,673 | $1,459,576 | $112,318,657 | $0 | $0 |
| 1999 | $7,750,006 | $779,722 | $107,584,560 | $0 | $0 |
| 1998 | $2,259,261 | $1,082,705 | $100,614,276 | $0 | $0 |
| 1997 | $2,175,205 | $1,542,829 | $99,437,720 | $0 | $0 |
| 1996 | $9,692,760 | $1,128,837 | $98,805,344 | $0 | $0 |
| 1995 | $5,532,239 | $1,671,011 | $90,241,421 | $0 | $0 |
| 1994 | $6,419,736 | $144,412 | $86,380,193 | $0 | $0 |
| 1993 | $5,227,092 | $1,304,149 | $80,104,869 | $0 | $0 |
| 1992 | $6,185,410 | $1,465,072 | $76,181,926 | $0 | $0 |
| 1991 | $6,088,191 | $1,480,558 | $71,461,588 | $0 | $0 |
| 1990 | $5,783,242 | $2,752,129 | $66,853,955 | $0 | $0 |
| 1989 | $5,307,552 | $3,823,950 | $63,822,842 | $0 | $0 |
| 1988 | $4,827,488 | $1,966,798 | $62,339,240 | $0 | $0 |
| 1987 | $5,327,380 | $1,607,747 | $59,478,550 | $0 | $0 |
| 1986 | $5,369,391 | $1,438,007 | $55,758,917 | $0 | $0 |
| 1985 | $4,909,635 | $937,730 | $51,827,533 | $0 | $0 |
| 1984 | $4,313,710 | $808,923 | $47,855,628 | $0 | $0 |
| 1983 | $4,439,316 | $768,785 | $44,350,841 | $0 | $0 |
| 1982 | $4,665,175 | $635,786 | $40,680,310 | $0 | $0 |
| 1981 | $5,803,340 | $1,253,167 | $36,650,921 | $0 | $0 |
| 1980 | $4,804,915 | $714,013 | $32,100,748 | $0 | $0 |
| 1979 | $3,884,010 | $638,797 | $28,009,846 | $0 | $0 |
| 1978 | $3,251,569 | $641,825 | $24,764,633 | $0 | $0 |
| 1977 | $3,061,702 | $378,298 | $22,054,889 | $0 | $0 |
| 1976 | $2,270,319 | $328,987 | $19,371,485 | $0 | $0 |
| 1975 | $1,611,041 | $258,071 | $17,430,153 | $0 | $0 |
| 1974 | $1,552,522 | $299,128 | $16,077,183 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $1,515,199 | $360,031 | $14,823,789 | $0 | $0 |
| 1972 | $1,255,246 | $292,633 | $13,668,621 | $0 | $0 |
| 1971 | $1,229,340 | $314,758 | $12,706,008 | $0 | $0 |
| 1970 | $840,500 | $269,359 | $11,791,426 | $0 | $0 |
| 1969 | $775,929 | $321,093 | $11,220,285 | $0 | $0 |
| 1968 | $779,145 | $366,869 | $10,765,449 | $0 | $0 |
| 1967 | $736,064 | $292,779 | $10,353,173 | $0 | $0 |
| 1966 | $623,348 | $243,858 | $9,909,888 | $0 | $0 |
| 1965 | $625,458 | $234,974 | $9,530,398 | $0 | $0 |
| 1964 | $510,960 | $197,965 | $9,139,914 | $0 | $0 |
| 1963 | $412,308 | $173,515 | $8,826,919 | $0 | $0 |
| 1962 | $374,871 | $151,846 | $8,588,126 | $0 | $0 |
| 1961 | $499,550 | $198,316 | $8,365,101 | $0 | $0 |
| 1960 | $350,996 | $152,841 | $8,063,867 | $0 | $0 |
| 1959 | $417,502 | $179,999 | $7,865,712 | $0 | $0 |
| 1958 | $460,209 | $145,963 | $7,628,209 | $0 | $0 |
| 1957 | $421,180 | $101,977 | $7,313,963 | $0 | $0 |
| 1956 | $364,630 | $98,076 | $6,994,760 | $0 | $0 |
| 1955 | $300,304 | $83,548 | $6,728,206 | $0 | $0 |
| 1954 | $286,975 | $69,917 | $6,511,450 | $0 | $0 |
| 1953 | $314,622 | $80,158 | $6,294,392 | $0 | $0 |
| 1952 | $352,512 | $62,890 | $6,059,928 | $0 | $0 |
| 1951 | $535,120 | $86,968 | $5,770,306 | $0 | $0 |
| 1950 | $649,686 | $74,781 | $5,322,154 | $0 | $0 |
| 1949 | $716,821 | $84,381 | $4,747,249 | $0 | $0 |
| 1948 | $927,453 | $64,525 | $4,114,809 | $0 | $0 |
| 1947 | $1,015,765 | $52,850 | $3,251,881 | $0 | $0 |
| 1946 | $836,816 | $19,182 | $2,288,966 | $0 | $0 |
| 1945 | $176,492 | $14,956 | $1,471,332 | $0 | $0 |
| 1944 | $61,306 | $15,239 | $1,309,796 | $0 | $0 |
| 1943 | $39,257 | $42,381 | $1,263,729 | $0 | $0 |
| 1942 | $117,724 | $4,914 | $1,266,853 | $0 | $0 |
| 1941 | $118,223 | $48,820 | $1,154,043 | $0 | $0 |
| 1940 | $206,783 | $83,909 | $1,084,640 | $0 | $0 |
| 1939 | $181,871 | $88,380 | $961,766 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $160,568 | $160,633 | $868,275 | $0 | $0 |
| 1937 | $146,719 | $139,472 | $868,340 | $0 | $0 |
| 1936 | $861,093 | $0 | $861,093 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

Account 365 OVERHEAD CONDUCTOR & DEVICES

Depreciable Balance $129,155,638

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 26 | 30 |
| Iowa Curve | R1.5 | R0.5 |
| Gross Removal, % | | 25% |
| Gross Salvage, % | | 50% |
| Net Salvage % | 25% | 25% |

**********************************************************************************************************************

The simulation analyses for all bands indicate a retirement dispersion of an R0.5 type curve with an average service life of 30 years is appropriate for the investments in this account.

Removal costs should be expected from the labor and transportation costs involved in removing the conductor. Salvage costs would be expected from the sale of the conductor and the reuse of circuit breakers, insulators and switches.

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 365 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.4 | 2.53E+13 | 14.7225 | 67.92 | 100.00 |
| L0 | 32.9 | 2.79E+13 | 15.4526 | 64.71 | 95.40 |
| S-.5 | 30.3 | 2.99E+13 | 16.0078 | 62.47 | 100.00 |
| R1 | 28.3 | 3.21E+13 | 16.5670 | 60.36 | 100.00 |
| L0.5 | 30.7 | 3.84E+13 | 18.1235 | 55.18 | 98.17 |
| S0 | 28.2 | 4.29E+13 | 19.1736 | 52.16 | 100.00 |
| R1.5 | 27.1 | 4.44E+13 | 19.4854 | 51.32 | 100.00 |
| L1 | 29.1 | 5.17E+13 | 21.0378 | 47.53 | 99.63 |
| S0.5 | 27.3 | 5.53E+13 | 21.7619 | 45.95 | 100.00 |
| R2 | 25.9 | 6.46E+13 | 23.4915 | 42.57 | 100.00 |
| L1.5 | 27.8 | 6.79E+13 | 24.1080 | 41.48 | 99.92 |
| S1 | 26.3 | 7.25E+13 | 24.9181 | 40.13 | 100.00 |
| R2.5 | 25.2 | 8.92E+13 | 27.6272 | 36.20 | 100.00 |
| L2 | 26.6 | 9.02E+13 | 27.7852 | 35.99 | 100.00 |
| S1.5 | 25.7 | 9.11E+13 | 27.9291 | 35.80 | 100.00 |
| S2 | 25.0 | 1.15E+14 | 31.3451 | 31.90 | 100.00 |
| R3 | 24.6 | 1.22E+14 | 32.3320 | 30.93 | 100.00 |
| L3 | 25.2 | 1.35E+14 | 34.0135 | 29.40 | 100.00 |
| S3 | 24.4 | 1.64E+14 | 37.5224 | 26.65 | 100.00 |
| R4 | 24.0 | 1.86E+14 | 39.9434 | 25.04 | 100.00 |
| L4 | 24.3 | 1.91E+14 | 40.4413 | 24.73 | 100.00 |
| S4 | 23.8 | 2.28E+14 | 44.1547 | 22.65 | 100.00 |
| L5 | 23.7 | 2.50E+14 | 46.2385 | 21.63 | 100.00 |
| R5 | 23.6 | 2.65E+14 | 47.6049 | 21.01 | 100.00 |
| S5 | 23.7 | 2.84E+14 | 49.2787 | 20.29 | 100.00 |
| S6 | 23.5 | 3.26E+14 | 52.8006 | 18.94 | 100.00 |
| SQ | 25.1 | 5.84E+14 | 70.7259 | 14.14 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

Account: KEPCo 101/6 365 - KY

'ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.2 | 2.23E+13 | 12.9389 | 77.29 | 100.00 |
| L0 | 32.9 | 2.44E+13 | 13.5099 | 74.02 | 95.40 |
| S-.5 | 30.3 | 2.57E+13 | 13.8693 | 72.10 | 100.00 |
| R1 | 28.4 | 2.88E+13 | 14.6810 | 68.12 | 100.00 |
| L0.5 | 31.0 | 3.26E+13 | 15.6347 | 63.96 | 98.01 |
| S0 | 28.2 | 3.67E+13 | 16.5783 | 60.32 | 100.00 |
| R1.5 | 27.2 | 4.09E+13 | 17.5025 | 57.13 | 100.00 |
| L1 | 29.1 | 4.33E+13 | 18.0185 | 55.50 | 99.63 |
| S0.5 | 27.3 | 4.75E+13 | 18.8618 | 53.02 | 100.00 |
| L1.5 | 27.8 | 5.84E+13 | 20.9304 | 47.78 | 99.92 |
| R2 | 26.0 | 5.99E+13 | 21.1857 | 47.20 | 100.00 |
| S1 | 26.3 | 6.33E+13 | 21.7764 | 45.92 | 100.00 |
| L2 | 26.9 | 7.80E+13 | 24.1863 | 41.35 | 100.00 |
| S1.5 | 25.7 | 8.16E+13 | 24.7340 | 40.43 | 100.00 |
| R2.5 | 25.3 | 8.37E+13 | 25.0529 | 39.92 | 100.00 |
| S2 | 25.0 | 1.05E+14 | 28.0258 | 35.68 | 100.00 |
| R3 | 24.7 | 1.15E+14 | 29.2957 | 34.13 | 100.00 |
| L3 | 25.3 | 1.22E+14 | 30.1992 | 33.11 | 100.00 |
| S3 | 24.4 | 1.52E+14 | 33.7434 | 29.64 | 100.00 |
| R4 | 24.1 | 1.74E+14 | 36.1153 | 27.69 | 100.00 |
| L4 | 24.4 | 1.77E+14 | 36.4377 | 27.44 | 100.00 |
| S4 | 23.8 | 2.13E+14 | 39.9727 | 25.02 | 100.00 |
| L5 | 23.8 | 2.32E+14 | 41.7331 | 23.96 | 100.00 |
| R5 | 23.7 | 2.47E+14 | 43.0138 | 23.25 | 100.00 |
| S5 | 23.7 | 2.65E+14 | 44.5427 | 22.45 | 100.00 |
| S6 | 23.5 | 3.04E+14 | 47.7480 | 20.94 | 100.00 |
| SQ | 25.1 | 5.38E+14 | 63.5296 | 15.74 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 365 - KY
Version: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.7 | 5.09E+12 | 7.0698 | 141.45 | 100.00 |
| S-.5 | 30.8 | 5.37E+12 | 7.2624 | 137.70 | 100.00 |
| L0 | 33.4 | 5.39E+12 | 7.2726 | 137.50 | 94.98 |
| R1 | 28.9 | 6.34E+12 | 7.8908 | 126.73 | 100.00 |
| L0.5 | 31.4 | 6.52E+12 | 7.9977 | 125.04 | 97.75 |
| S0 | 28.9 | 7.58E+12 | 8.6276 | 115.91 | 100.00 |
| L1 | 29.8 | 8.38E+12 | 9.0704 | 110.25 | 99.46 |
| R1.5 | 27.6 | 9.47E+12 | 9.6404 | 103.73 | 100.00 |
| S0.5 | 27.7 | 1.02E+13 | 9.9849 | 100.15 | 100.00 |
| L1.5 | 28.5 | 1.12E+13 | 10.4725 | 95.49 | 99.86 |
| S1 | 27.0 | 1.39E+13 | 11.6758 | 85.65 | 100.00 |
| R2 | 26.6 | 1.48E+13 | 12.0633 | 82.90 | 100.00 |
| L2 | 27.5 | 1.50E+13 | 12.1489 | 82.31 | 100.00 |
| S1.5 | 26.3 | 1.80E+13 | 13.3091 | 75.14 | 100.00 |
| R2.5 | 25.9 | 2.13E+13 | 14.4553 | 69.18 | 100.00 |
| S2 | 25.6 | 2.30E+13 | 15.0381 | 66.50 | 100.00 |
| L3 | 25.9 | 2.56E+13 | 15.8474 | 63.10 | 100.00 |
| R3 | 25.3 | 2.88E+13 | 16.8085 | 59.49 | 100.00 |
| S3 | 25.0 | 3.54E+13 | 18.6302 | 53.68 | 100.00 |
| L4 | 25.0 | 4.44E+13 | 20.8776 | 47.90 | 100.00 |
| R4 | 24.7 | 4.63E+13 | 21.3134 | 46.92 | 100.00 |
| S4 | 24.6 | 5.62E+13 | 23.4851 | 42.58 | 100.00 |
| L5 | 24.4 | 6.60E+13 | 25.4440 | 39.30 | 100.00 |
| R5 | 24.3 | 7.41E+13 | 26.9688 | 37.08 | 100.00 |
| S5 | 24.2 | 8.09E+13 | 28.1716 | 35.50 | 100.00 |
| S6 | 24.1 | 1.08E+14 | 32.6190 | 30.66 | 100.00 |
| SQ | 26.0 | 3.98E+14 | 62.4713 | 16.01 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $10,259,055 | $3,155,687 | $129,155,638 | $0 | $0 |
| 2007 | $14,237,195 | $2,993,281 | $122,052,270 | $0 | $0 |
| 2006 | $8,984,427 | $2,373,219 | $110,808,356 | $0 | $0 |
| 2005 | $6,436,239 | $1,665,652 | $104,197,148 | $0 | $0 |
| 2004 | $5,364,176 | $1,048,651 | $99,426,561 | $0 | $0 |
| 2003 | $4,069,103 | $1,665,159 | $95,111,036 | $0 | $0 |
| 2002 | $5,622,594 | $2,020,300 | $92,707,092 | $0 | $0 |
| 2001 | $5,169,647 | $1,323,285 | $89,104,798 | $0 | $0 |
| 2000 | $5,230,644 | $1,553,565 | $85,258,436 | $0 | $0 |
| 1999 | $6,688,639 | $767,232 | $81,581,367 | $0 | $0 |
| 1998 | $2,314,364 | $867,054 | $75,659,950 | $0 | $0 |
| 1997 | $7,910,940 | $1,666,505 | $74,212,640 | $0 | $0 |
| 1996 | $3,270,420 | $1,662,236 | $67,968,205 | $0 | $0 |
| 1995 | $5,785,493 | $2,549,129 | $66,360,021 | $0 | $0 |
| 1994 | $4,473,083 | $1,379,552 | $63,123,657 | $0 | $0 |
| 1993 | $2,861,816 | $758,447 | $60,030,126 | $0 | $0 |
| 1992 | $3,277,636 | $909,965 | $57,926,757 | $0 | $0 |
| 1991 | $3,654,148 | $1,060,633 | $55,559,086 | $0 | $0 |
| 1990 | $3,794,891 | $1,114,551 | $52,965,571 | $0 | $0 |
| 1989 | $3,611,129 | $899,096 | $50,285,231 | $0 | $0 |
| 1988 | $3,229,945 | $1,188,810 | $47,573,198 | $0 | $0 |
| 1987 | $3,764,540 | $1,004,247 | $45,532,063 | $0 | $0 |
| 1986 | $3,340,589 | $919,744 | $42,771,770 | $0 | $0 |
| 1985 | $2,604,969 | $519,259 | $40,350,925 | $0 | $0 |
| 1984 | $2,380,654 | $517,838 | $38,265,215 | $0 | $0 |
| 1983 | $2,562,107 | $598,823 | $36,402,399 | $0 | $0 |
| 1982 | $2,865,659 | $452,557 | $34,439,115 | $0 | $0 |
| 1981 | $4,443,270 | $876,800 | $32,026,013 | $0 | $0 |
| 1980 | $3,591,035 | $532,297 | $28,459,543 | $0 | $0 |
| 1979 | $3,199,783 | $516,238 | $25,400,805 | $0 | $0 |
| 1978 | $2,734,482 | $472,645 | $22,717,260 | $0 | $0 |
| 1977 | $3,143,781 | $369,728 | $20,455,423 | $0 | $0 |
| 1976 | $1,782,930 | $302,893 | $17,681,370 | $0 | $0 |
| 1975 | $1,026,632 | $230,227 | $16,201,333 | $0 | $0 |
| 1974 | $1,088,826 | $298,710 | $15,404,928 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $1,108,750 | $379,766 | $14,614,812 | $0 | $0 |
| 1972 | $1,152,475 | $309,059 | $13,885,828 | $0 | $0 |
| 1971 | $1,451,307 | $334,232 | $13,042,412 | $0 | $0 |
| 1970 | $1,150,481 | $281,292 | $11,925,337 | $0 | $0 |
| 1969 | $992,508 | $307,427 | $11,056,148 | $0 | $0 |
| 1968 | $949,626 | $293,616 | $10,371,067 | $0 | $0 |
| 1967 | $869,418 | $235,317 | $9,715,057 | $0 | $0 |
| 1966 | $728,131 | $219,295 | $9,080,956 | $0 | $0 |
| 1965 | $688,379 | $182,223 | $8,572,120 | $0 | $0 |
| 1964 | $500,173 | $118,173 | $8,065,964 | $0 | $0 |
| 1963 | $342,519 | $115,279 | $7,683,964 | $0 | $0 |
| 1962 | $356,863 | $110,412 | $7,456,724 | $0 | $0 |
| 1961 | $431,518 | $83,006 | $7,210,273 | $0 | $0 |
| 1960 | $309,663 | $119,535 | $6,861,761 | $0 | $0 |
| 1959 | $332,979 | $86,363 | $6,671,633 | $0 | $0 |
| 1958 | $411,734 | $100,947 | $6,425,017 | $0 | $0 |
| 1957 | $370,826 | $75,501 | $6,114,230 | $0 | $0 |
| 1956 | $335,384 | $67,420 | $5,818,905 | $0 | $0 |
| 1955 | $247,836 | $54,244 | $5,550,941 | $0 | $0 |
| 1954 | $237,566 | $58,761 | $5,357,349 | $0 | $0 |
| 1953 | $254,683 | $55,985 | $5,178,544 | $0 | $0 |
| 1952 | $291,012 | $43,132 | $4,979,846 | $0 | $0 |
| 1951 | $393,824 | $52,380 | $4,731,966 | $0 | $0 |
| 1950 | $509,472 | $43,539 | $4,390,522 | $0 | $0 |
| 1949 | $591,741 | $38,785 | $3,924,589 | $0 | $0 |
| 1948 | $780,371 | $33,031 | $3,371,633 | $0 | $0 |
| 1947 | $845,275 | $23,250 | $2,624,293 | $0 | $0 |
| 1946 | $541,149 | $8,911 | $1,802,268 | $0 | $0 |
| 1945 | $107,824 | $7,008 | $1,270,030 | $0 | $0 |
| 1944 | $34,927 | $8,392 | $1,169,214 | $0 | $0 |
| 1943 | $14,300 | $15,652 | $1,142,679 | $0 | $0 |
| 1942 | $71,460 | $1,863 | $1,144,031 | $0 | $0 |
| 1941 | $90,549 | $26,224 | $1,074,434 | $0 | $0 |
| 1940 | $125,801 | $56,768 | $1,010,109 | $0 | $0 |
| 1939 | $132,698 | $43,031 | $941,076 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $124,001 | $56,193 | $851,409 | $0 | $0 |
| 1937 | $120,859 | $109,143 | $783,601 | $0 | $0 |
| 1936 | $771,885 | $0 | $771,885 | $0 | $0 |





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KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 366 UNDERGROUND CONDUIT | |
| Depreciable Balance | $4,302,754 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 37 | 50 |
| Iowa Curve | R2.0 | R0.5 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

**************************************************************************************************************************************

The simulation analyses for this account do not provide meaningful guidance for the selection of an average service life. However, it is obvious that the service life should be increased from the current 37 years. The recommendation is to move to a 50 year average service life following an R0.5 type curve.

Neither salvage nor removal is expected from this investment as it is likely the conduit will be retired in place.

Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 366 - KY

Version: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 145.3 | 4.23E+09 | 7.7780 | 128.57 | 21.12 |
| R1 | 107.4 | 4.52E+09 | 8.0422 | 124.34 | 26.00 |
| S-.5 | 121.7 | 4.74E+09 | 8.2384 | 121.38 | 26.43 |
| R1.5 | 82.3 | 4.98E+09 | 8.4403 | 118.48 | 36.64 |
| L0 | 123.2 | 5.60E+09 | 8.9570 | 111.64 | 30.77 |
| L0.5 | 96.3 | 6.16E+09 | 9.3913 | 106.48 | 38.93 |
| R2 | 62.1 | 6.40E+09 | 9.5694 | 104.50 | 64.07 |
| S0 | 78.6 | 7.00E+09 | 10.0140 | 99.86 | 44.62 |
| L1 | 73.8 | 8.11E+09 | 10.7753 | 92.80 | 53.19 |
| R2.5 | 51.5 | 8.15E+09 | 10.8053 | 92.55 | 90.98 |
| S0.5 | 65.2 | 8.22E+09 | 10.8452 | 92.21 | 58.92 |
| L1.5 | 62.4 | 9.54E+09 | 11.6897 | 85.55 | 66.38 |
| S1 | 54.1 | 1.11E+10 | 12.5957 | 79.39 | 78.78 |
| R3 | 43.6 | 1.23E+10 | 13.2597 | 75.42 | 100.00 |
| S1.5 | 48.4 | 1.30E+10 | 13.6185 | 73.43 | 91.63 |
| L2 | 52.3 | 1.34E+10 | 13.8580 | 72.16 | 81.15 |
| S2 | 43.7 | 1.68E+10 | 15.5096 | 64.48 | 98.78 |
| L3 | 43.0 | 2.02E+10 | 17.0230 | 58.74 | 96.19 |
| R4 | 37.8 | 2.23E+10 | 17.8689 | 55.96 | 100.00 |
| S3 | 39.1 | 2.41E+10 | 18.5762 | 53.83 | 100.00 |
| L4 | 38.1 | 2.83E+10 | 20.1302 | 49.68 | 99.98 |
| S4 | 36.4 | 3.55E+10 | 22.5507 | 44.34 | 100.00 |
| R5 | 35.6 | 4.00E+10 | 23.9263 | 41.80 | 100.00 |
| L5 | 36.0 | 4.03E+10 | 24.0130 | 41.64 | 100.00 |
| S5 | 35.2 | 4.72E+10 | 26.0049 | 38.45 | 100.00 |
| S6 | 34.6 | 5.78E+10 | 28.7693 | 34.76 | 100.00 |
| SQ | 37.0 | 9.13E+10 | 36.1532 | 27.66 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 366 - KY
Version: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 146.5 | 3.19E+09 | 5.5820 | 179.15 | 20.93 |
| R1 | 108.3 | 3.40E+09 | 5.7638 | 173.50 | 25.70 |
| S-.5 | 122.9 | 3.55E+09 | 5.8924 | 169.71 | 26.10 |
| R1.5 | 83.0 | 3.73E+09 | 6.0432 | 165.48 | 36.07 |
| L0 | 124.5 | 4.15E+09 | 6.3706 | 156.97 | 30.40 |
| L0.5 | 97.3 | 4.57E+09 | 6.6843 | 149.60 | 38.42 |
| R2 | 62.0 | 4.80E+09 | 6.8530 | 145.92 | 64.28 |
| S0 | 79.4 | 5.15E+09 | 7.0974 | 140.90 | 43.99 |
| L1 | 74.1 | 6.02E+09 | 7.6742 | 130.31 | 52.90 |
| S0.5 | 65.2 | 6.05E+09 | 7.6955 | 129.95 | 58.92 |
| R2.5 | 51.4 | 6.18E+09 | 7.7737 | 128.64 | 91.13 |
| L1.5 | 62.7 | 7.13E+09 | 8.3495 | 119.77 | 66.06 |
| S1 | 54.1 | 8.19E+09 | 8.9493 | 111.74 | 78.77 |
| R3 | 43.8 | 9.49E+09 | 9.6339 | 103.80 | 99.99 |
| S1.5 | 48.4 | 9.78E+09 | 9.7800 | 102.25 | 91.63 |
| L2 | 52.6 | 1.03E+10 | 10.0216 | 99.78 | 80.87 |
| S2 | 43.7 | 1.30E+10 | 11.2622 | 88.79 | 98.77 |
| L3 | 43.2 | 1.63E+10 | 12.6079 | 79.32 | 96.04 |
| R4 | 38.0 | 1.84E+10 | 13.4201 | 74.52 | 100.00 |
| S3 | 39.1 | 1.97E+10 | 13.8964 | 71.96 | 100.00 |
| L4 | 38.2 | 2.38E+10 | 15.2694 | 65.49 | 99.98 |
| S4 | 36.4 | 3.10E+10 | 17.4127 | 57.43 | 100.00 |
| R5 | 35.4 | 3.54E+10 | 18.6100 | 53.73 | 100.00 |
| L5 | 36.0 | 3.58E+10 | 18.7034 | 53.47 | 100.00 |
| S5 | 35.2 | 4.27E+10 | 20.4431 | 48.92 | 100.00 |
| S6 | 34.6 | 5.33E+10 | 22.8350 | 43.79 | 100.00 |
| SQ | 37.0 | 8.68E+10 | 29.1354 | 34.32 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

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*ccount: KEPCo 101/6 366 - KY
rsion: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 153.3 | 1.05E+09 | 3.3244 | 300.81 | 19.89 |
| R1 | 113.4 | 1.11E+09 | 3.4291 | 291.62 | 24.09 |
| S-.5 | 128.6 | 1.17E+09 | 3.5073 | 285.12 | 24.67 |
| R1.5 | 86.3 | 1.22E+09 | 3.5929 | 278.33 | 33.49 |
| L0 | 129.0 | 1.37E+09 | 3.7999 | 263.16 | 29.14 |
| L0.5 | 100.8 | 1.50E+09 | 3.9791 | 251.31 | 36.68 |
| R2 | 63.8 | 1.57E+09 | 4.0747 | 245.42 | 60.51 |
| S0 | 81.4 | 1.70E+09 | 4.2307 | 236.37 | 42.42 |
| L1 | 76.8 | 1.95E+09 | 4.5371 | 220.41 | 50.59 |
| S0.5 | 67.5 | 1.99E+09 | 4.5818 | 218.25 | 55.88 |
| R2.5 | 53.0 | 2.03E+09 | 4.6350 | 215.75 | 88.27 |
| L1.5 | 64.3 | 2.35E+09 | 4.9761 | 200.96 | 64.15 |
| S1 | 55.5 | 2.67E+09 | 5.3050 | 188.50 | 76.30 |
| S1.5 | 49.6 | 3.18E+09 | 5.7909 | 172.68 | 89.73 |
| R3 | 44.8 | 3.23E+09 | 5.8439 | 171.12 | 99.93 |
| L2 | 53.4 | 3.43E+09 | 6.0184 | 166.16 | 79.82 |
| S2 | 44.9 | 4.18E+09 | 6.6422 | 150.55 | 98.05 |
| L3 | 43.8 | 5.67E+09 | 7.7342 | 129.30 | 95.47 |
| R4 | 38.2 | 6.68E+09 | 8.3999 | 119.05 | 100.00 |
| S3 | 39.7 | 6.69E+09 | 8.4034 | 119.00 | 100.00 |
| L4 | 38.5 | 9.03E+09 | 9.7661 | 102.40 | 99.98 |
| S4 | 36.6 | 1.24E+10 | 11.4255 | 87.52 | 100.00 |
| R5 | 35.5 | 1.57E+10 | 12.8799 | 77.64 | 100.00 |
| L5 | 36.2 | 1.57E+10 | 12.8859 | 77.60 | 100.00 |
| S5 | 35.4 | 2.06E+10 | 14.7515 | 67.79 | 100.00 |
| S6 | 34.8 | 2.98E+10 | 17.7469 | 56.35 | 100.00 |
| SQ | 37.9 | 7.42E+10 | 27.9934 | 35.72 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $332,819 | $694 | $4,302,754 | $0 | $0 |
| 2007 | $312,381 | $3,259 | $3,970,629 | $0 | $0 |
| 2006 | $509,176 | $7,368 | $3,661,507 | $0 | $0 |
| 2005 | $199,943 | $143 | $3,159,699 | $0 | $0 |
| 2004 | $173,356 | $2,052 | $2,959,899 | $0 | $0 |
| 2003 | $118,994 | $2,929 | $2,788,595 | $0 | $0 |
| 2002 | $134,439 | $16,953 | $2,672,530 | $0 | $0 |
| 2001 | $123,659 | $9,421 | $2,555,044 | $0 | $0 |
| 2000 | $182,080 | $6,479 | $2,440,806 | $0 | $0 |
| 1999 | $137,692 | $2,608 | $2,265,205 | $0 | $0 |
| 1998 | $60,158 | $1,777 | $2,130,121 | $0 | $0 |
| 1997 | $291,323 | $4,035 | $2,071,740 | $0 | $0 |
| 1996 | $131,833 | $3,248 | $1,784,452 | $0 | $0 |
| 1995 | $133,289 | $5,842 | $1,655,867 | $0 | $0 |
| 1994 | $118,922 | $199 | $1,528,420 | $0 | $0 |
| 1993 | $270,669 | $0 | $1,409,697 | $0 | $0 |
| 1992 | $131,413 | $0 | $1,139,028 | $0 | $0 |
| 1991 | $51,993 | $1,608 | $1,007,615 | $0 | $0 |
| 1990 | $207,078 | $7,201 | $957,230 | $0 | $0 |
| 1989 | $49,004 | $3,823 | $757,353 | $0 | $0 |
| 1988 | $25,065 | $172 | $712,172 | $0 | $0 |
| 1987 | $9,664 | $6,968 | $687,279 | $0 | $0 |
| 1986 | $35,696 | $896 | $684,583 | $0 | $0 |
| 1985 | $75,471 | $5,819 | $649,783 | $0 | $0 |
| 1984 | $4,604 | $3,998 | $580,131 | $0 | $0 |
| 1983 | $39,828 | $78 | $579,525 | $0 | $0 |
| 1982 | $48,652 | $0 | $539,775 | $0 | $0 |
| 1981 | $79,179 | $71 | $491,123 | $0 | $0 |
| 1980 | $46,085 | $13,388 | $412,015 | $0 | $0 |
| 1979 | $8,197 | $0 | $379,318 | $0 | $0 |
| 1978 | $28,154 | $216 | $371,121 | $0 | $0 |
| 1977 | $37,280 | $0 | $343,183 | $0 | $0 |
| 1976 | $51,203 | $138 | $305,903 | $0 | $0 |
| 1975 | $31,345 | $0 | $254,838 | $0 | $0 |
| 1974 | $53,663 | $352 | $223,493 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $60,340 | $679 | $170,182 | $0 | $0 |
| 1972 | $27,833 | $104 | $110,521 | $0 | $0 |
| 1971 | $37,062 | $83 | $82,792 | $0 | $0 |
| 1970 | $30,547 | $34 | $45,813 | $0 | $0 |
| 1969 | $3,136 | $0 | $15,300 | $0 | $0 |
| 1968 | $820 | $0 | $12,164 | $0 | $0 |
| 1967 | $6,556 | $0 | $11,344 | $0 | $0 |
| 1966 | $4,153 | $237 | $4,788 | $0 | $0 |
| 1965 | $0 | $0 | $872 | $0 | $0 |
| 1964 | $0 | $0 | $872 | $0 | $0 |
| 1963 | $0 | $0 | $872 | $0 | $0 |
| 1962 | $0 | $0 | $872 | $0 | $0 |
| 1961 | $0 | $0 | $872 | $0 | $0 |
| 1960 | $0 | $0 | $872 | $0 | $0 |
| 1959 | $0 | $0 | $872 | $0 | $0 |
| 1958 | $0 | $0 | $872 | $0 | $0 |
| 1957 | $0 | $0 | $872 | $0 | $0 |
| 1956 | $0 | $0 | $872 | $0 | $0 |
| 1955 | $0 | $0 | $872 | $0 | $0 |
| 1954 | $0 | $0 | $872 | $0 | $0 |
| 1953 | $0 | $0 | $872 | $0 | $0 |
| 1952 | $0 | $0 | $872 | $0 | $0 |
| 1951 | $0 | $18 | $872 | $0 | $0 |
| 1950 | $0 | $0 | $890 | $0 | $0 |
| 1949 | $0 | $0 | $890 | $0 | $0 |
| 1948 | $0 | $78 | $890 | $0 | $0 |
| 1947 | $55 | $259 | $968 | $0 | $0 |
| 1946 | $0 | $107 | $1,172 | $0 | $0 |
| 1945 | $0 | $389 | $1,279 | $0 | $0 |
| 1944 | $0 | $122 | $1,668 | $0 | $0 |
| 1943 | $0 | $14 | $1,790 | $0 | $0 |
| 1942 | $144 | $0 | $1,804 | $0 | $0 |
| 1941 | $0 | $0 | $1,660 | $0 | $0 |
| 1940 | $77 | $115 | $1,660 | $0 | $0 |
| 1939 | $315 | $0 | $1,698 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $0 | $0 | $1,383 | $0 | $0 |
| 1937 | $0 | $0 | $1,383 | $0 | $0 |
| 1936 | $1,383 | $0 | $1,383 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 367 UNDERGROUND CONDUCTOR & DEVICES | |
| Depreciable Balance | $7,652,121 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 44 | 50 |
| Iowa Curve | R1.0 | S-.5 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

***************************************************************************************************************************

As in the related underground conduit account, the simulation analyses indicates an increase in average, although the increase is not as dramatic. Based on the analyses, the recommendation is to move to a 50 year average service life following an S-.5 type dispersion.

The recommendation of 0% for both salvage and removal is based on the fact that the conductor may be abandonded in place. If the conductor is removed, it may be likely that the scrap price would be equal to the cost of removal.

Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 367 - KY
Version: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| S-.5 | 49.6 | 1.19E+10 | 7.1041 | 140.76 | 76.77 |
| R1 | 43.0 | 1.21E+10 | 7.1537 | 139.79 | 94.11 |
| R0.5 | 51.8 | 1.24E+10 | 7.2383 | 138.15 | 73.74 |
| L0 | 54.8 | 1.26E+10 | 7.2917 | 137.14 | 71.23 |
| L0.5 | 47.1 | 1.64E+10 | 8.3340 | 119.99 | 81.60 |
| R1.5 | 37.7 | 1.77E+10 | 8.6522 | 115.58 | 99.80 |
| S0 | 40.7 | 1.96E+10 | 9.1087 | 109.79 | 95.53 |
| L1 | 41.3 | 2.81E+10 | 10.8986 | 91.75 | 90.54 |
| S0.5 | 36.8 | 3.23E+10 | 11.6972 | 85.49 | 99.93 |
| R2 | 34.1 | 3.89E+10 | 12.8274 | 77.96 | 100.00 |
| L1.5 | 37.7 | 4.61E+10 | 13.9653 | 71.61 | 96.71 |
| S1 | 33.9 | 5.73E+10 | 15.5764 | 64.20 | 100.00 |
| R2.5 | 31.7 | 7.47E+10 | 17.7842 | 56.23 | 100.00 |
| L2 | 34.4 | 8.02E+10 | 18.4262 | 54.27 | 98.86 |
| S1.5 | 32.4 | 8.62E+10 | 19.0977 | 52.36 | 100.00 |
| S2 | 30.7 | 1.29E+11 | 23.3729 | 42.78 | 100.00 |
| R3 | 30.3 | 1.36E+11 | 23.9983 | 41.67 | 100.00 |
| L3 | 31.1 | 1.60E+11 | 26.0489 | 38.39 | 100.00 |
| S3 | 29.3 | 2.20E+11 | 30.5292 | 32.76 | 100.00 |
| L4 | 29.0 | 2.67E+11 | 33.6344 | 29.73 | 100.00 |
| R4 | 28.7 | 2.68E+11 | 33.6871 | 29.68 | 100.00 |
| S4 | 28.3 | 3.45E+11 | 38.2156 | 26.17 | 100.00 |
| L5 | 28.3 | 3.79E+11 | 40.0704 | 24.96 | 100.00 |
| R5 | 28.0 | 4.17E+11 | 42.0333 | 23.79 | 100.00 |
| S5 | 27.9 | 4.50E+11 | 43.6313 | 22.92 | 100.00 |
| S6 | 27.4 | 5.16E+11 | 46.7445 | 21.39 | 100.00 |
| SQ | 29.9 | 9.82E+11 | 64.4743 | 15.51 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 367 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 51.8 | 1.10E+10 | 5.8400 | 171.23 | 73.85 |
| S-.5 | 49.6 | 1.13E+10 | 5.9078 | 169.27 | 76.77 |
| R1 | 43.0 | 1.15E+10 | 5.9602 | 167.78 | 94.20 |
| L0 | 55.0 | 1.20E+10 | 6.0837 | 164.37 | 71.00 |
| L0.5 | 47.3 | 1.48E+10 | 6.7608 | 147.91 | 81.38 |
| R1.5 | 37.7 | 1.68E+10 | 7.2030 | 138.83 | 99.81 |
| S0 | 40.7 | 1.71E+10 | 7.2767 | 137.42 | 95.53 |
| L1 | 41.5 | 2.28E+10 | 8.3860 | 119.25 | 90.35 |
| S0.5 | 37.2 | 2.67E+10 | 9.0785 | 110.15 | 99.82 |
| R2 | 34.1 | 3.43E+10 | 10.2968 | 97.12 | 100.00 |
| L1.5 | 37.5 | 3.70E+10 | 10.6881 | 93.56 | 95.90 |
| S1 | 33.9 | 4.54E+10 | 11.8378 | 84.48 | 100.00 |
| L2 | 34.6 | 6.19E+10 | 13.8245 | 72.34 | 98.81 |
| R2.5 | 32.0 | 6.51E+10 | 14.1815 | 70.51 | 100.00 |
| S1.5 | 32.4 | 6.82E+10 | 14.5116 | 68.91 | 100.00 |
| S2 | 31.0 | 1.02E+11 | 17.7646 | 56.29 | 100.00 |
| R3 | 30.4 | 1.16E+11 | 18.9691 | 52.72 | 100.00 |
| L3 | 31.3 | 1.29E+11 | 19.9334 | 50.17 | 100.00 |
| S3 | 29.4 | 1.81E+11 | 23.6775 | 42.23 | 100.00 |
| L4 | 29.1 | 2.24E+11 | 26.3133 | 38.00 | 100.00 |
| R4 | 28.9 | 2.31E+11 | 26.7094 | 37.44 | 100.00 |
| S4 | 28.4 | 2.97E+11 | 30.2775 | 33.03 | 100.00 |
| L5 | 28.1 | 3.28E+11 | 31.8485 | 31.40 | 100.00 |
| R5 | 27.9 | 3.67E+11 | 33.6838 | 29.69 | 100.00 |
| S5 | 27.7 | 3.98E+11 | 35.0834 | 28.50 | 100.00 |
| S6 | 27.5 | 4.64E+11 | 37.8562 | 26.42 | 100.00 |
| SQ | 30.0 | 9.30E+11 | 53.5918 | 18.66 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

*ccount: KEPCo 101/6 367 - KY
ersion: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R1.5 | 38.1 | 5.39E+09 | 4.3288 | 231.01 | 99.71 |
| S0 | 41.1 | 5.73E+09 | 4.4654 | 223.94 | 94.91 |
| L1 | 42.2 | 5.78E+09 | 4.4826 | 223.08 | 89.57 |
| L0.5 | 47.6 | 5.91E+09 | 4.5323 | 220.64 | 81.03 |
| R1 | 43.4 | 5.93E+09 | 4.5417 | 220.18 | 93.45 |
| S0.5 | 37.5 | 6.02E+09 | 4.5772 | 218.47 | 99.67 |
| L0 | 55.4 | 6.53E+09 | 4.7669 | 209.78 | 70.66 |
| S-.5 | 49.6 | 6.54E+09 | 4.7685 | 209.71 | 76.77 |
| R0.5 | 51.8 | 7.12E+09 | 4.9780 | 200.88 | 73.77 |
| L1.5 | 38.1 | 7.13E+09 | 4.9813 | 200.75 | 95.39 |
| R2 | 34.4 | 7.37E+09 | 5.0619 | 197.55 | 100.00 |
| S1 | 34.6 | 8.09E+09 | 5.3041 | 188.53 | 100.00 |
| L2 | 35.1 | 9.96E+09 | 5.8861 | 169.89 | 98.55 |
| S1.5 | 32.7 | 1.19E+10 | 6.4215 | 155.73 | 100.00 |
| R2.5 | 32.4 | 1.32E+10 | 6.7710 | 147.69 | 100.00 |
| S2 | 31.3 | 1.74E+10 | 7.7796 | 128.54 | 100.00 |
| L3 | 31.8 | 1.92E+10 | 8.1700 | 122.40 | 100.00 |
| R3 | 30.6 | 2.38E+10 | 9.1067 | 109.81 | 100.00 |
| S3 | 29.9 | 3.09E+10 | 10.3749 | 96.39 | 100.00 |
| L4 | 29.6 | 3.53E+10 | 11.0842 | 90.22 | 100.00 |
| R4 | 29.3 | 4.82E+10 | 12.9491 | 77.23 | 100.00 |
| L5 | 28.8 | 5.03E+10 | 13.2259 | 75.61 | 100.00 |
| S4 | 28.9 | 5.12E+10 | 13.3404 | 74.96 | 100.00 |
| S6 | 28.3 | 6.33E+10 | 14.8384 | 67.39 | 100.00 |
| S5 | 28.4 | 6.39E+10 | 14.9032 | 67.10 | 100.00 |
| R5 | 28.5 | 6.71E+10 | 15.2791 | 65.45 | 100.00 |
| SQ | 30.2 | 3.31E+11 | 33.9287 | 29.47 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $578,819 | $53,234 | $7,652,121 | $0 | $0 |
| 2007 | $973,386 | $36,512 | $7,126,536 | $0 | $0 |
| 2006 | $784,947 | $144,643 | $6,189,662 | $0 | $0 |
| 2005 | $104,018 | $36,728 | $5,549,358 | $0 | $0 |
| 2004 | $811,825 | $37,052 | $5,482,068 | $0 | $0 |
| 2003 | $245,976 | $23,089 | $4,707,295 | $0 | $0 |
| 2002 | $150,681 | $71,261 | $4,484,408 | $0 | $0 |
| 2001 | $293,525 | $11,194 | $4,404,988 | $0 | $0 |
| 2000 | $259,570 | $36,661 | $4,122,657 | $0 | $0 |
| 1999 | $377,491 | $11,656 | $3,899,748 | $0 | $0 |
| 1998 | $147,054 | $16,729 | $3,533,913 | $0 | $0 |
| 1997 | $339,985 | $46,345 | $3,403,588 | $0 | $0 |
| 1996 | $190,902 | $37,421 | $3,109,948 | $0 | $0 |
| 1995 | $209,851 | $19,071 | $2,956,467 | $0 | $0 |
| 1994 | $177,719 | $18,365 | $2,765,687 | $0 | $0 |
| 1993 | $285,294 | $9,042 | $2,606,333 | $0 | $0 |
| 1992 | $155,416 | $69,723 | $2,330,081 | $0 | $0 |
| 1991 | $141,320 | $19,317 | $2,244,388 | $0 | $0 |
| 1990 | $367,094 | $11,675 | $2,122,385 | $0 | $0 |
| 1989 | $117,298 | $8,169 | $1,766,966 | $0 | $0 |
| 1988 | $78,161 | $12,299 | $1,657,837 | $0 | $0 |
| 1987 | $108,890 | $20,306 | $1,591,975 | $0 | $0 |
| 1986 | $79,589 | $8,069 | $1,503,391 | $0 | $0 |
| 1985 | $119,906 | $5,814 | $1,431,871 | $0 | $0 |
| 1984 | $21,545 | $1,761 | $1,317,779 | $0 | $0 |
| 1983 | $100,965 | $8,742 | $1,297,995 | $0 | $0 |
| 1982 | $263,053 | $5,334 | $1,205,772 | $0 | $0 |
| 1981 | $112,466 | $6,587 | $948,053 | $0 | $0 |
| 1980 | $86,392 | $18,792 | $842,274 | $0 | $0 |
| 1979 | $45,415 | $8,720 | $774,674 | $0 | $0 |
| 1978 | $83,270 | $175 | $737,979 | $0 | $0 |
| 1977 | $52,882 | $3,175 | $654,884 | $0 | $0 |
| 1976 | $67,240 | $2,083 | $605,177 | $0 | $0 |
| 1975 | $23,860 | $1,477 | $640,020 | $0 | $0 |
| 1974 | $76,050 | $2,226 | $517,637 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $137,903 | $8,385 | $443,813 | $0 | $0 |
| 1972 | $109,531 | $60 | $314,295 | $0 | $0 |
| 1971 | $86,370 | $0 | $204,824 | $0 | $0 |
| 1970 | $76,458 | $927 | $118,454 | $0 | $0 |
| 1969 | $11,767 | $0 | $42,923 | $0 | $0 |
| 1968 | $4,973 | $0 | $31,156 | $0 | $0 |
| 1967 | $15,264 | $0 | $26,183 | $0 | $0 |
| 1966 | $4,745 | $60 | $10,919 | $0 | $0 |
| 1965 | $2,102 | $0 | $6,234 | $0 | $0 |
| 1964 | $0 | $0 | $4,132 | $0 | $0 |
| 1963 | $1,638 | $0 | $4,132 | $0 | $0 |
| 1962 | $0 | $0 | $2,494 | $0 | $0 |
| 1961 | $0 | $0 | $2,494 | $0 | $0 |
| 1960 | $0 | $0 | $2,494 | $0 | $0 |
| 1959 | $0 | $0 | $2,494 | $0 | $0 |
| 1958 | $0 | $0 | $2,494 | $0 | $0 |
| 1957 | $474 | $58 | $2,494 | $0 | $0 |
| 1956 | $0 | $0 | $2,078 | $0 | $0 |
| 1955 | $0 | $0 | $2,078 | $0 | $0 |
| 1954 | $0 | $0 | $2,078 | $0 | $0 |
| 1953 | $0 | $0 | $2,078 | $0 | $0 |
| 1952 | $0 | $0 | $2,078 | $0 | $0 |
| 1951 | $0 | $513 | $2,078 | $0 | $0 |
| 1950 | $0 | $0 | $2,591 | $0 | $0 |
| 1949 | $0 | $0 | $2,591 | $0 | $0 |
| 1948 | $0 | $26 | $2,591 | $0 | $0 |
| 1947 | $543 | $48 | $2,617 | $0 | $0 |
| 1946 | $0 | $39 | $2,122 | $0 | $0 |
| 1945 | $0 | $851 | $2,161 | $0 | $0 |
| 1944 | $0 | $116 | $3,012 | $0 | $0 |
| 1943 | $0 | $11 | $3,128 | $0 | $0 |
| 1942 | $306 | $0 | $3,139 | $0 | $0 |
| 1941 | $0 | $0 | $2,833 | $0 | $0 |
| 1940 | $198 | $563 | $2,833 | $0 | $0 |
| 1939 | $1,515 | $0 | $3,198 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $0 | $0 | $1,683 | $0 | $0 |
| 1937 | $0 | $0 | $1,683 | $0 | $0 |
| 1936 | $1,683 | $0 | $1,683 | $0 | $0 |

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KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 368 LINE TRANSFORMERS | |
| Depreciable Balance | $98,415,053 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 25 | 30 |
| Iowa Curve | R1.5 | R0.5 |
| Gross Removal, % | | 10% |
| Gross Salvage, % | | 35% |
| Net Salvage % | 15% | 25% |

*****************************************************************************************************************

The results of the simulation analyses for the investment in this account indicate a slight increase in the average service life. Based on the analyses of all bands, the recommendation is to move to a 30 year average service life following an RO.5 type dispersion.

Labor, equipment and transportation costs will result in a cost of removal for the investments in this account. The reuse of materials and scrap sales would be expected to result in salvage received.

Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 368 - KY

Version: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.1 | 4.72E+13 | 21.8580 | 45.75 | 100.00 |
| L0 | 32.9 | 5.41E+13 | 23.4099 | 42.72 | 95.40 |
| S-.5 | 30.0 | 5.72E+13 | 24.0647 | 41.55 | 100.00 |
| R1 | 28.0 | 6.85E+13 | 26.3301 | 37.98 | 100.00 |
| L0.5 | 30.7 | 7.71E+13 | 27.9431 | 35.79 | 98.17 |
| S0 | 28.2 | 9.31E+13 | 30.6943 | 32.58 | 100.00 |
| R1.5 | 27.1 | 9.70E+13 | 31.3406 | 31.91 | 100.00 |
| L1 | 29.0 | 1.07E+14 | 32.9706 | 30.33 | 99.66 |
| S0.5 | 27.3 | 1.21E+14 | 34.9733 | 28.59 | 100.00 |
| R2 | 25.9 | 1.38E+14 | 37.3784 | 26.75 | 100.00 |
| L1.5 | 28.0 | 1.41E+14 | 37.7457 | 26.49 | 99.91 |
| S1 | 26.3 | 1.57E+14 | 39.8194 | 25.11 | 100.00 |
| L2 | 26.7 | 1.82E+14 | 42.9118 | 23.30 | 100.00 |
| R2.5 | 25.2 | 1.85E+14 | 43.2610 | 23.12 | 100.00 |
| S1.5 | 25.6 | 1.90E+14 | 43.8568 | 22.80 | 100.00 |
| S2 | 25.0 | 2.32E+14 | 48.4146 | 20.65 | 100.00 |
| R3 | 24.8 | 2.43E+14 | 49.5566 | 20.18 | 100.00 |
| L3 | 25.4 | 2.59E+14 | 51.1628 | 19.55 | 100.00 |
| S3 | 24.4 | 3.08E+14 | 55.8030 | 17.92 | 100.00 |
| L4 | 24.3 | 3.45E+14 | 59.0680 | 16.93 | 100.00 |
| R4 | 24.2 | 3.47E+14 | 59.2796 | 16.87 | 100.00 |
| S4 | 24.0 | 4.01E+14 | 63.7388 | 15.69 | 100.00 |
| L5 | 23.9 | 4.27E+14 | 65.7758 | 15.20 | 100.00 |
| R5 | 23.8 | 4.57E+14 | 67.9926 | 14.71 | 100.00 |
| S5 | 23.7 | 4.80E+14 | 69.6686 | 14.35 | 100.00 |
| S6 | 23.5 | 5.31E+14 | 73.3343 | 13.64 | 100.00 |
| SQ | 25.1 | 7.70E+14 | 88.3045 | 11.32 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 368 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.1 | 4.25E+13 | 19.8800 | 50.30 | 100.00 |
| L0 | 32.9 | 4.73E+13 | 20.9746 | 47.68 | 95.40 |
| S-.5 | 30.0 | 5.09E+13 | 21.7532 | 45.97 | 100.00 |
| R1 | 28.3 | 6.13E+13 | 23.8870 | 41.86 | 100.00 |
| L0.5 | 31.0 | 6.62E+13 | 24.8148 | 40.30 | 98.01 |
| S0 | 28.2 | 8.02E+13 | 27.3158 | 36.61 | 100.00 |
| R1.5 | 27.1 | 8.70E+13 | 28.4565 | 35.14 | 100.00 |
| L1 | 29.1 | 9.13E+13 | 29.1422 | 34.31 | 99.63 |
| S0.5 | 27.3 | 1.04E+14 | 31.1130 | 32.14 | 100.00 |
| L1.5 | 28.1 | 1.20E+14 | 33.4436 | 29.90 | 99.90 |
| R2 | 26.1 | 1.24E+14 | 33.9875 | 29.42 | 100.00 |
| S1 | 26.3 | 1.36E+14 | 35.5583 | 28.12 | 100.00 |
| L2 | 26.9 | 1.57E+14 | 38.1728 | 26.20 | 100.00 |
| S1.5 | 25.9 | 1.67E+14 | 39.4519 | 25.35 | 100.00 |
| R2.5 | 25.5 | 1.68E+14 | 39.5114 | 25.31 | 100.00 |
| S2 | 25.3 | 2.05E+14 | 43.6400 | 22.91 | 100.00 |
| R3 | 24.8 | 2.22E+14 | 45.4630 | 22.00 | 100.00 |
| L3 | 25.4 | 2.29E+14 | 46.1121 | 21.69 | 100.00 |
| S3 | 24.6 | 2.79E+14 | 50.9738 | 19.62 | 100.00 |
| L4 | 24.5 | 3.15E+14 | 54.0981 | 18.48 | 100.00 |
| R4 | 24.2 | 3.21E+14 | 54.6798 | 18.29 | 100.00 |
| S4 | 24.0 | 3.71E+14 | 58.7755 | 17.01 | 100.00 |
| L5 | 23.9 | 3.97E+14 | 60.7880 | 16.45 | 100.00 |
| R5 | 23.8 | 4.27E+14 | 63.0001 | 15.87 | 100.00 |
| S5 | 23.9 | 4.49E+14 | 64.6387 | 15.47 | 100.00 |
| S6 | 23.8 | 5.01E+14 | 68.2660 | 14.65 | 100.00 |
| SQ | 25.9 | 9.99E+14 | 96.4328 | 10.37 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 368 - KY

Version: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 30.8 | 1.98E+13 | 16.5762 | 60.33 | 100.00 |
| L0 | 33.8 | 2.10E+13 | 17.0841 | 58.53 | 94.68 |
| S-.5 | 30.8 | 2.23E+13 | 17.6038 | 56.81 | 100.00 |
| R1 | 28.7 | 2.74E+13 | 19.4928 | 51.30 | 100.00 |
| L0.5 | 31.7 | 2.76E+13 | 19.5559 | 51.14 | 97.56 |
| S0 | 28.9 | 3.31E+13 | 21.4261 | 46.67 | 100.00 |
| L1 | 30.1 | 3.61E+13 | 22.3654 | 44.71 | 99.37 |
| R1.5 | 27.7 | 3.74E+13 | 22.7689 | 43.92 | 100.00 |
| S0.5 | 27.9 | 4.17E+13 | 24.0441 | 41.59 | 100.00 |
| L1.5 | 28.8 | 4.53E+13 | 25.0708 | 39.89 | 99.83 |
| R2 | 26.8 | 5.16E+13 | 26.7536 | 37.38 | 100.00 |
| S1 | 27.2 | 5.27E+13 | 27.0431 | 36.98 | 100.00 |
| L2 | 27.8 | 5.63E+13 | 27.9480 | 35.78 | 99.99 |
| S1.5 | 26.6 | 6.36E+13 | 29.6980 | 33.67 | 100.00 |
| R2.5 | 26.1 | 6.81E+13 | 30.7418 | 32.53 | 100.00 |
| S2 | 25.9 | 7.66E+13 | 32.5946 | 30.68 | 100.00 |
| L3 | 26.4 | 8.03E+13 | 33.3803 | 29.96 | 100.00 |
| R3 | 25.4 | 8.84E+13 | 35.0164 | 28.56 | 100.00 |
| S3 | 25.3 | 1.01E+14 | 37.4861 | 26.68 | 100.00 |
| L4 | 25.2 | 1.13E+14 | 39.5789 | 25.27 | 100.00 |
| R4 | 25.0 | 1.24E+14 | 41.4631 | 24.12 | 100.00 |
| S4 | 24.9 | 1.35E+14 | 43.2115 | 23.14 | 100.00 |
| L5 | 24.9 | 1.46E+14 | 44.9528 | 22.25 | 100.00 |
| R5 | 24.7 | 1.63E+14 | 47.5617 | 21.03 | 100.00 |
| S5 | 24.5 | 1.69E+14 | 48.4435 | 20.64 | 100.00 |
| S6 | 24.4 | 1.99E+14 | 52.5040 | 19.05 | 100.00 |
| SQ | 26.0 | 4.25E+14 | 76.7513 | 13.03 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $7,450,618 | $2,310,335 | $98,415,054 | $0 | $0 |
| 2007 | $7,254,032 | $2,367,716 | $93,274,771 | $0 | $0 |
| 2006 | $4,661,413 | $1,756,227 | $88,388,455 | $0 | $0 |
| 2005 | $2,488,476 | $1,190,629 | $85,483,269 | $0 | $0 |
| 2004 | $2,607,713 | $1,076,234 | $84,185,422 | $0 | $0 |
| 2003 | $1,347,430 | $1,073,924 | $82,653,943 | $0 | $0 |
| 2002 | $3,758,604 | $1,055,795 | $82,380,437 | $0 | $0 |
| 2001 | $2,396,046 | $1,029,459 | $79,677,628 | $0 | $0 |
| 2000 | $3,420,485 | $1,443,110 | $78,311,041 | $0 | $0 |
| 1999 | $4,458,378 | $1,278,242 | $76,333,666 | $0 | $0 |
| 1998 | $3,482,894 | $1,560,837 | $73,153,530 | $0 | $0 |
| 1997 | $4,777,388 | $2,186,374 | $71,231,473 | $0 | $0 |
| 1996 | $3,287,901 | $1,578,917 | $68,640,459 | $0 | $0 |
| 1995 | $4,198,526 | $1,313,309 | $66,931,475 | $0 | $0 |
| 1994 | $5,479,512 | $1,164,053 | $64,046,258 | $0 | $0 |
| 1993 | $4,268,448 | $1,105,636 | $59,730,799 | $0 | $0 |
| 1992 | $3,210,065 | $1,618,101 | $56,667,987 | $0 | $0 |
| 1991 | $3,837,537 | $1,219,271 | $54,976,023 | $0 | $0 |
| 1990 | $3,902,514 | $959,910 | $52,357,757 | $0 | $0 |
| 1989 | $3,776,952 | $1,161,193 | $49,415,153 | $0 | $0 |
| 1988 | $2,317,695 | $601,750 | $46,799,394 | $0 | $0 |
| 1987 | $3,159,121 | $784,243 | $45,083,449 | $0 | $0 |
| 1986 | $3,654,901 | $714,994 | $42,708,571 | $0 | $0 |
| 1985 | $2,911,382 | $640,462 | $39,768,664 | $0 | $0 |
| 1984 | $3,261,356 | $509,740 | $37,497,744 | $0 | $0 |
| 1983 | $2,530,699 | $816,897 | $34,746,128 | $0 | $0 |
| 1982 | $2,206,738 | $667,258 | $33,032,326 | $0 | $0 |
| 1981 | $2,989,360 | $1,160,266 | $31,492,846 | $0 | $0 |
| 1980 | $3,636,711 | $707,768 | $29,663,752 | $0 | $0 |
| 1979 | $2,852,002 | $411,317 | $26,734,809 | $0 | $0 |
| 1978 | $3,851,592 | $627,160 | $24,294,124 | $0 | $0 |
| 1977 | $3,541,256 | $312,212 | $21,069,692 | $0 | $0 |
| 1976 | $1,711,891 | $266,974 | $17,840,648 | $0 | $0 |
| 1975 | $1,610,300 | $253,830 | $16,394,731 | $0 | $0 |
| 1974 | $1,473,612 | $242,975 | $15,038,261 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $1,402,782 | $229,211 | $13,807,624 | $0 | $0 |
| 1972 | $1,089,601 | $396,582 | $12,634,053 | $0 | $0 |
| 1971 | $1,128,076 | $205,337 | $11,941,034 | $0 | $0 |
| 1970 | $954,361 | $193,411 | $11,018,295 | $0 | $0 |
| 1969 | $633,909 | $349,749 | $10,257,345 | $0 | $0 |
| 1968 | $994,850 | $191,068 | $9,973,185 | $0 | $0 |
| 1967 | $823,498 | $131,999 | $9,169,403 | $0 | $0 |
| 1966 | $699,015 | $131,560 | $8,477,904 | $0 | $0 |
| 1965 | $474,052 | $144,033 | $7,910,449 | $0 | $0 |
| 1964 | $376,312 | $57,553 | $7,580,430 | $0 | $0 |
| 1963 | $318,004 | $67,861 | $7,261,671 | $0 | $0 |
| 1962 | $290,851 | $71,202 | $7,011,528 | $0 | $0 |
| 1961 | $386,601 | $64,955 | $6,791,879 | $0 | $0 |
| 1960 | $377,379 | $69,198 | $6,470,233 | $0 | $0 |
| 1959 | $463,712 | $81,628 | $6,162,052 | $0 | $0 |
| 1958 | $493,518 | $64,683 | $5,779,968 | $0 | $0 |
| 1957 | $284,379 | $51,169 | $5,351,133 | $0 | $0 |
| 1956 | $694,523 | $48,821 | $5,117,923 | $0 | $0 |
| 1955 | $438,445 | $52,899 | $4,472,221 | $0 | $0 |
| 1954 | $265,710 | $32,894 | $4,086,675 | $0 | $0 |
| 1953 | $295,026 | $43,675 | $3,853,859 | $0 | $0 |
| 1952 | $222,457 | $24,126 | $3,602,508 | $0 | $0 |
| 1951 | $500,026 | $34,643 | $3,404,177 | $0 | $0 |
| 1950 | $463,556 | $55,812 | $2,938,794 | $0 | $0 |
| 1949 | $433,985 | $39,333 | $2,531,050 | $0 | $0 |
| 1948 | $489,204 | $27,858 | $2,136,398 | $0 | $0 |
| 1947 | $491,803 | $12,232 | $1,675,052 | $0 | $0 |
| 1946 | $332,267 | $10,975 | $1,195,481 | $0 | $0 |
| 1945 | $161,745 | $5,865 | $874,189 | $0 | $0 |
| 1944 | $30,578 | $7,340 | $718,309 | $0 | $0 |
| 1943 | $6,171 | $9,985 | $695,071 | $0 | $0 |
| 1942 | $25,547 | $505 | $698,885 | $0 | $0 |
| 1941 | $126,413 | $23,827 | $673,843 | $0 | $0 |
| 1940 | $83,745 | $28,729 | $571,257 | $0 | $0 |
| 1939 | $107,763 | $36,711 | $516,241 | $0 | $0 |

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| Act.Yr. | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $101,940 | $37,399 | $445,189 | $0 | $0 |
| 1937 | $94,566 | $84,031 | $380,648 | $0 | $0 |
| 1936 | $370,113 | $0 | $370,113 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 369 SERVICES | |
| Depreciable Balance | $38,162,243 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 18 | 25 |
| Iowa Curve | R2.0 | L0 |
| Gross Removal, % | | 15% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | -15% |

**********************************************************************************************************************

Based on the results of the simulation analyses for all the observation bands, the recommendation is to move to a 25 year average service life following an LO.0 type dispersion.

The removal and replacements of services will involve labor and equipment costs. No reuse or scrap value is expected.

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 369 - KY

rsion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 25.1 | 1.68E+13 | 41.7244 | 23.97 | 99.59 |
| S-.5 | 23.6 | 1.81E+13 | 43.2746 | 23.11 | 100.00 |
| R0.5 | 23.6 | 1.82E+13 | 43.3900 | 23.05 | 100.00 |
| L0.5 | 24.0 | 1.84E+13 | 43.6412 | 22.91 | 99.89 |
| L1 | 23.0 | 2.00E+13 | 45.4951 | 21.98 | 100.00 |
| S0 | 22.5 | 2.04E+13 | 45.9923 | 21.74 | 100.00 |
| R1 | 22.6 | 2.09E+13 | 46.4943 | 21.51 | 100.00 |
| L1.5 | 22.4 | 2.19E+13 | 47.6540 | 20.98 | 100.00 |
| S0.5 | 22.0 | 2.26E+13 | 48.3238 | 20.69 | 100.00 |
| R1.5 | 21.8 | 2.37E+13 | 49.5336 | 20.19 | 100.00 |
| L2 | 21.6 | 2.38E+13 | 49.6046 | 20.16 | 100.00 |
| S1 | 21.4 | 2.47E+13 | 50.5928 | 19.77 | 100.00 |
| R2 | 21.2 | 2.65E+13 | 52.4096 | 19.08 | 100.00 |
| S1.5 | 21.1 | 2.69E+13 | 52.7341 | 18.96 | 100.00 |
| L3 | 20.9 | 2.80E+13 | 53.8430 | 18.57 | 100.00 |
| S2 | 20.6 | 2.90E+13 | 54.7409 | 18.27 | 100.00 |
| R2.5 | 20.9 | 2.91E+13 | 54.8389 | 18.24 | 100.00 |
| R3 | 20.6 | 3.16E+13 | 57.1944 | 17.48 | 100.00 |
| S3 | 20.3 | 3.24E+13 | 57.9267 | 17.26 | 100.00 |
| L4 | 20.1 | 3.29E+13 | 58.3904 | 17.13 | 100.00 |
| R4 | 20.1 | 3.49E+13 | 60.1391 | 16.63 | 100.00 |
| S4 | 20.0 | 3.58E+13 | 60.9097 | 16.42 | 100.00 |
| L5 | 19.8 | 3.63E+13 | 61.2561 | 16.32 | 100.00 |
| R5 | 19.8 | 3.76E+13 | 62.4026 | 16.02 | 100.00 |
| S5 | 19.9 | 3.81E+13 | 62.8057 | 15.92 | 100.00 |
| S6 | 19.8 | 3.93E+13 | 63.8009 | 15.67 | 100.00 |
| SQ | 21.1 | 6.09E+13 | 79.3843 | 12.60 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 369 - KY
ersion: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 25.4 | 1.12E+13 | 31.9215 | 31.33 | 99.53 |
| S-.5 | 23.8 | 1.19E+13 | 32.8255 | 30.46 | 100.00 |
| L0.5 | 24.3 | 1.19E+13 | 32.8823 | 30.41 | 99.87 |
| R0.5 | 23.9 | 1.23E+13 | 33.3600 | 29.98 | 100.00 |
| L1 | 23.4 | 1.27E+13 | 33.8619 | 29.53 | 100.00 |
| S0 | 22.8 | 1.32E+13 | 34.5762 | 28.92 | 100.00 |
| L1.5 | 22.6 | 1.36E+13 | 35.1451 | 28.45 | 100.00 |
| R1 | 22.8 | 1.43E+13 | 35.9567 | 27.81 | 100.00 |
| S0.5 | 22.2 | 1.46E+13 | 36.3957 | 27.48 | 100.00 |
| L2 | 22.0 | 1.46E+13 | 36.3978 | 27.47 | 100.00 |
| S1 | 21.7 | 1.60E+13 | 38.1057 | 26.24 | 100.00 |
| R1.5 | 22.2 | 1.64E+13 | 38.4907 | 25.98 | 100.00 |
| L3 | 21.1 | 1.73E+13 | 39.5868 | 25.26 | 100.00 |
| S1.5 | 21.3 | 1.75E+13 | 39.7727 | 25.14 | 100.00 |
| R2 | 21.5 | 1.84E+13 | 40.8375 | 24.49 | 100.00 |
| S2 | 21.0 | 1.88E+13 | 41.2758 | 24.23 | 100.00 |
| R2.5 | 21.1 | 2.00E+13 | 42.5650 | 23.49 | 100.00 |
| L4 | 20.5 | 2.10E+13 | 43.6618 | 22.90 | 100.00 |
| S3 | 20.5 | 2.11E+13 | 43.7046 | 22.88 | 100.00 |
| R3 | 20.8 | 2.15E+13 | 44.0989 | 22.68 | 100.00 |
| S4 | 20.2 | 2.32E+13 | 45.8249 | 21.82 | 100.00 |
| L5 | 20.2 | 2.32E+13 | 45.8488 | 21.81 | 100.00 |
| R4 | 20.3 | 2.33E+13 | 45.9600 | 21.76 | 100.00 |
| S5 | 20.1 | 2.44E+13 | 47.0501 | 21.25 | 100.00 |
| R5 | 20.2 | 2.45E+13 | 47.1259 | 21.22 | 100.00 |
| S6 | 20.0 | 2.52E+13 | 47.7571 | 20.94 | 100.00 |
| SQ | 21.7 | 6.88E+13 | 78.9456 | 12.67 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 369 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 26.4 | 1.80E+12 | 13.9501 | 71.68 | 99.25 |
| L0.5 | 25.3 | 1.83E+12 | 14.1034 | 70.90 | 99.78 |
| L1 | 24.1 | 1.85E+12 | 14.1460 | 70.69 | 100.00 |
| L2 | 22.7 | 1.88E+12 | 14.2785 | 70.04 | 100.00 |
| L1.5 | 23.5 | 1.93E+12 | 14.4454 | 69.23 | 100.00 |
| S-.5 | 24.6 | 1.94E+12 | 14.5108 | 68.91 | 100.00 |
| L3 | 21.9 | 1.95E+12 | 14.5383 | 68.78 | 100.00 |
| R0.5 | 24.6 | 2.06E+12 | 14.9569 | 66.86 | 100.00 |
| S0 | 23.5 | 2.09E+12 | 15.0661 | 66.37 | 100.00 |
| L4 | 21.4 | 2.15E+12 | 15.2774 | 65.46 | 100.00 |
| L5 | 21.1 | 2.19E+12 | 15.3970 | 64.95 | 100.00 |
| S0.5 | 22.9 | 2.22E+12 | 15.5220 | 64.42 | 100.00 |
| S4 | 21.2 | 2.26E+12 | 15.6594 | 63.86 | 100.00 |
| S5 | 21.1 | 2.30E+12 | 15.7814 | 63.37 | 100.00 |
| S1 | 22.5 | 2.33E+12 | 15.9081 | 62.86 | 100.00 |
| S6 | 21.0 | 2.34E+12 | 15.9283 | 62.78 | 100.00 |
| S3 | 21.3 | 2.35E+12 | 15.9456 | 62.71 | 100.00 |
| R5 | 21.0 | 2.37E+12 | 16.0151 | 62.44 | 100.00 |
| R1 | 23.7 | 2.39E+12 | 16.0846 | 62.17 | 100.00 |
| S1.5 | 22.2 | 2.39E+12 | 16.1100 | 62.07 | 100.00 |
| S2 | 21.9 | 2.40E+12 | 16.1132 | 62.06 | 100.00 |
| R4 | 21.3 | 2.54E+12 | 16.5934 | 60.26 | 100.00 |
| R1.5 | 22.9 | 2.57E+12 | 16.6835 | 59.94 | 100.00 |
| R3 | 21.7 | 2.66E+12 | 16.9955 | 58.84 | 100.00 |
| R2 | 22.3 | 2.70E+12 | 17.1188 | 58.42 | 100.00 |
| R2.5 | 22.0 | 2.71E+12 | 17.1441 | 58.33 | 100.00 |
| SQ | 22.9 | 3.04E+13 | 57.3850 | 17.43 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $2,815,091 | $720,680 | $38,162,243 | $0 | $0 |
| 2007 | $2,552,906 | $887,176 | $36,067,832 | $0 | $0 |
| 2006 | $2,696,436 | $1,144,609 | $34,402,102 | $0 | $0 |
| 2005 | $2,370,702 | $760,371 | $32,850,275 | $0 | $0 |
| 2004 | $2,034,573 | $511,999 | $31,239,944 | $0 | $0 |
| 2003 | $2,678,347 | $630,850 | $29,717,370 | $0 | $0 |
| 2002 | $1,907,359 | $508,684 | $27,669,873 | $0 | $0 |
| 2001 | $1,931,126 | $390,080 | $26,271,198 | $0 | $0 |
| 2000 | $2,680,192 | $569,287 | $24,730,152 | $0 | $0 |
| 1999 | $2,508,736 | $344,602 | $22,619,247 | $0 | $0 |
| 1998 | $795,615 | $431,172 | $20,455,113 | $0 | $0 |
| 1997 | $2,636,990 | $522,610 | $20,090,470 | $0 | $0 |
| 1996 | $816,459 | $475,561 | $17,976,090 | $0 | $0 |
| 1995 | $1,107,925 | $497,449 | $17,635,192 | $0 | $0 |
| 1994 | $1,352,925 | $562,012 | $17,024,716 | $0 | $0 |
| 1993 | $1,658,958 | $696,650 | $16,233,803 | $0 | $0 |
| 1992 | $1,167,485 | $415,580 | $15,271,495 | $0 | $0 |
| 1991 | $1,236,345 | $456,573 | $14,519,590 | $0 | $0 |
| 1990 | $945,888 | $396,795 | $13,739,818 | $0 | $0 |
| 1989 | $1,182,480 | $374,843 | $13,190,725 | $0 | $0 |
| 1988 | $888,422 | $392,321 | $12,383,088 | $0 | $0 |
| 1987 | $931,227 | $429,089 | $11,886,987 | $0 | $0 |
| 1986 | $733,462 | $304,874 | $11,384,849 | $0 | $0 |
| 1985 | $712,353 | $281,524 | $10,956,261 | $0 | $0 |
| 1984 | $807,358 | $304,542 | $10,525,432 | $0 | $0 |
| 1983 | $969,567 | $319,764 | $10,022,616 | $0 | $0 |
| 1982 | $716,135 | $166,004 | $9,372,813 | $0 | $0 |
| 1981 | $868,594 | $281,371 | $8,822,682 | $0 | $0 |
| 1980 | $864,476 | $216,061 | $8,235,459 | $0 | $0 |
| 1979 | $711,506 | $322,670 | $7,587,044 | $0 | $0 |
| 1978 | $830,075 | $201,569 | $7,198,208 | $0 | $0 |
| 1977 | $723,397 | $177,138 | $6,569,702 | $0 | $0 |
| 1976 | $596,974 | $176,814 | $6,023,443 | $0 | $0 |
| 1975 | $524,332 | $168,457 | $5,603,283 | $0 | $0 |
| 1974 | $483,476 | $160,110 | $5,247,408 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $654,650 | $163,509 | $4,924,042 | $0 | $0 |
| 1972 | $683,325 | $158,801 | $4,432,901 | $0 | $0 |
| 1971 | $509,551 | $118,146 | $3,908,377 | $0 | $0 |
| 1970 | $423,419 | $108,673 | $3,516,972 | $0 | $0 |
| 1969 | $373,867 | $126,343 | $3,202,226 | $0 | $0 |
| 1968 | $328,382 | $128,889 | $2,954,702 | $0 | $0 |
| 1967 | $299,067 | $97,914 | $2,755,209 | $0 | $0 |
| 1966 | $231,692 | $101,048 | $2,554,056 | $0 | $0 |
| 1965 | $186,261 | $91,455 | $2,423,412 | $0 | $0 |
| 1964 | $161,204 | $84,465 | $2,328,606 | $0 | $0 |
| 1963 | $125,832 | $81,492 | $2,251,867 | $0 | $0 |
| 1962 | $128,946 | $70,456 | $2,207,527 | $0 | $0 |
| 1961 | $166,728 | $71,168 | $2,149,037 | $0 | $0 |
| 1960 | $142,251 | $71,016 | $2,053,477 | $0 | $0 |
| 1959 | $148,227 | $65,607 | $1,982,242 | $0 | $0 |
| 1958 | $169,015 | $72,705 | $1,899,622 | $0 | $0 |
| 1957 | $144,373 | $61,021 | $1,803,312 | $0 | $0 |
| 1956 | $136,713 | $54,615 | $1,719,960 | $0 | $0 |
| 1955 | $113,139 | $50,921 | $1,637,862 | $0 | $0 |
| 1954 | $115,530 | $47,791 | $1,575,644 | $0 | $0 |
| 1953 | $124,065 | $43,728 | $1,507,905 | $0 | $0 |
| 1952 | $128,566 | $36,275 | $1,427,568 | $0 | $0 |
| 1951 | $139,833 | $35,506 | $1,335,277 | $0 | $0 |
| 1950 | $161,544 | $24,246 | $1,230,950 | $0 | $0 |
| 1949 | $219,751 | $29,813 | $1,093,652 | $0 | $0 |
| 1948 | $243,279 | $16,194 | $903,714 | $0 | $0 |
| 1947 | $218,255 | $11,858 | $676,629 | $0 | $0 |
| 1946 | $112,216 | $6,923 | $470,232 | $0 | $0 |
| 1945 | $39,254 | $4,137 | $364,939 | $0 | $0 |
| 1944 | $14,444 | $3,671 | $329,822 | $0 | $0 |
| 1943 | $11,021 | $8,861 | $319,049 | $0 | $0 |
| 1942 | $29,900 | $971 | $316,889 | $0 | $0 |
| 1941 | $25,996 | $10,956 | $287,960 | $0 | $0 |
| 1940 | $54,016 | $15,722 | $272,920 | $0 | $0 |
| 1939 | $45,804 | $12,835 | $234,626 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $46,593 | $14,239 | $201,657 | $0 | $0 |
| 1937 | $37,203 | $11,112 | $169,303 | $0 | $0 |
| 1936 | $143,212 | $0 | $143,212 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

| | | |
|---|---|---|
| Account | 370 METERS | |
| Depreciable Balance | $22,962,067 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 27 | 17 |
| Iowa Curve | R0.5 | S6.0 |
| Gross Removal, % | | 10% |
| Gross Salvage, % | | 2% |
| Net Salvage % | 0% | -8% |

*************************************************************************************************************************

The results of the simulation analyses for the investment in this account point to a shortening of the average service life. Based on the analyses, the recommendation is to move to a 17 year average service life following an S6.0 type retirement dispersion as indicated in both the 40 year and 20 year band analyses.

Labor and transportation costs will be incurred in the removal of the meters. A minimal amount of scrap value may be obtained.

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 370 - KY
ersion: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| S6 | 16.9 | 4.74E+14 | 234.4046 | 4.27 | 100.00 |
| S5 | 17.0 | 4.78E+14 | 235.3818 | 4.25 | 100.00 |
| R5 | 16.9 | 4.80E+14 | 235.7537 | 4.24 | 100.00 |
| L5 | 17.0 | 4.84E+14 | 236.8425 | 4.22 | 100.00 |
| S4 | 16.9 | 4.85E+14 | 237.1622 | 4.22 | 100.00 |
| R4 | 17.0 | 4.89E+14 | 238.0943 | 4.20 | 100.00 |
| L4 | 17.1 | 4.98E+14 | 240.2378 | 4.16 | 100.00 |
| SQ | 18.2 | 4.98E+14 | 240.2643 | 4.16 | 100.00 |
| S3 | 17.0 | 5.00E+14 | 240.6232 | 4.16 | 100.00 |
| R3 | 17.0 | 5.03E+14 | 241.4064 | 4.14 | 100.00 |
| R2.5 | 17.0 | 5.13E+14 | 243.8979 | 4.10 | 100.00 |
| S2 | 17.1 | 5.19E+14 | 245.2971 | 4.08 | 100.00 |
| R2 | 17.1 | 5.26E+14 | 246.7887 | 4.05 | 100.00 |
| L3 | 17.1 | 5.28E+14 | 247.4611 | 4.04 | 100.00 |
| S1.5 | 17.2 | 5.33E+14 | 248.5863 | 4.02 | 100.00 |
| R1.5 | 17.2 | 5.41E+14 | 250.3929 | 3.99 | 100.00 |
| S1 | 17.1 | 5.49E+14 | 252.1514 | 3.97 | 100.00 |
| R1 | 17.3 | 5.59E+14 | 254.5650 | 3.93 | 100.00 |
| L2 | 17.6 | 5.63E+14 | 255.5268 | 3.91 | 100.00 |
| S0.5 | 17.4 | 5.64E+14 | 255.7180 | 3.91 | 100.00 |
| L1.5 | 17.7 | 5.80E+14 | 259.3025 | 3.86 | 100.00 |
| S0 | 17.4 | 5.82E+14 | 259.6932 | 3.85 | 100.00 |
| R0.5 | 17.6 | 5.86E+14 | 260.5791 | 3.84 | 100.00 |
| S-.5 | 17.7 | 5.97E+14 | 263.0474 | 3.80 | 100.00 |
| L1 | 17.9 | 5.99E+14 | 263.4576 | 3.80 | 100.00 |
| L0.5 | 18.4 | 6.13E+14 | 266.5306 | 3.75 | 100.00 |
| L0 | 18.9 | 6.29E+14 | 269.9156 | 3.70 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

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^ccount: KEPCo 101/6 370 - KY
,rsion: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| S6 | 16.9 | 4.58E+14 | 228.6109 | 4.37 | 100.00 |
| S5 | 16.8 | 4.62E+14 | 229.4931 | 4.36 | 100.00 |
| R5 | 16.8 | 4.63E+14 | 229.8526 | 4.35 | 100.00 |
| L5 | 16.8 | 4.68E+14 | 230.9681 | 4.33 | 100.00 |
| S4 | 16.9 | 4.69E+14 | 231.2329 | 4.32 | 100.00 |
| R4 | 16.9 | 4.71E+14 | 231.9272 | 4.31 | 100.00 |
| L4 | 16.9 | 4.81E+14 | 234.2141 | 4.27 | 100.00 |
| S3 | 16.8 | 4.82E+14 | 234.4693 | 4.26 | 100.00 |
| R3 | 16.8 | 4.83E+14 | 234.7333 | 4.26 | 100.00 |
| SQ | 18.2 | 4.86E+14 | 235.5782 | 4.24 | 100.00 |
| R2.5 | 16.9 | 4.91E+14 | 236.7002 | 4.22 | 100.00 |
| S2 | 16.9 | 5.00E+14 | 238.7483 | 4.19 | 100.00 |
| R2 | 16.8 | 5.01E+14 | 238.9892 | 4.18 | 100.00 |
| '.3 | 17.0 | 5.10E+14 | 241.2251 | 4.15 | 100.00 |
| S1.5 | 16.8 | 5.12E+14 | 241.6659 | 4.14 | 100.00 |
| R1.5 | 16.9 | 5.12E+14 | 241.7463 | 4.14 | 100.00 |
| S1 | 16.9 | 5.25E+14 | 244.7635 | 4.09 | 100.00 |
| R1 | 17.0 | 5.26E+14 | 244.9701 | 4.08 | 100.00 |
| S0.5 | 17.0 | 5.38E+14 | 247.6522 | 4.04 | 100.00 |
| L2 | 17.2 | 5.42E+14 | 248.7798 | 4.02 | 100.00 |
| R0.5 | 17.2 | 5.48E+14 | 249.9897 | 4.00 | 100.00 |
| S0 | 17.1 | 5.52E+14 | 250.8797 | 3.99 | 100.00 |
| L1.5 | 17.5 | 5.57E+14 | 251.9986 | 3.97 | 100.00 |
| S-.5 | 17.2 | 5.61E+14 | 252.9295 | 3.95 | 100.00 |
| L1 | 17.6 | 5.72E+14 | 255.5763 | 3.91 | 100.00 |
| L0.5 | 18.0 | 5.83E+14 | 258.0198 | 3.88 | 100.00 |
| L0 | 18.3 | 5.96E+14 | 260.7674 | 3.83 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

Account: KEPCo 101/6 370 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 15.7 | 4.29E+14 | 292.8819 | 3.41 | 100.00 |
| R1 | 15.6 | 4.30E+14 | 293.3488 | 3.41 | 100.00 |
| R1.5 | 15.7 | 4.33E+14 | 294.4440 | 3.40 | 100.00 |
| R2 | 15.8 | 4.37E+14 | 295.5392 | 3.38 | 100.00 |
| S6 | 16.2 | 4.38E+14 | 296.1167 | 3.38 | 100.00 |
| R2.5 | 15.9 | 4.39E+14 | 296.1798 | 3.38 | 100.00 |
| S-.5 | 15.6 | 4.39E+14 | 296.2908 | 3.38 | 100.00 |
| S5 | 16.1 | 4.39E+14 | 296.3114 | 3.37 | 100.00 |
| R5 | 16.1 | 4.39E+14 | 296.3614 | 3.37 | 100.00 |
| R3 | 16.0 | 4.40E+14 | 296.7793 | 3.37 | 100.00 |
| R4 | 16.0 | 4.40E+14 | 296.8139 | 3.37 | 100.00 |
| S4 | 16.2 | 4.41E+14 | 296.9180 | 3.37 | 100.00 |
| L5 | 16.1 | 4.41E+14 | 297.0000 | 3.37 | 100.00 |
| SQ | 17.3 | 4.44E+14 | 298.0337 | 3.36 | 100.00 |
| S3 | 16.1 | 4.44E+14 | 298.0448 | 3.36 | 100.00 |
| L4 | 16.0 | 4.45E+14 | 298.3521 | 3.35 | 100.00 |
| S2 | 15.9 | 4.48E+14 | 299.4942 | 3.34 | 100.00 |
| S0 | 15.7 | 4.51E+14 | 300.2361 | 3.33 | 100.00 |
| S1.5 | 15.8 | 4.51E+14 | 300.2998 | 3.33 | 100.00 |
| S0.5 | 15.8 | 4.52E+14 | 300.6594 | 3.33 | 100.00 |
| S1 | 15.7 | 4.53E+14 | 301.0741 | 3.32 | 100.00 |
| L3 | 16.0 | 4.56E+14 | 302.0115 | 3.31 | 100.00 |
| L0 | 16.1 | 4.62E+14 | 303.8610 | 3.29 | 100.00 |
| L0.5 | 16.0 | 4.64E+14 | 304.6868 | 3.28 | 100.00 |
| L2 | 15.9 | 4.66E+14 | 305.1628 | 3.28 | 100.00 |
| L1.5 | 15.8 | 4.66E+14 | 305.4216 | 3.27 | 100.00 |
| L1 | 15.9 | 4.67E+14 | 305.7060 | 3.27 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $2,963,121 | $1,023,534 | $22,962,066 | $0 | $0 |
| 2007 | $2,353,738 | $9,974,912 | $21,022,479 | $0 | $0 |
| 2006 | $14,223,681 | $9,319,669 | $28,643,653 | $0 | $0 |
| 2005 | $4,183,747 | $1,515,899 | $23,739,641 | $0 | $0 |
| 2004 | $1,006,674 | $832,607 | $21,071,793 | $0 | $0 |
| 2003 | $617,066 | $624,632 | $20,897,726 | $0 | $0 |
| 2002 | $489,075 | $970,185 | $20,905,292 | $0 | $0 |
| 2001 | $648,901 | $639,511 | $21,386,402 | $0 | $0 |
| 2000 | $1,514,864 | $1,709,961 | $21,377,012 | $0 | $0 |
| 1999 | $980,778 | $979,544 | $21,572,109 | $0 | $0 |
| 1998 | $1,324,431 | $723,727 | $21,570,875 | $0 | $0 |
| 1997 | $1,105,728 | $836,156 | $20,970,171 | $0 | $0 |
| 1996 | $669,427 | $517,207 | $20,700,599 | $0 | $0 |
| 1995 | $850,393 | $631,063 | $20,548,379 | $0 | $0 |
| 1994 | $1,413,819 | $576,545 | $20,329,049 | $0 | $0 |
| 1993 | $1,029,446 | $502,234 | $19,491,775 | $0 | $0 |
| 1992 | $999,844 | $381,788 | $18,964,563 | $0 | $0 |
| 1991 | $1,093,280 | $293,127 | $18,346,507 | $0 | $0 |
| 1990 | $1,278,153 | $363,340 | $17,546,354 | $0 | $0 |
| 1989 | $1,133,142 | $320,905 | $16,631,541 | $0 | $0 |
| 1988 | $1,262,548 | $409,799 | $15,819,304 | $0 | $0 |
| 1987 | $1,107,129 | $373,822 | $14,966,555 | $0 | $0 |
| 1986 | $1,253,695 | $350,900 | $14,233,248 | $0 | $0 |
| 1985 | $1,086,299 | $388,485 | $13,330,453 | $0 | $0 |
| 1984 | $1,266,454 | $385,107 | $12,632,639 | $0 | $0 |
| 1983 | $1,584,355 | $279,281 | $11,751,292 | $0 | $0 |
| 1982 | $1,226,850 | $248,786 | $10,446,218 | $0 | $0 |
| 1981 | $1,149,365 | $261,646 | $9,468,154 | $0 | $0 |
| 1980 | $890,564 | $217,875 | $8,580,435 | $0 | $0 |
| 1979 | $814,814 | $196,583 | $7,907,746 | $0 | $0 |
| 1978 | $926,839 | $174,912 | $7,289,515 | $0 | $0 |
| 1977 | $940,534 | $249,384 | $6,537,588 | $0 | $0 |
| 1976 | $667,327 | $144,244 | $5,846,438 | $0 | $0 |
| 1975 | $497,286 | $105,836 | $5,323,356 | $0 | $0 |
| 1974 | $480,510 | $105,229 | $4,931,905 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $423,051 | $70,531 | $4,556,624 | $0 | $0 |
| 1972 | $371,979 | $61,436 | $4,204,104 | $0 | $0 |
| 1971 | $279,535 | $60,702 | $3,893,561 | $0 | $0 |
| 1970 | $255,663 | $51,994 | $3,674,728 | $0 | $0 |
| 1969 | $205,326 | $114,258 | $3,471,059 | $0 | $0 |
| 1968 | $181,449 | $84,855 | $3,379,991 | $0 | $0 |
| 1967 | $181,316 | $37,032 | $3,283,397 | $0 | $0 |
| 1966 | $145,871 | $55,662 | $3,139,113 | $0 | $0 |
| 1965 | $209,404 | $56,012 | $3,048,904 | $0 | $0 |
| 1964 | $184,491 | $72,715 | $2,895,512 | $0 | $0 |
| 1963 | $169,199 | $68,235 | $2,783,736 | $0 | $0 |
| 1962 | $139,771 | $47,026 | $2,682,772 | $0 | $0 |
| 1961 | $122,140 | $44,649 | $2,590,027 | $0 | $0 |
| 1960 | $128,169 | $41,245 | $2,512,536 | $0 | $0 |
| 1959 | $156,474 | $47,096 | $2,425,612 | $0 | $0 |
| 1958 | $131,604 | $40,319 | $2,316,234 | $0 | $0 |
| 1957 | $153,490 | $46,355 | $2,224,949 | $0 | $0 |
| 1956 | $128,652 | $31,269 | $2,117,814 | $0 | $0 |
| 1955 | $118,059 | $31,785 | $2,020,431 | $0 | $0 |
| 1954 | $81,155 | $31,742 | $1,934,157 | $0 | $0 |
| 1953 | $119,866 | $34,715 | $1,884,744 | $0 | $0 |
| 1952 | $94,922 | $32,524 | $1,799,593 | $0 | $0 |
| 1951 | $155,600 | $36,312 | $1,737,195 | $0 | $0 |
| 1950 | $177,105 | $31,485 | $1,617,907 | $0 | $0 |
| 1949 | $195,423 | $35,189 | $1,472,287 | $0 | $0 |
| 1948 | $260,771 | $12,529 | $1,312,053 | $0 | $0 |
| 1947 | $271,471 | $12,466 | $1,063,811 | $0 | $0 |
| 1946 | $139,554 | $8,366 | $804,806 | $0 | $0 |
| 1945 | $60,653 | $9,191 | $673,618 | $0 | $0 |
| 1944 | $25,218 | $4,542 | $622,156 | $0 | $0 |
| 1943 | $10,056 | $9,581 | $601,480 | $0 | $0 |
| 1942 | $18,454 | $460 | $601,005 | $0 | $0 |
| 1941 | $84,476 | $19,344 | $583,011 | $0 | $0 |
| 1940 | $59,490 | $13,467 | $517,879 | $0 | $0 |
| 1939 | $48,100 | $15,560 | $471,856 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $52,663 | $14,262 | $439,316 | $0 | $0 |
| 1937 | $50,591 | $20,604 | $400,915 | $0 | $0 |
| 1936 | $370,928 | $0 | $370,928 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

Account 371 INSTALLATIONS ON CUSTOMERS PREMISES

Depreciable Balance $18,001,253

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 11 | 14 |
| Iowa Curve | LO.O | R0.5 |
| Gross Removal, % | | 20% |
| Gross Salvage, % | | 5% |
| Net Salvage % | 30% | -15% |

******************************************************************************

The simulation analyses of the 40 and 20 year bands indicate an R0.5 type dispersion is appropriate for the investments in this account. The resultant average service life is 14 years.

Labor and equipment costs will result in removal costs being incurred for the retirement of this investment. A minimum amount of scrap value may result in some salvage.

Simulated Plant Record Analysis

Kentucky Power - Distr



Account: KEPCo 101/6 371 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 13.5 | 9.47E+12 | 80.3693 | 12.44 | 100.00 |
| L0 | 14.2 | 9.55E+12 | 80.7068 | 12.39 | 100.00 |
| S-.5 | 13.4 | 9.55E+12 | 80.7306 | 12.39 | 100.00 |
| L0.5 | 13.8 | 9.95E+12 | 82.3701 | 12.14 | 100.00 |
| R1 | 13.0 | 1.01E+13 | 82.9905 | 12.05 | 100.00 |
| S0 | 13.0 | 1.02E+13 | 83.5687 | 11.97 | 100.00 |
| L1 | 13.3 | 1.04E+13 | 84.0400 | 11.90 | 100.00 |
| R1.5 | 12.7 | 1.07E+13 | 85.5805 | 11.68 | 100.00 |
| S0.5 | 12.8 | 1.08E+13 | 85.7979 | 11.66 | 100.00 |
| L1.5 | 12.9 | 1.09E+13 | 86.0865 | 11.62 | 100.00 |
| S1 | 12.5 | 1.13E+13 | 87.9345 | 11.37 | 100.00 |
| L2 | 12.6 | 1.14E+13 | 88.1986 | 11.34 | 100.00 |
| R2 | 12.5 | 1.14E+13 | 88.3663 | 11.32 | 100.00 |
| S1.5 | 12.3 | 1.19E+13 | 89.9393 | 11.12 | 100.00 |
| R2.5 | 12.3 | 1.21E+13 | 90.8543 | 11.01 | 100.00 |
| S2 | 12.1 | 1.24E+13 | 92.0207 | 10.87 | 100.00 |
| L3 | 12.2 | 1.25E+13 | 92.4725 | 10.81 | 100.00 |
| R3 | 12.1 | 1.28E+13 | 93.4063 | 10.71 | 100.00 |
| S3 | 11.9 | 1.34E+13 | 95.5014 | 10.47 | 100.00 |
| L4 | 11.9 | 1.38E+13 | 96.8893 | 10.32 | 100.00 |
| R4 | 11.9 | 1.39E+13 | 97.4720 | 10.26 | 100.00 |
| S4 | 11.8 | 1.45E+13 | 99.3421 | 10.07 | 100.00 |
| L5 | 11.8 | 1.48E+13 | 100.3095 | 9.97 | 100.00 |
| R5 | 11.7 | 1.51E+13 | 101.3687 | 9.86 | 100.00 |
| S5 | 11.8 | 1.53E+13 | 102.3179 | 9.77 | 100.00 |
| S6 | 11.7 | 1.59E+13 | 104.2172 | 9.60 | 100.00 |
| SQ | 12.8 | 2.92E+13 | 141.1578 | 7.08 | 100.00 |

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Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 371 - KY

rsion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| R0.5 | 13.5 | 7.63E+12 | 60.3148 | 16.58 | 100.00 |
| S-.5 | 13.6 | 7.73E+12 | 60.7055 | 16.47 | 100.00 |
| L0 | 14.2 | 7.90E+12 | 61.3677 | 16.30 | 100.00 |
| R1 | 13.1 | 8.16E+12 | 62.3697 | 16.03 | 100.00 |
| L0.5 | 13.8 | 8.18E+12 | 62.4616 | 16.01 | 100.00 |
| S0 | 13.1 | 8.31E+12 | 62.9560 | 15.88 | 100.00 |
| L1 | 13.3 | 8.51E+12 | 63.7196 | 15.69 | 100.00 |
| R1.5 | 12.7 | 8.73E+12 | 64.5291 | 15.50 | 100.00 |
| S0.5 | 12.8 | 8.79E+12 | 64.7351 | 15.45 | 100.00 |
| L1.5 | 13.1 | 8.96E+12 | 65.3735 | 15.30 | 100.00 |
| S1 | 12.6 | 9.29E+12 | 66.5454 | 15.03 | 100.00 |
| R2 | 12.5 | 9.33E+12 | 66.7055 | 14.99 | 100.00 |
| L2 | 12.7 | 9.43E+12 | 67.0742 | 14.91 | 100.00 |
| S1.5 | 12.4 | 9.76E+12 | 68.2092 | 14.66 | 100.00 |
| R2.5 | 12.3 | 9.93E+12 | 68.8187 | 14.53 | 100.00 |
| S2 | 12.2 | 1.03E+13 | 69.9369 | 14.30 | 100.00 |
| L3 | 12.3 | 1.05E+13 | 70.5981 | 14.16 | 100.00 |
| R3 | 12.2 | 1.06E+13 | 71.0095 | 14.08 | 100.00 |
| S3 | 12.0 | 1.12E+13 | 72.9311 | 13.71 | 100.00 |
| L4 | 12.0 | 1.16E+13 | 74.2337 | 13.47 | 100.00 |
| R4 | 12.0 | 1.16E+13 | 74.5259 | 13.42 | 100.00 |
| S4 | 11.8 | 1.22E+13 | 76.3157 | 13.10 | 100.00 |
| L5 | 11.8 | 1.25E+13 | 77.2086 | 12.95 | 100.00 |
| R5 | 11.8 | 1.28E+13 | 78.0546 | 12.81 | 100.00 |
| S5 | 11.8 | 1.30E+13 | 78.8412 | 12.68 | 100.00 |
| S6 | 11.8 | 1.36E+13 | 80.5478 | 12.41 | 100.00 |
| SQ | 12.9 | 2.46E+13 | 108.2238 | 9.24 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 371 - KY

Version: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 14.9 | 3.19E+12 | 39.7824 | 25.14 | 100.00 |
| S-.5 | 14.1 | 3.21E+12 | 39.9151 | 25.05 | 100.00 |
| R0.5 | 14.0 | 3.22E+12 | 39.9584 | 25.03 | 100.00 |
| L0.5 | 14.3 | 3.29E+12 | 40.4041 | 24.75 | 100.00 |
| L1 | 13.8 | 3.41E+12 | 41.1335 | 24.31 | 100.00 |
| S0 | 13.6 | 3.45E+12 | 41.3901 | 24.16 | 100.00 |
| R1 | 13.5 | 3.50E+12 | 41.6730 | 24.00 | 100.00 |
| L1.5 | 13.4 | 3.63E+12 | 42.4153 | 23.58 | 100.00 |
| S0.5 | 13.2 | 3.66E+12 | 42.5980 | 23.48 | 100.00 |
| R1.5 | 13.2 | 3.76E+12 | 43.1966 | 23.15 | 100.00 |
| L2 | 13.2 | 3.84E+12 | 43.6727 | 22.90 | 100.00 |
| S1 | 13.0 | 3.89E+12 | 43.9540 | 22.75 | 100.00 |
| R2 | 12.9 | 4.04E+12 | 44.7529 | 22.34 | 100.00 |
| S1.5 | 12.8 | 4.11E+12 | 45.1409 | 22.15 | 100.00 |
| R2.5 | 12.7 | 4.29E+12 | 46.1334 | 21.68 | 100.00 |
| S2 | 12.6 | 4.32E+12 | 46.3067 | 21.60 | 100.00 |
| L3 | 12.8 | 4.42E+12 | 46.8369 | 21.35 | 100.00 |
| R3 | 12.6 | 4.56E+12 | 47.5494 | 21.03 | 100.00 |
| S3 | 12.5 | 4.79E+12 | 48.7364 | 20.52 | 100.00 |
| R4 | 12.4 | 5.05E+12 | 50.0646 | 19.97 | 100.00 |
| L4 | 12.4 | 5.06E+12 | 50.1100 | 19.96 | 100.00 |
| S4 | 12.3 | 5.40E+12 | 51.7530 | 19.32 | 100.00 |
| L5 | 12.2 | 5.62E+12 | 52.8145 | 18.93 | 100.00 |
| R5 | 12.2 | 5.74E+12 | 53.3432 | 18.75 | 100.00 |
| S5 | 12.2 | 5.95E+12 | 54.3376 | 18.40 | 100.00 |
| S6 | 12.3 | 6.37E+12 | 56.2214 | 17.79 | 100.00 |
| SQ | 13.4 | 1.05E+13 | 72.1963 | 13.85 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $1,469,673 | $1,060,049 | $18,001,253 | $0 | $0 |
| 2007 | $1,459,010 | $930,355 | $17,591,629 | $0 | $0 |
| 2006 | $1,577,577 | $1,063,929 | $17,062,974 | $0 | $0 |
| 2005 | $1,768,968 | $818,524 | $16,649,326 | $0 | $0 |
| 2004 | $1,563,148 | $115,921 | $15,598,882 | $0 | $0 |
| 2003 | $2,356,246 | $155,458 | $14,151,655 | $0 | $0 |
| 2002 | $1,536,211 | $370,170 | $11,960,867 | $0 | $0 |
| 2001 | $858,732 | $563,686 | $10,784,826 | $0 | $0 |
| 2000 | $1,331,176 | $637,697 | $10,489,780 | $0 | $0 |
| 1999 | $1,742,973 | $465,115 | $9,796,301 | $0 | $0 |
| 1998 | $600,987 | $553,968 | $8,518,443 | $0 | $0 |
| 1997 | $1,583,946 | $529,850 | $8,471,424 | $0 | $0 |
| 1996 | $496,928 | $246,115 | $7,417,328 | $0 | $0 |
| 1995 | $559,153 | $350,093 | $7,166,515 | $0 | $0 |
| 1994 | $1,062,578 | $354,006 | $6,957,455 | $0 | $0 |
| 1993 | $1,380,740 | $349,338 | $6,248,883 | $0 | $0 |
| 1992 | $843,872 | $292,580 | $5,217,481 | $0 | $0 |
| 1991 | $757,210 | $317,371 | $4,666,189 | $0 | $0 |
| 1990 | $574,638 | $261,542 | $4,226,350 | $0 | $0 |
| 1989 | $673,733 | $291,379 | $3,913,254 | $0 | $0 |
| 1988 | $464,215 | $257,746 | $3,530,900 | $0 | $0 |
| 1987 | $478,198 | $421,123 | $3,324,431 | $0 | $0 |
| 1986 | $500,633 | $195,928 | $3,267,356 | $0 | $0 |
| 1985 | $430,816 | $184,064 | $2,962,651 | $0 | $0 |
| 1984 | $455,174 | $152,915 | $2,715,899 | $0 | $0 |
| 1983 | $359,728 | $156,108 | $2,413,640 | $0 | $0 |
| 1982 | $259,270 | $102,664 | $2,210,020 | $0 | $0 |
| 1981 | $301,789 | $124,056 | $2,053,414 | $0 | $0 |
| 1980 | $217,442 | $114,552 | $1,875,681 | $0 | $0 |
| 1979 | $195,902 | $87,903 | $1,772,791 | $0 | $0 |
| 1978 | $183,648 | $67,643 | $1,664,792 | $0 | $0 |
| 1977 | $122,908 | $58,498 | $1,548,787 | $0 | $0 |
| 1976 | $245,454 | $66,077 | $1,484,377 | $0 | $0 |
| 1975 | $182,106 | $64,832 | $1,305,000 | $0 | $0 |
| 1974 | $198,910 | $65,653 | $1,187,726 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $226,725 | $64,412 | $1,054,469 | $0 | $0 |
| 1972 | $193,516 | $65,976 | $892,156 | $0 | $0 |
| 1971 | $118,336 | $55,327 | $764,616 | $0 | $0 |
| 1970 | $118,346 | $59,938 | $701,607 | $0 | $0 |
| 1969 | $134,430 | $67,189 | $643,199 | $0 | $0 |
| 1968 | $94,059 | $73,277 | $575,958 | $0 | $0 |
| 1967 | $112,403 | $61,218 | $555,176 | $0 | $0 |
| 1966 | $83,111 | $59,600 | $503,991 | $0 | $0 |
| 1965 | $113,528 | $57,173 | $480,480 | $0 | $0 |
| 1964 | $95,784 | $49,581 | $424,125 | $0 | $0 |
| 1963 | $117,412 | $40,351 | $377,922 | $0 | $0 |
| 1962 | $155,649 | $36,416 | $300,861 | $0 | $0 |
| 1961 | $133,773 | $7,257 | $181,628 | $0 | $0 |
| 1960 | $52,064 | $513 | $55,112 | $0 | $0 |
| 1959 | $3,085 | $0 | $3,561 | $0 | $0 |
| 1958 | $0 | $0 | $476 | $0 | $0 |
| 1957 | $62 | $0 | $476 | $0 | $0 |
| 1956 | $46 | $0 | $414 | $0 | $0 |
| 1955 | $0 | $0 | $368 | $0 | $0 |
| 1954 | $0 | $0 | $368 | $0 | $0 |
| 1953 | $45 | $0 | $368 | $0 | $0 |
| 1952 | $0 | $0 | $323 | $0 | $0 |
| 1951 | $0 | $0 | $323 | $0 | $0 |
| 1950 | $323 | $0 | $323 | $0 | $0 |
| 1949 | $0 | $0 | $0 | $0 | $0 |
| 1948 | $0 | $0 | $0 | $0 | $0 |
| 1947 | $0 | $0 | $0 | $0 | $0 |
| 1946 | $0 | $0 | $0 | $0 | $0 |
| 1945 | $0 | $0 | $0 | $0 | $0 |
| 1944 | $0 | $0 | $0 | $0 | $0 |
| 1943 | $0 | $0 | $0 | $0 | $0 |
| 1942 | $0 | $0 | $0 | $0 | $0 |
| 1941 | $0 | $0 | $0 | $0 | $0 |
| 1940 | $0 | $0 | $0 | $0 | $0 |
| 1939 | $0 | $0 | $0 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $0 | $0 | $0 | $0 | $0 |
| 1937 | $0 | $0 | $0 | $0 | $0 |
| 1936 | $0 | $0 | $0 | $0 | $0 |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
Distribution Plant

Account 373 STREET LIGHTING & SIGNAL SYSTEMS

Depreciable Balance $2,939,603

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 15 | 24 |
| Iowa Curve | LO.O | L0.0 |
| Gross Removal, % | | 5% |
| Gross Salvage, % | | 3% |
| Net Salvage % | 15% | -2% |

******************************************************************************************************************

The simulation analyses for the investment in this account show a fluction in the retirement dispersion between the L and S type Iowa Curves. Both dispersion types show a slight increase is occurring in the average service life. Based on the analysis of the 40 year band, the recommendation is to increase the average service life to 24 years and to retain the LO.O type dispersion.

Labor and material costs will result in removal costs for this investment. Some net salvage may be expected from the sale of material.

Simulated Plant Record Analysis

Kentucky Power - Distr

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Account: KEPCo 101/6 373 - KY

ersion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 40 Interval: 0 Observation Band: 1969 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 23.7 | 3.10E+12 | 170.7820 | 5.86 | 99.83 |
| R0.5 | 22.6 | 3.13E+12 | 171.5114 | 5.83 | 100.00 |
| S-.5 | 22.6 | 3.21E+12 | 173.7581 | 5.76 | 100.00 |
| R1 | 21.8 | 3.25E+12 | 174.7951 | 5.72 | 100.00 |
| L0.5 | 23.1 | 3.29E+12 | 175.8772 | 5.69 | 99.94 |
| R1.5 | 21.5 | 3.32E+12 | 176.5712 | 5.66 | 100.00 |
| R2 | 21.2 | 3.39E+12 | 178.5424 | 5.60 | 100.00 |
| R2.5 | 20.8 | 3.41E+12 | 179.1276 | 5.58 | 100.00 |
| S0 | 22.0 | 3.43E+12 | 179.6259 | 5.57 | 100.00 |
| R3 | 20.7 | 3.46E+12 | 180.3085 | 5.55 | 100.00 |
| S6 | 20.5 | 3.48E+12 | 180.7552 | 5.53 | 100.00 |
| L1 | 22.5 | 3.49E+12 | 181.1295 | 5.52 | 100.00 |
| R4 | 20.4 | 3.50E+12 | 181.3813 | 5.51 | 100.00 |
| S0.5 | 21.7 | 3.52E+12 | 182.0057 | 5.49 | 100.00 |
| R5 | 20.5 | 3.53E+12 | 182.0686 | 5.49 | 100.00 |
| S5 | 20.4 | 3.55E+12 | 182.5666 | 5.48 | 100.00 |
| L1.5 | 22.2 | 3.61E+12 | 184.2537 | 5.43 | 100.00 |
| L5 | 20.6 | 3.61E+12 | 184.2959 | 5.43 | 100.00 |
| S4 | 20.5 | 3.62E+12 | 184.3425 | 5.42 | 100.00 |
| S1 | 21.3 | 3.62E+12 | 184.5427 | 5.42 | 100.00 |
| S1.5 | 21.0 | 3.65E+12 | 185.1562 | 5.40 | 100.00 |
| S3 | 20.6 | 3.67E+12 | 185.7864 | 5.38 | 100.00 |
| S2 | 20.9 | 3.68E+12 | 186.0825 | 5.37 | 100.00 |
| L4 | 20.8 | 3.70E+12 | 186.3771 | 5.37 | 100.00 |
| L2 | 21.8 | 3.76E+12 | 187.9327 | 5.32 | 100.00 |
| L3 | 21.3 | 3.82E+12 | 189.5722 | 5.28 | 100.00 |
| SQ | 22.1 | 4.19E+12 | 198.4941 | 5.04 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr

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^ccount: KEPCo 101/6 373 - KY

rsion: KEPCO DISTRIBUTION 2008

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1989 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| S6 | 21.4 | 9.90E+11 | 93.1515 | 10.74 | 100.00 |
| S5 | 21.5 | 1.08E+12 | 97.2519 | 10.28 | 100.00 |
| R5 | 21.7 | 1.09E+12 | 97.7171 | 10.23 | 100.00 |
| R4 | 21.8 | 1.17E+12 | 101.1999 | 9.88 | 100.00 |
| L5 | 21.8 | 1.18E+12 | 101.5662 | 9.85 | 100.00 |
| R0.5 | 24.1 | 1.20E+12 | 102.6310 | 9.74 | 100.00 |
| S4 | 21.6 | 1.21E+12 | 102.7983 | 9.73 | 100.00 |
| L0 | 25.5 | 1.24E+12 | 104.3183 | 9.59 | 99.50 |
| R3 | 21.9 | 1.25E+12 | 104.4927 | 9.57 | 100.00 |
| S-.5 | 24.3 | 1.26E+12 | 105.1720 | 9.51 | 100.00 |
| R1 | 23.5 | 1.26E+12 | 105.2683 | 9.50 | 100.00 |
| R2.5 | 22.2 | 1.27E+12 | 105.4939 | 9.48 | 100.00 |
| R1.5 | 22.9 | 1.29E+12 | 106.1548 | 9.42 | 100.00 |
| R2 | 22.6 | 1.31E+12 | 106.9762 | 9.35 | 100.00 |
| L4 | 21.9 | 1.33E+12 | 108.0478 | 9.26 | 100.00 |
| L0.5 | 24.9 | 1.35E+12 | 108.6375 | 9.20 | 99.82 |
| S3 | 22.0 | 1.36E+12 | 109.0772 | 9.17 | 100.00 |
| S0 | 23.7 | 1.40E+12 | 110.7626 | 9.03 | 100.00 |
| SQ | 23.1 | 1.41E+12 | 111.1748 | 8.99 | 100.00 |
| S0.5 | 23.4 | 1.45E+12 | 112.5642 | 8.88 | 100.00 |
| S2 | 22.3 | 1.46E+12 | 113.2549 | 8.83 | 100.00 |
| L1 | 24.3 | 1.46E+12 | 113.2695 | 8.83 | 100.00 |
| S1.5 | 22.7 | 1.48E+12 | 113.7163 | 8.79 | 100.00 |
| S1 | 22.8 | 1.49E+12 | 114.4577 | 8.74 | 100.00 |
| L1.5 | 23.7 | 1.51E+12 | 115.1355 | 8.69 | 100.00 |
| L3 | 22.7 | 1.53E+12 | 115.9609 | 8.62 | 100.00 |
| L2 | 23.3 | 1.58E+12 | 117.7177 | 8.49 | 100.00 |

Simulated Plant Record Analysis

Kentucky Power - Distr

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^ccount: KEPCo 101/6 373 - KY
rsion: KEPCO DISTRIBUTION 2008
Method: Simulated Balances

No. of Test Points: 10 Interval: 0 Observation Band: 1999 - 2008

| Dispersion | Avg Service Life | Sum of Squared Differences | Index of Variation | Conformance Index | Retirement Experience Index |
|---|---|---|---|---|---|
| L0 | 28.5 | 5.31E+10 | 27.3103 | 36.62 | 98.41 |
| R0.5 | 26.8 | 5.39E+10 | 27.5115 | 36.35 | 100.00 |
| S-.5 | 26.7 | 5.76E+10 | 28.4264 | 35.18 | 100.00 |
| R1 | 25.9 | 6.09E+10 | 29.2306 | 34.21 | 100.00 |
| L0.5 | 27.5 | 6.45E+10 | 30.0957 | 33.23 | 99.37 |
| R1.5 | 25.5 | 6.59E+10 | 30.4143 | 32.88 | 100.00 |
| R2.5 | 24.4 | 6.94E+10 | 31.2148 | 32.04 | 100.00 |
| S0 | 26.1 | 6.97E+10 | 31.2756 | 31.97 | 100.00 |
| R2 | 24.8 | 7.02E+10 | 31.4046 | 31.84 | 100.00 |
| R3 | 24.1 | 7.17E+10 | 31.7399 | 31.51 | 100.00 |
| L1 | 26.8 | 7.84E+10 | 33.1753 | 30.14 | 99.94 |
| S0.5 | 25.7 | 7.91E+10 | 33.3181 | 30.01 | 100.00 |
| R4 | 23.5 | 8.35E+10 | 34.2417 | 29.20 | 100.00 |
| S1 | 25.3 | 9.06E+10 | 35.6716 | 28.03 | 100.00 |
| L1.5 | 26.1 | 9.21E+10 | 35.9615 | 27.81 | 99.98 |
| S1.5 | 24.7 | 9.60E+10 | 36.7126 | 27.24 | 100.00 |
| S2 | 24.3 | 1.03E+11 | 38.0980 | 26.25 | 100.00 |
| S3 | 23.7 | 1.09E+11 | 39.0512 | 25.61 | 100.00 |
| L2 | 25.5 | 1.12E+11 | 39.6209 | 25.24 | 100.00 |
| S4 | 23.1 | 1.19E+11 | 40.9618 | 24.41 | 100.00 |
| R5 | 22.9 | 1.22E+11 | 41.4034 | 24.15 | 100.00 |
| L4 | 23.5 | 1.25E+11 | 41.9385 | 23.84 | 100.00 |
| L3 | 24.6 | 1.32E+11 | 43.0460 | 23.23 | 100.00 |
| L5 | 22.9 | 1.35E+11 | 43.4657 | 23.01 | 100.00 |
| S5 | 22.7 | 1.37E+11 | 43.7795 | 22.84 | 100.00 |
| S6 | 22.4 | 1.54E+11 | 46.4275 | 21.54 | 100.00 |
| SQ | 24.2 | 4.21E+11 | 76.9184 | 13.00 | 100.00 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 2008 | $141,474 | $97,394 | $2,939,603 | $0 | $0 |
| 2007 | $173,112 | $102,177 | $2,895,523 | $0 | $0 |
| 2006 | $151,500 | $145,114 | $2,824,588 | $0 | $0 |
| 2005 | $155,045 | $78,077 | $2,818,202 | $0 | $0 |
| 2004 | $139,549 | $33,892 | $2,741,234 | $0 | $0 |
| 2003 | $114,834 | $39,163 | $2,635,577 | $0 | $0 |
| 2002 | $90,680 | $27,698 | $2,559,906 | $0 | $0 |
| 2001 | $105,554 | $22,268 | $2,496,924 | $0 | $0 |
| 2000 | $77,936 | $26,217 | $2,413,638 | $0 | $0 |
| 1999 | $88,549 | $15,450 | $2,361,919 | $0 | $0 |
| 1998 | $41,175 | $20,374 | $2,288,820 | $0 | $0 |
| 1997 | $40,819 | $26,937 | $2,268,019 | $0 | $0 |
| 1996 | $50,186 | $18,665 | $2,254,137 | $0 | $0 |
| 1995 | $65,504 | $30,017 | $2,222,616 | $0 | $0 |
| 1994 | $98,733 | $37,451 | $2,187,129 | $0 | $0 |
| 1993 | $183,145 | $27,095 | $2,125,847 | $0 | $0 |
| 1992 | $13,549 | $21,277 | $1,969,797 | $0 | $0 |
| 1991 | $62,428 | $48,604 | $1,977,525 | $0 | $0 |
| 1990 | $213,752 | $73,803 | $1,963,701 | $0 | $0 |
| 1989 | $347,755 | $109,998 | $1,823,752 | $0 | $0 |
| 1988 | $206,152 | $110,040 | $1,585,995 | $0 | $0 |
| 1987 | $203,890 | $73,264 | $1,489,883 | $0 | $0 |
| 1986 | $209,086 | $40,399 | $1,359,257 | $0 | $0 |
| 1985 | $120,997 | $37,932 | $1,190,570 | $0 | $0 |
| 1984 | $50,621 | $13,841 | $1,107,505 | $0 | $0 |
| 1983 | $93,110 | $28,192 | $1,070,725 | $0 | $0 |
| 1982 | $184,014 | $44,775 | $1,005,807 | $0 | $0 |
| 1981 | $142,598 | $53,310 | $866,568 | $0 | $0 |
| 1980 | $80,303 | $37,188 | $777,280 | $0 | $0 |
| 1979 | $22,164 | $17,100 | $734,165 | $0 | $0 |
| 1978 | $56,734 | $28,008 | $729,101 | $0 | $0 |
| 1977 | $19,464 | $15,865 | $700,375 | $0 | $0 |
| 1976 | $16,853 | $4,177 | $696,776 | $0 | $0 |
| 1975 | $41,522 | $16,546 | $684,100 | $0 | $0 |
| 1974 | $37,035 | $11,431 | $659,124 | $0 | $0 |

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| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1973 | $79,104 | $21,009 | $633,520 | $0 | $0 |
| 1972 | $17,862 | $9,816 | $575,425 | $0 | $0 |
| 1971 | $29,314 | $6,397 | $567,379 | $0 | $0 |
| 1970 | $82,272 | $25,322 | $544,462 | $0 | $0 |
| 1969 | $54,853 | $89,346 | $487,512 | $0 | $0 |
| 1968 | $62,051 | $77,466 | $522,005 | $0 | $0 |
| 1967 | $148,123 | $120,454 | $537,420 | $0 | $0 |
| 1966 | $65,587 | $65,904 | $509,751 | $0 | $0 |
| 1965 | $74,139 | $46,345 | $510,068 | $0 | $0 |
| 1964 | $33,854 | $25,886 | $482,274 | $0 | $0 |
| 1963 | $60,199 | $31,558 | $474,306 | $0 | $0 |
| 1962 | $47,237 | $20,015 | $445,665 | $0 | $0 |
| 1961 | $47,565 | $20,623 | $418,443 | $0 | $0 |
| 1960 | $34,406 | $16,536 | $391,501 | $0 | $0 |
| 1959 | $48,955 | $20,071 | $373,631 | $0 | $0 |
| 1958 | $37,190 | $33,373 | $344,747 | $0 | $0 |
| 1957 | $25,341 | $9,172 | $340,930 | $0 | $0 |
| 1956 | $16,379 | $6,068 | $324,761 | $0 | $0 |
| 1955 | $13,067 | $8,335 | $314,450 | $0 | $0 |
| 1954 | $22,190 | $6,972 | $309,718 | $0 | $0 |
| 1953 | $31,804 | $20,003 | $294,500 | $0 | $0 |
| 1952 | $31,861 | $10,628 | $282,699 | $0 | $0 |
| 1951 | $45,371 | $20,307 | $261,466 | $0 | $0 |
| 1950 | $34,099 | $7,081 | $236,402 | $0 | $0 |
| 1949 | $28,081 | $11,552 | $209,384 | $0 | $0 |
| 1948 | $23,457 | $5,209 | $192,855 | $0 | $0 |
| 1947 | $10,446 | $4,660 | $174,607 | $0 | $0 |
| 1946 | $6,221 | $663 | $168,821 | $0 | $0 |
| 1945 | $2,011 | $568 | $163,263 | $0 | $0 |
| 1944 | $4,620 | $2,723 | $161,820 | $0 | $0 |
| 1943 | $1,495 | $4,124 | $159,923 | $0 | $0 |
| 1942 | $13,088 | $182 | $162,552 | $0 | $0 |
| 1941 | $12,616 | $9,319 | $149,646 | $0 | $0 |
| 1940 | $10,369 | $8,981 | $146,349 | $0 | $0 |
| 1939 | $6,365 | $4,357 | $144,961 | $0 | $0 |

10/20/2009

| Act Yr | Additions | Retirements | Ending Balance | | |
|---|---|---|---|---|---|
| 1938 | $9,692 | $5,960 | $142,953 | $0 | $0 |
| 1937 | $16,031 | $3,042 | $139,221 | $0 | $0 |
| 1936 | $126,232 | $0 | $126,232 | $0 | $0 |

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# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# DISTRIBUTION PLANT WORKPAPERS

## SALVAGE AND REMOVAL ANALYSIS

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21-Oct-09

KENTUCKY POWER COMPANY
Distribution Plant Net Salvage Test

Original Cost Retired by Plant Account

| Year | 361 | 362 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 373 | Total | Net Salvage % | Functional Net Salvage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 19,675 | 267,934 | 144,412 | 1,379,552 | 199 | 18,365 | 1,164,053 | 562,102 | 576,545 | 354,006 | 37,451 | 4,524,294 | 4% | 200,646 |
| 1995 | 2,757 | 287,579 | 1,671,011 | 2,549,129 | 5,842 | 19,071 | 1,313,309 | 497,449 | 631,063 | 350,093 | 30,017 | 7,357,320 | 1% | 39,259 |
| 1996 | 5,030 | 454,597 | 1,128,837 | 1,662,236 | 1,248 | 37,421 | 1,578,917 | 475,561 | 517,207 | 246,115 | 18,665 | 6,125,834 | 2% | 96,665 |
| 1997 | 6,522 | 734,060 | 1,542,829 | 1,666,505 | 4,035 | 46,345 | 2,186,374 | 522,610 | 836,156 | 529,850 | 26,937 | 8,102,223 | 6% | 474,137 |
| 1998 | 57,059 | 430,669 | 1,082,705 | 867,054 | 1,777 | 16,729 | 1,560,837 | 431,172 | 723,727 | 553,968 | 20,374 | 5,746,071 | 8% | 487,840 |
| 1999 | 462 | 133,384 | 779,722 | 767,232 | 2,608 | 11,656 | 1,278,242 | 344,602 | 979,544 | 465,115 | 15,450 | 4,778,017 | 4% | 178,028 |
| 2000 | 0 | 430,936 | 1,459,576 | 1,553,565 | 6,479 | 36,661 | 1,443,110 | 569,287 | 1,709,961 | 637,697 | 26,217 | 7,873,489 | 16% | 1,288,086 |
| 2001 | 0 | 543,501 | 1,402,184 | 1,323,285 | 9,421 | 11,194 | 1,029,459 | 390,080 | 639,511 | 563,686 | 22,268 | 5,934,589 | -7% | -403,255 |
| 2002 | 0 | 163,287 | 1,100,199 | 2,020,300 | 16,953 | 71,261 | 1,055,795 | 508,684 | 970,185 | 370,170 | 27,698 | 6,304,532 | 30% | 1,866,215 |
| 2003 | 0 | 448,926 | 770,546 | 1,665,159 | 2,929 | 23,089 | 1,073,924 | 630,850 | 624,632 | 155,458 | 39,163 | 5,434,676 | -2% | -121,659 |
| 2004 | 370 | 325,880 | 3,264,700 | 1,048,651 | 2,052 | 37,052 | 1,076,234 | 511,999 | 832,607 | 115,921 | 33,892 | 7,249,358 | -15% | -1,080,231 |
| 2005 | 25,016 | 1,290,672 | 728,627 | 1,665,652 | 143 | 36,728 | 1,190,630 | 760,371 | 1,515,899 | 818,523 | 78,077 | 8,110,338 | -7% | -556,174 |
| 2006 | 0 | 854,863 | 839,957 | 2,373,219 | 7,368 | 144,643 | 1,756,227 | 1,144,609 | 9,319,669 | 1,063,929 | 145,114 | 17,649,598 | 6% | 1,086,023 |
| 2007 | 0 | 811,720 | 1,283,667 | 2,993,281 | 3,259 | 36,512 | 2,367,716 | 887,176 | 9,974,912 | 930,355 | 102,177 | 19,390,775 | -10% | -1,905,849 |
| 2008 | 206 | 197,774 | 1,315,032 | 3,155,687 | 694 | 53,234 | 2,310,335 | 720,680 | 1,023,534 | 1,060,049 | 97,394 | 9,934,619 | -22% | -2,182,453 |
| TOTAL | 117,097 | 7,375,782 | 18,514,004 | 26,690,507 | 65,007 | 599,961 | 22,385,162 | 8,957,232 | 30,875,152 | 8,214,935 | 720,894 | 124,515,733 | 0% | -532,722 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 361 | 362 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 373 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Retmts | 117,097 | 7,375,782 | 18,514,004 | 26,690,507 | 65,007 | 599,961 | 22,385,162 | 8,957,232 | 30,875,152 | 8,214,935 | 720,894 | 124,515,733 |
| Net Salvage % | 10 | 10 | -53 | 25 | 0 | 0 | 25 | -15 | -8 | -15 | -2 | -1 |
| Net Salvage $ | 11,710 | 737,578 | -9,812,422 | 6,672,627 | 0 | 0 | 5,596,291 | -1,343,585 | -2,470,012 | -1,232,240 | -14,418 | -1,854,472 |

21-Oct-09

KENTUCKY POWER COMPANY
Distribution Plant Gross Removal Test

| Year | Original Cost Retired by Plant Account | | | | | | | | | | | | Removal | Fucnctional Gross |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 361 | 362 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 373 | Total | % | Removal |
| 1994 | 19,675 | 267,934 | 144,412 | 1,379,552 | 199 | 18,365 | 1,164,053 | 562,102 | 576,545 | 354,006 | 37,451 | 4,524,294 | 43% | 1,954,453 |
| 1995 | 2,757 | 287,579 | 1,671,011 | 2,549,129 | 5,842 | 19,071 | 1,313,309 | 497,449 | 631,063 | 350,093 | 30,017 | 7,357,320 | 29% | 2,119,861 |
| 1996 | 5,030 | 454,597 | 1,128,837 | 1,662,236 | 1,246 | 37,421 | 1,578,917 | 475,561 | 517,207 | 246,115 | 18,665 | 6,125,834 | 20% | 1,245,388 |
| 1997 | 6,522 | 734,060 | 1,542,829 | 1,666,505 | 4,035 | 46,345 | 2,186,374 | 522,610 | 836,156 | 529,850 | 26,937 | 8,102,223 | 18% | 1,444,506 |
| 1998 | 57,059 | 430,669 | 1,082,705 | 867,054 | 1,777 | 16,729 | 1,560,837 | 431,172 | 723,727 | 553,968 | 20,374 | 5,746,071 | 14% | 804,413 |
| 1999 | 462 | 133,384 | 779,722 | 767,232 | 2,608 | 11,656 | 1,278,242 | 344,602 | 979,544 | 465,115 | 15,450 | 4,778,017 | 5% | 262,682 |
| 2000 | 0 | 430,936 | 1,459,576 | 1,553,565 | 6,479 | 36,661 | 1,443,110 | 569,287 | 1,709,961 | 637,697 | 26,217 | 7,873,469 | 3% | 213,654 |
| 2001 | 0 | 543,501 | 1,402,184 | 1,323,285 | 9,421 | 11,194 | 1,029,459 | 390,080 | 639,511 | 563,686 | 22,268 | 5,934,589 | 44% | 2,593,366 |
| 2002 | 0 | 163,287 | 1,100,199 | 2,020,300 | 16,953 | 71,261 | 1,055,795 | 508,684 | 970,185 | 370,170 | 27,698 | 6,304,532 | 47% | 2,969,610 |
| 2003 | 0 | 448,926 | 770,546 | 1,665,159 | 2,929 | 23,089 | 1,073,924 | 630,850 | 624,632 | 155,458 | 39,163 | 5,434,676 | 31% | 1,682,264 |
| 2004 | 370 | 325,880 | 3,264,700 | 1,048,651 | 2,052 | 37,052 | 1,076,234 | 511,999 | 832,607 | 115,921 | 33,692 | 7,249,358 | 29% | 2,119,206 |
| 2005 | 25,016 | 1,290,672 | 728,627 | 1,665,652 | 143 | 36,728 | 1,190,630 | 760,371 | 1,515,899 | 818,523 | 78,077 | 8,110,338 | 8% | 623,423 |
| 2006 | 0 | 854,663 | 839,957 | 2,373,219 | 7,368 | 144,643 | 1,756,227 | 1,144,609 | 9,319,669 | 1,063,929 | 145,114 | 17,649,598 | 14% | 2,537,791 |
| 2007 | 0 | 811,720 | 1,283,667 | 2,993,281 | 3,259 | 36,512 | 2,367,716 | 687,176 | 9,974,912 | 930,355 | 102,177 | 19,390,775 | 20% | 3,935,794 |
| 2008 | 206 | 197,774 | 1,315,032 | 3,155,687 | 694 | 53,234 | 2,310,335 | 720,660 | 1,023,534 | 1,060,049 | 97,394 | 9,934,619 | 39% | 3,892,317 |
| TOTAL | 117,097 | 7,375,782 | 18,514,004 | 26,690,507 | 65,007 | 599,961 | 22,385,162 | 8,957,232 | 30,875,152 | 8,214,935 | 720,894 | 124,515,733 | 23% | 28,388,728 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 361 | 362 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 373 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Retmts | 117,097 | 7,375,782 | 18,514,004 | 26,690,507 | 65,007 | 599,961 | 22,385,162 | 8,957,232 | 30,875,152 | 8,214,935 | 720,894 | 124,515,733 |
| Gross Removal, % | 5 | 25 | 65 | 25 | 0 | 0 | 10 | 15 | 10 | 20 | 5 | 23 |
| Gross Removal $ | 5,855 | 1,843,946 | 12,034,103 | 6,672,627 | 0 | 0 | 2,238,516 | 1,343,585 | 3,087,515 | 1,642,987 | 36,045 | 28,905,178 |

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21-Oct-09

KENTUCKY POWER COMPANY
Distribution Plant Gross Salvage Test

Original Cost Retired by Plant Account

| Year | 361 | 362 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 373 | Total | Salvage % | Functional Gross Salvage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 19,675 | 267,934 | 144,412 | 1,379,552 | 199 | 18,365 | 1,164,053 | 562,102 | 576,545 | 354,006 | 37,451 | 4,524,294 | 48% | 2,155,099 |
| 1995 | 2,757 | 287,579 | 1,671,011 | 2,549,129 | 5,842 | 19,071 | 1,313,309 | 497,449 | 631,063 | 350,093 | 30,017 | 7,357,320 | 29% | 2,159,120 |
| 1996 | 5,030 | 454,597 | 1,128,837 | 1,662,236 | 1,248 | 37,421 | 1,578,917 | 475,561 | 517,207 | 246,115 | 18,665 | 6,125,834 | 22% | 1,342,053 |
| 1997 | 6,522 | 734,060 | 1,542,829 | 1,666,505 | 4,035 | 46,345 | 2,186,374 | 522,610 | 836,156 | 529,850 | 26,937 | 8,102,223 | 24% | 1,918,643 |
| 1998 | 57,059 | 430,669 | 1,082,705 | 867,054 | 1,777 | 16,729 | 1,560,837 | 431,172 | 723,727 | 553,968 | 20,374 | 5,746,071 | 22% | 1,292,253 |
| 1999 | 462 | 133,384 | 779,722 | 767,232 | 2,608 | 11,656 | 1,278,242 | 344,602 | 979,544 | 465,115 | 15,450 | 4,778,017 | 9% | 440,710 |
| 2000 | 0 | 430,936 | 1,459,576 | 1,553,565 | 6,479 | 36,661 | 1,443,110 | 569,287 | 1,709,961 | 637,697 | 26,217 | 7,873,489 | 19% | 1,501,740 |
| 2001 | 0 | 543,501 | 1,402,184 | 1,323,285 | 9,421 | 11,194 | 1,029,459 | 390,080 | 639,511 | 563,686 | 22,268 | 5,934,589 | 37% | 2,190,111 |
| 2002 | 0 | 163,287 | 1,100,199 | 2,020,300 | 16,953 | 71,261 | 1,055,795 | 508,684 | 970,185 | 370,170 | 27,698 | 6,304,532 | 77% | 4,835,825 |
| 2003 | 0 | 448,926 | 770,546 | 1,665,159 | 2,929 | 23,089 | 1,073,924 | 630,850 | 624,632 | 155,458 | 39,163 | 5,434,676 | 29% | 1,560,605 |
| 2004 | 370 | 325,880 | 3,264,700 | 1,048,651 | 2,052 | 37,052 | 1,076,234 | 511,999 | 832,607 | 115,921 | 33,892 | 7,249,358 | 14% | 1,038,975 |
| 2005 | 25,016 | 1,290,672 | 728,627 | 1,665,652 | 143 | 36,728 | 1,190,630 | 760,371 | 1,515,899 | 818,523 | 78,077 | 8,110,338 | 1% | 67,249 |
| 2006 | 0 | 854,863 | 839,957 | 2,373,219 | 7,368 | 144,643 | 1,756,227 | 1,144,609 | 9,319,669 | 1,063,929 | 145,114 | 17,649,598 | 21% | 3,623,814 |
| 2007 | 0 | 811,720 | 1,283,667 | 2,993,281 | 3,259 | 36,512 | 2,367,716 | 887,176 | 9,974,912 | 930,355 | 102,177 | 19,390,775 | 10% | 2,029,945 |
| 2008 | 206 | 197,774 | 1,315,032 | 3,155,687 | 694 | 53,234 | 2,310,335 | 720,680 | 1,023,534 | 1,060,049 | 97,394 | 9,934,619 | 17% | 1,709,864 |
| TOTAL | 117,097 | 7,375,782 | 18,514,004 | 26,690,507 | 65,007 | 599,961 | 22,385,162 | 8,957,232 | 30,875,152 | 8,214,935 | 720,894 | 124,515,733 | 22% | 27,866,006 |

EVALUATION BASED ON 1994-2008 RESERVE ACTIVITY

| | 361 | 362 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 373 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Retmts | 117,097 | 7,375,782 | 18,514,004 | 26,690,507 | 65,007 | 599,961 | 22,385,162 | 8,957,232 | 30,875,152 | 8,214,935 | 720,894 | 124,515,733 |
| Gross Salvage % | 15 | 35 | 12 | 50 | 0 | 0 | 35 | 0 | 2 | 5 | 3 | 22 |
| Gross Salvage $ | 17,565 | 2,581,524 | 2,221,680 | 13,345,254 | 0 | 0 | 7,834,807 | 0 | 617,503 | 410,747 | 21,627 | 27,050,706 |

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# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# DISTRIBUTION PLANT WORKPAPERS

## CALCULATION OF AGE OF SIMULATED PLANT BALANCES

Computed Age Distribution Report



Account: KEPCo 101/6 364 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 30 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 7,948,638 | 0.5 | 99.37 | 7,898,323 | 100.00 | 7,948,639 | 0.50 |
| 2007 | 8,178,275 | 1.5 | 98.09 | 8,021,825 | 100.00 | 8,178,276 | 1.50 |
| 2006 | 6,214,520 | 2.5 | 96.79 | 6,014,765 | 100.00 | 6,214,521 | 2.50 |
| 2005 | 4,777,960 | 3.5 | 95.47 | 4,561,280 | 100.00 | 4,777,961 | 3.50 |
| 2004 | 4,606,829 | 4.5 | 94.12 | 4,336,132 | 100.00 | 4,606,830 | 4.50 |
| 2003 | 3,549,389 | 5.5 | 92.76 | 3,292,508 | 100.00 | 3,549,390 | 5.50 |
| 2002 | 4,243,760 | 6.5 | 91.38 | 3,878,033 | 99.31 | 4,214,323 | 6.48 |
| 2001 | 6,491,237 | 7.5 | 89.98 | 5,840,945 | 97.78 | 6,347,452 | 7.42 |
| 2000 | 6,193,673 | 8.5 | 88.56 | 5,485,303 | 96.24 | 5,960,969 | 8.34 |
| 1999 | 7,750,006 | 9.5 | 87.12 | 6,752,167 | 94.68 | 7,337,692 | 9.25 |
| 1998 | 2,259,261 | 10.5 | 85.67 | 1,935,441 | 93.10 | 2,103,276 | 10.14 |
| 1997 | 2,175,205 | 11.5 | 84.19 | 1,831,283 | 91.49 | 1,990,086 | 11.01 |
| 1996 | 9,692,760 | 12.5 | 82.69 | 8,014,943 | 89.86 | 8,709,971 | 11.87 |
| 1995 | 5,532,239 | 13.5 | 81.17 | 4,490,297 | 88.20 | 4,879,680 | 12.70 |
| 1994 | 6,419,736 | 14.5 | 79.62 | 5,111,180 | 86.52 | 5,554,404 | 13.52 |
| 1993 | 5,227,092 | 15.5 | 78.04 | 4,079,275 | 84.81 | 4,433,016 | 14.32 |
| 1992 | 6,185,410 | 16.5 | 76.44 | 4,727,818 | 83.06 | 5,137,798 | 15.10 |
| 1991 | 6,088,191 | 17.5 | 74.80 | 4,553,886 | 81.28 | 4,948,783 | 15.86 |
| 1990 | 5,783,242 | 18.5 | 73.13 | 4,229,266 | 79.47 | 4,596,013 | 16.60 |
| '89 | 5,307,552 | 19.5 | 71.43 | 3,791,025 | 77.62 | 4,119,770 | 17.32 |
| 1988 | 4,827,488 | 20.5 | 69.69 | 3,364,244 | 75.73 | 3,655,980 | 18.01 |
| 1987 | 5,327,380 | 21.5 | 67.92 | 3,618,179 | 73.81 | 3,931,935 | 18.68 |
| 1986 | 5,369,391 | 22.5 | 66.11 | 3,549,597 | 71.84 | 3,857,406 | 19.33 |
| 1985 | 4,909,635 | 23.5 | 64.26 | 3,155,046 | 69.83 | 3,428,641 | 19.96 |
| 1984 | 4,313,710 | 24.5 | 62.38 | 2,690,964 | 67.79 | 2,924,315 | 20.55 |
| 1983 | 4,439,316 | 25.5 | 60.47 | 2,684,232 | 65.71 | 2,917,000 | 21.13 |
| 1982 | 4,665,175 | 26.5 | 58.52 | 2,729,827 | 63.59 | 2,966,548 | 21.68 |
| 1981 | 5,803,340 | 27.5 | 56.53 | 3,280,783 | 61.43 | 3,565,281 | 22.20 |
| 1980 | 4,804,915 | 28.5 | 54.52 | 2,619,640 | 59.25 | 2,846,805 | 22.69 |
| 1979 | 3,884,010 | 29.5 | 52.48 | 2,038,238 | 57.03 | 2,214,987 | 23.16 |
| 1978 | 3,251,569 | 30.5 | 50.41 | 1,639,138 | 54.78 | 1,781,278 | 23.60 |
| 1977 | 3,061,702 | 31.5 | 48.32 | 1,479,476 | 52.51 | 1,607,770 | 24.02 |
| 1976 | 2,270,319 | 32.5 | 46.21 | 1,049,213 | 50.22 | 1,140,197 | 24.41 |
| 1975 | 1,611,041 | 33.5 | 44.09 | 710,335 | 47.92 | 771,933 | 24.78 |
| 1974 | 1,552,522 | 34.5 | 41.96 | 651,423 | 45.60 | 707,912 | 25.12 |
| 1973 | 1,515,199 | 35.5 | 39.82 | 603,352 | 43.27 | 655,673 | 25.43 |
| 1972 | 1,255,246 | 36.5 | 37.68 | 472,989 | 40.95 | 514,005 | 25.72 |
| 1971 | 1,229,340 | 37.5 | 35.55 | 436,993 | 38.63 | 474,888 | 25.99 |
| 1970 | 840,500 | 38.5 | 33.42 | 280,915 | 36.32 | 305,275 | 26.24 |
| 1969 | 775,929 | 39.5 | 31.31 | 242,980 | 34.03 | 264,050 | 26.47 |
| '968 | 779,145 | 40.5 | 29.23 | 227,729 | 31.76 | 247,476 | 26.68 |
| 1967 | 736,064 | 41.5 | 27.17 | 199,996 | 29.53 | 217,339 | 26.88 |
| 1966 | 623,348 | 42.5 | 25.15 | 156,751 | 27.33 | 170,344 | 27.06 |
| 1965 | 625,458 | 43.5 | 23.16 | 144,875 | 25.17 | 157,438 | 27.22 |
| 1964 | 510,960 | 44.5 | 21.23 | 108,463 | 23.07 | 117,869 | 27.38 |

Computed Age Distribution Report

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Account: KEPCo 101/6 364 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 30 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 412,308 | 45.5 | 19.34 | 79,753 | 21.02 | 86,669 | 27.53 |
| 1962 | 374,871 | 46.5 | 17.52 | 65,666 | 19.04 | 71,361 | 27.68 |
| 1961 | 499,550 | 47.5 | 15.76 | 78,707 | 17.12 | 85,533 | 27.82 |
| 1960 | 350,996 | 48.5 | 14.06 | 49,361 | 15.28 | 53,641 | 27.96 |
| 1959 | 417,502 | 49.5 | 12.44 | 51,946 | 13.52 | 56,450 | 28.10 |
| 1958 | 460,209 | 50.5 | 10.90 | 50,163 | 11.85 | 54,513 | 28.24 |
| 1957 | 421,180 | 51.5 | 9.44 | 39,747 | 10.26 | 43,194 | 28.39 |
| 1956 | 364,630 | 52.5 | 8.05 | 29,370 | 8.75 | 31,917 | 28.55 |
| 1955 | 300,304 | 53.5 | 6.76 | 20,289 | 7.34 | 22,048 | 28.71 |
| 1954 | 286,975 | 54.5 | 5.54 | 15,890 | 6.02 | 17,268 | 28.89 |
| 1953 | 314,622 | 55.5 | 4.39 | 13,824 | 4.77 | 15,022 | 29.08 |
| 1952 | 352,512 | 56.5 | 3.32 | 11,703 | 3.61 | 12,718 | 29.27 |
| 1951 | 535,120 | 57.5 | 2.30 | 12,318 | 2.50 | 13,386 | 29.47 |
| 1950 | 649,686 | 58.5 | 1.34 | 8,693 | 1.45 | 9,447 | 29.68 |
| 1949 | 716,821 | 59.5 | 0.00 | | -0.00 | (1) | 29.75 |
| 1948 | 927,453 | 60.5 | 0.00 | | 0.00 | | 0.00 |
| 1947 | 1,015,765 | 61.5 | 0.00 | | 0.00 | | 0.00 |
| 1946 | 836,816 | 62.5 | 0.00 | | 0.00 | | 0.00 |
| 1945 | 176,492 | 63.5 | 0.00 | | 0.00 | | 0.00 |
| 1944 | 61,306 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| 1943 | 39,257 | 65.5 | 0.00 | | 0.00 | | 0.00 |
| 1942 | 117,724 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 118,223 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1940 | 206,783 | 68.5 | 0.00 | | 0.00 | | 0.00 |
| 1939 | 181,871 | 69.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 160,568 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| 1937 | 146,719 | 71.5 | 0.00 | | 0.00 | | 0.00 |
| 1936 | 861,093 | 72.5 | 0.00 | | 0.00 | | 0.00 |
| | 194,915,033 | | | 137,508,499 | | 147,624,353 * | |

* Recorded Balance January 1, 2009: 147,624,353



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Computed Age Distribution Report

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Account: KEPCo 101/6 365 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 30 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 10,259,054 | 0.5 | 99.37 | 10,194,114 | 100.00 | 10,259,055 | 0.50 |
| 2007 | 14,237,195 | 1.5 | 98.09 | 13,964,837 | 98.84 | 14,071,576 | 1.49 |
| 2006 | 8,984,427 | 2.5 | 96.79 | 8,695,638 | 97.53 | 8,762,102 | 2.47 |
| 2005 | 6,436,239 | 3.5 | 95.47 | 6,144,356 | 96.19 | 6,191,320 | 3.43 |
| 2004 | 5,364,176 | 4.5 | 94.12 | 5,048,977 | 94.84 | 5,087,569 | 4.38 |
| 2003 | 4,069,103 | 5.5 | 92.76 | 3,774,608 | 93.47 | 3,803,460 | 5.32 |
| 2002 | 5,622,594 | 6.5 | 91.38 | 5,138,039 | 92.08 | 5,177,311 | 6.24 |
| 2001 | 5,169,647 | 7.5 | 89.98 | 4,651,752 | 90.67 | 4,687,307 | 7.15 |
| 2000 | 5,230,644 | 8.5 | 88.56 | 4,632,415 | 89.24 | 4,667,823 | 8.04 |
| 1999 | 6,688,639 | 9.5 | 87.12 | 5,827,454 | 87.79 | 5,871,996 | 8.92 |
| 1998 | 2,314,364 | 10.5 | 85.67 | 1,982,646 | 86.32 | 1,997,801 | 9.78 |
| 1997 | 7,910,940 | 11.5 | 84.19 | 6,660,141 | 84.83 | 6,711,047 | 10.63 |
| 1996 | 3,270,420 | 12.5 | 82.69 | 2,704,310 | 83.32 | 2,724,981 | 11.46 |
| 1995 | 5,785,493 | 13.5 | 81.17 | 4,695,853 | 81.79 | 4,731,745 | 12.27 |
| 1994 | 4,473,083 | 14.5 | 79.62 | 3,561,320 | 80.23 | 3,588,540 | 13.07 |
| 1993 | 2,861,816 | 15.5 | 78.04 | 2,233,390 | 78.64 | 2,250,461 | 13.84 |
| 1992 | 3,277,636 | 16.5 | 76.44 | 2,505,261 | 77.02 | 2,524,410 | 14.60 |
| 1991 | 3,654,148 | 17.5 | 74.80 | 2,733,254 | 75.37 | 2,754,145 | 15.34 |
| 1990 | 3,794,891 | 18.5 | 73.13 | 2,775,191 | 73.69 | 2,796,403 | 16.07 |
| 1989 | 3,611,129 | 19.5 | 71.43 | 2,579,321 | 71.97 | 2,599,036 | 16.77 |
| 1988 | 3,229,945 | 20.5 | 69.69 | 2,250,927 | 70.22 | 2,268,132 | 17.45 |
| 1987 | 3,764,640 | 21.5 | 67.92 | 2,556,750 | 68.44 | 2,576,292 | 18.11 |
| 1986 | 3,340,589 | 22.5 | 66.11 | 2,208,397 | 66.61 | 2,225,276 | 18.74 |
| 1985 | 2,604,969 | 23.5 | 64.26 | 1,674,014 | 64.75 | 1,686,809 | 19.36 |
| 1984 | 2,380,654 | 24.5 | 62.38 | 1,485,092 | 62.86 | 1,496,443 | 19.95 |
| 1983 | 2,562,107 | 25.5 | 60.47 | 1,549,178 | 60.93 | 1,561,019 | 20.52 |
| 1982 | 2,865,659 | 26.5 | 58.52 | 1,676,840 | 58.96 | 1,689,657 | 21.06 |
| 1981 | 4,443,270 | 27.5 | 56.53 | 2,511,899 | 56.96 | 2,531,098 | 21.58 |
| 1980 | 3,591,035 | 28.5 | 54.52 | 1,957,832 | 54.94 | 1,972,796 | 22.08 |
| 1979 | 3,199,783 | 29.5 | 52.48 | 1,679,171 | 52.88 | 1,692,006 | 22.55 |
| 1978 | 2,734,482 | 30.5 | 50.41 | 1,378,471 | 50.80 | 1,389,007 | 23.00 |
| 1977 | 3,143,781 | 31.5 | 48.32 | 1,519,138 | 48.69 | 1,530,749 | 23.42 |
| 1976 | 1,782,930 | 32.5 | 46.21 | 823,969 | 46.57 | 830,267 | 23.82 |
| 1975 | 1,026,632 | 33.5 | 44.09 | 452,659 | 44.43 | 456,119 | 24.19 |
| 1974 | 1,088,826 | 34.5 | 41.96 | 456,861 | 42.28 | 460,353 | 24.54 |
| 1973 | 1,108,750 | 35.5 | 39.82 | 441,504 | 40.12 | 444,879 | 24.87 |
| 1972 | 1,152,475 | 36.5 | 37.68 | 434,264 | 37.97 | 437,583 | 25.18 |
| 1971 | 1,451,307 | 37.5 | 35.55 | 515,896 | 35.82 | 519,839 | 25.47 |
| 1970 | 1,150,481 | 38.5 | 33.42 | 384,518 | 33.68 | 387,456 | 25.73 |
| 1969 | 992,508 | 39.5 | 31.31 | 310,801 | 31.55 | 313,176 | 25.98 |
| 1968 | 949,626 | 40.5 | 29.23 | 277,557 | 29.45 | 279,678 | 26.21 |
| 1967 | 869,418 | 41.5 | 27.17 | 236,230 | 27.38 | 238,035 | 26.43 |
| 1966 | 728,131 | 42.5 | 25.15 | 183,101 | 25.34 | 184,500 | 26.63 |
| 1965 | 688,379 | 43.5 | 23.16 | 159,449 | 23.34 | 160,668 | 26.83 |
| 1964 | 500,173 | 44.5 | 21.23 | 106,173 | 21.39 | 106,985 | 27.01 |



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Computed Age Distribution Report

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Account: KEPCo 101/6 365 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 30 - R0.5

| ..itage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 342,519 | 45.5 | 19.34 | 66,253 | 19.49 | 66,760 | 27.18 |
| 1962 | 356,863 | 46.5 | 17.52 | 62,512 | 17.65 | 62,990 | 27.35 |
| 1961 | 431,518 | 47.5 | 15.76 | 67,989 | 15.88 | 68,508 | 27.52 |
| 1960 | 309,663 | 48.5 | 14.06 | 43,548 | 14.17 | 43,881 | 27.69 |
| 1959 | 332,979 | 49.5 | 12.44 | 41,429 | 12.54 | 41,746 | 27.85 |
| 1958 | 411,734 | 50.5 | 10.90 | 44,879 | 10.98 | 45,222 | 28.02 |
| 1957 | 370,826 | 51.5 | 9.44 | 34,995 | 9.51 | 35,262 | 28.20 |
| 1956 | 335,384 | 52.5 | 8.05 | 27,015 | 8.12 | 27,221 | 28.38 |
| 1955 | 247,836 | 53.5 | 6.76 | 16,744 | 6.81 | 16,872 | 28.57 |
| 1954 | 237,566 | 54.5 | 5.54 | 13,154 | 5.58 | 13,255 | 28.77 |
| 1953 | 254,683 | 55.5 | 4.39 | 11,190 | 4.43 | 11,275 | 28.98 |
| 1952 | 291,012 | 56.5 | 3.32 | 9,662 | 3.35 | 9,735 | 29.20 |
| 1951 | 393,824 | 57.5 | 2.30 | 9,065 | 2.32 | 9,134 | 29.42 |
| 1950 | 509,472 | 58.5 | 1.34 | 6,817 | 1.35 | 6,869 | 29.64 |
| 1949 | 591,741 | 59.5 | 0.00 | | -0.00 | (1) | 29.75 |
| 1948 | 780,371 | 60.5 | 0.00 | | 0.00 | | 0.00 |
| 1947 | 845,275 | 61.5 | 0.00 | | 0.00 | | 0.00 |
| 1946 | 541,149 | 62.5 | 0.00 | | 0.00 | | 0.00 |
| 1945 | 107,824 | 63.5 | 0.00 | | 0.00 | | 0.00 |
| 944 | 34,927 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| 1943 | 14,300 | 65.5 | 0.00 | | 0.00 | | 0.00 |
| 1942 | 71,460 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 90,549 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1940 | 125,801 | 68.5 | 0.00 | | 0.00 | | 0.00 |
| 1939 | 132,698 | 69.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 124,001 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| 1937 | 120,859 | 71.5 | 0.00 | | 0.00 | | 0.00 |
| 1936 | 771,885 | 72.5 | 0.00 | | 0.00 | | 0.00 |
| | 173,544,807 | | | 128,188,820 | | 129,155,638 * | |

* Recorded Balance January 1, 2009: 129,155,638



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Computed Age Distribution Report

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Account: KEPCo 101/6 366 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 50 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 332,819 | 0.5 | 99.62 | 331,558 | 100.00 | 332,820 | 0.50 |
| 2007 | 312,381 | 1.5 | 98.86 | 308,810 | 100.00 | 312,382 | 1.50 |
| 2006 | 509,176 | 2.5 | 98.09 | 499,435 | 100.00 | 509,177 | 2.50 |
| 2005 | 199,943 | 3.5 | 97.31 | 194,561 | 100.00 | 199,944 | 3.50 |
| 2004 | 173,356 | 4.5 | 96.52 | 167,328 | 100.00 | 173,357 | 4.50 |
| 2003 | 118,994 | 5.5 | 95.73 | 113,914 | 100.00 | 118,995 | 5.50 |
| 2002 | 134,439 | 6.5 | 94.93 | 127,624 | 100.00 | 134,440 | 6.50 |
| 2001 | 123,659 | 7.5 | 94.12 | 116,393 | 100.00 | 123,660 | 7.50 |
| 2000 | 182,080 | 8.5 | 93.31 | 169,897 | 100.00 | 182,081 | 8.50 |
| 1999 | 137,692 | 9.5 | 92.49 | 127,349 | 100.00 | 137,693 | 9.50 |
| 1998 | 60,158 | 10.5 | 91.66 | 55,141 | 100.00 | 60,159 | 10.50 |
| 1997 | 291,323 | 11.5 | 90.82 | 264,591 | 100.00 | 291,324 | 11.50 |
| 1996 | 131,833 | 12.5 | 89.98 | 118,626 | 100.00 | 131,834 | 12.50 |
| 1995 | 133,289 | 13.5 | 89.13 | 118,804 | 100.00 | 133,290 | 13.50 |
| 1994 | 118,922 | 14.5 | 88.28 | 104,981 | 100.00 | 118,923 | 14.50 |
| 1993 | 270,669 | 15.5 | 87.41 | 236,603 | 100.00 | 270,670 | 15.50 |
| 1992 | 131,413 | 16.5 | 86.54 | 113,730 | 100.00 | 131,414 | 16.50 |
| 1991 | 51,993 | 17.5 | 85.67 | 44,541 | 99.39 | 51,675 | 17.45 |
| 1990 | 207,078 | 18.5 | 84.78 | 175,567 | 98.36 | 203,685 | 18.35 |
| 1989 | 49,004 | 19.5 | 83.89 | 41,110 | 97.33 | 47,694 | 19.24 |
| 1988 | 25,065 | 20.5 | 82.99 | 20,802 | 96.29 | 24,134 | 20.12 |
| 1987 | 9,664 | 21.5 | 82.08 | 7,933 | 95.23 | 9,203 | 20.99 |
| 1986 | 35,696 | 22.5 | 81.17 | 28,973 | 94.17 | 33,613 | 21.84 |
| 1985 | 75,471 | 23.5 | 80.24 | 60,558 | 93.09 | 70,257 | 22.69 |
| 1984 | 4,604 | 24.5 | 79.30 | 3,651 | 92.01 | 4,236 | 23.52 |
| 1983 | 39,828 | 25.5 | 78.36 | 31,209 | 90.91 | 36,207 | 24.34 |
| 1982 | 48,652 | 26.5 | 77.40 | 37,658 | 89.80 | 43,689 | 25.15 |
| 1981 | 79,179 | 27.5 | 76.44 | 60,520 | 88.68 | 70,213 | 25.94 |
| 1980 | 46,085 | 28.5 | 75.46 | 34,774 | 87.54 | 40,344 | 26.72 |
| 1979 | 8,197 | 29.5 | 74.47 | 6,104 | 86.40 | 7,082 | 27.49 |
| 1978 | 28,154 | 30.5 | 73.47 | 20,684 | 85.23 | 23,997 | 28.25 |
| 1977 | 37,280 | 31.5 | 72.45 | 27,010 | 84.06 | 31,336 | 28.99 |
| 1976 | 51,203 | 32.5 | 71.43 | 36,573 | 82.87 | 42,430 | 29.72 |
| 1975 | 31,345 | 33.5 | 70.39 | 22,063 | 81.66 | 25,597 | 30.43 |
| 1974 | 53,663 | 34.5 | 69.34 | 37,209 | 80.44 | 43,167 | 31.13 |
| 1973 | 60,340 | 35.5 | 68.27 | 41,197 | 79.21 | 47,793 | 31.81 |
| 1972 | 27,833 | 36.5 | 67.20 | 18,703 | 77.96 | 21,698 | 32.48 |
| 1971 | 37,062 | 37.5 | 66.11 | 24,501 | 76.69 | 28,424 | 33.13 |
| 1970 | 30,547 | 38.5 | 65.01 | 19,857 | 75.41 | 23,036 | 33.77 |
| 1969 | 3,136 | 39.5 | 63.89 | 2,004 | 74.13 | 2,325 | 34.39 |
| 1968 | 820 | 40.5 | 62.76 | 515 | 72.86 | 597 | 35.00 |
| 1967 | 6,556 | 41.5 | 61.62 | 4,040 | 71.48 | 4,686 | 35.58 |
| 1966 | 4,153 | 42.5 | 60.47 | 2,511 | 70.14 | 2,913 | 36.15 |
| 1947 | 55 | 61.5 | 36.83 | 20 | 43.58 | 24 | 44.15 |
| 1942 | 144 | 66.5 | 30.48 | 44 | 35.63 | 51 | 45.10 |



10/22/2009

Computed Age Distribution Report



Account: KEPCo 101/6 366 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 50 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1940 | 77 | 68.5 | 27.99 | 22 | 33.02 | 25 | 45.56 |
| 1939 | 315 | 69.5 | 26.76 | 84 | 31.08 | 98 | 45.55 |
| 1936 | 1,383 | 72.5 | 23.16 | 320 | 26.76 | 370 | 45.96 |
| | 4,416,728 | | | 3,980,102 | | 4,302,755 * | |

* Recorded Balance January 1, 2009: 4,302,755



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Computed Age Distribution Report

Account: KEPCo 101/6 367 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 50 - S-.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 578,818 | 0.5 | 99.74 | 577,307 | 99.54 | 576,157 | 0.50 |
| 2007 | 973,386 | 1.5 | 99.18 | 965,385 | 98.98 | 963,461 | 1.49 |
| 2006 | 784,947 | 2.5 | 98.58 | 773,762 | 98.38 | 772,220 | 2.48 |
| 2005 | 104,018 | 3.5 | 97.94 | 101,871 | 97.74 | 101,669 | 3.46 |
| 2004 | 811,825 | 4.5 | 97.27 | 789,622 | 97.07 | 788,048 | 4.43 |
| 2003 | 245,976 | 5.5 | 96.57 | 237,527 | 96.37 | 237,054 | 5.40 |
| 2002 | 150,681 | 6.5 | 95.84 | 144,408 | 95.65 | 144,121 | 6.36 |
| 2001 | 293,525 | 7.5 | 95.08 | 279,092 | 94.89 | 278,537 | 7.31 |
| 2000 | 259,570 | 8.5 | 94.30 | 244,785 | 94.12 | 244,297 | 8.25 |
| 1999 | 377,491 | 9.5 | 93.50 | 352,965 | 93.32 | 352,262 | 9.18 |
| 1998 | 147,054 | 10.5 | 92.68 | 136,290 | 92.50 | 136,018 | 10.11 |
| 1997 | 339,985 | 11.5 | 91.84 | 312,225 | 91.65 | 311,603 | 11.02 |
| 1996 | 190,902 | 12.5 | 90.97 | 173,664 | 90.79 | 173,318 | 11.92 |
| 1995 | 209,851 | 13.5 | 90.09 | 189,046 | 89.91 | 188,670 | 12.82 |
| 1994 | 177,719 | 14.5 | 89.18 | 158,497 | 89.01 | 158,181 | 13.70 |
| 1993 | 285,294 | 15.5 | 88.26 | 251,812 | 88.09 | 251,310 | 14.58 |
| 1992 | 155,416 | 16.5 | 87.33 | 135,720 | 87.15 | 135,450 | 15.44 |
| 1991 | 141,320 | 17.5 | 86.37 | 122,064 | 86.20 | 121,821 | 16.29 |
| 1990 | 367,094 | 18.5 | 85.41 | 313,520 | 85.24 | 312,895 | 17.13 |
| '89 | 117,298 | 19.5 | 84.42 | 99,025 | 84.25 | 98,828 | 17.96 |
| 1988 | 78,161 | 20.5 | 83.43 | 65,206 | 83.26 | 65,076 | 18.78 |
| 1987 | 108,890 | 21.5 | 82.41 | 89,740 | 82.25 | 89,561 | 19.59 |
| 1986 | 79,589 | 22.5 | 81.39 | 64,777 | 81.23 | 64,648 | 20.39 |
| 1985 | 119,906 | 23.5 | 80.35 | 96,347 | 80.19 | 96,155 | 21.17 |
| 1984 | 21,545 | 24.5 | 79.30 | 17,086 | 79.15 | 17,052 | 21.95 |
| 1983 | 100,965 | 25.5 | 78.24 | 78,997 | 78.09 | 78,840 | 22.71 |
| 1982 | 263,053 | 26.5 | 77.17 | 203,001 | 77.02 | 202,595 | 23.45 |
| 1981 | 112,466 | 27.5 | 76.09 | 85,574 | 75.94 | 85,404 | 24.19 |
| 1980 | 86,392 | 28.5 | 75.00 | 64,791 | 74.85 | 64,662 | 24.92 |
| 1979 | 45,415 | 29.5 | 73.90 | 33,560 | 73.75 | 33,493 | 25.63 |
| 1978 | 83,270 | 30.5 | 72.79 | 60,609 | 72.64 | 60,488 | 26.33 |
| 1977 | 52,882 | 31.5 | 71.67 | 37,899 | 71.52 | 37,824 | 27.02 |
| 1976 | 67,240 | 32.5 | 70.54 | 47,432 | 70.40 | 47,337 | 27.69 |
| 1975 | 23,860 | 33.5 | 69.41 | 16,560 | 69.27 | 16,528 | 28.35 |
| 1974 | 76,050 | 34.5 | 68.27 | 51,916 | 68.13 | 51,812 | 29.00 |
| 1973 | 137,903 | 35.5 | 67.12 | 92,558 | 66.98 | 92,372 | 29.64 |
| 1972 | 109,531 | 36.5 | 65.96 | 72,251 | 65.83 | 72,106 | 30.26 |
| 1971 | 86,370 | 37.5 | 64.80 | 55,971 | 64.67 | 55,859 | 30.88 |
| 1970 | 76,458 | 38.5 | 63.64 | 48,657 | 63.51 | 48,559 | 31.48 |
| 1969 | 11,767 | 39.5 | 62.47 | 7,351 | 62.35 | 7,336 | 32.06 |
| '968 | 4,973 | 40.5 | 61.30 | 3,048 | 61.18 | 3,042 | 32.64 |
| 1967 | 15,264 | 41.5 | 60.12 | 9,176 | 59.99 | 9,157 | 33.20 |
| 1966 | 4,745 | 42.5 | 58.94 | 2,796 | 58.82 | 2,791 | 33.75 |
| 1965 | 2,102 | 43.5 | 57.75 | 1,214 | 57.64 | 1,212 | 34.29 |
| 1963 | 1,638 | 45.5 | 55.37 | 907 | 55.26 | 905 | 35.32 |



10/22/2009

Computed Age Distribution Report



Account: KEPCo 101/6 367 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 50 - S-.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1957 | 474 | 51.5 | 48.21 | 229 | 48.17 | 228 | 38.15 |
| 1947 | 543 | 61.5 | 36.36 | 197 | 36.33 | 197 | 41.92 |
| 1942 | 306 | 66.5 | 30.59 | 94 | 30.64 | 94 | 43.44 |
| 1940 | 198 | 68.5 | 28.33 | 56 | 28.46 | 56 | 44.00 |
| 1939 | 1,515 | 69.5 | 27.21 | 412 | 27.11 | 411 | 44.17 |
| 1936 | 1,683 | 72.5 | 23.91 | 402 | 23.79 | 400 | 44.87 |
| | 8,487,324 | | | 7,667,400 | | 7,652,122 * | |

* Recorded Balance January 1, 2009: 7,652,122

Computed Age Distribution Report

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Account: KEPCo 101/6 368 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 30 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 7,450,618 | 0.5 | 99.37 | 7,403,456 | 100.00 | 7,450,619 | 0.50 |
| 2007 | 7,254,032 | 1.5 | 98.09 | 7,115,262 | 100.00 | 7,254,033 | 1.50 |
| 2006 | 4,661,413 | 2.5 | 96.79 | 4,511,580 | 98.91 | 4,610,531 | 2.49 |
| 2005 | 2,488,476 | 3.5 | 95.47 | 2,375,624 | 97.56 | 2,427,728 | 3.46 |
| 2004 | 2,607,713 | 4.5 | 94.12 | 2,454,484 | 96.19 | 2,508,317 | 4.41 |
| 2003 | 1,347,430 | 5.5 | 92.76 | 1,249,912 | 94.80 | 1,277,326 | 5.36 |
| 2002 | 3,758,604 | 6.5 | 91.38 | 3,434,688 | 93.39 | 3,510,020 | 6.29 |
| 2001 | 2,396,046 | 7.5 | 89.98 | 2,156,010 | 91.96 | 2,203,297 | 7.20 |
| 2000 | 3,420,485 | 8.5 | 88.56 | 3,029,284 | 90.51 | 3,095,725 | 8.10 |
| 1999 | 4,458,378 | 9.5 | 87.12 | 3,884,347 | 89.04 | 3,969,541 | 8.98 |
| 1998 | 3,482,894 | 10.5 | 85.67 | 2,983,691 | 87.55 | 3,049,131 | 9.85 |
| 1997 | 4,777,388 | 11.5 | 84.19 | 4,022,035 | 86.04 | 4,110,249 | 10.70 |
| 1996 | 3,287,901 | 12.5 | 82.69 | 2,718,765 | 84.50 | 2,778,395 | 11.53 |
| 1995 | 4,198,526 | 13.5 | 81.17 | 3,407,776 | 82.95 | 3,482,517 | 12.35 |
| 1994 | 5,479,512 | 14.5 | 79.62 | 4,362,605 | 81.36 | 4,458,288 | 13.15 |
| 1993 | 4,268,448 | 15.5 | 78.04 | 3,331,140 | 79.75 | 3,404,200 | 13.93 |
| 1992 | 3,210,065 | 16.5 | 76.44 | 2,453,613 | 78.11 | 2,507,428 | 14.69 |
| 1991 | 3,837,537 | 17.5 | 74.80 | 2,870,427 | 76.44 | 2,933,383 | 15.44 |
| 1990 | 3,902,514 | 18.5 | 73.13 | 2,853,895 | 74.73 | 2,916,489 | 16.16 |
| 1989 | 3,776,952 | 19.5 | 71.43 | 2,697,764 | 72.99 | 2,756,933 | 16.87 |
| 1988 | 2,317,695 | 20.5 | 69.69 | 1,615,186 | 71.22 | 1,650,612 | 17.55 |
| 1987 | 3,159,121 | 21.5 | 67.92 | 2,145,570 | 69.41 | 2,192,628 | 18.21 |
| 1986 | 3,654,901 | 22.5 | 66.11 | 2,416,182 | 67.56 | 2,469,175 | 18.85 |
| 1985 | 2,911,382 | 23.5 | 64.26 | 1,870,922 | 65.67 | 1,911,956 | 19.47 |
| 1984 | 3,261,356 | 24.5 | 62.38 | 2,034,488 | 63.75 | 2,079,110 | 20.06 |
| 1983 | 2,530,699 | 25.5 | 60.47 | 1,530,187 | 61.79 | 1,563,748 | 20.63 |
| 1982 | 2,206,738 | 26.5 | 58.52 | 1,291,273 | 59.80 | 1,319,594 | 21.17 |
| 1981 | 2,989,360 | 27.5 | 56.53 | 1,689,965 | 57.77 | 1,727,030 | 21.69 |
| 1980 | 3,636,711 | 28.5 | 54.52 | 1,982,736 | 55.72 | 2,026,221 | 22.19 |
| 1979 | 2,852,002 | 29.5 | 52.48 | 1,496,664 | 53.63 | 1,529,490 | 22.66 |
| 1978 | 3,851,592 | 30.5 | 50.41 | 1,941,613 | 51.52 | 1,984,197 | 23.11 |
| 1977 | 3,541,256 | 31.5 | 48.32 | 1,711,206 | 49.38 | 1,748,736 | 23.53 |
| 1976 | 1,711,891 | 32.5 | 46.21 | 791,139 | 47.23 | 808,491 | 23.92 |
| 1975 | 1,610,300 | 33.5 | 44.09 | 710,008 | 45.06 | 725,580 | 24.30 |
| 1974 | 1,473,612 | 34.5 | 41.96 | 618,313 | 42.88 | 631,874 | 24.65 |
| 1973 | 1,402,782 | 35.5 | 39.82 | 558,588 | 40.69 | 570,839 | 24.97 |
| 1972 | 1,089,601 | 36.5 | 37.68 | 410,573 | 38.51 | 419,577 | 25.28 |
| 1971 | 1,128,076 | 37.5 | 35.55 | 400,997 | 36.33 | 409,792 | 25.56 |
| 1970 | 954,361 | 38.5 | 33.42 | 318,970 | 34.16 | 325,966 | 25.82 |
| 1969 | 633,909 | 39.5 | 31.31 | 198,506 | 32.00 | 202,860 | 26.07 |
| 1968 | 994,850 | 40.5 | 29.23 | 290,775 | 29.87 | 297,152 | 26.30 |
| 1967 | 823,498 | 41.5 | 27.17 | 223,753 | 27.77 | 228,660 | 26.51 |
| 1966 | 699,015 | 42.5 | 25.15 | 175,779 | 25.70 | 179,634 | 26.71 |
| 1965 | 474,052 | 43.5 | 23.16 | 109,805 | 23.67 | 112,213 | 26.90 |
| 1964 | 376,312 | 44.5 | 21.23 | 79,881 | 21.69 | 81,633 | 27.08 |



10/22/2009

Computed Age Distribution Report



Account: KEPCo 101/6 368 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 30 - R0.5

| ..ntage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 318,004 | 45.5 | 19.34 | 61,512 | 19.77 | 62,861 | 27.25 |
| 1962 | 290,851 | 46.5 | 17.52 | 50,948 | 17.90 | 52,066 | 27.41 |
| 1961 | 386,601 | 47.5 | 15.76 | 60,912 | 16.10 | 62,248 | 27.57 |
| 1960 | 377,379 | 48.5 | 14.06 | 53,071 | 14.37 | 54,236 | 27.74 |
| 1959 | 463,712 | 49.5 | 12.44 | 57,695 | 12.71 | 58,960 | 27.90 |
| 1958 | 493,518 | 50.5 | 10.90 | 53,793 | 11.14 | 54,973 | 28.06 |
| 1957 | 284,379 | 51.5 | 9.44 | 26,837 | 9.64 | 27,426 | 28.23 |
| 1956 | 694,523 | 52.5 | 8.05 | 55,942 | 8.23 | 57,169 | 28.41 |
| 1955 | 438,445 | 53.5 | 6.76 | 29,622 | 6.90 | 30,271 | 28.60 |
| 1954 | 265,710 | 54.5 | 5.54 | 14,713 | 5.66 | 15,035 | 28.79 |
| 1953 | 295,026 | 55.5 | 4.39 | 12,963 | 4.49 | 13,247 | 29.00 |
| 1952 | 222,457 | 56.5 | 3.32 | 7,386 | 3.39 | 7,548 | 29.21 |
| 1951 | 500,026 | 57.5 | 2.30 | 11,510 | 2.35 | 11,762 | 29.43 |
| 1950 | 463,556 | 58.5 | 1.34 | 6,203 | 1.37 | 6,338 | 29.65 |
| 1949 | 433,985 | 59.5 | 0.00 | | -0.00 | (1) | 29.75 |
| 1948 | 489,204 | 60.5 | 0.00 | | 0.00 | | 0.00 |
| 1947 | 491,803 | 61.5 | 0.00 | | 0.00 | | 0.00 |
| 1946 | 332,267 | 62.5 | 0.00 | | 0.00 | | 0.00 |
| 1945 | 161,745 | 63.5 | 0.00 | | 0.00 | | 0.00 |
| 944 | 30,578 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| 1943 | 6,171 | 65.5 | 0.00 | | 0.00 | | 0.00 |
| 1942 | 25,547 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 126,413 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1940 | 83,745 | 68.5 | 0.00 | | 0.00 | | 0.00 |
| 1939 | 107,763 | 69.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 101,940 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| 1937 | 94,566 | 71.5 | 0.00 | | 0.00 | | 0.00 |
| 1936 | 370,113 | 72.5 | 0.00 | | 0.00 | | 0.00 |
| | 138,700,031 | | | 96,432,538 | | 98,415,054 * | |

* Recorded Balance January 1, 2009: 98,415,054

Computed Age Distribution Report



Account: KEPCo 101/6 369 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 25 - L0

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 2,815,091 | 0.5 | 99.68 | 2,806,195 | 100.00 | 2,815,092 | 0.50 |
| 2007 | 2,552,906 | 1.5 | 98.58 | 2,516,553 | 100.00 | 2,552,907 | 1.50 |
| 2006 | 2,696,436 | 2.5 | 97.11 | 2,618,374 | 100.00 | 2,696,437 | 2.50 |
| 2005 | 2,370,702 | 3.5 | 95.38 | 2,261,270 | 99.94 | 2,369,259 | 3.50 |
| 2004 | 2,034,573 | 4.5 | 93.47 | 1,901,756 | 97.94 | 1,992,576 | 4.45 |
| 2003 | 2,678,347 | 5.5 | 91.41 | 2,448,277 | 95.78 | 2,565,196 | 5.38 |
| 2002 | 1,907,359 | 6.5 | 89.23 | 1,701,898 | 93.49 | 1,783,174 | 6.29 |
| 2001 | 1,931,126 | 7.5 | 86.95 | 1,679,075 | 91.10 | 1,759,261 | 7.17 |
| 2000 | 2,680,192 | 8.5 | 84.59 | 2,267,255 | 88.63 | 2,375,529 | 8.02 |
| 1999 | 2,508,736 | 9.5 | 82.18 | 2,061,629 | 86.10 | 2,160,083 | 8.84 |
| 1998 | 795,815 | 10.5 | 79.72 | 634,440 | 83.53 | 664,738 | 9.64 |
| 1997 | 2,636,990 | 11.5 | 77.24 | 2,036,758 | 80.93 | 2,134,025 | 10.40 |
| 1996 | 816,459 | 12.5 | 74.74 | 610,246 | 78.31 | 639,389 | 11.14 |
| 1995 | 1,107,925 | 13.5 | 72.25 | 800,443 | 75.70 | 838,668 | 11.86 |
| 1994 | 1,352,925 | 14.5 | 69.76 | 943,733 | 73.09 | 988,801 | 12.55 |
| 1993 | 1,658,958 | 15.5 | 67.27 | 1,116,014 | 70.48 | 1,169,310 | 13.21 |
| 1992 | 1,167,486 | 16.5 | 64.80 | 756,542 | 67.90 | 792,671 | 13.85 |
| 1991 | 1,236,345 | 17.5 | 62.35 | 770,824 | 65.32 | 807,635 | 14.47 |
| 1990 | 945,888 | 18.5 | 59.91 | 566,700 | 62.77 | 593,764 | 15.06 |
| 1989 | 1,182,480 | 19.5 | 57.50 | 679,936 | 60.25 | 712,409 | 15.62 |
| 1988 | 888,422 | 20.5 | 55.12 | 489,680 | 57.75 | 513,065 | 16.17 |
| 1987 | 931,227 | 21.5 | 52.77 | 491,362 | 55.28 | 514,827 | 16.69 |
| 1986 | 733,462 | 22.5 | 50.45 | 370,002 | 52.86 | 387,672 | 17.20 |
| 1985 | 712,353 | 23.5 | 48.17 | 343,105 | 50.47 | 359,490 | 17.68 |
| 1984 | 807,358 | 24.5 | 45.92 | 370,771 | 48.12 | 388,477 | 18.14 |
| 1983 | 969,567 | 25.5 | 43.73 | 423,953 | 45.81 | 444,199 | 18.59 |
| 1982 | 716,135 | 26.5 | 41.57 | 297,726 | 43.56 | 311,944 | 19.02 |
| 1981 | 868,594 | 27.5 | 39.47 | 342,843 | 41.36 | 359,215 | 19.44 |
| 1980 | 864,476 | 28.5 | 37.42 | 323,478 | 39.21 | 338,926 | 19.84 |
| 1979 | 711,506 | 29.5 | 35.42 | 252,015 | 37.11 | 264,050 | 20.22 |
| 1978 | 830,075 | 30.5 | 33.48 | 277,876 | 35.07 | 291,146 | 20.60 |
| 1977 | 723,397 | 31.5 | 31.59 | 228,514 | 33.10 | 239,427 | 20.96 |
| 1976 | 596,974 | 32.5 | 29.76 | 177,665 | 31.18 | 186,150 | 21.32 |
| 1975 | 524,332 | 33.5 | 27.99 | 146,771 | 29.33 | 153,780 | 21.66 |
| 1974 | 483,476 | 34.5 | 26.28 | 127,077 | 27.54 | 133,145 | 22.00 |
| 1973 | 654,650 | 35.5 | 24.64 | 161,299 | 25.82 | 169,002 | 22.33 |
| 1972 | 683,325 | 36.5 | 23.06 | 157,541 | 24.16 | 165,064 | 22.66 |
| 1971 | 509,551 | 37.5 | 21.54 | 109,732 | 22.56 | 114,972 | 22.98 |
| 1970 | 423,419 | 38.5 | 20.08 | 85,014 | 21.04 | 89,074 | 23.30 |
| 1969 | 373,867 | 39.5 | 18.68 | 69,853 | 19.58 | 73,189 | 23.62 |
| 1968 | 328,382 | 40.5 | 17.35 | 56,987 | 18.18 | 59,709 | 23.93 |
| 1967 | 299,067 | 41.5 | 16.09 | 48,108 | 16.85 | 50,405 | 24.25 |
| 1966 | 231,692 | 42.5 | 14.88 | 34,478 | 15.59 | 36,124 | 24.56 |
| 1965 | 186,261 | 43.5 | 13.74 | 25,589 | 14.39 | 26,810 | 24.88 |
| 1964 | 161,204 | 44.5 | 12.66 | 20,400 | 13.26 | 21,375 | 25.20 |

Computed Age Distribution Report

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Account: KEPCo 101/6 369 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 25 - L0

| ..itage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 125,832 | 45.5 | 11.63 | 14,638 | 12.19 | 15,337 | 25.52 |
| 1962 | 128,946 | 46.5 | 10.67 | 13,757 | 11.18 | 14,414 | 25.85 |
| 1961 | 166,728 | 47.5 | 9.76 | 16,276 | 10.23 | 17,053 | 26.18 |
| 1960 | 142,251 | 48.5 | 8.91 | 12,676 | 9.34 | 13,281 | 26.51 |
| 1959 | 148,227 | 49.5 | 0.00 | | -0.00 | (1) | 24.75 |
| 1958 | 169,015 | 50.5 | 0.00 | | 0.00 | | 0.00 |
| 1957 | 144,373 | 51.5 | 0.00 | | 0.00 | | 0.00 |
| 1956 | 136,713 | 52.5 | 0.00 | | 0.00 | | 0.00 |
| 1955 | 113,139 | 53.5 | 0.00 | | 0.00 | | 0.00 |
| 1954 | 115,530 | 54.5 | 0.00 | | 0.00 | | 0.00 |
| 1953 | 124,065 | 55.5 | 0.00 | | 0.00 | | 0.00 |
| 1952 | 128,566 | 56.5 | 0.00 | | 0.00 | | 0.00 |
| 1951 | 139,833 | 57.5 | 0.00 | | 0.00 | | 0.00 |
| 1950 | 161,544 | 58.5 | 0.00 | | 0.00 | | 0.00 |
| 1949 | 219,751 | 59.5 | 0.00 | | 0.00 | | 0.00 |
| 1948 | 243,279 | 60.5 | 0.00 | | 0.00 | | 0.00 |
| 1947 | 218,255 | 61.5 | 0.00 | | 0.00 | | 0.00 |
| 1946 | 112,216 | 62.5 | 0.00 | | 0.00 | | 0.00 |
| 1945 | 39,254 | 63.5 | 0.00 | | 0.00 | | 0.00 |
| 944 | 14,444 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| 1943 | 11,021 | 65.5 | 0.00 | | 0.00 | | 0.00 |
| 1942 | 29,900 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 25,986 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1940 | 54,016 | 68.5 | 0.00 | | 0.00 | | 0.00 |
| 1939 | 45,804 | 69.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 46,593 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| 1937 | 37,203 | 71.5 | 0.00 | | 0.00 | | 0.00 |
| 1936 | 143,212 | 72.5 | 0.00 | | 0.00 | | 0.00 |
| | 55,475,216 | | | 36,667,109 | | 38,162,243 * | |

* Recorded Balance January 1, 2009: 38,162,243

Computed Age Distribution Report



Account: KEPCo 101/6 370 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 17 - S6

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 2,963,121 | 0.5 | 100.00 | 2,963,121 | 63.03 | 1,867,578 | 0.41 |
| 2007 | 2,353,738 | 1.5 | 100.00 | 2,353,738 | 63.03 | 1,483,500 | 1.22 |
| 2006 | 14,223,681 | 2.5 | 100.00 | 14,223,681 | 63.03 | 8,964,813 | 2.04 |
| 2005 | 4,183,747 | 3.5 | 100.00 | 4,183,747 | 63.03 | 2,636,906 | 2.85 |
| 2004 | 1,006,674 | 4.5 | 100.00 | 1,006,674 | 63.03 | 634,481 | 3.67 |
| 2003 | 617,066 | 5.5 | 100.00 | 617,066 | 63.03 | 388,921 | 4.48 |
| 2002 | 489,075 | 6.5 | 100.00 | 489,075 | 63.03 | 308,252 | 5.30 |
| 2001 | 648,901 | 7.5 | 100.00 | 648,901 | 63.03 | 408,986 | 6.11 |
| 2000 | 1,514,864 | 8.5 | 100.00 | 1,514,864 | 63.03 | 954,779 | 6.93 |
| 1999 | 980,778 | 9.5 | 100.00 | 980,778 | 63.03 | 618,159 | 7.74 |
| 1998 | 1,324,431 | 10.5 | 100.00 | 1,324,431 | 63.03 | 834,754 | 8.56 |
| 1997 | 1,105,728 | 11.5 | 100.00 | 1,105,728 | 63.03 | 696,911 | 9.37 |
| 1996 | 669,427 | 12.5 | 99.98 | 669,325 | 63.02 | 421,858 | 10.19 |
| 1995 | 850,393 | 13.5 | 99.71 | 847,953 | 62.85 | 534,443 | 10.99 |
| 1994 | 1,413,819 | 14.5 | 97.46 | 1,377,840 | 61.42 | 868,416 | 11.70 |
| 1993 | 1,029,446 | 15.5 | 87.77 | 903,577 | 55.32 | 569,500 | 12.04 |
| 1992 | 999,844 | 16.5 | 65.06 | 650,464 | 41.00 | 409,970 | 11.63 |
| 1991 | 1,093,280 | 17.5 | 34.94 | 382,030 | 22.02 | 240,783 | 10.68 |
| 1990 | 1,278,153 | 18.5 | 12.23 | 156,278 | 7.71 | 98,498 | 9.96 |
| 1989 | 1,133,142 | 19.5 | 2.54 | 28,836 | 1.60 | 18,174 | 9.91 |
| 1988 | 1,262,548 | 20.5 | 0.29 | 3,617 | 0.18 | 2,279 | 10.27 |
| 1987 | 1,107,129 | 21.5 | 0.02 | 171 | 0.01 | 108 | 10.75 |
| 1986 | 1,253,695 | 22.5 | 0.00 | | -0.00 | (1) | 11.25 |
| 1985 | 1,086,299 | 23.5 | 0.00 | | 0.00 | | 0.00 |
| 1984 | 1,266,454 | 24.5 | 0.00 | | 0.00 | | 0.00 |
| 1983 | 1,584,355 | 25.5 | 0.00 | | 0.00 | | 0.00 |
| 1982 | 1,226,850 | 26.5 | 0.00 | | 0.00 | | 0.00 |
| 1981 | 1,149,365 | 27.5 | 0.00 | | 0.00 | | 0.00 |
| 1980 | 890,564 | 28.5 | 0.00 | | 0.00 | | 0.00 |
| 1979 | 814,814 | 29.5 | 0.00 | | 0.00 | | 0.00 |
| 1978 | 926,839 | 30.5 | 0.00 | | 0.00 | | 0.00 |
| 1977 | 940,534 | 31.5 | 0.00 | | 0.00 | | 0.00 |
| 1976 | 667,327 | 32.5 | 0.00 | | 0.00 | | 0.00 |
| 1975 | 497,286 | 33.5 | 0.00 | | 0.00 | | 0.00 |
| 1974 | 480,510 | 34.5 | 0.00 | | 0.00 | | 0.00 |
| 1973 | 423,051 | 35.5 | 0.00 | | 0.00 | | 0.00 |
| 1972 | 371,979 | 36.5 | 0.00 | | 0.00 | | 0.00 |
| 1971 | 279,535 | 37.5 | 0.00 | | 0.00 | | 0.00 |
| 1970 | 255,663 | 38.5 | 0.00 | | 0.00 | | 0.00 |
| 1969 | 205,326 | 39.5 | 0.00 | | 0.00 | | 0.00 |
| 1968 | 181,449 | 40.5 | 0.00 | | 0.00 | | 0.00 |
| 1967 | 181,316 | 41.5 | 0.00 | | 0.00 | | 0.00 |
| 1966 | 145,871 | 42.5 | 0.00 | | 0.00 | | 0.00 |
| 1965 | 209,404 | 43.5 | 0.00 | | 0.00 | | 0.00 |
| 1964 | 184,491 | 44.5 | 0.00 | | 0.00 | | 0.00 |

Computed Age Distribution Report



Account: KEPCo 101/6 370 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 17 - S6

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 169,199 | 45.5 | 0.00 | | 0.00 | | 0.00 |
| 1962 | 139,771 | 46.5 | 0.00 | | 0.00 | | 0.00 |
| 1961 | 122,140 | 47.5 | 0.00 | | 0.00 | | 0.00 |
| 1960 | 128,169 | 48.5 | 0.00 | | 0.00 | | 0.00 |
| 1959 | 156,474 | 49.5 | 0.00 | | 0.00 | | 0.00 |
| 1958 | 131,604 | 50.5 | 0.00 | | 0.00 | | 0.00 |
| 1957 | 153,490 | 51.5 | 0.00 | | 0.00 | | 0.00 |
| 1956 | 128,652 | 52.5 | 0.00 | | 0.00 | | 0.00 |
| 1955 | 118,059 | 53.5 | 0.00 | | 0.00 | | 0.00 |
| 1954 | 81,155 | 54.5 | 0.00 | | 0.00 | | 0.00 |
| 1953 | 119,866 | 55.5 | 0.00 | | 0.00 | | 0.00 |
| 1952 | 94,922 | 56.5 | 0.00 | | 0.00 | | 0.00 |
| 1951 | 155,600 | 57.5 | 0.00 | | 0.00 | | 0.00 |
| 1950 | 177,105 | 58.5 | 0.00 | | 0.00 | | 0.00 |
| 1949 | 195,423 | 59.5 | 0.00 | | 0.00 | | 0.00 |
| 1948 | 260,771 | 60.5 | 0.00 | | 0.00 | | 0.00 |
| 1947 | 271,471 | 61.5 | 0.00 | | 0.00 | | 0.00 |
| 1946 | 139,554 | 62.5 | 0.00 | | 0.00 | | 0.00 |
| 1945 | 60,653 | 63.5 | 0.00 | | 0.00 | | 0.00 |
| 944 | 25,218 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| 1943 | 10,056 | 65.5 | 0.00 | | 0.00 | | 0.00 |
| 1942 | 18,454 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 84,476 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1940 | 59,490 | 68.5 | 0.00 | | 0.00 | | 0.00 |
| 1939 | 48,100 | 69.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 52,663 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| 1937 | 50,591 | 71.5 | 0.00 | | 0.00 | | 0.00 |
| 1936 | 370,928 | 72.5 | 0.00 | | 0.00 | | 0.00 |
| | 60,996,016 | | | 36,431,895 | | 22,962,066 * | |

* Recorded Balance January 1, 2009: 22,962,066

Computed Age Distribution Report

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Account: KEPCo 101/6 371 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 14 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 1,469,673 | 0.5 | 98.64 | 1,449,650 | 99.83 | 1,467,152 | 0.50 |
| 2007 | 1,459,010 | 1.5 | 95.84 | 1,398,380 | 97.00 | 1,415,263 | 1.48 |
| 2006 | 1,577,577 | 2.5 | 92.96 | 1,466,491 | 94.08 | 1,484,196 | 2.43 |
| 2005 | 1,768,968 | 3.5 | 89.98 | 1,591,753 | 91.07 | 1,610,970 | 3.34 |
| 2004 | 1,563,148 | 4.5 | 86.92 | 1,358,653 | 87.97 | 1,375,056 | 4.23 |
| 2003 | 2,356,246 | 5.5 | 83.76 | 1,973,662 | 84.77 | 1,997,490 | 5.08 |
| 2002 | 1,536,211 | 6.5 | 80.51 | 1,236,729 | 81.48 | 1,251,660 | 5.90 |
| 2001 | 858,732 | 7.5 | 77.13 | 662,311 | 78.06 | 670,307 | 6.68 |
| 2000 | 1,331,176 | 8.5 | 73.61 | 979,884 | 74.50 | 991,715 | 7.42 |
| 1999 | 1,742,973 | 9.5 | 69.94 | 1,219,033 | 70.78 | 1,233,750 | 8.11 |
| 1998 | 600,987 | 10.5 | 66.11 | 397,300 | 66.91 | 402,097 | 8.76 |
| 1997 | 1,583,946 | 11.5 | 62.11 | 983,791 | 62.86 | 995,668 | 9.36 |
| 1996 | 496,928 | 12.5 | 57.95 | 287,978 | 58.65 | 291,455 | 9.92 |
| 1995 | 559,153 | 13.5 | 53.65 | 299,973 | 54.30 | 303,595 | 10.41 |
| 1994 | 1,062,578 | 14.5 | 49.22 | 522,998 | 49.81 | 529,312 | 10.86 |
| 1993 | 1,380,740 | 15.5 | 44.70 | 617,181 | 45.24 | 624,632 | 11.26 |
| 1992 | 843,872 | 16.5 | 40.13 | 338,610 | 40.61 | 342,698 | 11.60 |
| 1991 | 757,210 | 17.5 | 35.55 | 269,165 | 35.98 | 272,415 | 11.90 |
| 1990 | 574,638 | 18.5 | 31.02 | 178,226 | 31.39 | 180,377 | 12.15 |
| 1989 | 673,733 | 19.5 | 26.59 | 179,139 | 26.91 | 181,301 | 12.37 |
| 1988 | 464,215 | 20.5 | 22.33 | 103,648 | 22.60 | 104,899 | 12.57 |
| 1987 | 478,198 | 21.5 | 18.29 | 87,474 | 18.51 | 88,530 | 12.74 |
| 1986 | 500,633 | 22.5 | 14.54 | 72,788 | 14.71 | 73,667 | 12.91 |
| 1985 | 430,816 | 23.5 | 11.12 | 47,886 | 11.25 | 48,464 | 13.07 |
| 1984 | 455,174 | 24.5 | 8.05 | 36,663 | 8.15 | 37,106 | 13.25 |
| 1983 | 359,728 | 25.5 | 5.37 | 19,314 | 5.43 | 19,546 | 13.44 |
| 1982 | 259,270 | 26.5 | 3.02 | 7,839 | 3.06 | 7,934 | 13.66 |
| 1981 | 301,789 | 27.5 | 0.00 | | -0.00 | (1) | 13.75 |
| 1980 | 217,442 | 28.5 | 0.00 | | 0.00 | | 0.00 |
| 1979 | 195,902 | 29.5 | 0.00 | | 0.00 | | 0.00 |
| 1978 | 183,648 | 30.5 | 0.00 | | 0.00 | | 0.00 |
| 1977 | 122,908 | 31.5 | 0.00 | | 0.00 | | 0.00 |
| 1976 | 245,454 | 32.5 | 0.00 | | 0.00 | | 0.00 |
| 1975 | 182,106 | 33.5 | 0.00 | | 0.00 | | 0.00 |
| 1974 | 198,910 | 34.5 | 0.00 | | 0.00 | | 0.00 |
| 1973 | 226,725 | 35.5 | 0.00 | | 0.00 | | 0.00 |
| 1972 | 193,516 | 36.5 | 0.00 | | 0.00 | | 0.00 |
| 1971 | 118,336 | 37.5 | 0.00 | | 0.00 | | 0.00 |
| 1970 | 118,346 | 38.5 | 0.00 | | 0.00 | | 0.00 |
| 1969 | 134,430 | 39.5 | 0.00 | | 0.00 | | 0.00 |
| 1968 | 94,059 | 40.5 | 0.00 | | 0.00 | | 0.00 |
| 1967 | 112,403 | 41.5 | 0.00 | | 0.00 | | 0.00 |
| 1966 | 83,111 | 42.5 | 0.00 | | 0.00 | | 0.00 |
| 1965 | 113,528 | 43.5 | 0.00 | | 0.00 | | 0.00 |
| 1964 | 95,784 | 44.5 | 0.00 | | 0.00 | | 0.00 |



10/22/2009

Computed Age Distribution Report



Account: KEPCo 101/6 371 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 14 - R0.5

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 117,412 | 45.5 | 0.00 | | 0.00 | | 0.00 |
| 1962 | 155,649 | 46.5 | 0.00 | | 0.00 | | 0.00 |
| 1961 | 133,773 | 47.5 | 0.00 | | 0.00 | | 0.00 |
| 1960 | 52,064 | 48.5 | 0.00 | | 0.00 | | 0.00 |
| 1959 | 3,085 | 49.5 | 0.00 | | 0.00 | | 0.00 |
| 1957 | 62 | 51.5 | 0.00 | | 0.00 | | 0.00 |
| 1956 | 46 | 52.5 | 0.00 | | 0.00 | | 0.00 |
| 1953 | 45 | 55.5 | 0.00 | | 0.00 | | 0.00 |
| 1950 | 323 | 58.5 | 0.00 | | 0.00 | | 0.00 |
| | 30,546,389 | | | 17,786,518 | | 18,001,253 * | |

* Recorded Balance January 1, 2009: 18,001,253

Computed Age Distribution Report



Account: KEPCo 101/6 373 - KY
Version: KEPCO DISTRIBUTION 2008
Dispersion: 24 - L0

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 2008 | 141,474 | 0.5 | 99.66 | 141,000 | 100.00 | 141,475 | 0.50 |
| 2007 | 173,112 | 1.5 | 98.49 | 170,500 | 100.00 | 173,113 | 1.50 |
| 2006 | 151,500 | 2.5 | 96.93 | 146,855 | 100.00 | 151,501 | 2.50 |
| 2005 | 155,045 | 3.5 | 95.11 | 147,470 | 100.00 | 155,046 | 3.50 |
| 2004 | 139,549 | 4.5 | 93.09 | 129,913 | 100.00 | 139,550 | 4.50 |
| 2003 | 114,834 | 5.5 | 90.92 | 104,407 | 100.00 | 114,835 | 5.50 |
| 2002 | 90,680 | 6.5 | 88.62 | 80,359 | 100.00 | 90,681 | 6.50 |
| 2001 | 105,554 | 7.5 | 86.22 | 91,008 | 100.00 | 105,555 | 7.50 |
| 2000 | 77,936 | 8.5 | 83.74 | 65,266 | 98.65 | 76,888 | 8.44 |
| 1999 | 88,549 | 9.5 | 81.21 | 71,911 | 95.67 | 84,715 | 9.29 |
| 1998 | 41,175 | 10.5 | 78.64 | 32,379 | 92.64 | 38,146 | 10.11 |
| 1997 | 40,819 | 11.5 | 76.04 | 31,040 | 89.58 | 36,567 | 10.90 |
| 1996 | 50,186 | 12.5 | 73.44 | 36,858 | 86.52 | 43,421 | 11.66 |
| 1995 | 65,504 | 13.5 | 70.84 | 46,406 | 83.46 | 54,669 | 12.38 |
| 1994 | 98,733 | 14.5 | 68.25 | 67,389 | 80.41 | 79,388 | 13.08 |
| 1993 | 183,145 | 15.5 | 65.68 | 120,281 | 77.37 | 141,698 | 13.75 |
| 1992 | 13,549 | 16.5 | 63.11 | 8,551 | 74.35 | 10,074 | 14.38 |
| 1991 | 62,428 | 17.5 | 60.57 | 37,812 | 71.36 | 44,546 | 14.99 |
| 1990 | 213,752 | 18.5 | 58.05 | 124,087 | 68.39 | 146,182 | 15.58 |
| 1989 | 347,755 | 19.5 | 55.56 | 193,222 | 65.46 | 227,627 | 16.13 |
| 1988 | 206,152 | 20.5 | 53.11 | 109,480 | 62.56 | 128,973 | 16.66 |
| 1987 | 203,890 | 21.5 | 50.69 | 103,344 | 59.71 | 121,745 | 17.17 |
| 1986 | 209,086 | 22.5 | 48.31 | 101,002 | 56.91 | 118,986 | 17.65 |
| 1985 | 120,997 | 23.5 | 45.97 | 55,623 | 54.16 | 65,527 | 18.11 |
| 1984 | 50,621 | 24.5 | 43.68 | 22,112 | 51.46 | 26,049 | 18.55 |
| 1983 | 93,110 | 25.5 | 41.44 | 38,586 | 48.82 | 45,457 | 18.97 |
| 1982 | 184,014 | 26.5 | 39.26 | 72,235 | 46.24 | 85,097 | 19.38 |
| 1981 | 142,598 | 27.5 | 37.12 | 52,939 | 43.73 | 62,365 | 19.76 |
| 1980 | 80,303 | 28.5 | 35.05 | 28,148 | 41.29 | 33,160 | 20.13 |
| 1979 | 22,164 | 29.5 | 33.04 | 7,323 | 38.92 | 8,627 | 20.49 |
| 1978 | 56,734 | 30.5 | 31.09 | 17,638 | 36.62 | 20,779 | 20.84 |
| 1977 | 19,464 | 31.5 | 29.20 | 5,684 | 34.40 | 6,696 | 21.17 |
| 1976 | 16,853 | 32.5 | 27.38 | 4,614 | 32.26 | 5,436 | 21.49 |
| 1975 | 41,522 | 33.5 | 25.63 | 10,640 | 30.19 | 12,535 | 21.81 |
| 1974 | 37,035 | 34.5 | 23.94 | 8,866 | 28.20 | 10,444 | 22.11 |
| 1973 | 79,104 | 35.5 | 22.32 | 17,655 | 26.29 | 20,798 | 22.42 |
| 1972 | 17,862 | 36.5 | 20.77 | 3,710 | 24.47 | 4,370 | 22.72 |
| 1971 | 29,314 | 37.5 | 19.29 | 5,654 | 22.72 | 6,661 | 23.01 |
| 1970 | 82,272 | 38.5 | 17.87 | 14,705 | 21.06 | 17,323 | 23.30 |
| 1969 | 54,853 | 39.5 | 16.53 | 9,066 | 19.47 | 10,680 | 23.60 |
| 1968 | 62,051 | 40.5 | 15.25 | 9,464 | 17.97 | 11,149 | 23.89 |
| 1967 | 148,123 | 41.5 | 14.04 | 20,799 | 16.54 | 24,501 | 24.18 |
| 1966 | 65,587 | 42.5 | 12.90 | 8,459 | 15.19 | 9,965 | 24.48 |
| 1965 | 74,139 | 43.5 | 11.82 | 8,764 | 13.92 | 10,323 | 24.78 |
| 1964 | 33,854 | 44.5 | 10.81 | 3,658 | 12.73 | 4,310 | 25.08 |



10/22/2009

Computed Age Distribution Report

Page 261 of 350

Account: KEPCo 101/6 373 - KY

Version: KEPCO DISTRIBUTION 2008

Dispersion: 24 - L0

| Vintage | Additions | Age 2009 | Theoretical Survivors Percent | Theoretical Survivors Amount | Computed Survivors Percent | Computed Survivors Amount | Realized Life |
|---|---|---|---|---|---|---|---|
| 1963 | 60,199 | 45.5 | 9.85 | 5,932 | 11.61 | 6,988 | 25.39 |
| 1962 | 47,237 | 46.5 | 8.96 | 4,234 | 10.56 | 4,987 | 25.70 |
| 1961 | 47,565 | 47.5 | 0.00 | | -0.00 | (1) | 23.75 |
| 1960 | 34,406 | 48.5 | 0.00 | | 0.00 | | 0.00 |
| 1959 | 48,955 | 49.5 | 0.00 | | 0.00 | | 0.00 |
| 1958 | 37,190 | 50.5 | 0.00 | | 0.00 | | 0.00 |
| 1957 | 25,341 | 51.5 | 0.00 | | 0.00 | | 0.00 |
| 1956 | 16,379 | 52.5 | 0.00 | | 0.00 | | 0.00 |
| 1955 | 13,067 | 53.5 | 0.00 | | 0.00 | | 0.00 |
| 1954 | 22,190 | 54.5 | 0.00 | | 0.00 | | 0.00 |
| 1953 | 31,804 | 55.5 | 0.00 | | 0.00 | | 0.00 |
| 1952 | 31,861 | 56.5 | 0.00 | | 0.00 | | 0.00 |
| 1951 | 45,371 | 57.5 | 0.00 | | 0.00 | | 0.00 |
| 1950 | 34,099 | 58.5 | 0.00 | | 0.00 | | 0.00 |
| 1949 | 28,081 | 59.5 | 0.00 | | 0.00 | | 0.00 |
| 1948 | 23,457 | 60.5 | 0.00 | | 0.00 | | 0.00 |
| 1947 | 10,446 | 61.5 | 0.00 | | 0.00 | | 0.00 |
| 1946 | 6,221 | 62.5 | 0.00 | | 0.00 | | 0.00 |
| 1945 | 2,011 | 63.5 | 0.00 | | 0.00 | | 0.00 |
| 44 | 4,620 | 64.5 | 0.00 | | 0.00 | | 0.00 |
| 1943 | 1,495 | 65.5 | 0.00 | | 0.00 | | 0.00 |
| 1942 | 13,088 | 66.5 | 0.00 | | 0.00 | | 0.00 |
| 1941 | 12,616 | 67.5 | 0.00 | | 0.00 | | 0.00 |
| 1940 | 10,369 | 68.5 | 0.00 | | 0.00 | | 0.00 |
| 1939 | 6,365 | 69.5 | 0.00 | | 0.00 | | 0.00 |
| 1938 | 9,692 | 70.5 | 0.00 | | 0.00 | | 0.00 |
| 1937 | 16,031 | 71.5 | 0.00 | | 0.00 | | 0.00 |
| 1936 | 126,232 | 72.5 | 0.00 | | 0.00 | | 0.00 |
| | 5,253,369 | | | 2,597,045 | | 2,939,603 * | |

* Recorded Balance January 1, 2009: 2,939,603

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# DISTRIBUTION PLANT WORKPAPERS

## CALCULATED RESERVE

Depreciation Reserve Summary

Account: KEPCo 101/6 360 Land Rights
Scenario: KEPCO DISTRIBUTION 2008 NEW
version: 75 - R4

...erage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $4,178,634.88 | $927,055.90 | 0.2219 | $3,251,578.98 | 0.7781 |
| Computed | $4,178,634.88 | $1,085,983.48 | 0.2599 | $3,092,651.40 | 0.7401 |
| Difference | | ($158,927.58) | -0.0380 | $158,927.58 | 0.0380 |

Generation Arrangement Report



Account: KEPCo 101/6 360 Land Rights
Dispersion: 75.00 - R4

;age Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2006 | 2.50 | $174,821.73 | 75.00 | 72.50 | 0.9667 | 1.0000 | $169,000.07 | $2,330.96 |
| 2005 | 3.50 | $117,956.02 | 75.00 | 71.50 | 0.9534 | 1.0000 | $112,457.91 | $1,572.75 |
| 2004 | 4.50 | $100,775.44 | 75.00 | 70.51 | 0.9401 | 1.0000 | $94,735.75 | $1,343.67 |
| 2003 | 5.50 | $188,981.14 | 75.00 | 69.51 | 0.9268 | 1.0000 | $175,140.63 | $2,519.75 |
| 2002 | 6.50 | $131,307.26 | 75.00 | 68.51 | 0.9135 | 1.0000 | $119,943.50 | $1,750.76 |
| 2001 | 7.50 | $106,531.58 | 75.00 | 67.51 | 0.9002 | 1.0000 | $95,895.43 | $1,420.42 |
| 2000 | 8.50 | $315,016.21 | 75.00 | 66.51 | 0.8869 | 1.0000 | $279,376.88 | $4,200.22 |
| 1999 | 9.50 | $3,677.00 | 75.00 | 65.52 | 0.8736 | 1.0000 | $3,212.17 | $49.03 |
| 1998 | 10.50 | $108,643.00 | 75.00 | 64.52 | 0.8603 | 1.0000 | $93,466.56 | $1,448.57 |
| 1997 | 11.50 | $219,539.50 | 75.00 | 63.53 | 0.8470 | 1.0000 | $185,957.75 | $2,927.19 |
| 1996 | 12.50 | $53,347.00 | 75.00 | 62.53 | 0.8338 | 1.0000 | $44,479.25 | $711.29 |
| 1995 | 13.50 | $106,401.00 | 75.00 | 61.54 | 0.8205 | 1.0000 | $87,304.91 | $1,418.68 |
| 1994 | 14.50 | $14,023.00 | 75.00 | 60.55 | 0.8073 | 1.0000 | $11,320.69 | $186.97 |
| 1993 | 15.50 | $49,128.00 | 75.00 | 59.56 | 0.7941 | 1.0000 | $39,011.49 | $655.04 |
| 1992 | 16.50 | $94,764.00 | 75.00 | 58.57 | 0.7809 | 1.0000 | $73,998.49 | $1,263.52 |
| 1991 | 17.50 | $76,154.00 | 75.00 | 57.58 | 0.7677 | 1.0000 | $58,462.50 | $1,015.39 |
| 1990 | 18.50 | $54,838.00 | 75.00 | 56.59 | 0.7545 | 1.0000 | $41,376.07 | $731.17 |
| 1989 | 19.50 | $31,201.00 | 75.00 | 55.60 | 0.7414 | 1.0000 | $23,131.83 | $416.01 |
| 1988 | 20.50 | $26,380.00 | 75.00 | 54.62 | 0.7283 | 1.0000 | $19,211.53 | $351.73 |
| 1987 | 21.50 | $19,016.00 | 75.00 | 53.64 | 0.7152 | 1.0000 | $13,599.47 | $253.55 |
| 1986 | 22.50 | $47,346.00 | 75.00 | 52.66 | 0.7021 | 1.0000 | $33,242.10 | $631.28 |
| 1985 | 23.50 | $20,719.00 | 75.00 | 51.68 | 0.6891 | 1.0000 | $14,277.08 | $276.25 |
| 1984 | 24.50 | $25,934.00 | 75.00 | 50.71 | 0.6761 | 1.0000 | $17,533.37 | $345.79 |
| 1983 | 25.50 | $66,861.00 | 75.00 | 49.73 | 0.6631 | 1.0000 | $44,337.46 | $891.48 |
| 1982 | 26.50 | $48,942.00 | 75.00 | 48.77 | 0.6502 | 1.0000 | $31,823.06 | $652.56 |
| 1981 | 27.50 | $38,508.00 | 75.00 | 47.80 | 0.6373 | 1.0000 | $24,542.67 | $513.44 |
| 1980 | 28.50 | $24,590.00 | 75.00 | 46.84 | 0.6245 | 1.0000 | $15,357.22 | $327.87 |
| 1979 | 29.50 | $1,913,234.00 | 75.00 | 45.88 | 0.6118 | 1.0000 | $1,170,455.58 | $25,509.79 |
| | | $4,178,634.88 | 75.00 | 55.51 | 0.7401 | 1.0000 | $3,092,651.40 | $55,715.13 |

Depreciation Reserve Summary

Page 265 of 350

Account: KEPCo 101/6 361 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 75 - L2

...erage Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $4,273,116.69 | $749,460.89 | 0.1754 | $3,096,344.13 | 0.7246 |
| Computed | $4,273,116.69 | $877,942.90 | 0.2055 | $2,967,862.12 | 0.6945 |
| Difference | | ($128,482.01) | -0.0301 | $128,482.01 | 0.0301 |

Generation Arrangement Report

Page 266 of 350

Account: KEPCo 101/6 361 - KY
Dispersion: 75.00 - L2

.rage Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $121,240.22 | 75.00 | 74.50 | 0.8940 | 1.0000 | $108,388.39 | $1,454.88 |
| 2005 | 3.50 | $8,634.85 | 75.00 | 71.51 | 0.8581 | 1.0000 | $7,409.48 | $103.62 |
| 2003 | 5.50 | $395,783.91 | 75.00 | 69.53 | 0.8344 | 1.0000 | $330,235.37 | $4,749.41 |
| 2002 | 6.50 | $38,513.72 | 75.00 | 68.55 | 0.8226 | 1.0000 | $31,681.44 | $462.16 |
| 2001 | 7.50 | $7,027.54 | 75.00 | 67.58 | 0.8109 | 1.0000 | $5,698.75 | $84.33 |
| 2000 | 8.50 | $100,752.20 | 75.00 | 66.61 | 0.7993 | 1.0000 | $80,532.22 | $1,209.03 |
| 1999 | 9.50 | $387,262.85 | 75.00 | 65.65 | 0.7878 | 1.0000 | $305,071.32 | $4,647.15 |
| 1998 | 10.50 | $30,887.03 | 75.00 | 64.69 | 0.7763 | 1.0000 | $23,978.77 | $370.64 |
| 1997 | 11.50 | $67,892.00 | 75.00 | 63.75 | 0.7650 | 1.0000 | $51,937.75 | $814.70 |
| 1996 | 12.50 | $35,578.00 | 75.00 | 62.81 | 0.7537 | 1.0000 | $26,816.66 | $426.94 |
| 1995 | 13.50 | $604,605.00 | 75.00 | 61.88 | 0.7426 | 1.0000 | $448,988.83 | $7,255.26 |
| 1994 | 14.50 | $104,061.00 | 75.00 | 60.97 | 0.7316 | 1.0000 | $76,129.94 | $1,248.73 |
| 1993 | 15.50 | $254,730.00 | 75.00 | 60.05 | 0.7206 | 1.0000 | $183,568.28 | $3,056.76 |
| 1992 | 16.50 | $112,019.00 | 75.00 | 59.15 | 0.7098 | 1.0000 | $79,514.72 | $1,344.23 |
| 1991 | 17.50 | $344,187.00 | 75.00 | 58.26 | 0.6991 | 1.0000 | $240,630.33 | $4,130.24 |
| 1990 | 18.50 | $32,711.00 | 75.00 | 57.37 | 0.6885 | 1.0000 | $22,521.37 | $392.53 |
| 1989 | 19.50 | $33,374.00 | 75.00 | 56.50 | 0.6780 | 1.0000 | $22,627.98 | $400.49 |
| 1988 | 20.50 | $35,799.00 | 75.00 | 55.64 | 0.6676 | 1.0000 | $23,900.34 | $429.59 |
| 1987 | 21.50 | $127,890.00 | 75.00 | 54.78 | 0.6573 | 1.0000 | $84,063.81 | $1,534.68 |
| 1986 | 22.50 | $148,205.00 | 75.00 | 53.93 | 0.6471 | 1.0000 | $95,910.27 | $1,778.46 |
| 1985 | 23.50 | $119,083.00 | 75.00 | 53.09 | 0.6371 | 1.0000 | $75,864.68 | $1,429.00 |
| 1984 | 24.50 | $10,503.00 | 75.00 | 52.26 | 0.6271 | 1.0000 | $6,586.10 | $126.04 |
| 1983 | 25.50 | $7,053.00 | 75.00 | 51.43 | 0.6172 | 1.0000 | $4,353.24 | $84.64 |
| 1982 | 26.50 | $62,465.00 | 75.00 | 50.62 | 0.6075 | 1.0000 | $37,945.95 | $749.58 |
| 1981 | 27.50 | $92,865.00 | 75.00 | 49.82 | 0.5978 | 1.0000 | $55,517.51 | $1,114.38 |
| 1980 | 28.50 | $373,477.00 | 75.00 | 49.03 | 0.5884 | 1.0000 | $219,753.51 | $4,481.72 |
| 1979 | 29.50 | $5,950.00 | 75.00 | 48.26 | 0.5791 | 1.0000 | $3,445.80 | $71.40 |
| 1978 | 30.50 | $44,891.00 | 75.00 | 47.50 | 0.5700 | 1.0000 | $25,587.22 | $538.69 |
| 1977 | 31.50 | $83,665.00 | 75.00 | 46.76 | 0.5611 | 1.0000 | $46,945.95 | $1,003.98 |
| 1976 | 32.50 | $24,921.00 | 75.00 | 46.04 | 0.5524 | 1.0000 | $13,767.45 | $299.05 |
| 1975 | 33.50 | $72,704.00 | 75.00 | 45.33 | 0.5439 | 1.0000 | $39,545.89 | $872.45 |
| 1974 | 34.50 | $62,865.00 | 75.00 | 44.64 | 0.5357 | 1.0000 | $33,678.19 | $754.38 |
| 1973 | 35.50 | $44,691.00 | 75.00 | 43.98 | 0.5277 | 1.0000 | $23,585.05 | $536.29 |

Generation Arrangement Report

Page 267 of 350

Account: KEPCo 101/6 361 - KY
Dispersion: 75.00 - L2

,rage Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1972 | 36.50 | $49,794.00 | 75.00 | 43.33 | 0.5199 | 1.0000 | $25,888.78 | $597.53 |
| 1971 | 37.50 | $60,176.00 | 75.00 | 42.70 | 0.5124 | 1.0000 | $30,835.90 | $722.11 |
| 1970 | 38.50 | $13,257.00 | 75.00 | 42.10 | 0.5052 | 1.0000 | $6,696.84 | $159.08 |
| 1969 | 39.50 | $6,970.00 | 75.00 | 41.50 | 0.4981 | 1.0000 | $3,471.48 | $83.64 |
| 1968 | 40.50 | $20,793.00 | 75.00 | 40.94 | 0.4913 | 1.0000 | $10,215.05 | $249.52 |
| 1967 | 41.50 | $15,108.00 | 75.00 | 40.39 | 0.4847 | 1.0000 | $7,323.01 | $181.30 |
| 1966 | 42.50 | $31,096.00 | 75.00 | 39.86 | 0.4783 | 1.0000 | $14,873.67 | $373.15 |
| 1965 | 43.50 | $1,812.70 | 75.00 | 39.35 | 0.4722 | 1.0000 | $855.97 | $21.75 |
| 1964 | 44.50 | $495.00 | 75.00 | 38.86 | 0.4663 | 1.0000 | $230.82 | $5.94 |
| 1963 | 45.50 | $5,202.00 | 75.00 | 38.38 | 0.4606 | 1.0000 | $2,395.86 | $62.42 |
| 1962 | 46.50 | $190.00 | 75.00 | 37.92 | 0.4551 | 1.0000 | $86.47 | $2.28 |
| 1961 | 47.50 | $1,585.00 | 75.00 | 37.48 | 0.4498 | 1.0000 | $712.91 | $19.02 |
| 1960 | 48.50 | $291.00 | 75.00 | 37.05 | 0.4446 | 1.0000 | $129.39 | $3.49 |
| 1959 | 49.50 | $193.00 | 75.00 | 36.64 | 0.4397 | 1.0000 | $84.86 | $2.32 |
| 1957 | 51.50 | $6,356.00 | 75.00 | 35.86 | 0.4303 | 1.0000 | $2,735.10 | $76.27 |
| 1956 | 52.50 | $5,955.00 | 75.00 | 35.49 | 0.4259 | 1.0000 | $2,536.12 | $71.46 |
| 1955 | 53.50 | $701.00 | 75.00 | 35.13 | 0.4216 | 1.0000 | $295.53 | $8.41 |
| 1954 | 54.50 | $4,906.00 | 75.00 | 34.78 | 0.4174 | 1.0000 | $2,047.74 | $58.87 |
| 1953 | 55.50 | $9,315.00 | 75.00 | 34.45 | 0.4134 | 1.0000 | $3,850.54 | $111.78 |
| 1952 | 56.50 | $4,482.00 | 75.00 | 34.12 | 0.4095 | 1.0000 | $1,835.17 | $53.78 |
| 1951 | 57.50 | $2,866.00 | 75.00 | 33.80 | 0.4056 | 1.0000 | $1,162.58 | $34.39 |
| 1950 | 58.50 | $3,771.63 | 75.00 | 33.50 | 0.4020 | 1.0000 | $1,516.03 | $45.26 |
| 1949 | 59.50 | $3,862.00 | 75.00 | 33.20 | 0.3984 | 1.0000 | $1,538.45 | $46.34 |
| 1948 | 60.50 | $5,174.00 | 75.00 | 32.90 | 0.3949 | 1.0000 | $2,043.00 | $62.09 |
| 1947 | 61.50 | $2,508.00 | 75.00 | 32.62 | 0.3914 | 1.0000 | $981.71 | $30.10 |
| 1946 | 62.50 | $42.00 | 75.00 | 32.34 | 0.3881 | 1.0000 | $16.30 | $0.50 |
| 1945 | 63.50 | $946.00 | 75.00 | 32.07 | 0.3848 | 1.0000 | $364.04 | $11.35 |
| 1943 | 65.50 | $1,672.00 | 75.00 | 31.54 | 0.3784 | 1.0000 | $632.76 | $20.06 |
| 1942 | 66.50 | $977.00 | 75.00 | 31.28 | 0.3754 | 1.0000 | $366.72 | $11.72 |
| 1941 | 67.50 | $140.00 | 75.00 | 31.02 | 0.3723 | 1.0000 | $52.12 | $1.68 |
| 1940 | 68.50 | $3,539.00 | 75.00 | 30.77 | 0.3693 | 1.0000 | $1,306.81 | $42.47 |
| 1938 | 70.50 | $12,655.04 | 75.00 | 30.28 | 0.3633 | 1.0000 | $4,597.80 | $151.86 |
| | | $4,273,116.69 | 75.00 | 57.88 | 0.6945 | 1.0000 | $2,967,862.12 | $51,277.40 |

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Depreciation Reserve Summary

Account: KEPCo 101/6 362 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 32 - R1

Average Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $48,811,222.57 | $11,516,934.53 | 0.2359 | $32,413,165.78 | 0.6641 |
| Computed | $48,811,222.57 | $13,491,312.23 | 0.2764 | $30,438,788.08 | 0.6236 |
| Difference | | ($1,974,377.70) | -0.0404 | $1,974,377.70 | 0.0404 |

Generation Arrangement Report



Account: KEPCo 101/6 362 - KY
Dispersion: 32.00 - R1

erage Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $1,007,391.55 | 32.00 | 31.63 | 0.8896 | 1.0000 | $896,135.50 | $28,332.89 |
| 2007 | 1.50 | $2,719,291.66 | 32.00 | 30.89 | 0.8689 | 1.0000 | $2,362,663.34 | $76,480.08 |
| 2006 | 2.50 | $3,162,171.87 | 32.00 | 30.16 | 0.8483 | 1.0000 | $2,682,615.85 | $88,936.08 |
| 2005 | 3.50 | $3,574,863.11 | 32.00 | 29.44 | 0.8280 | 1.0000 | $2,960,076.92 | $100,543.02 |
| 2004 | 4.50 | $722,443.48 | 32.00 | 28.73 | 0.8079 | 1.0000 | $583,656.43 | $20,318.72 |
| 2003 | 5.50 | $1,124,197.05 | 32.00 | 28.02 | 0.7879 | 1.0000 | $885,790.59 | $31,618.04 |
| 2002 | 6.50 | $727,429.09 | 32.00 | 27.31 | 0.7681 | 1.0000 | $558,763.85 | $20,458.94 |
| 2001 | 7.50 | $2,095,432.80 | 32.00 | 26.61 | 0.7485 | 1.0000 | $1,568,431.66 | $58,934.05 |
| 2000 | 8.50 | $1,754,288.96 | 32.00 | 25.92 | 0.7290 | 1.0000 | $1,278,862.97 | $49,339.38 |
| 1999 | 9.50 | $1,086,152.71 | 32.00 | 25.23 | 0.7096 | 1.0000 | $770,777.21 | $30,548.04 |
| 1998 | 10.50 | $829,599.58 | 32.00 | 24.55 | 0.6904 | 1.0000 | $572,777.94 | $23,332.49 |
| 1997 | 11.50 | $1,706,473.99 | 32.00 | 23.87 | 0.6713 | 1.0000 | $1,145,623.25 | $47,994.58 |
| 1996 | 12.50 | $1,815,306.06 | 32.00 | 23.20 | 0.6524 | 1.0000 | $1,184,285.99 | $51,055.48 |
| 1995 | 13.50 | $4,481,127.59 | 32.00 | 22.53 | 0.6336 | 1.0000 | $2,839,256.04 | $126,031.71 |
| 1994 | 14.50 | $1,330,971.72 | 32.00 | 21.87 | 0.6150 | 1.0000 | $818,534.69 | $37,433.58 |
| 1993 | 15.50 | $3,295,948.31 | 32.00 | 21.21 | 0.5966 | 1.0000 | $1,966,240.29 | $92,698.55 |
| 1992 | 16.50 | $1,031,364.53 | 32.00 | 20.56 | 0.5783 | 1.0000 | $596,459.17 | $29,007.13 |
| 1991 | 17.50 | $1,477,699.38 | 32.00 | 19.92 | 0.5603 | 1.0000 | $827,991.16 | $41,560.30 |
| 1990 | 18.50 | $396,281.22 | 32.00 | 19.29 | 0.5426 | 1.0000 | $215,007.76 | $11,145.41 |
| 1989 | 19.50 | $515,611.35 | 32.00 | 18.67 | 0.5251 | 1.0000 | $270,721.95 | $14,501.57 |
| 1988 | 20.50 | $294,675.51 | 32.00 | 18.06 | 0.5078 | 1.0000 | $149,635.77 | $8,287.75 |
| 1987 | 21.50 | $1,691,241.59 | 32.00 | 17.45 | 0.4908 | 1.0000 | $830,108.38 | $47,566.17 |
| 1986 | 22.50 | $1,192,654.37 | 32.00 | 16.86 | 0.4741 | 1.0000 | $565,483.40 | $33,543.40 |
| 1985 | 23.50 | $639,499.84 | 32.00 | 16.28 | 0.4577 | 1.0000 | $292,721.59 | $17,985.93 |
| 1984 | 24.50 | $646,616.75 | 32.00 | 15.70 | 0.4416 | 1.0000 | $285,558.04 | $18,186.10 |
| 1983 | 25.50 | $706,844.36 | 32.00 | 15.14 | 0.4258 | 1.0000 | $300,988.85 | $19,880.00 |
| 1982 | 26.50 | $995,099.53 | 32.00 | 14.59 | 0.4103 | 1.0000 | $408,315.12 | $27,987.17 |
| 1981 | 27.50 | $692,905.42 | 32.00 | 14.05 | 0.3951 | 1.0000 | $273,796.44 | $19,487.96 |
| 1980 | 28.50 | $2,456,583.25 | 32.00 | 13.52 | 0.3803 | 1.0000 | $934,166.37 | $69,091.40 |
| 1979 | 29.50 | $428,316.69 | 32.00 | 13.00 | 0.3657 | 1.0000 | $156,634.75 | $12,046.41 |
| 1978 | 30.50 | $911,780.56 | 32.00 | 12.50 | 0.3514 | 1.0000 | $320,431.49 | $25,643.83 |
| 1977 | 31.50 | $697,721.10 | 32.00 | 12.00 | 0.3375 | 1.0000 | $235,461.11 | $19,623.41 |
| 1976 | 32.50 | $146,004.67 | 32.00 | 11.51 | 0.3238 | 1.0000 | $47,276.29 | $4,106.38 |

Generation Arrangement Report



Account: KEPCo 101/6 362 - KY
Dispersion: 32.00 - R1
rage Net Salvage Rate: 10.00%
Future Net Salvage Rate: 10.00%
Broad Group Procedure
January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $331,376.93 | 32.00 | 11.04 | 0.3104 | 1.0000 | $102,869.66 | $9,319.98 |
| 1974 | 34.50 | $284,028.75 | 32.00 | 10.57 | 0.2974 | 1.0000 | $84,458.07 | $7,988.31 |
| 1973 | 35.50 | $429,163.76 | 32.00 | 10.12 | 0.2846 | 1.0000 | $122,125.60 | $12,070.23 |
| 1972 | 36.50 | $507,404.33 | 32.00 | 9.67 | 0.2721 | 1.0000 | $138,041.42 | $14,270.75 |
| 1971 | 37.50 | $268,376.72 | 32.00 | 9.24 | 0.2598 | 1.0000 | $69,729.42 | $7,548.10 |
| 1970 | 38.50 | $185,400.70 | 32.00 | 8.81 | 0.2479 | 1.0000 | $45,952.72 | $5,214.39 |
| 1969 | 39.50 | $20,274.01 | 32.00 | 8.40 | 0.2361 | 1.0000 | $4,787.67 | $570.21 |
| 1968 | 40.50 | $124,994.58 | 32.00 | 7.99 | 0.2247 | 1.0000 | $28,087.26 | $3,515.47 |
| 1967 | 41.50 | $111,324.60 | 32.00 | 7.59 | 0.2135 | 1.0000 | $23,769.58 | $3,131.00 |
| 1966 | 42.50 | $53,681.54 | 32.00 | 7.20 | 0.2026 | 1.0000 | $10,874.03 | $1,509.79 |
| 1965 | 43.50 | $987.00 | 32.00 | 6.82 | 0.1919 | 1.0000 | $189.37 | $27.76 |
| 1964 | 44.50 | $19,288.02 | 32.00 | 6.45 | 0.1814 | 1.0000 | $3,498.58 | $542.48 |
| 1963 | 45.50 | $68,072.83 | 32.00 | 6.08 | 0.1711 | 1.0000 | $11,649.88 | $1,914.55 |
| 1962 | 46.50 | $10,263.94 | 32.00 | 5.73 | 0.1611 | 1.0000 | $1,653.64 | $288.67 |
| 1961 | 47.50 | $26,558.66 | 32.00 | 5.38 | 0.1513 | 1.0000 | $4,018.58 | $746.96 |
| 1957 | 51.50 | $16,036.55 | 32.00 | 4.06 | 0.1143 | 1.0000 | $1,832.46 | $451.03 |
| | | $48,811,222.57 | 32.00 | 22.17 | 0.6236 | 1.0000 | $30,438,788.09 | $1,372,815.63 |

Depreciation Reserve Summary



Account: KEPCo 101/6 364 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 30 - R0.5

Average Net Salvage Rate: -53.00%
Future Net Salvage Rate: -53.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $147,624,353.34 | $54,369,431.79 | 0.3683 | $171,495,828.82 | 1.1617 |
| Computed | $147,624,353.34 | $63,690,123.30 | 0.4314 | $162,175,137.31 | 1.0986 |
| Difference | | ($9,320,691.51) | -0.0631 | $9,320,691.51 | 0.0631 |

 10/26/2009

Generation Arrangement Report



Account: KEPCo 101/6 364 - KY
Dispersion: 30.00 - R0.5

...rage Net Salvage Rate: -53.00%
Future Net Salvage Rate: -53.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $7,948,638.50 | 30.00 | 29.69 | 1.5142 | 1.0000 | $12,035,471.82 | $405,380.56 |
| 2007 | 1.50 | $8,178,275.50 | 30.00 | 29.07 | 1.4826 | 1.0000 | $12,125,043.33 | $417,092.05 |
| 2006 | 2.50 | $6,214,520.50 | 30.00 | 28.45 | 1.4512 | 1.0000 | $9,018,407.02 | $316,940.56 |
| 2005 | 3.50 | $4,777,960.50 | 30.00 | 27.84 | 1.4199 | 1.0000 | $6,784,207.07 | $243,675.99 |
| 2004 | 4.50 | $4,606,829.50 | 30.00 | 27.23 | 1.3888 | 1.0000 | $6,397,836.62 | $234,948.30 |
| 2003 | 5.50 | $3,549,389.50 | 30.00 | 26.62 | 1.3578 | 1.0000 | $4,819,286.21 | $181,018.86 |
| 2002 | 6.50 | $4,214,322.76 | 30.00 | 26.02 | 1.3269 | 1.0000 | $5,591,977.46 | $214,930.46 |
| 2001 | 7.50 | $6,347,451.74 | 30.00 | 25.41 | 1.2962 | 1.0000 | $8,227,288.19 | $323,720.04 |
| 2000 | 8.50 | $5,960,969.40 | 30.00 | 24.81 | 1.2655 | 1.0000 | $7,543,698.37 | $304,009.44 |
| 1999 | 9.50 | $7,337,691.68 | 30.00 | 24.22 | 1.2350 | 1.0000 | $9,061,882.40 | $374,222.28 |
| 1998 | 10.50 | $2,103,276.29 | 30.00 | 23.62 | 1.2046 | 1.0000 | $2,533,536.80 | $107,267.09 |
| 1997 | 11.50 | $1,990,086.30 | 30.00 | 23.02 | 1.1743 | 1.0000 | $2,336,891.67 | $101,494.40 |
| 1996 | 12.50 | $8,709,971.42 | 30.00 | 22.43 | 1.1441 | 1.0000 | $9,964,882.15 | $444,208.54 |
| 1995 | 13.50 | $4,879,680.34 | 30.00 | 21.84 | 1.1141 | 1.0000 | $5,436,424.72 | $248,863.70 |
| 1994 | 14.50 | $5,554,403.77 | 30.00 | 21.26 | 1.0843 | 1.0000 | $6,022,522.36 | $283,274.59 |
| 1993 | 15.50 | $4,433,015.64 | 30.00 | 20.68 | 1.0546 | 1.0000 | $4,675,246.54 | $226,083.80 |
| 1992 | 16.50 | $5,137,798.24 | 30.00 | 20.10 | 1.0253 | 1.0000 | $5,267,682.32 | $262,027.71 |
| 1991 | 17.50 | $4,948,782.95 | 30.00 | 19.53 | 0.9962 | 1.0000 | $4,929,741.95 | $252,387.93 |
| 1990 | 18.50 | $4,596,012.91 | 30.00 | 18.97 | 0.9673 | 1.0000 | $4,445,708.08 | $234,396.66 |
| 1989 | 19.50 | $4,119,769.79 | 30.00 | 18.41 | 0.9388 | 1.0000 | $3,867,461.14 | $210,108.26 |
| 1988 | 20.50 | $3,655,979.86 | 30.00 | 17.85 | 0.9105 | 1.0000 | $3,328,875.63 | $186,454.97 |
| 1987 | 21.50 | $3,931,934.83 | 30.00 | 17.31 | 0.8826 | 1.0000 | $3,470,372.18 | $200,528.68 |
| 1986 | 22.50 | $3,857,405.68 | 30.00 | 16.77 | 0.8551 | 1.0000 | $3,298,390.56 | $196,727.69 |
| 1985 | 23.50 | $3,428,640.60 | 30.00 | 16.23 | 0.8279 | 1.0000 | $2,838,596.59 | $174,860.67 |
| 1984 | 24.50 | $2,924,315.25 | 30.00 | 15.71 | 0.8011 | 1.0000 | $2,342,615.02 | $149,140.08 |
| 1983 | 25.50 | $2,916,999.66 | 30.00 | 15.19 | 0.7747 | 1.0000 | $2,259,755.63 | $148,766.98 |
| 1982 | 26.50 | $2,966,548.13 | 30.00 | 14.68 | 0.7487 | 1.0000 | $2,220,914.34 | $151,293.95 |
| 1981 | 27.50 | $3,565,280.57 | 30.00 | 14.18 | 0.7230 | 1.0000 | $2,577,692.64 | $181,829.31 |
| 1980 | 28.50 | $2,846,805.41 | 30.00 | 13.68 | 0.6978 | 1.0000 | $1,986,392.42 | $145,187.08 |
| 1979 | 29.50 | $2,214,986.51 | 30.00 | 13.19 | 0.6729 | 1.0000 | $1,490,524.02 | $112,964.31 |
| 1978 | 30.50 | $1,781,277.76 | 30.00 | 12.72 | 0.6485 | 1.0000 | $1,155,099.05 | $90,845.17 |
| 1977 | 31.50 | $1,607,770.43 | 30.00 | 12.24 | 0.6244 | 1.0000 | $1,003,898.84 | $81,996.29 |
| 1976 | 32.50 | $1,140,196.79 | 30.00 | 11.78 | 0.6007 | 1.0000 | $684,939.60 | $58,150.04 |

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## Generation Arrangement Report

Account: KEPCo 101/6 364 - KY
Dispersion: 30.00 - R0.5

rage Net Salvage Rate: -53.00%
Future Net Salvage Rate: -53.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $771,932.62 | 30.00 | 11.32 | 0.5774 | 1.0000 | $445,722.25 | $39,368.56 |
| 1974 | 34.50 | $707,911.81 | 30.00 | 10.87 | 0.5545 | 1.0000 | $392,515.97 | $36,103.50 |
| 1973 | 35.50 | $655,672.79 | 30.00 | 10.43 | 0.5319 | 1.0000 | $348,744.29 | $33,439.31 |
| 1972 | 36.50 | $514,005.20 | 30.00 | 9.99 | 0.5096 | 1.0000 | $261,960.72 | $26,214.27 |
| 1971 | 37.50 | $474,887.97 | 30.00 | 9.56 | 0.4877 | 1.0000 | $231,605.40 | $24,219.29 |
| 1970 | 38.50 | $305,274.71 | 30.00 | 9.14 | 0.4661 | 1.0000 | $142,286.01 | $15,569.01 |
| 1969 | 39.50 | $264,049.96 | 30.00 | 8.72 | 0.4448 | 1.0000 | $117,437.65 | $13,466.55 |
| 1968 | 40.50 | $247,476.31 | 30.00 | 8.31 | 0.4237 | 1.0000 | $104,852.48 | $12,621.29 |
| 1967 | 41.50 | $217,338.86 | 30.00 | 7.90 | 0.4028 | 1.0000 | $87,552.12 | $11,084.28 |
| 1966 | 42.50 | $170,344.16 | 30.00 | 7.49 | 0.3822 | 1.0000 | $65,112.35 | $8,687.55 |
| 1965 | 43.50 | $157,437.82 | 30.00 | 7.09 | 0.3618 | 1.0000 | $56,957.28 | $8,029.33 |
| 1964 | 44.50 | $117,868.73 | 30.00 | 6.70 | 0.3414 | 1.0000 | $40,245.92 | $6,011.31 |
| 1963 | 45.50 | $86,668.67 | 30.00 | 6.30 | 0.3213 | 1.0000 | $27,843.90 | $4,420.10 |
| 1962 | 46.50 | $71,360.55 | 30.00 | 5.90 | 0.3011 | 1.0000 | $21,484.77 | $3,639.39 |
| 1961 | 47.50 | $85,532.53 | 30.00 | 5.51 | 0.2809 | 1.0000 | $24,025.10 | $4,362.16 |
| 1960 | 48.50 | $53,640.97 | 30.00 | 5.11 | 0.2607 | 1.0000 | $13,983.01 | $2,735.69 |
| 1959 | 49.50 | $56,450.03 | 30.00 | 4.71 | 0.2403 | 1.0000 | $13,564.38 | $2,878.95 |
| 1958 | 50.50 | $54,512.51 | 30.00 | 4.31 | 0.2197 | 1.0000 | $11,975.71 | $2,780.14 |
| 1957 | 51.50 | $43,193.57 | 30.00 | 3.90 | 0.1989 | 1.0000 | $8,589.57 | $2,202.87 |
| 1956 | 52.50 | $31,916.96 | 30.00 | 3.48 | 0.1776 | 1.0000 | $5,667.59 | $1,627.76 |
| 1955 | 53.50 | $22,048.26 | 30.00 | 3.06 | 0.1558 | 1.0000 | $3,435.58 | $1,124.46 |
| 1954 | 54.50 | $17,267.85 | 30.00 | 2.62 | 0.1336 | 1.0000 | $2,306.93 | $880.66 |
| 1953 | 55.50 | $15,022.13 | 30.00 | 2.17 | 0.1107 | 1.0000 | $1,662.86 | $766.13 |
| 1952 | 56.50 | $12,718.05 | 30.00 | 1.71 | 0.0873 | 1.0000 | $1,109.96 | $648.62 |
| 1951 | 57.50 | $13,385.54 | 30.00 | 1.25 | 0.0637 | 1.0000 | $852.68 | $682.66 |
| 1950 | 58.50 | $9,446.57 | 30.00 | 0.79 | 0.0402 | 1.0000 | $380.10 | $481.78 |
| 1949 | 59.50 | ($0.50) | 30.00 | 0.40 | 0.0203 | 1.0000 | ($0.01) | ($0.03) |
| | | $147,624,353.34 | 30.00 | 21.54 | 1.0986 | 1.0000 | $162,175,137.31 | $7,528,842.02 |

Depreciation Reserve Summary

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Account: KEPCo 101/6 365 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 30 - R0.5

Average Net Salvage Rate: 25.00%
Future Net Salvage Rate: 25.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $129,155,637.73 | $19,207,656.07 | 0.1487 | $77,659,072.23 | 0.6013 |
| Computed | $129,155,637.73 | $22,500,473.95 | 0.1742 | $74,366,254.35 | 0.5758 |
| Difference | | ($3,292,817.88) | -0.0255 | $3,292,817.88 | 0.0255 |

Generation Arrangement Report



Account: KEPCo 101/6 365 - KY
Dispersion: 30.00 - R0.5

/rage Net Salvage Rate: 25.00%
Future Net Salvage Rate: 25.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $10,259,054.50 | 30.00 | 29.69 | 0.7422 | 1.0000 | $7,614,607.88 | $256,476.36 |
| 2007 | 1.50 | $14,071,576.37 | 30.00 | 29.07 | 0.7268 | 1.0000 | $10,226,667.77 | $351,789.41 |
| 2006 | 2.50 | $8,762,102.00 | 30.00 | 28.45 | 0.7114 | 1.0000 | $6,233,046.18 | $219,052.55 |
| 2005 | 3.50 | $6,191,319.58 | 30.00 | 27.84 | 0.6960 | 1.0000 | $4,309,328.43 | $154,782.99 |
| 2004 | 4.50 | $5,087,568.64 | 30.00 | 27.23 | 0.6808 | 1.0000 | $3,463,467.53 | $127,189.22 |
| 2003 | 5.50 | $3,803,459.60 | 30.00 | 26.62 | 0.6656 | 1.0000 | $2,531,498.64 | $95,086.49 |
| 2002 | 6.50 | $5,177,311.14 | 30.00 | 26.02 | 0.6504 | 1.0000 | $3,367,531.88 | $129,432.78 |
| 2001 | 7.50 | $4,687,307.16 | 30.00 | 25.41 | 0.6354 | 1.0000 | $2,978,177.30 | $117,182.68 |
| 2000 | 8.50 | $4,667,822.82 | 30.00 | 24.81 | 0.6204 | 1.0000 | $2,895,687.01 | $116,695.57 |
| 1999 | 9.50 | $5,871,996.04 | 30.00 | 24.22 | 0.6054 | 1.0000 | $3,554,794.91 | $146,799.90 |
| 1998 | 10.50 | $1,997,800.69 | 30.00 | 23.62 | 0.5905 | 1.0000 | $1,179,649.21 | $49,945.02 |
| 1997 | 11.50 | $6,711,047.26 | 30.00 | 23.02 | 0.5756 | 1.0000 | $3,863,018.61 | $167,776.18 |
| 1996 | 12.50 | $2,724,980.64 | 30.00 | 22.43 | 0.5608 | 1.0000 | $1,528,229.89 | $68,124.52 |
| 1995 | 13.50 | $4,731,745.49 | 30.00 | 21.84 | 0.5461 | 1.0000 | $2,584,123.20 | $118,293.64 |
| 1994 | 14.50 | $3,588,540.22 | 30.00 | 21.26 | 0.5315 | 1.0000 | $1,907,342.23 | $89,713.51 |
| 1993 | 15.50 | $2,250,460.70 | 30.00 | 20.68 | 0.5170 | 1.0000 | $1,163,446.78 | $56,261.52 |
| 1992 | 16.50 | $2,524,409.91 | 30.00 | 20.10 | 0.5026 | 1.0000 | $1,268,738.85 | $63,110.25 |
| 1991 | 17.50 | $2,754,145.38 | 30.00 | 19.53 | 0.4883 | 1.0000 | $1,344,876.71 | $68,853.63 |
| 1990 | 18.50 | $2,796,403.03 | 30.00 | 18.97 | 0.4742 | 1.0000 | $1,325,956.57 | $69,910.08 |
| 1989 | 19.50 | $2,599,035.88 | 30.00 | 18.41 | 0.4602 | 1.0000 | $1,196,010.85 | $64,975.90 |
| 1988 | 20.50 | $2,268,131.89 | 30.00 | 17.85 | 0.4463 | 1.0000 | $1,012,352.86 | $56,703.30 |
| 1987 | 21.50 | $2,576,292.24 | 30.00 | 17.31 | 0.4327 | 1.0000 | $1,114,640.20 | $64,407.31 |
| 1986 | 22.50 | $2,225,276.16 | 30.00 | 16.77 | 0.4192 | 1.0000 | $932,739.81 | $55,631.90 |
| 1985 | 23.50 | $1,686,809.05 | 30.00 | 16.23 | 0.4058 | 1.0000 | $684,569.38 | $42,170.23 |
| 1984 | 24.50 | $1,496,442.83 | 30.00 | 15.71 | 0.3927 | 1.0000 | $587,633.70 | $37,411.07 |
| 1983 | 25.50 | $1,561,018.96 | 30.00 | 15.19 | 0.3797 | 1.0000 | $592,793.06 | $39,025.47 |
| 1982 | 26.50 | $1,689,657.01 | 30.00 | 14.68 | 0.3670 | 1.0000 | $620,081.53 | $42,241.43 |
| 1981 | 27.50 | $2,531,097.95 | 30.00 | 14.18 | 0.3544 | 1.0000 | $897,049.08 | $63,277.45 |
| 1980 | 28.50 | $1,972,796.40 | 30.00 | 13.68 | 0.3420 | 1.0000 | $674,775.59 | $49,319.91 |
| 1979 | 29.50 | $1,692,005.70 | 30.00 | 13.19 | 0.3299 | 1.0000 | $558,135.37 | $42,300.14 |
| 1978 | 30.50 | $1,389,006.54 | 30.00 | 12.72 | 0.3179 | 1.0000 | $441,531.51 | $34,725.16 |
| 1977 | 31.50 | $1,530,748.77 | 30.00 | 12.24 | 0.3061 | 1.0000 | $468,532.44 | $38,268.72 |
| 1976 | 32.50 | $830,267.04 | 30.00 | 11.78 | 0.2945 | 1.0000 | $244,489.43 | $20,756.68 |

Generation Arrangement Report

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Account: KEPCo 101/6 365 - KY
Dispersion: 30.00 - R0.5

rage Net Salvage Rate: 25.00%
Future Net Salvage Rate: 25.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $456,119.13 | 30.00 | 11.32 | 0.2830 | 1.0000 | $129,102.02 | $11,402.98 |
| 1974 | 34.50 | $460,352.53 | 30.00 | 10.87 | 0.2718 | 1.0000 | $125,123.40 | $11,508.81 |
| 1973 | 35.50 | $444,878.85 | 30.00 | 10.43 | 0.2607 | 1.0000 | $115,992.94 | $11,121.97 |
| 1972 | 36.50 | $437,583.31 | 30.00 | 9.99 | 0.2498 | 1.0000 | $109,319.90 | $10,939.58 |
| 1971 | 37.50 | $519,839.04 | 30.00 | 9.56 | 0.2391 | 1.0000 | $124,278.57 | $12,995.98 |
| 1970 | 38.50 | $387,456.46 | 30.00 | 9.14 | 0.2285 | 1.0000 | $88,524.63 | $9,686.41 |
| 1969 | 39.50 | $313,176.03 | 30.00 | 8.72 | 0.2180 | 1.0000 | $68,277.81 | $7,829.40 |
| 1968 | 40.50 | $279,678.01 | 30.00 | 8.31 | 0.2077 | 1.0000 | $58,086.24 | $6,991.95 |
| 1967 | 41.50 | $238,035.00 | 30.00 | 7.90 | 0.1975 | 1.0000 | $47,004.55 | $5,950.88 |
| 1966 | 42.50 | $184,500.08 | 30.00 | 7.49 | 0.1874 | 1.0000 | $34,570.25 | $4,612.50 |
| 1965 | 43.50 | $160,667.82 | 30.00 | 7.09 | 0.1773 | 1.0000 | $28,493.05 | $4,016.70 |
| 1964 | 44.50 | $106,984.89 | 30.00 | 6.70 | 0.1674 | 1.0000 | $17,906.70 | $2,674.62 |
| 1963 | 45.50 | $66,759.95 | 30.00 | 6.30 | 0.1575 | 1.0000 | $10,513.66 | $1,669.00 |
| 1962 | 46.50 | $62,989.54 | 30.00 | 5.90 | 0.1476 | 1.0000 | $9,296.32 | $1,574.74 |
| 1961 | 47.50 | $68,508.10 | 30.00 | 5.51 | 0.1377 | 1.0000 | $9,432.91 | $1,712.70 |
| 1960 | 48.50 | $43,880.79 | 30.00 | 5.11 | 0.1278 | 1.0000 | $5,607.23 | $1,097.02 |
| 1959 | 49.50 | $41,745.87 | 30.00 | 4.71 | 0.1178 | 1.0000 | $4,917.22 | $1,043.65 |
| 1958 | 50.50 | $45,221.82 | 30.00 | 4.31 | 0.1077 | 1.0000 | $4,869.93 | $1,130.55 |
| 1957 | 51.50 | $35,262.38 | 30.00 | 3.90 | 0.0975 | 1.0000 | $3,437.43 | $881.56 |
| 1956 | 52.50 | $27,220.81 | 30.00 | 3.48 | 0.0870 | 1.0000 | $2,369.45 | $680.52 |
| 1955 | 53.50 | $16,872.07 | 30.00 | 3.06 | 0.0764 | 1.0000 | $1,288.73 | $421.80 |
| 1954 | 54.50 | $13,254.67 | 30.00 | 2.62 | 0.0655 | 1.0000 | $868.03 | $331.37 |
| 1953 | 55.50 | $11,275.41 | 30.00 | 2.17 | 0.0543 | 1.0000 | $611.82 | $281.89 |
| 1952 | 56.50 | $9,735.21 | 30.00 | 1.71 | 0.0428 | 1.0000 | $416.49 | $243.38 |
| 1951 | 57.50 | $9,134.25 | 30.00 | 1.25 | 0.0312 | 1.0000 | $285.23 | $228.36 |
| 1950 | 58.50 | $6,868.62 | 30.00 | 0.79 | 0.0197 | 1.0000 | $135.48 | $171.72 |
| 1949 | 59.50 | ($0.50) | 30.00 | 0.40 | 0.0100 | 1.0000 | $0.00 | ($0.01) |
| | | $129,155,637.73 | 30.00 | 23.03 | 0.5758 | 1.0000 | $74,366,254.35 | $3,228,890.94 |



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Depreciation Reserve Summary

Account: KEPCo 101/6 366 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 50 - R0.5

Average Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $4,302,754.53 | $504,000.00 | 0.1171 | $3,798,754.53 | 0.8829 |
| Computed | $4,302,754.53 | $590,402.02 | 0.1372 | $3,712,352.51 | 0.8628 |
| Difference | | ($86,402.02) | -0.0201 | $86,402.02 | 0.0201 |

Generation Arrangement Report

Page 278 of 350

Account: KEPCo 101/6 366 - KY
Dispersion: 50.00 - R0.5

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $332,819.50 | 50.00 | 49.69 | 0.9938 | 1.0000 | $330,751.16 | $6,656.39 |
| 2007 | 1.50 | $312,381.50 | 50.00 | 49.07 | 0.9814 | 1.0000 | $306,567.59 | $6,247.63 |
| 2006 | 2.50 | $509,176.50 | 50.00 | 48.45 | 0.9690 | 1.0000 | $493,399.15 | $10,183.53 |
| 2005 | 3.50 | $199,943.50 | 50.00 | 47.83 | 0.9567 | 1.0000 | $191,284.23 | $3,998.87 |
| 2004 | 4.50 | $173,356.50 | 50.00 | 47.22 | 0.9444 | 1.0000 | $163,716.26 | $3,467.13 |
| 2003 | 5.50 | $118,994.50 | 50.00 | 46.61 | 0.9321 | 1.0000 | $110,917.28 | $2,379.89 |
| 2002 | 6.50 | $134,439.50 | 50.00 | 45.99 | 0.9199 | 1.0000 | $123,669.81 | $2,688.79 |
| 2001 | 7.50 | $123,659.50 | 50.00 | 45.38 | 0.9077 | 1.0000 | $112,244.88 | $2,473.19 |
| 2000 | 8.50 | $182,080.50 | 50.00 | 44.78 | 0.8955 | 1.0000 | $163,059.28 | $3,641.61 |
| 1999 | 9.50 | $137,692.50 | 50.00 | 44.17 | 0.8834 | 1.0000 | $121,636.84 | $2,753.85 |
| 1998 | 10.50 | $60,158.50 | 50.00 | 43.56 | 0.8713 | 1.0000 | $52,415.17 | $1,203.17 |
| 1997 | 11.50 | $291,323.50 | 50.00 | 42.96 | 0.8592 | 1.0000 | $250,308.75 | $5,826.47 |
| 1996 | 12.50 | $131,833.50 | 50.00 | 42.36 | 0.8472 | 1.0000 | $111,683.91 | $2,636.67 |
| 1995 | 13.50 | $133,289.50 | 50.00 | 41.76 | 0.8351 | 1.0000 | $111,314.44 | $2,665.79 |
| 1994 | 14.50 | $118,922.50 | 50.00 | 41.16 | 0.8231 | 1.0000 | $97,889.15 | $2,378.45 |
| 1993 | 15.50 | $270,669.50 | 50.00 | 40.56 | 0.8112 | 1.0000 | $219,556.75 | $5,413.39 |
| 1992 | 16.50 | $131,413.50 | 50.00 | 39.96 | 0.7992 | 1.0000 | $105,027.73 | $2,628.27 |
| 1991 | 17.50 | $51,674.59 | 50.00 | 39.36 | 0.7873 | 1.0000 | $40,683.15 | $1,033.49 |
| 1990 | 18.50 | $203,684.51 | 50.00 | 38.77 | 0.7754 | 1.0000 | $157,936.92 | $4,073.69 |
| 1989 | 19.50 | $47,694.17 | 50.00 | 38.18 | 0.7635 | 1.0000 | $36,416.32 | $953.88 |
| 1988 | 20.50 | $24,133.84 | 50.00 | 37.59 | 0.7517 | 1.0000 | $18,141.43 | $482.68 |
| 1987 | 21.50 | $9,203.37 | 50.00 | 37.00 | 0.7399 | 1.0000 | $6,809.71 | $184.07 |
| 1986 | 22.50 | $33,613.44 | 50.00 | 36.41 | 0.7282 | 1.0000 | $24,476.00 | $672.27 |
| 1985 | 23.50 | $70,256.51 | 50.00 | 35.82 | 0.7164 | 1.0000 | $50,335.21 | $1,405.13 |
| 1984 | 24.50 | $4,236.37 | 50.00 | 35.24 | 0.7048 | 1.0000 | $2,985.74 | $84.73 |
| 1983 | 25.50 | $36,207.20 | 50.00 | 34.66 | 0.6932 | 1.0000 | $25,097.61 | $724.14 |
| 1982 | 26.50 | $43,688.68 | 50.00 | 34.08 | 0.6816 | 1.0000 | $29,778.78 | $873.77 |
| 1981 | 27.50 | $70,212.75 | 50.00 | 33.51 | 0.6701 | 1.0000 | $47,050.27 | $1,404.26 |
| 1980 | 28.50 | $40,343.58 | 50.00 | 32.93 | 0.6587 | 1.0000 | $26,572.94 | $806.87 |
| 1979 | 29.50 | $7,082.14 | 50.00 | 32.36 | 0.6473 | 1.0000 | $4,584.13 | $141.64 |
| 1978 | 30.50 | $23,996.61 | 50.00 | 31.80 | 0.6360 | 1.0000 | $15,260.98 | $479.93 |
| 1977 | 31.50 | $31,336.24 | 50.00 | 31.24 | 0.6247 | 1.0000 | $19,576.52 | $626.72 |
| 1976 | 32.50 | $42,429.68 | 50.00 | 30.68 | 0.6136 | 1.0000 | $26,032.94 | $848.59 |

Generation Arrangement Report



Account: KEPCo 101/6 366 - KY
Dispersion: 50.00 - R0.5

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $25,596.90 | 50.00 | 30.12 | 0.6025 | 1.0000 | $15,420.99 | $511.94 |
| 1974 | 34.50 | $43,167.39 | 50.00 | 29.57 | 0.5914 | 1.0000 | $25,530.74 | $863.35 |
| 1973 | 35.50 | $47,793.41 | 50.00 | 29.02 | 0.5805 | 1.0000 | $27,743.94 | $955.87 |
| 1972 | 36.50 | $21,698.35 | 50.00 | 28.48 | 0.5696 | 1.0000 | $12,360.08 | $433.97 |
| 1971 | 37.50 | $28,424.14 | 50.00 | 27.94 | 0.5589 | 1.0000 | $15,885.11 | $568.48 |
| 1970 | 38.50 | $23,036.43 | 50.00 | 27.41 | 0.5482 | 1.0000 | $12,627.95 | $460.73 |
| 1969 | 39.50 | $2,324.70 | 50.00 | 26.88 | 0.5376 | 1.0000 | $1,249.70 | $46.49 |
| 1968 | 40.50 | $597.47 | 50.00 | 26.35 | 0.5271 | 1.0000 | $314.90 | $11.95 |
| 1967 | 41.50 | $4,686.19 | 50.00 | 25.83 | 0.5166 | 1.0000 | $2,421.07 | $93.72 |
| 1966 | 42.50 | $2,912.71 | 50.00 | 25.32 | 0.5063 | 1.0000 | $1,474.73 | $58.25 |
| 1947 | 61.50 | $23.97 | 50.00 | 16.36 | 0.3273 | 1.0000 | $7.84 | $0.48 |
| 1942 | 66.50 | $51.31 | 50.00 | 14.25 | 0.2851 | 1.0000 | $14.63 | $1.03 |
| 1940 | 68.50 | $25.42 | 50.00 | 13.43 | 0.2687 | 1.0000 | $6.83 | $0.51 |
| 1939 | 69.50 | $97.89 | 50.00 | 13.03 | 0.2605 | 1.0000 | $25.50 | $1.96 |
| 1936 | 72.50 | $370.07 | 50.00 | 11.82 | 0.2364 | 1.0000 | $87.47 | $7.40 |
| | | $4,302,754.53 | 50.00 | 43.14 | 0.8628 | 1.0000 | $3,712,352.51 | $86,055.09 |

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Depreciation Reserve Summary

Account: KEPCo 101/6 367 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 50 - S-.5

Average Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $7,652,121.53 | $898,240.40 | 0.1174 | $6,753,881.13 | 0.8826 |
| Computed | $7,652,121.53 | $1,052,228.06 | 0.1375 | $6,599,893.47 | 0.8625 |
| Difference | | ($153,987.66) | -0.0201 | $153,987.66 | 0.0201 |



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Generation Arrangement Report

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Account: KEPCo 101/6 367 - KY
Dispersion: 50.00 - S-.5

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $576,157.36 | 50.00 | 49.63 | 0.9926 | 1.0000 | $571,895.95 | $11,523.15 |
| 2007 | 1.50 | $963,461.43 | 50.00 | 48.91 | 0.9782 | 1.0000 | $942,421.21 | $19,269.23 |
| 2006 | 2.50 | $772,219.97 | 50.00 | 48.20 | 0.9641 | 1.0000 | $744,485.11 | $15,444.40 |
| 2005 | 3.50 | $101,668.54 | 50.00 | 47.52 | 0.9503 | 1.0000 | $96,616.56 | $2,033.37 |
| 2004 | 4.50 | $788,048.30 | 50.00 | 46.84 | 0.9368 | 1.0000 | $738,240.67 | $15,760.97 |
| 2003 | 5.50 | $237,053.79 | 50.00 | 46.18 | 0.9235 | 1.0000 | $218,922.63 | $4,741.08 |
| 2002 | 6.50 | $144,120.80 | 50.00 | 45.52 | 0.9105 | 1.0000 | $131,215.34 | $2,882.42 |
| 2001 | 7.50 | $278,536.52 | 50.00 | 44.88 | 0.8976 | 1.0000 | $250,012.81 | $5,570.73 |
| 2000 | 8.50 | $244,297.40 | 50.00 | 44.25 | 0.8849 | 1.0000 | $216,185.21 | $4,885.95 |
| 1999 | 9.50 | $352,262.20 | 50.00 | 43.62 | 0.8724 | 1.0000 | $307,321.11 | $7,045.24 |
| 1998 | 10.50 | $136,018.40 | 50.00 | 43.00 | 0.8601 | 1.0000 | $116,986.68 | $2,720.37 |
| 1997 | 11.50 | $311,603.14 | 50.00 | 42.40 | 0.8479 | 1.0000 | $264,208.81 | $6,232.06 |
| 1996 | 12.50 | $173,317.73 | 50.00 | 41.79 | 0.8359 | 1.0000 | $144,870.90 | $3,466.35 |
| 1995 | 13.50 | $188,669.84 | 50.00 | 41.20 | 0.8240 | 1.0000 | $155,458.86 | $3,773.40 |
| 1994 | 14.50 | $158,181.27 | 50.00 | 40.61 | 0.8122 | 1.0000 | $128,475.70 | $3,163.63 |
| 1993 | 15.50 | $251,310.07 | 50.00 | 40.03 | 0.8006 | 1.0000 | $201,190.58 | $5,026.20 |
| 1992 | 16.50 | $135,449.86 | 50.00 | 39.45 | 0.7890 | 1.0000 | $106,876.67 | $2,709.00 |
| 1991 | 17.50 | $121,820.67 | 50.00 | 38.88 | 0.7776 | 1.0000 | $94,733.27 | $2,436.41 |
| 1990 | 18.50 | $312,895.12 | 50.00 | 38.32 | 0.7663 | 1.0000 | $239,785.88 | $6,257.90 |
| 1989 | 19.50 | $98,828.16 | 50.00 | 37.76 | 0.7552 | 1.0000 | $74,631.23 | $1,976.56 |
| 1988 | 20.50 | $65,076.14 | 50.00 | 37.20 | 0.7441 | 1.0000 | $48,421.00 | $1,301.52 |
| 1987 | 21.50 | $89,560.82 | 50.00 | 36.65 | 0.7331 | 1.0000 | $65,655.34 | $1,791.22 |
| 1986 | 22.50 | $64,647.82 | 50.00 | 36.11 | 0.7222 | 1.0000 | $46,687.27 | $1,292.96 |
| 1985 | 23.50 | $96,154.90 | 50.00 | 35.57 | 0.7114 | 1.0000 | $68,401.68 | $1,923.10 |
| 1984 | 24.50 | $17,052.19 | 50.00 | 35.03 | 0.7006 | 1.0000 | $11,947.57 | $341.04 |
| 1983 | 25.50 | $78,839.64 | 50.00 | 34.50 | 0.6900 | 1.0000 | $54,400.35 | $1,576.79 |
| 1982 | 26.50 | $202,595.28 | 50.00 | 33.97 | 0.6795 | 1.0000 | $137,653.39 | $4,051.91 |
| 1981 | 27.50 | $85,403.61 | 50.00 | 33.45 | 0.6690 | 1.0000 | $57,132.44 | $1,708.07 |
| 1980 | 28.50 | $64,662.27 | 50.00 | 32.93 | 0.6586 | 1.0000 | $42,584.30 | $1,293.25 |
| 1979 | 29.50 | $33,493.19 | 50.00 | 32.41 | 0.6482 | 1.0000 | $21,711.22 | $669.86 |
| 1978 | 30.50 | $60,488.02 | 50.00 | 31.90 | 0.6380 | 1.0000 | $38,589.00 | $1,209.76 |
| 1977 | 31.50 | $37,823.50 | 50.00 | 31.39 | 0.6278 | 1.0000 | $23,744.31 | $756.47 |
| 1976 | 32.50 | $47,337.17 | 50.00 | 30.88 | 0.6176 | 1.0000 | $29,236.71 | $946.74 |

Generation Arrangement Report



Account: KEPCo 101/6 367 - KY
Dispersion: 50.00 - S-.5

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $16,527.54 | 50.00 | 30.38 | 0.6076 | 1.0000 | $10,041.53 | $330.55 |
| 1974 | 34.50 | $51,811.79 | 50.00 | 29.88 | 0.5976 | 1.0000 | $30,960.21 | $1,036.24 |
| 1973 | 35.50 | $92,372.24 | 50.00 | 29.38 | 0.5876 | 1.0000 | $54,277.21 | $1,847.44 |
| 1972 | 36.50 | $72,106.16 | 50.00 | 28.88 | 0.5777 | 1.0000 | $41,655.50 | $1,442.12 |
| 1971 | 37.50 | $55,858.89 | 50.00 | 28.39 | 0.5679 | 1.0000 | $31,719.96 | $1,117.18 |
| 1970 | 38.50 | $48,559.20 | 50.00 | 27.90 | 0.5581 | 1.0000 | $27,099.49 | $971.18 |
| 1969 | 39.50 | $7,336.22 | 50.00 | 27.42 | 0.5483 | 1.0000 | $4,022.71 | $146.72 |
| 1968 | 40.50 | $3,042.39 | 50.00 | 26.93 | 0.5386 | 1.0000 | $1,638.77 | $60.85 |
| 1967 | 41.50 | $9,157.48 | 50.00 | 26.45 | 0.5290 | 1.0000 | $4,844.36 | $183.15 |
| 1966 | 42.50 | $2,790.87 | 50.00 | 25.97 | 0.5194 | 1.0000 | $1,449.62 | $55.82 |
| 1965 | 43.50 | $1,211.59 | 50.00 | 25.49 | 0.5099 | 1.0000 | $617.75 | $24.23 |
| 1963 | 45.50 | $905.19 | 50.00 | 24.55 | 0.4909 | 1.0000 | $444.36 | $18.10 |
| 1957 | 51.50 | $228.34 | 50.00 | 21.75 | 0.4349 | 1.0000 | $99.32 | $4.57 |
| 1947 | 61.50 | $197.28 | 50.00 | 17.21 | 0.3442 | 1.0000 | $67.90 | $3.95 |
| 1942 | 66.50 | $93.76 | 50.00 | 14.98 | 0.2997 | 1.0000 | $28.10 | $1.88 |
| 1940 | 68.50 | $56.35 | 50.00 | 14.10 | 0.2820 | 1.0000 | $15.89 | $1.13 |
| 1939 | 69.50 | $410.72 | 50.00 | 13.66 | 0.2732 | 1.0000 | $112.21 | $8.21 |
| 1936 | 72.50 | $400.40 | 50.00 | 12.34 | 0.2468 | 1.0000 | $98.82 | $8.01 |
| | | $7,652,121.53 | 50.00 | 43.12 | 0.8625 | 1.0000 | $6,599,893.47 | $153,042.43 |

Depreciation Reserve Summary



Account: KEPCo 101/6 368 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 30 - R0.5

Average Net Salvage Rate: 25.00%
Future Net Salvage Rate: 25.00%

Broad Group Procedure

January 1 , 2009

| | Plant Amt | Depreciation Reserve Amount | Depreciation Reserve Ratio | Net Plant Amount | Net Plant Ratio |
|---|---|---|---|---|---|
| Recorded | $98,415,054.43 | $17,662,832.57 | 0.1795 | $56,148,458.25 | 0.5705 |
| Computed | $98,415,054.43 | $20,690,817.38 | 0.2102 | $53,120,473.44 | 0.5398 |
| Difference | | ($3,027,984.81) | -0.0308 | $3,027,984.81 | 0.0308 |

Generation Arrangement Report



Account: KEPCo 101/6 368 - KY
Dispersion: 30.00 - R0.5
rage Net Salvage Rate: 25.00%
Future Net Salvage Rate: 25.00%

Broad Group Procedure
January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $7,450,618.50 | 30.00 | 29.69 | 0.7422 | 1.0000 | $5,530,094.25 | $186,265.46 |
| 2007 | 1.50 | $7,254,032.50 | 30.00 | 29.07 | 0.7268 | 1.0000 | $5,271,945.26 | $181,350.81 |
| 2006 | 2.50 | $4,610,530.84 | 30.00 | 28.45 | 0.7114 | 1.0000 | $3,279,766.84 | $115,263.27 |
| 2005 | 3.50 | $2,427,727.71 | 30.00 | 27.84 | 0.6960 | 1.0000 | $1,689,765.15 | $60,693.19 |
| 2004 | 4.50 | $2,508,317.48 | 30.00 | 27.23 | 0.6808 | 1.0000 | $1,707,588.98 | $62,707.94 |
| 2003 | 5.50 | $1,277,326.30 | 30.00 | 26.62 | 0.6656 | 1.0000 | $850,160.15 | $31,933.16 |
| 2002 | 6.50 | $3,510,019.56 | 30.00 | 26.02 | 0.6504 | 1.0000 | $2,283,058.23 | $87,750.49 |
| 2001 | 7.50 | $2,203,297.46 | 30.00 | 25.41 | 0.6354 | 1.0000 | $1,399,910.49 | $55,082.44 |
| 2000 | 8.50 | $3,095,724.60 | 30.00 | 24.81 | 0.6204 | 1.0000 | $1,920,434.83 | $77,393.11 |
| 1999 | 9.50 | $3,969,541.13 | 30.00 | 24.22 | 0.6054 | 1.0000 | $2,403,084.83 | $99,238.53 |
| 1998 | 10.50 | $3,049,131.24 | 30.00 | 23.62 | 0.5905 | 1.0000 | $1,800,432.48 | $76,228.28 |
| 1997 | 11.50 | $4,110,249.12 | 30.00 | 23.02 | 0.5756 | 1.0000 | $2,365,945.02 | $102,756.23 |
| 1996 | 12.50 | $2,778,395.23 | 30.00 | 22.43 | 0.5608 | 1.0000 | $1,558,185.99 | $69,459.88 |
| 1995 | 13.50 | $3,482,517.21 | 30.00 | 21.84 | 0.5461 | 1.0000 | $1,901,888.75 | $87,062.93 |
| 1994 | 14.50 | $4,458,288.16 | 30.00 | 21.26 | 0.5315 | 1.0000 | $2,369,621.28 | $111,457.20 |
| 1993 | 15.50 | $3,404,200.20 | 30.00 | 20.68 | 0.5170 | 1.0000 | $1,759,908.87 | $85,105.01 |
| 1992 | 16.50 | $2,507,427.51 | 30.00 | 20.10 | 0.5026 | 1.0000 | $1,260,203.70 | $62,685.69 |
| 1991 | 17.50 | $2,933,382.55 | 30.00 | 19.53 | 0.4883 | 1.0000 | $1,432,400.01 | $73,334.56 |
| 1990 | 18.50 | $2,916,488.91 | 30.00 | 18.97 | 0.4742 | 1.0000 | $1,382,897.09 | $72,912.22 |
| 1989 | 19.50 | $2,756,932.53 | 30.00 | 18.41 | 0.4602 | 1.0000 | $1,268,670.91 | $68,923.31 |
| 1988 | 20.50 | $1,650,611.63 | 30.00 | 17.85 | 0.4463 | 1.0000 | $736,730.26 | $41,265.29 |
| 1987 | 21.50 | $2,192,627.67 | 30.00 | 17.31 | 0.4327 | 1.0000 | $948,646.62 | $54,815.69 |
| 1986 | 22.50 | $2,469,175.06 | 30.00 | 16.77 | 0.4192 | 1.0000 | $1,034,971.71 | $61,729.38 |
| 1985 | 23.50 | $1,911,956.23 | 30.00 | 16.23 | 0.4058 | 1.0000 | $775,942.42 | $47,798.91 |
| 1984 | 24.50 | $2,079,109.79 | 30.00 | 15.71 | 0.3927 | 1.0000 | $816,439.47 | $51,977.74 |
| 1983 | 25.50 | $1,563,748.17 | 30.00 | 15.19 | 0.3797 | 1.0000 | $593,829.47 | $39,093.70 |
| 1982 | 26.50 | $1,319,593.78 | 30.00 | 14.68 | 0.3670 | 1.0000 | $484,273.27 | $32,989.84 |
| 1981 | 27.50 | $1,727,030.12 | 30.00 | 14.18 | 0.3544 | 1.0000 | $612,078.55 | $43,175.75 |
| 1980 | 28.50 | $2,026,221.05 | 30.00 | 13.68 | 0.3420 | 1.0000 | $693,048.97 | $50,655.53 |
| 1979 | 29.50 | $1,529,489.65 | 30.00 | 13.19 | 0.3299 | 1.0000 | $504,526.83 | $38,237.24 |
| 1978 | 30.50 | $1,984,197.33 | 30.00 | 12.72 | 0.3179 | 1.0000 | $630,728.24 | $49,604.93 |
| 1977 | 31.50 | $1,748,736.42 | 30.00 | 12.24 | 0.3061 | 1.0000 | $535,254.23 | $43,718.41 |
| 1976 | 32.50 | $808,490.71 | 30.00 | 11.78 | 0.2945 | 1.0000 | $238,076.94 | $20,212.27 |

Generation Arrangement Report



Account: KEPCo 101/6 368 - KY
Dispersion: 30.00 - R0.5

;rage Net Salvage Rate: 25.00%
Future Net Salvage Rate: 25.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $725,580.37 | 30.00 | 11.32 | 0.2830 | 1.0000 | $205,371.55 | $18,139.51 |
| 1974 | 34.50 | $631,874.00 | 30.00 | 10.87 | 0.2718 | 1.0000 | $171,742.78 | $15,796.85 |
| 1973 | 35.50 | $570,838.98 | 30.00 | 10.43 | 0.2607 | 1.0000 | $148,834.43 | $14,270.97 |
| 1972 | 36.50 | $419,577.46 | 30.00 | 9.99 | 0.2498 | 1.0000 | $104,821.57 | $10,489.44 |
| 1971 | 37.50 | $409,792.00 | 30.00 | 9.56 | 0.2391 | 1.0000 | $97,969.48 | $10,244.80 |
| 1970 | 38.50 | $325,965.50 | 30.00 | 9.14 | 0.2285 | 1.0000 | $74,475.40 | $8,149.14 |
| 1969 | 39.50 | $202,860.35 | 30.00 | 8.72 | 0.2180 | 1.0000 | $44,227.08 | $5,071.51 |
| 1968 | 40.50 | $297,152.00 | 30.00 | 8.31 | 0.2077 | 1.0000 | $61,715.41 | $7,428.80 |
| 1967 | 41.50 | $228,659.98 | 30.00 | 7.90 | 0.1975 | 1.0000 | $45,153.28 | $5,716.50 |
| 1966 | 42.50 | $179,634.16 | 30.00 | 7.49 | 0.1874 | 1.0000 | $33,658.51 | $4,490.85 |
| 1965 | 43.50 | $112,213.01 | 30.00 | 7.09 | 0.1773 | 1.0000 | $19,900.01 | $2,805.33 |
| 1964 | 44.50 | $81,633.10 | 30.00 | 6.70 | 0.1674 | 1.0000 | $13,663.42 | $2,040.83 |
| 1963 | 45.50 | $62,860.75 | 30.00 | 6.30 | 0.1575 | 1.0000 | $9,899.59 | $1,571.52 |
| 1962 | 46.50 | $52,065.94 | 30.00 | 5.90 | 0.1476 | 1.0000 | $7,684.16 | $1,301.65 |
| 1961 | 47.50 | $62,247.50 | 30.00 | 5.51 | 0.1377 | 1.0000 | $8,570.88 | $1,556.19 |
| 1960 | 48.50 | $54,234.76 | 30.00 | 5.11 | 0.1278 | 1.0000 | $6,930.29 | $1,355.87 |
| 1959 | 49.50 | $58,960.27 | 30.00 | 4.71 | 0.1178 | 1.0000 | $6,944.89 | $1,474.01 |
| 1958 | 50.50 | $54,973.04 | 30.00 | 4.31 | 0.1077 | 1.0000 | $5,920.04 | $1,374.33 |
| 1957 | 51.50 | $27,425.68 | 30.00 | 3.90 | 0.0975 | 1.0000 | $2,673.50 | $685.64 |
| 1956 | 52.50 | $57,168.75 | 30.00 | 3.48 | 0.0870 | 1.0000 | $4,976.29 | $1,429.22 |
| 1955 | 53.50 | $30,271.32 | 30.00 | 3.06 | 0.0764 | 1.0000 | $2,312.21 | $756.78 |
| 1954 | 54.50 | $15,035.19 | 30.00 | 2.62 | 0.0655 | 1.0000 | $984.63 | $375.88 |
| 1953 | 55.50 | $13,246.72 | 30.00 | 2.17 | 0.0543 | 1.0000 | $718.79 | $331.17 |
| 1952 | 56.50 | $7,547.55 | 30.00 | 1.71 | 0.0428 | 1.0000 | $322.90 | $188.69 |
| 1951 | 57.50 | $11,761.92 | 30.00 | 1.25 | 0.0312 | 1.0000 | $367.28 | $294.05 |
| 1950 | 58.50 | $6,338.28 | 30.00 | 0.79 | 0.0197 | 1.0000 | $125.02 | $158.46 |
| 1949 | 59.50 | ($0.50) | 30.00 | 0.40 | 0.0100 | 1.0000 | $0.00 | ($0.01) |
| | | $98,415,064.43 | 30.00 | 21.59 | 0.5398 | 1.0000 | $53,120,473.44 | $2,460,376.36 |



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Depreciation Reserve Summary



Account: KEPCo 101/6 369 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 25 - L0

Average Net Salvage Rate: -15.00%
Future Net Salvage Rate: -15.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $38,162,243.26 | $7,829,242.37 | 0.2052 | $36,057,337.38 | 0.9448 |
| Computed | $38,162,243.26 | $9,171,429.52 | 0.2403 | $34,715,150.23 | 0.9097 |
| Difference | | ($1,342,187.15) | -0.0352 | $1,342,187.15 | 0.0352 |

Generation Arrangement Report

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Account: KEPCo 101/6 369 - KY
Dispersion: 25.00 - L0

erage Net Salvage Rate: -15.00%
Future Net Salvage Rate: -15.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $2,815,091.50 | 25.00 | 24.58 | 1.1306 | 1.0000 | $3,182,767.97 | $129,494.21 |
| 2007 | 1.50 | $2,552,906.50 | 25.00 | 23.85 | 1.0971 | 1.0000 | $2,800,688.20 | $117,433.70 |
| 2006 | 2.50 | $2,696,436.50 | 25.00 | 23.20 | 1.0673 | 1.0000 | $2,877,985.23 | $124,036.08 |
| 2005 | 3.50 | $2,369,258.87 | 25.00 | 22.61 | 1.0402 | 1.0000 | $2,464,436.43 | $108,985.91 |
| 2004 | 4.50 | $1,992,575.74 | 25.00 | 22.06 | 1.0150 | 1.0000 | $2,022,421.61 | $91,658.48 |
| 2003 | 5.50 | $2,565,195.95 | 25.00 | 21.55 | 0.9914 | 1.0000 | $2,543,020.91 | $117,999.01 |
| 2002 | 6.50 | $1,783,173.59 | 25.00 | 21.07 | 0.9690 | 1.0000 | $1,727,959.30 | $82,025.99 |
| 2001 | 7.50 | $1,759,260.78 | 25.00 | 20.61 | 0.9478 | 1.0000 | $1,667,504.12 | $80,926.00 |
| 2000 | 8.50 | $2,375,528.82 | 25.00 | 20.17 | 0.9276 | 1.0000 | $2,203,518.57 | $109,274.33 |
| 1999 | 9.50 | $2,160,083.28 | 25.00 | 19.74 | 0.9082 | 1.0000 | $1,961,732.84 | $99,363.83 |
| 1998 | 10.50 | $664,737.97 | 25.00 | 19.34 | 0.8894 | 1.0000 | $591,247.59 | $30,577.95 |
| 1997 | 11.50 | $2,134,024.70 | 25.00 | 18.94 | 0.8713 | 1.0000 | $1,859,397.29 | $98,165.14 |
| 1996 | 12.50 | $639,388.86 | 25.00 | 18.56 | 0.8536 | 1.0000 | $545,800.24 | $29,411.89 |
| 1995 | 13.50 | $838,668.32 | 25.00 | 18.18 | 0.8363 | 1.0000 | $701,399.41 | $38,578.74 |
| 1994 | 14.50 | $988,801.38 | 25.00 | 17.81 | 0.8194 | 1.0000 | $810,205.81 | $45,484.86 |
| 1993 | 15.50 | $1,169,310.03 | 25.00 | 17.45 | 0.8028 | 1.0000 | $938,694.83 | $53,788.26 |
| 1992 | 16.50 | $792,671.10 | 25.00 | 17.10 | 0.7865 | 1.0000 | $623,445.23 | $36,462.87 |
| 1991 | 17.50 | $807,635.15 | 25.00 | 16.75 | 0.7706 | 1.0000 | $622,335.12 | $37,151.22 |
| 1990 | 18.50 | $593,763.61 | 25.00 | 16.41 | 0.7549 | 1.0000 | $448,261.06 | $27,313.13 |
| 1989 | 19.50 | $712,408.59 | 25.00 | 16.08 | 0.7396 | 1.0000 | $526,925.84 | $32,770.80 |
| 1988 | 20.50 | $513,065.46 | 25.00 | 15.75 | 0.7246 | 1.0000 | $371,779.77 | $23,601.01 |
| 1987 | 21.50 | $514,827.20 | 25.00 | 15.43 | 0.7099 | 1.0000 | $365,482.85 | $23,682.05 |
| 1986 | 22.50 | $387,672.00 | 25.00 | 15.12 | 0.6955 | 1.0000 | $269,622.81 | $17,832.91 |
| 1985 | 23.50 | $359,490.06 | 25.00 | 14.81 | 0.6813 | 1.0000 | $244,935.37 | $16,536.54 |
| 1984 | 24.50 | $388,477.47 | 25.00 | 14.51 | 0.6675 | 1.0000 | $259,296.33 | $17,869.96 |
| 1983 | 25.50 | $444,198.84 | 25.00 | 14.21 | 0.6539 | 1.0000 | $290,446.22 | $20,433.15 |
| 1982 | 26.50 | $311,944.04 | 25.00 | 13.92 | 0.6405 | 1.0000 | $199,807.12 | $14,349.43 |
| 1981 | 27.50 | $359,215.25 | 25.00 | 13.64 | 0.6274 | 1.0000 | $225,380.70 | $16,523.90 |
| 1980 | 28.50 | $338,925.99 | 25.00 | 13.36 | 0.6146 | 1.0000 | $208,294.62 | $15,590.60 |
| 1979 | 29.50 | $264,050.48 | 25.00 | 13.09 | 0.6020 | 1.0000 | $158,948.07 | $12,146.32 |
| 1978 | 30.50 | $291,145.81 | 25.00 | 12.82 | 0.5896 | 1.0000 | $171,654.87 | $13,392.71 |
| 1977 | 31.50 | $239,426.52 | 25.00 | 12.55 | 0.5774 | 1.0000 | $138,252.36 | $11,013.62 |
| 1976 | 32.50 | $186,149.86 | 25.00 | 12.29 | 0.5655 | 1.0000 | $105,265.52 | $8,562.89 |



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Generation Arrangement Report

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Account: KEPCo 101/6 369 - KY
Dispersion: 25.00 - L0

Average Net Salvage Rate: -15.00%
Future Net Salvage Rate: -15.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $153,780.09 | 25.00 | 12.04 | 0.5538 | 1.0000 | $85,159.36 | $7,073.88 |
| 1974 | 34.50 | $133,145.41 | 25.00 | 11.79 | 0.5423 | 1.0000 | $72,200.36 | $6,124.69 |
| 1973 | 35.50 | $169,001.86 | 25.00 | 11.54 | 0.5309 | 1.0000 | $89,729.49 | $7,774.09 |
| 1972 | 36.50 | $165,063.63 | 25.00 | 11.30 | 0.5198 | 1.0000 | $85,806.43 | $7,592.93 |
| 1971 | 37.50 | $114,971.88 | 25.00 | 11.06 | 0.5089 | 1.0000 | $58,510.28 | $5,288.71 |
| 1970 | 38.50 | $89,073.79 | 25.00 | 10.83 | 0.4982 | 1.0000 | $44,374.20 | $4,097.39 |
| 1969 | 39.50 | $73,189.03 | 25.00 | 10.60 | 0.4876 | 1.0000 | $35,689.08 | $3,366.70 |
| 1968 | 40.50 | $59,708.72 | 25.00 | 10.37 | 0.4772 | 1.0000 | $28,495.45 | $2,746.60 |
| 1967 | 41.50 | $50,405.15 | 25.00 | 10.15 | 0.4671 | 1.0000 | $23,541.75 | $2,318.64 |
| 1966 | 42.50 | $36,124.49 | 25.00 | 9.94 | 0.4570 | 1.0000 | $16,509.31 | $1,661.73 |
| 1965 | 43.50 | $26,810.45 | 25.00 | 9.72 | 0.4471 | 1.0000 | $11,987.62 | $1,233.28 |
| 1964 | 44.50 | $21,374.50 | 25.00 | 9.51 | 0.4374 | 1.0000 | $9,349.74 | $983.23 |
| 1963 | 45.50 | $15,337.03 | 25.00 | 9.30 | 0.4278 | 1.0000 | $6,561.77 | $705.50 |
| 1962 | 46.50 | $14,414.05 | 25.00 | 9.10 | 0.4184 | 1.0000 | $6,031.15 | $663.05 |
| 1961 | 47.50 | $17,052.67 | 25.00 | 8.89 | 0.4092 | 1.0000 | $6,977.36 | $784.42 |
| 1960 | 48.50 | $13,280.79 | 25.00 | 8.70 | 0.4000 | 1.0000 | $5,312.84 | $610.92 |
| 1959 | 49.50 | ($0.50) | 25.00 | 8.50 | 0.3911 | 1.0000 | ($0.20) | ($0.02) |
| | | $38,162,243.26 | 25.00 | 19.78 | 0.9097 | 1.0000 | $34,715,150.23 | $1,755,463.19 |

## Depreciation Reserve Summary

Account: KEPCo 101/6 370 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 17 - S6

Average Net Salvage Rate: -8.00%
Future Net Salvage Rate: -8.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $22,962,066.14 | $6,591,671.18 | 0.2871 | $18,207,360.25 | 0.7929 |
| Computed | $22,962,066.14 | $7,721,698.32 | 0.3363 | $17,077,333.11 | 0.7437 |
| Difference | | ($1,130,027.14) | -0.0492 | $1,130,027.14 | 0.0492 |

Generation Arrangement Report



Account: KEPCo 101/6 370 - KY
Dispersion: 17.00 - S6
rage Net Salvage Rate: -8.00%
Future Net Salvage Rate: -8.00%
Broad Group Procedure
January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $1,867,577.83 | 17.00 | 16.50 | 1.0482 | 1.0000 | $1,957,661.00 | $118,646.12 |
| 2007 | 1.50 | $1,483,499.70 | 17.00 | 15.50 | 0.9847 | 1.0000 | $1,460,810.88 | $94,245.86 |
| 2006 | 2.50 | $8,964,812.56 | 17.00 | 14.50 | 0.9212 | 1.0000 | $8,258,174.40 | $569,529.27 |
| 2005 | 3.50 | $2,636,906.08 | 17.00 | 13.50 | 0.8576 | 1.0000 | $2,261,534.74 | $167,521.09 |
| 2004 | 4.50 | $634,480.58 | 17.00 | 12.50 | 0.7941 | 1.0000 | $503,852.23 | $40,308.18 |
| 2003 | 5.50 | $388,920.90 | 17.00 | 11.50 | 0.7306 | 1.0000 | $284,141.03 | $24,707.92 |
| 2002 | 6.50 | $308,251.53 | 17.00 | 10.50 | 0.6671 | 1.0000 | $205,621.90 | $19,583.04 |
| 2001 | 7.50 | $408,985.60 | 17.00 | 9.50 | 0.6035 | 1.0000 | $246,834.84 | $25,982.61 |
| 2000 | 8.50 | $954,779.05 | 17.00 | 8.50 | 0.5400 | 1.0000 | $515,580.69 | $60,656.55 |
| 1999 | 9.50 | $618,158.77 | 17.00 | 7.50 | 0.4765 | 1.0000 | $294,534.47 | $39,271.26 |
| 1998 | 10.50 | $834,754.02 | 17.00 | 6.50 | 0.4129 | 1.0000 | $344,704.31 | $53,031.43 |
| 1997 | 11.50 | $696,911.27 | 17.00 | 5.50 | 0.3494 | 1.0000 | $243,508.06 | $44,274.36 |
| 1996 | 12.50 | $421,858.08 | 17.00 | 4.50 | 0.2859 | 1.0000 | $120,617.69 | $26,800.40 |
| 1995 | 13.50 | $534,442.64 | 17.00 | 3.51 | 0.2231 | 1.0000 | $119,229.46 | $33,952.83 |
| 1994 | 14.50 | $868,415.56 | 17.00 | 2.58 | 0.1640 | 1.0000 | $142,413.85 | $55,169.93 |
| 1993 | 15.50 | $569,500.27 | 17.00 | 1.81 | 0.1150 | 1.0000 | $65,514.92 | $36,180.02 |
| 1992 | 16.50 | $409,969.78 | 17.00 | 1.27 | 0.0806 | 1.0000 | $33,025.06 | $26,045.14 |
| 1991 | 17.50 | $240,783.05 | 17.00 | 0.93 | 0.0590 | 1.0000 | $14,211.49 | $15,296.81 |
| 1990 | 18.50 | $98,497.80 | 17.00 | 0.73 | 0.0464 | 1.0000 | $4,566.51 | $6,257.51 |
| 1989 | 19.50 | $18,174.32 | 17.00 | 0.62 | 0.0392 | 1.0000 | $711.62 | $1,154.60 |
| 1988 | 20.50 | $2,279.49 | 17.00 | 0.56 | 0.0354 | 1.0000 | $80.74 | $144.81 |
| 1987 | 21.50 | $107.76 | 17.00 | 0.47 | 0.0300 | 1.0000 | $3.23 | $6.85 |
| 1986 | 22.50 | ($0.50) | 17.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| | | $22,962,066.14 | 17.00 | 11.71 | 0.7437 | 1.0000 | $17,077,333.11 | $1,458,766.59 |



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Depreciation Reserve Summary

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Account: KEPCo 101/6 371 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 14 - R0.5

Average Net Salvage Rate: -15.00%
Future Net Salvage Rate: -15.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $18,001,253.13 | $5,252,970.70 | 0.2918 | $15,448,470.40 | 0.8582 |
| Computed | $18,001,253.13 | $6,153,500.98 | 0.3418 | $14,547,940.12 | 0.8082 |
| Difference | | ($900,530.28) | -0.0500 | $900,530.28 | 0.0500 |

Generation Arrangement Report

Page 292 of 350

Account: KEPCo 101/6 371 - KY
Dispersion: 14.00 - R0.5
rage Net Salvage Rate: -15.00%
Future Net Salvage Rate: -15.00%
Broad Group Procedure
January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $1,467,151.75 | 14.00 | 13.69 | 1.1245 | 1.0000 | $1,649,840.53 | $120,516.04 |
| 2007 | 1.50 | $1,415,262.77 | 14.00 | 13.07 | 1.0740 | 1.0000 | $1,519,927.27 | $116,253.73 |
| 2006 | 2.50 | $1,484,196.01 | 14.00 | 12.46 | 1.0239 | 1.0000 | $1,519,638.91 | $121,916.10 |
| 2005 | 3.50 | $1,610,970.21 | 14.00 | 11.86 | 0.9743 | 1.0000 | $1,569,491.27 | $132,329.70 |
| 2004 | 4.50 | $1,375,055.71 | 14.00 | 11.26 | 0.9250 | 1.0000 | $1,271,939.96 | $112,951.00 |
| 2003 | 5.50 | $1,997,490.31 | 14.00 | 10.67 | 0.8762 | 1.0000 | $1,750,120.33 | $164,079.56 |
| 2002 | 6.50 | $1,251,659.97 | 14.00 | 10.08 | 0.8278 | 1.0000 | $1,036,140.09 | $102,814.93 |
| 2001 | 7.50 | $670,306.85 | 14.00 | 9.50 | 0.7801 | 1.0000 | $522,921.29 | $55,060.92 |
| 2000 | 8.50 | $991,714.53 | 14.00 | 8.93 | 0.7333 | 1.0000 | $727,209.86 | $81,462.26 |
| 1999 | 9.50 | $1,233,750.01 | 14.00 | 8.37 | 0.6875 | 1.0000 | $848,180.73 | $101,343.75 |
| 1998 | 10.50 | $402,097.32 | 14.00 | 7.83 | 0.6428 | 1.0000 | $258,474.60 | $33,029.42 |
| 1997 | 11.50 | $995,668.14 | 14.00 | 7.30 | 0.5994 | 1.0000 | $596,814.79 | $81,787.03 |
| 1996 | 12.50 | $291,454.56 | 14.00 | 6.79 | 0.5573 | 1.0000 | $162,439.71 | $23,940.91 |
| 1995 | 13.50 | $303,594.53 | 14.00 | 6.29 | 0.5166 | 1.0000 | $156,844.30 | $24,938.12 |
| 1994 | 14.50 | $529,311.80 | 14.00 | 5.81 | 0.4773 | 1.0000 | $252,621.95 | $43,479.18 |
| 1993 | 15.50 | $624,631.65 | 14.00 | 5.35 | 0.4393 | 1.0000 | $274,372.28 | $51,309.03 |
| 1992 | 16.50 | $342,697.53 | 14.00 | 4.90 | 0.4025 | 1.0000 | $137,939.65 | $28,150.15 |
| 1991 | 17.50 | $272,414.91 | 14.00 | 4.47 | 0.3669 | 1.0000 | $99,960.44 | $22,376.94 |
| 1990 | 18.50 | $180,377.27 | 14.00 | 4.05 | 0.3324 | 1.0000 | $59,963.43 | $14,816.70 |
| 1989 | 19.50 | $181,301.38 | 14.00 | 3.64 | 0.2988 | 1.0000 | $54,176.24 | $14,892.61 |
| 1988 | 20.50 | $104,899.22 | 14.00 | 3.24 | 0.2659 | 1.0000 | $27,892.64 | $8,616.72 |
| 1987 | 21.50 | $88,529.97 | 14.00 | 2.84 | 0.2334 | 1.0000 | $20,665.26 | $7,272.10 |
| 1986 | 22.50 | $73,667.01 | 14.00 | 2.45 | 0.2010 | 1.0000 | $14,805.74 | $6,051.22 |
| 1985 | 23.50 | $48,464.37 | 14.00 | 2.05 | 0.1681 | 1.0000 | $8,149.02 | $3,981.00 |
| 1984 | 24.50 | $37,105.68 | 14.00 | 1.64 | 0.1343 | 1.0000 | $4,984.78 | $3,047.97 |
| 1983 | 25.50 | $19,546.48 | 14.00 | 1.20 | 0.0990 | 1.0000 | $1,934.21 | $1,605.60 |
| 1982 | 26.50 | $7,933.69 | 14.00 | 0.75 | 0.0619 | 1.0000 | $490.84 | $651.70 |
| 1981 | 27.50 | ($0.50) | 14.00 | 0.32 | 0.0261 | 1.0000 | ($0.01) | ($0.04) |
| | | $18,001,253.13 | 14.00 | 9.84 | 0.8082 | 1.0000 | $14,547,940.12 | $1,478,674.36 |



10/26/2009

Depreciation Reserve Summary

Page 293 of 350

Account: KEPCo 101/6 373 - KY
Scenario: KEPCO DISTRIBUTION 2008 NEW
Version: 24 - L0

Average Net Salvage Rate: -2.00%
Future Net Salvage Rate: -2.00%

Broad Group Procedure

January 1, 2009

| | Plant Amt | Depreciation Reserve Amount | Depreciation Reserve Ratio | Net Plant Amount | Net Plant Ratio |
|---|---|---|---|---|---|
| Recorded | $2,939,603.17 | $700,716.60 | 0.2384 | $2,297,678.63 | 0.7816 |
| Computed | $2,939,603.17 | $820,842.24 | 0.2792 | $2,177,552.99 | 0.7408 |
| Difference | | ($120,125.64) | -0.0409 | $120,125.64 | 0.0409 |



10/26/2009

Generation Arrangement Report

Page 294 of 350

Account: KEPCo 101/6 373 - KY
Dispersion: 24.00 - L0

,rage Net Salvage Rate: -2.00%
Future Net Salvage Rate: -2.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $141,474.50 | 24.00 | 23.58 | 1.0021 | 1.0000 | $141,778.13 | $6,012.67 |
| 2007 | 1.50 | $173,112.50 | 24.00 | 22.85 | 0.9713 | 1.0000 | $168,150.23 | $7,357.28 |
| 2006 | 2.50 | $151,500.50 | 24.00 | 22.21 | 0.9441 | 1.0000 | $143,030.73 | $6,438.77 |
| 2005 | 3.50 | $155,045.50 | 24.00 | 21.63 | 0.9192 | 1.0000 | $142,518.46 | $6,589.43 |
| 2004 | 4.50 | $139,549.50 | 24.00 | 21.09 | 0.8962 | 1.0000 | $125,065.71 | $5,930.85 |
| 2003 | 5.50 | $114,834.50 | 24.00 | 20.58 | 0.8747 | 1.0000 | $100,440.66 | $4,880.47 |
| 2002 | 6.50 | $90,680.50 | 24.00 | 20.10 | 0.8543 | 1.0000 | $77,470.12 | $3,853.92 |
| 2001 | 7.50 | $105,554.50 | 24.00 | 19.65 | 0.8350 | 1.0000 | $88,138.46 | $4,486.07 |
| 2000 | 8.50 | $76,887.73 | 24.00 | 19.21 | 0.8166 | 1.0000 | $62,783.85 | $3,267.73 |
| 1999 | 9.50 | $84,715.22 | 24.00 | 18.80 | 0.7989 | 1.0000 | $67,676.54 | $3,600.40 |
| 1998 | 10.50 | $38,145.06 | 24.00 | 18.40 | 0.7818 | 1.0000 | $29,821.90 | $1,621.17 |
| 1997 | 11.50 | $36,567.39 | 24.00 | 18.01 | 0.7653 | 1.0000 | $27,983.63 | $1,554.11 |
| 1996 | 12.50 | $43,421.44 | 24.00 | 17.63 | 0.7491 | 1.0000 | $32,527.07 | $1,845.41 |
| 1995 | 13.50 | $54,669.17 | 24.00 | 17.25 | 0.7333 | 1.0000 | $40,088.98 | $2,323.44 |
| 1994 | 14.50 | $79,388.39 | 24.00 | 16.89 | 0.7178 | 1.0000 | $56,987.22 | $3,374.01 |
| 1993 | 15.50 | $141,697.78 | 24.00 | 16.53 | 0.7027 | 1.0000 | $99,567.95 | $6,022.16 |
| 1992 | 16.50 | $10,074.14 | 24.00 | 16.18 | 0.6879 | 1.0000 | $6,929.53 | $428.15 |
| 1991 | 17.50 | $44,545.61 | 24.00 | 15.84 | 0.6733 | 1.0000 | $29,994.09 | $1,893.19 |
| 1990 | 18.50 | $146,181.88 | 24.00 | 15.51 | 0.6591 | 1.0000 | $96,350.75 | $6,212.73 |
| 1989 | 19.50 | $227,626.68 | 24.00 | 15.18 | 0.6452 | 1.0000 | $146,862.98 | $9,674.13 |
| 1988 | 20.50 | $128,973.28 | 24.00 | 14.86 | 0.6316 | 1.0000 | $81,453.66 | $5,481.36 |
| 1987 | 21.50 | $121,744.77 | 24.00 | 14.55 | 0.6182 | 1.0000 | $75,263.59 | $5,174.15 |
| 1986 | 22.50 | $118,986.20 | 24.00 | 14.24 | 0.6051 | 1.0000 | $71,999.80 | $5,056.91 |
| 1985 | 23.50 | $65,526.86 | 24.00 | 13.94 | 0.5923 | 1.0000 | $38,810.17 | $2,784.89 |
| 1984 | 24.50 | $26,049.08 | 24.00 | 13.64 | 0.5797 | 1.0000 | $15,100.89 | $1,107.09 |
| 1983 | 25.50 | $45,456.85 | 24.00 | 13.35 | 0.5674 | 1.0000 | $25,791.59 | $1,931.92 |
| 1982 | 26.50 | $85,096.65 | 24.00 | 13.07 | 0.5553 | 1.0000 | $47,254.60 | $3,616.61 |
| 1981 | 27.50 | $62,364.59 | 24.00 | 12.79 | 0.5435 | 1.0000 | $33,894.16 | $2,650.50 |
| 1980 | 28.50 | $33,159.55 | 24.00 | 12.51 | 0.5319 | 1.0000 | $17,636.01 | $1,409.28 |
| 1979 | 29.50 | $8,626.93 | 24.00 | 12.25 | 0.5205 | 1.0000 | $4,489.95 | $366.64 |
| 1978 | 30.50 | $20,778.56 | 24.00 | 11.98 | 0.5093 | 1.0000 | $10,581.85 | $883.09 |
| 1977 | 31.50 | $6,696.29 | 24.00 | 11.72 | 0.4983 | 1.0000 | $3,336.77 | $284.59 |
| 1976 | 32.50 | $5,436.47 | 24.00 | 11.47 | 0.4875 | 1.0000 | $2,650.47 | $231.05 |

Generation Arrangement Report



Account: KEPCo 101/6 373 - KY
Dispersion: 24.00 - L0

›rage Net Salvage Rate: -2.00%
Future Net Salvage Rate: -2.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1975 | 33.50 | $12,535.22 | 24.00 | 11.22 | 0.4770 | 1.0000 | $5,979.16 | $532.75 |
| 1974 | 34.50 | $10,444.38 | 24.00 | 10.98 | 0.4666 | 1.0000 | $4,873.51 | $443.89 |
| 1973 | 35.50 | $20,798.47 | 24.00 | 10.74 | 0.4564 | 1.0000 | $9,492.95 | $883.93 |
| 1972 | 36.50 | $4,370.39 | 24.00 | 10.50 | 0.4464 | 1.0000 | $1,951.04 | $185.74 |
| 1971 | 37.50 | $6,660.52 | 24.00 | 10.27 | 0.4366 | 1.0000 | $2,907.85 | $283.07 |
| 1970 | 38.50 | $17,322.84 | 24.00 | 10.05 | 0.4269 | 1.0000 | $7,395.42 | $736.22 |
| 1969 | 39.50 | $10,680.46 | 24.00 | 9.82 | 0.4175 | 1.0000 | $4,458.91 | $453.92 |
| 1968 | 40.50 | $11,148.78 | 24.00 | 9.60 | 0.4081 | 1.0000 | $4,550.11 | $473.82 |
| 1967 | 41.50 | $24,501.11 | 24.00 | 9.39 | 0.3990 | 1.0000 | $9,774.96 | $1,041.30 |
| 1966 | 42.50 | $9,965.27 | 24.00 | 9.18 | 0.3899 | 1.0000 | $3,885.94 | $423.52 |
| 1965 | 43.50 | $10,323.46 | 24.00 | 8.97 | 0.3811 | 1.0000 | $3,933.84 | $438.75 |
| 1964 | 44.50 | $4,309.60 | 24.00 | 8.76 | 0.3723 | 1.0000 | $1,604.63 | $183.16 |
| 1963 | 45.50 | $6,987.70 | 24.00 | 8.56 | 0.3638 | 1.0000 | $2,542.22 | $296.98 |
| 1962 | 46.50 | $4,986.90 | 24.00 | 8.36 | 0.3554 | 1.0000 | $1,772.13 | $211.94 |
| 1961 | 47.50 | ($0.50) | 24.00 | 8.17 | 0.3470 | 1.0000 | ($0.17) | ($0.02) |
| | | $2,939,603.17 | 24.00 | 17.43 | 0.7408 | 1.0000 | $2,177,552.99 | $124,933.13 |

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# GENERAL PLANT WORKPAPERS

## LIFE ANALYSIS

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 3892 RIGHTS OF WAY | |
| Depreciable Balance | $219,615 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 75 | 75 |
| Iowa Curve | R4.0 | R4.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

******************************************************************************************************

There have been no retirements in this account. Therefore, no actuarial analysis was done. The recommendation is to continue the current 75 year average service life following an R4.O type dispersion.

No removal or salvage is expected from the retirement of rights-of way.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

Account 390 STRUCTURES & IMPROVEMENTS

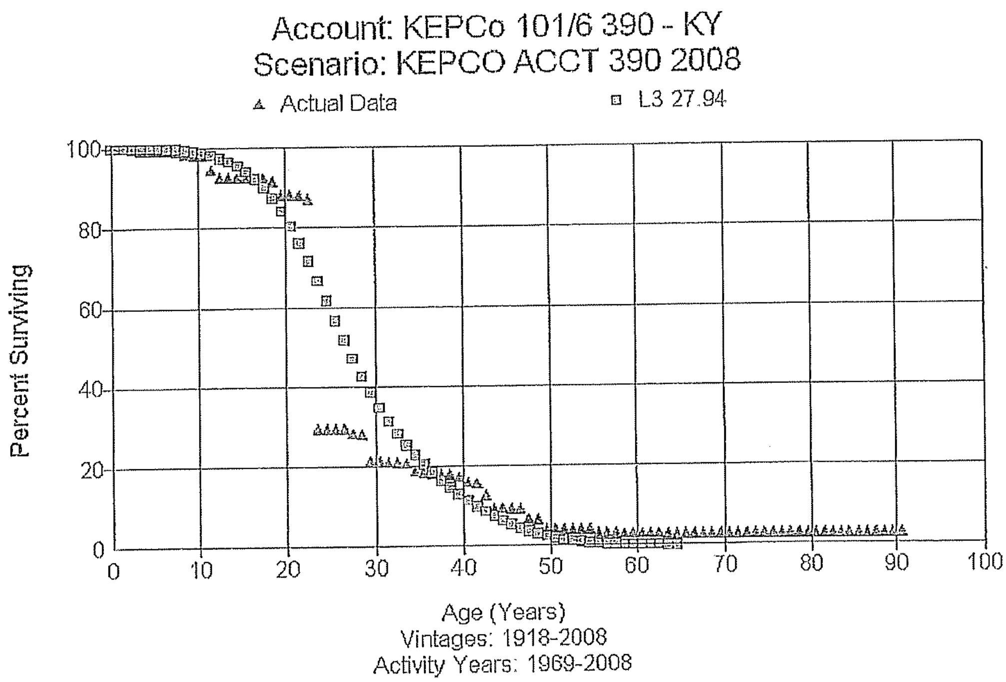
Depreciable Balance $19,910,322

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 45 | 28 |
| Iowa Curve | L3.0 | L3.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 11% |
| Net Salvage % | 0% | 11% |

************************************************************************************************************

The actuarial analyses show the average service life for this account has decreased. Based on the results of the 40 year band analysis, the recommendation is to move to a 28 year average service life following an L3.0 type dispersion.

Gross salvage could be expected from the sale of service center buildings


Account: KEPCo 101/6 390 - KY
Scenario: KEPCO ACCT 390 2008
Actual Data
L3 27.94
Percent Surviving
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1918-2008
Activity Years: 1969-2008

Actuarial Life Analysis

Account: KEPCo 101/6 390 - KY
Scenario: KEPCO ACCT 390 2008
Placement Band: 1918 - 2008
'unction: Survivorship Annual Rate Method
.Veighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1969 -2008 | 90.5 | 2.77 | 0.55789224 | L3 | 27.94 |

Observed Life Table

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008

Observation Band: 1969 - 2008



| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 32,371,761.83 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 32,376,068.21 | 603.00 | 0.00002 | 0.99998 | 100.00 |
| 1.5 | 32,345,773.19 | 103,309.00 | 0.00319 | 0.99681 | 100.00 |
| 2.5 | 31,803,602.83 | 49,424.00 | 0.00155 | 0.99845 | 99.68 |
| 3.5 | 31,511,043.51 | 12,121.00 | 0.00038 | 0.99962 | 99.53 |
| 4.5 | 31,368,714.91 | 19,811.00 | 0.00063 | 0.99937 | 99.49 |
| 5.5 | 31,352,034.91 | 55,342.00 | 0.00177 | 0.99823 | 99.43 |
| 6.5 | 31,293,807.67 | 3,901.00 | 0.00012 | 0.99988 | 99.25 |
| 7.5 | 31,279,448.84 | 254,535.00 | 0.00814 | 0.99186 | 99.24 |
| 8.5 | 30,668,631.41 | 79,617.00 | 0.00260 | 0.99740 | 98.43 |
| 9.5 | 30,680,038.41 | 38,893.00 | 0.00127 | 0.99873 | 98.17 |
| 10.5 | 30,566,819.41 | 1,096,646.00 | 0.03588 | 0.96412 | 98.05 |
| 11.5 | 29,156,450.41 | 565,743.00 | 0.01940 | 0.98060 | 94.53 |
| 12.5 | 27,581,670.97 | 25,519.00 | 0.00093 | 0.99907 | 92.70 |
| 13.5 | 27,072,680.97 | 42,855.00 | 0.00158 | 0.99842 | 92.61 |
| 14.5 | 27,000,390.97 | 10,059.00 | 0.00037 | 0.99963 | 92.46 |
| 15.5 | 26,971,578.97 | 5,783.00 | 0.00021 | 0.99979 | 92.43 |
| 16.5 | 26,807,772.97 | 13,171.00 | 0.00049 | 0.99951 | 92.41 |
| 17.5 | 26,404,768.97 | 231,286.00 | 0.00876 | 0.99124 | 92.36 |
| 18.5 | 14,220,198.52 | 531,837.00 | 0.03740 | 0.96260 | 91.55 |
| 19.5 | 13,668,606.52 | 3,550.00 | 0.00026 | 0.99974 | 88.13 |
| 20.5 | 13,662,663.52 | 17,530.00 | 0.00128 | 0.99872 | 88.11 |
| 21.5 | 13,633,645.77 | 140,513.00 | 0.01031 | 0.98969 | 88.00 |
| 22.5 | 13,481,099.77 | 8,906,128.00 | 0.66064 | 0.33936 | 87.09 |
| 23.5 | 4,573,215.77 | 15,721.00 | 0.00344 | 0.99656 | 29.55 |
| 24.5 | 4,557,816.77 | 14,620.00 | 0.00321 | 0.99679 | 29.45 |
| 25.5 | 4,531,133.77 | 2,679.00 | 0.00059 | 0.99941 | 29.36 |
| 26.5 | 4,524,762.77 | 176,311.00 | 0.03897 | 0.96103 | 29.34 |
| 27.5 | 619,968.00 | 3,775.00 | 0.00609 | 0.99391 | 28.20 |
| 28.5 | 602,533.00 | 142,637.00 | 0.23673 | 0.76327 | 28.03 |
| 29.5 | 445,224.00 | 460.00 | 0.00103 | 0.99897 | 21.39 |
| 30.5 | 472,049.00 | 7,111.00 | 0.01506 | 0.98494 | 21.37 |
| 31.5 | 484,562.00 | 5,297.00 | 0.01093 | 0.98907 | 21.05 |
| 32.5 | 473,110.00 | 4,886.00 | 0.01033 | 0.98967 | 20.82 |
| 33.5 | 456,033.00 | 37,541.00 | 0.08232 | 0.91768 | 20.60 |
| 34.5 | 404,339.00 | 9,576.00 | 0.02368 | 0.97632 | 18.90 |
| 35.5 | 390,667.00 | 6,392.00 | 0.01636 | 0.98364 | 18.45 |
| 36.5 | 388,215.00 | 7,479.00 | 0.01927 | 0.98073 | 18.15 |
| 37.5 | 380,736.00 | 551.00 | 0.00145 | 0.99855 | 17.80 |
| 38.5 | 379,315.00 | 9,675.00 | 0.02551 | 0.97449 | 17.77 |
| 39.5 | 359,864.00 | 30,779.00 | 0.08553 | 0.91447 | 17.32 |
| 40.5 | 295,029.00 | 4,432.00 | 0.01502 | 0.98498 | 15.84 |
| 41.5 | 349,398.00 | 67,421.00 | 0.19296 | 0.80704 | 15.60 |
| 42.5 | 281,513.00 | 71,514.00 | 0.25403 | 0.74597 | 12.59 |
| 43.5 | 209,999.00 | 12.00 | 0.00006 | 0.99994 | 9.39 |
| 44.5 | 209,987.00 | 2,203.00 | 0.01049 | 0.98951 | 9.39 |
| 45.5 | 207,303.00 | 100.00 | 0.00048 | 0.99952 | 9.29 |
| 46.5 | 206,754.00 | 59,911.00 | 0.28977 | 0.71023 | 9.29 |
| 47.5 | 146,395.00 | 2,370.00 | 0.01619 | 0.98381 | 6.60 |
| 48.5 | 128,780.00 | 47,943.00 | 0.37229 | 0.62771 | 6.49 |
| 49.5 | 73,933.00 | 0.00 | 0.00000 | 1.00000 | 4.07 |
| 50.5 | 73,408.00 | 0.00 | 0.00000 | 1.00000 | 4.07 |
| 51.5 | 73,261.00 | 0.00 | 0.00000 | 1.00000 | 4.07 |
| 52.5 | 73,261.00 | 344.00 | 0.00470 | 0.99530 | 4.07 |

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Observed Life Table

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1969 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 72,917.00 | 0.00 | 0.00000 | 1.00000 | 4.05 |
| 54.5 | 72,917.00 | 18,000.00 | 0.24686 | 0.75314 | 4.05 |
| 55.5 | 54,412.00 | 784.00 | 0.01441 | 0.98559 | 3.05 |
| 56.5 | 53,531.00 | 0.00 | 0.00000 | 1.00000 | 3.01 |
| 57.5 | 53,531.00 | 3,940.00 | 0.07360 | 0.92640 | 3.01 |
| 58.5 | 49,287.00 | 0.00 | 0.00000 | 1.00000 | 2.79 |
| 59.5 | 48,171.00 | 0.00 | 0.00000 | 1.00000 | 2.79 |
| 60.5 | 47,635.00 | 0.00 | 0.00000 | 1.00000 | 2.79 |
| 61.5 | 47,635.00 | 0.00 | 0.00000 | 1.00000 | 2.79 |
| 62.5 | 47,635.00 | 368.00 | 0.00773 | 0.99227 | 2.79 |
| 63.5 | 46,833.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 64.5 | 46,511.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 65.5 | 46,511.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 66.5 | 44,627.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 67.5 | 44,510.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 68.5 | 44,080.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 69.5 | 43,738.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |
| 70.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 2.77 |

Surviving Percent Report

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1969- 2008

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| Age | Actual | L3 27.94 |
|---|---|---|
| 0.0 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 |
| 1.5 | 100.00 | 100.00 |
| 2.5 | 99.68 | 100.00 |
| 3.5 | 99.52 | 100.00 |
| 4.5 | 99.49 | 99.98 |
| 5.5 | 99.42 | 99.94 |
| 6.5 | 99.25 | 99.84 |
| 7.5 | 99.23 | 99.71 |
| 8.5 | 98.43 | 99.45 |
| 9.5 | 98.17 | 99.07 |
| 10.5 | 98.05 | 98.70 |
| 11.5 | 94.53 | 98.06 |
| 12.5 | 92.70 | 97.45 |
| 13.5 | 92.61 | 96.44 |
| 14.5 | 92.46 | 95.49 |
| 15.5 | 92.43 | 93.89 |
| 16.5 | 92.41 | 91.82 |
| 17.5 | 92.36 | 89.89 |
| 18.5 | 91.55 | 86.76 |
| 19.5 | 88.13 | 83.98 |
| 20.5 | 88.11 | 79.70 |
| 21.5 | 87.99 | 76.12 |
| 22.5 | 87.09 | 70.93 |
| 23.5 | 29.55 | 65.43 |
| 24.5 | 29.45 | 61.22 |
| 25.5 | 29.36 | 55.61 |
| 26.5 | 29.34 | 51.51 |
| 27.5 | 28.20 | 46.29 |
| 28.5 | 28.03 | 41.43 |
| 29.5 | 21.39 | 38.06 |
| 30.5 | 21.37 | 33.93 |
| 31.5 | 21.05 | 31.11 |
| 32.5 | 20.82 | 27.68 |
| 33.5 | 20.60 | 25.35 |
| 34.5 | 18.91 | 22.51 |
| 35.5 | 18.46 | 19.95 |
| 36.5 | 18.16 | 18.18 |
| 37.5 | 17.81 | 16.01 |
| 38.5 | 17.78 | 14.51 |
| 39.5 | 17.33 | 12.65 |
| 40.5 | 15.85 | 11.36 |
| 41.5 | 15.61 | 9.78 |
| 42.5 | 12.60 | 8.34 |
| 43.5 | 9.40 | 7.35 |
| 44.5 | 9.40 | 6.16 |
| 45.5 | 9.30 | 5.36 |
| 46.5 | 9.29 | 4.38 |
| 47.5 | 6.60 | 3.54 |
| 48.5 | 6.49 | 2.99 |
| 49.5 | 4.08 | 2.34 |
| 50.5 | 4.08 | 1.93 |
| 51.5 | 4.08 | 1.46 |
| 52.5 | 4.08 | 1.17 |
| 53.5 | 4.06 | 0.84 |

Surviving Percent Report

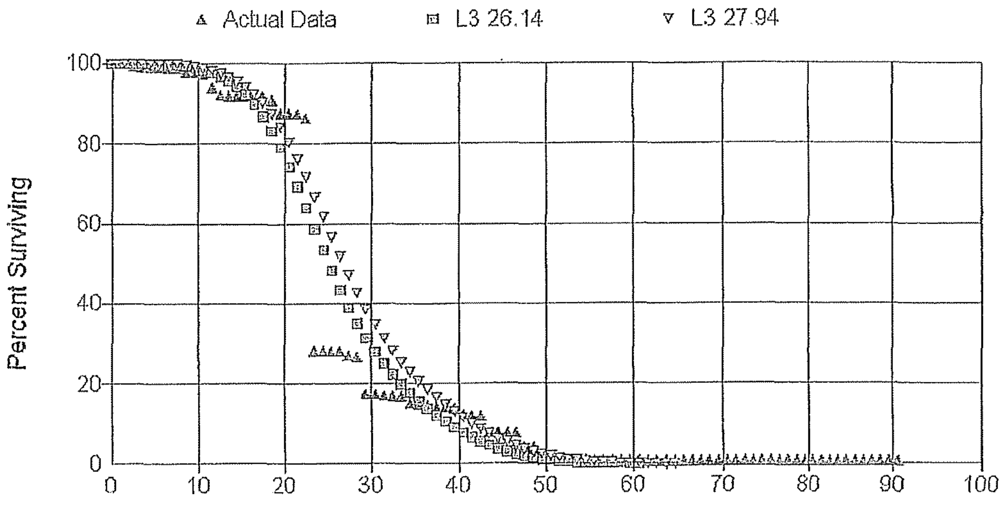
Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008



Observation Band: 1969- 2008

| Age | Actual | L3 27.94 |
|---|---|---|
| 54.5 | 4.06 | 0.59 |
| 55.5 | 3.06 | 0.44 |
| 56.5 | 3.01 | 0.29 |
| 57.5 | 3.01 | 0.20 |
| 58.5 | 2.79 | 0.12 |
| 59.5 | 2.79 | 0.08 |
| 60.5 | 2.79 | 0.04 |
| 61.5 | 2.79 | 0.02 |
| 62.5 | 2.79 | 0.01 |
| 63.5 | 2.77 | 0 |
| 64.5 | 2.77 | 0 |
| 65.5 | 2.77 | 0 |
| 66.5 | 2.77 | 0 |
| 67.5 | 2.77 | |
| 68.5 | 2.77 | |
| 69.5 | 2.77 | |
| 70.5 | 2.77 | |
| 71.5 | 2.77 | |
| 72.5 | 2.77 | |
| 73.5 | 2.77 | |
| 74.5 | 2.77 | |
| 75.5 | 2.77 | |
| 76.5 | 2.77 | |
| 77.5 | 2.77 | |
| 78.5 | 2.77 | |
| 79.5 | 2.77 | |
| 80.5 | 2.77 | |
| 81.5 | 2.77 | |
| 82.5 | 2.77 | |
| 83.5 | 2.77 | |
| 84.5 | 2.77 | |
| 85.5 | 2.77 | |
| 86.5 | 2.77 | |
| 87.5 | 2.77 | |
| 88.5 | 2.77 | |
| 89.5 | 2.77 | |
| 90.5 | 2.77 | |

Account: KEPCo 101/6 390 - KY
Scenario: KEPCO ACCT 390 2008




Vintages: 1918-2008
Activity Years: 1989-2008

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Actuarial Life Analysis

Account: KEPCo 101/6 390 - KY
Scenario: KEPCO ACCT 390 2008
Placement Band: 1918 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1989 -2008 | 90.5 | 0.63 | 0.41746662 | L3 | 26.14 |

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Observed Life Table

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1989 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 18,121,974.31 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 18,094,338.69 | 574.00 | 0.00003 | 0.99997 | 100.00 |
| 1.5 | 18,075,866.42 | 103,069.00 | 0.00570 | 0.99430 | 100.00 |
| 2.5 | 17,574,006.06 | 49,424.00 | 0.00281 | 0.99719 | 99.43 |
| 3.5 | 17,770,167.74 | 11,372.00 | 0.00064 | 0.99936 | 99.15 |
| 4.5 | 17,623,175.14 | 19,811.00 | 0.00112 | 0.99888 | 99.09 |
| 5.5 | 17,615,819.14 | 54,476.00 | 0.00309 | 0.99691 | 98.98 |
| 6.5 | 17,667,250.90 | 3,500.00 | 0.00020 | 0.99980 | 98.67 |
| 7.5 | 30,299,989.84 | 253,871.00 | 0.00838 | 0.99162 | 98.65 |
| 8.5 | 29,688,719.41 | 79,517.00 | 0.00268 | 0.99732 | 97.82 |
| 9.5 | 29,658,454.41 | 26,799.00 | 0.00090 | 0.99910 | 97.56 |
| 10.5 | 29,855,601.41 | 1,096,487.00 | 0.03673 | 0.96327 | 97.47 |
| 11.5 | 28,444,500.41 | 565,059.00 | 0.01987 | 0.98013 | 93.89 |
| 12.5 | 26,773,250.97 | 25,199.00 | 0.00094 | 0.99906 | 92.02 |
| 13.5 | 26,276,891.97 | 41,731.00 | 0.00159 | 0.99841 | 91.93 |
| 14.5 | 26,558,574.97 | 9,966.00 | 0.00038 | 0.99962 | 91.78 |
| 15.5 | 26,533,945.97 | 5,623.00 | 0.00021 | 0.99979 | 91.75 |
| 16.5 | 26,369,308.97 | 12,636.00 | 0.00048 | 0.99952 | 91.73 |
| 17.5 | 25,966,839.97 | 226,885.00 | 0.00874 | 0.99126 | 91.69 |
| 18.5 | 13,786,270.52 | 531,837.00 | 0.03858 | 0.96142 | 90.89 |
| 19.5 | 13,336,533.52 | 3,550.00 | 0.00027 | 0.99973 | 87.38 |
| 20.5 | 13,372,922.52 | 17,530.00 | 0.00131 | 0.99869 | 87.36 |
| 21.5 | 13,351,847.77 | 140,385.00 | 0.01051 | 0.98949 | 87.25 |
| 22.5 | 13,206,217.77 | 8,906,128.00 | 0.67439 | 0.32561 | 86.33 |
| 23.5 | 4,327,026.77 | 12,392.00 | 0.00286 | 0.99714 | 28.11 |
| 24.5 | 4,328,312.77 | 14,620.00 | 0.00338 | 0.99662 | 28.03 |
| 25.5 | 4,304,062.77 | 1,907.00 | 0.00044 | 0.99956 | 27.94 |
| 26.5 | 4,295,891.77 | 175,590.00 | 0.04087 | 0.95913 | 27.93 |
| 27.5 | 390,732.00 | 3,775.00 | 0.00966 | 0.99034 | 26.79 |
| 28.5 | 405,162.00 | 141,208.00 | 0.34852 | 0.65148 | 26.53 |
| 29.5 | 328,345.00 | 387.00 | 0.00118 | 0.99882 | 17.28 |
| 30.5 | 312,021.00 | 4,735.00 | 0.01518 | 0.98482 | 17.26 |
| 31.5 | 307,189.00 | 3,068.00 | 0.00999 | 0.99001 | 17.00 |
| 32.5 | 401,733.00 | 3,405.00 | 0.00848 | 0.99152 | 16.83 |
| 33.5 | 385,353.00 | 37,541.00 | 0.09742 | 0.90258 | 16.69 |
| 34.5 | 333,659.00 | 9,576.00 | 0.02870 | 0.97130 | 15.06 |
| 35.5 | 320,492.00 | 6,392.00 | 0.01994 | 0.98006 | 14.63 |
| 36.5 | 315,091.00 | 6,670.00 | 0.02117 | 0.97883 | 14.34 |
| 37.5 | 308,421.00 | 551.00 | 0.00179 | 0.99821 | 14.04 |
| 38.5 | 305,968.00 | 9,675.00 | 0.03162 | 0.96838 | 14.01 |
| 39.5 | 284,539.00 | 30,779.00 | 0.10817 | 0.89183 | 13.57 |
| 40.5 | 220,240.00 | 4,432.00 | 0.02012 | 0.97988 | 12.10 |
| 41.5 | 209,577.00 | 2,389.00 | 0.01140 | 0.98860 | 11.86 |
| 42.5 | 205,524.00 | 71,514.00 | 0.34796 | 0.65204 | 11.72 |
| 43.5 | 134,444.00 | 12.00 | 0.00009 | 0.99991 | 7.64 |
| 44.5 | 134,754.00 | 867.00 | 0.00643 | 0.99357 | 7.64 |
| 45.5 | 133,406.00 | 100.00 | 0.00075 | 0.99925 | 7.59 |
| 46.5 | 134,397.00 | 59,911.00 | 0.44578 | 0.55422 | 7.58 |
| 47.5 | 74,155.00 | 1,170.00 | 0.01578 | 0.98422 | 4.20 |
| 48.5 | 58,170.00 | 44,849.00 | 0.77100 | 0.22900 | 4.13 |
| 49.5 | 6,759.00 | 0.00 | 0.00000 | 1.00000 | 0.95 |
| 50.5 | 50,340.00 | 0.00 | 0.00000 | 1.00000 | 0.95 |
| 51.5 | 68,193.00 | 0.00 | 0.00000 | 1.00000 | 0.95 |
| 52.5 | 68,193.00 | 0.00 | 0.00000 | 1.00000 | 0.95 |

Observed Life Table

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008

Observation Band: 1989 - 2008



| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 68,977.00 | 0.00 | 0.00000 | 1.00000 | 0.95 |
| 54.5 | 68,977.00 | 18,000.00 | 0.26096 | 0.73904 | 0.95 |
| 55.5 | 50,472.00 | 784.00 | 0.01553 | 0.98447 | 0.70 |
| 56.5 | 53,531.00 | 0.00 | 0.00000 | 1.00000 | 0.69 |
| 57.5 | 53,531.00 | 3,940.00 | 0.07360 | 0.92640 | 0.69 |
| 58.5 | 49,287.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 59.5 | 48,171.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 60.5 | 47,635.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 61.5 | 47,635.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 62.5 | 47,635.00 | 368.00 | 0.00773 | 0.99227 | 0.64 |
| 63.5 | 46,833.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 64.5 | 46,511.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 65.5 | 46,511.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 66.5 | 44,627.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 67.5 | 44,510.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 68.5 | 44,080.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 69.5 | 43,738.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |
| 70.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 0.64 |

Surviving Percent Report

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008

Observation Band: 1989 - 2008



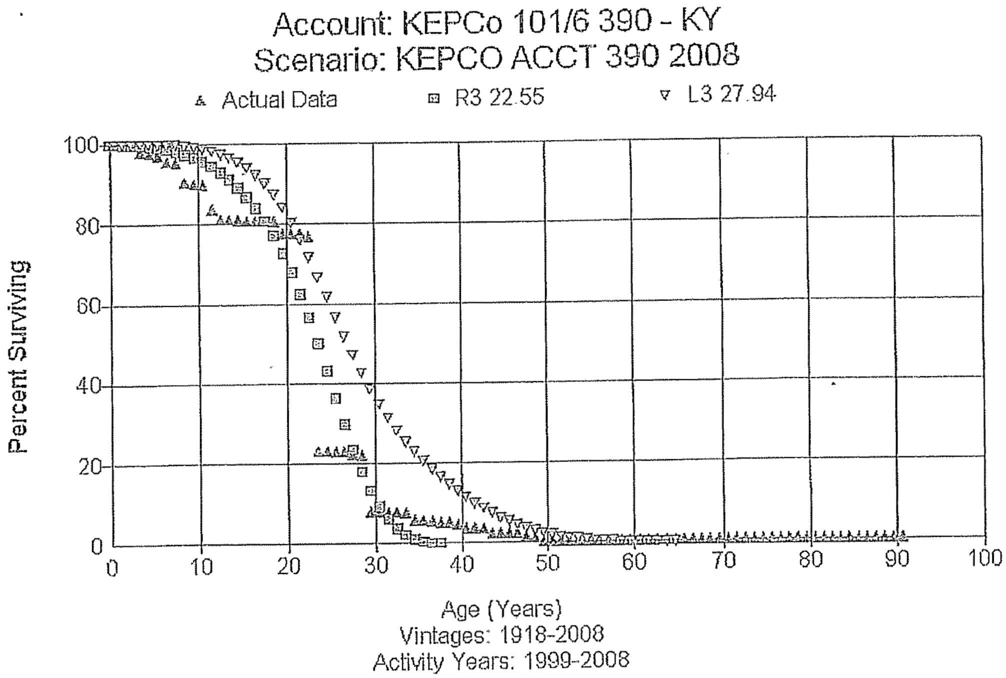
| Age | Actual | L3 26.14 | L3 28.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 100.00 | 100.00 |
| 1.5 | 100.00 | 100.00 | 100.00 |
| 2.5 | 99.43 | 100.00 | 100.00 |
| 3.5 | 99.15 | 100.00 | 100.00 |
| 4.5 | 99.08 | 99.97 | 99.98 |
| 5.5 | 98.97 | 99.90 | 99.94 |
| 6.5 | 98.67 | 99.80 | 99.84 |
| 7.5 | 98.66 | 99.59 | 99.71 |
| 8.5 | 97.82 | 99.28 | 99.45 |
| 9.5 | 97.56 | 98.83 | 99.18 |
| 10.5 | 97.47 | 98.23 | 98.70 |
| 11.5 | 93.89 | 97.67 | 98.06 |
| 12.5 | 92.03 | 96.72 | 97.45 |
| 13.5 | 91.94 | 95.49 | 96.44 |
| 14.5 | 91.79 | 93.89 | 95.49 |
| 15.5 | 91.76 | 91.82 | 93.89 |
| 16.5 | 91.74 | 89.17 | 92.39 |
| 17.5 | 91.69 | 86.76 | 89.89 |
| 18.5 | 90.89 | 82.97 | 86.76 |
| 19.5 | 87.39 | 78.54 | 83.98 |
| 20.5 | 87.36 | 73.57 | 79.70 |
| 21.5 | 87.25 | 68.21 | 76.12 |
| 22.5 | 86.33 | 62.62 | 70.93 |
| 23.5 | 28.11 | 58.40 | 66.83 |
| 24.5 | 28.03 | 52.87 | 61.22 |
| 25.5 | 27.94 | 47.57 | 55.61 |
| 26.5 | 27.92 | 42.61 | 51.51 |
| 27.5 | 26.78 | 38.06 | 46.29 |
| 28.5 | 26.52 | 33.93 | 42.61 |
| 29.5 | 17.28 | 31.11 | 38.06 |
| 30.5 | 17.26 | 27.68 | 34.92 |
| 31.5 | 17.00 | 24.61 | 31.11 |
| 32.5 | 16.83 | 21.85 | 27.68 |
| 33.5 | 16.68 | 19.35 | 25.35 |
| 34.5 | 15.06 | 17.62 | 22.51 |
| 35.5 | 14.63 | 15.50 | 20.57 |
| 36.5 | 14.34 | 13.56 | 18.18 |
| 37.5 | 14.03 | 11.78 | 16.54 |
| 38.5 | 14.01 | 10.16 | 14.51 |
| 39.5 | 13.56 | 8.69 | 12.65 |
| 40.5 | 12.10 | 7.67 | 11.36 |
| 41.5 | 11.85 | 6.45 | 9.78 |
| 42.5 | 11.72 | 5.35 | 8.69 |
| 43.5 | 7.64 | 4.38 | 7.35 |
| 44.5 | 7.64 | 3.54 | 6.45 |
| 45.5 | 7.59 | 2.81 | 5.35 |
| 46.5 | 7.59 | 2.34 | 4.38 |
| 47.5 | 4.20 | 1.80 | 3.74 |
| 48.5 | 4.14 | 1.36 | 2.99 |
| 49.5 | 0.95 | 1.00 | 2.49 |
| 50.5 | 0.95 | 0.71 | 1.93 |
| 51.5 | 0.95 | 0.49 | 1.57 |
| 52.5 | 0.95 | 0.36 | 1.17 |
| 53.5 | 0.95 | 0.23 | 0.84 |

Surviving Percent Report

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1989- 2008



| Age | Actual | L3 26.14 | L3 28.00 |
|---|---|---|---|
| 54.5 | 0.95 | 0.14 | 0.65 |
| 55.5 | 0.70 | 0.08 | 0.44 |
| 56.5 | 0.69 | 0.04 | 0.32 |
| 57.5 | 0.69 | 0.02 | 0.20 |
| 58.5 | 0.64 | 0.01 | 0.14 |
| 59.5 | 0.64 | 0 | 0.08 |
| 60.5 | 0.64 | 0 | 0.04 |
| 61.5 | 0.64 | 0 | 0.02 |
| 62.5 | 0.64 | | 0.01 |
| 63.5 | 0.63 | | 0 |
| 64.5 | 0.63 | | 0 |
| 65.5 | 0.63 | | 0 |
| 66.5 | 0.63 | | 0 |
| 67.5 | 0.63 | | |
| 68.5 | 0.63 | | |
| 69.5 | 0.63 | | |
| 70.5 | 0.63 | | |
| 71.5 | 0.63 | | |
| 72.5 | 0.63 | | |
| 73.5 | 0.63 | | |
| 74.5 | 0.63 | | |
| 75.5 | 0.63 | | |
| 76.5 | 0.63 | | |
| 77.5 | 0.63 | | |
| 78.5 | 0.63 | | |
| 79.5 | 0.63 | | |
| 80.5 | 0.63 | | |
| 81.5 | 0.63 | | |
| 82.5 | 0.63 | | |
| 83.5 | 0.63 | | |
| 84.5 | 0.63 | | |
| 85.5 | 0.63 | | |
| 86.5 | 0.63 | | |
| 87.5 | 0.63 | | |
| 88.5 | 0.63 | | |
| 89.5 | 0.63 | | |
| 90.5 | 0.63 | | |


Account: KEPCo 101/6 390 - KY
Scenario: KEPCO ACCT 390 2008
Actual Data
R3 22.55
L3 27.94
Percent Surviving
0
20
40
60
80
100
0
10
20
30
40
50
60
70
80
90
100
Age (Years)
Vintages: 1918-2008
Activity Years: 1999-2008

Actuarial Life Analysis

Account: KEPCo 101/6 390 - KY
Scenario: KEPCO ACCT 390 2008
Placement Band: 1918 - 2008
Function: Survivorship Annual Rate Method
Weighting: Unweighted
T-Cut: None

| Observation Band | Censoring Age | Censoring Percent | Error Sum of Squares | Best Fit Disp | Best Fit ASL |
|---|---|---|---|---|---|
| 1999 -2008 | 90.5 | 0.19 | 0.29569838 | R3 | 22.55 |

Observed Life Table

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Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 0 | 1,389,797.42 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 0.5 | 1,487,258.80 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 1.5 | 1,767,426.78 | 0.00 | 0.00000 | 1.00000 | 100.00 |
| 2.5 | 2,673,783.86 | 48,288.00 | 0.01806 | 0.98194 | 100.00 |
| 3.5 | 2,903,099.54 | 11,372.00 | 0.00392 | 0.99608 | 98.19 |
| 4.5 | 2,848,531.94 | 19,811.00 | 0.00695 | 0.99305 | 97.81 |
| 5.5 | 2,857,724.94 | 48,668.00 | 0.01703 | 0.98297 | 97.13 |
| 6.5 | 4,472,906.70 | 3,500.00 | 0.00078 | 0.99922 | 95.48 |
| 7.5 | 4,891,867.87 | 253,871.00 | 0.05190 | 0.94810 | 95.41 |
| 8.5 | 16,253,240.89 | 79,517.00 | 0.00489 | 0.99511 | 90.46 |
| 9.5 | 16,204,848.89 | 26,799.00 | 0.00165 | 0.99835 | 90.02 |
| 10.5 | 16,112,175.89 | 1,094,961.00 | 0.06796 | 0.93204 | 89.87 |
| 11.5 | 14,719,148.64 | 458,999.00 | 0.03118 | 0.96882 | 83.76 |
| 12.5 | 13,195,033.20 | 1,647.00 | 0.00012 | 0.99988 | 81.15 |
| 13.5 | 13,221,369.20 | 41,731.00 | 0.00316 | 0.99684 | 81.14 |
| 14.5 | 13,158,442.20 | 9,966.00 | 0.00076 | 0.99924 | 80.88 |
| 15.5 | 13,141,673.20 | 5,623.00 | 0.00043 | 0.99957 | 80.82 |
| 16.5 | 13,087,400.20 | 9,300.00 | 0.00071 | 0.99929 | 80.79 |
| 17.5 | 25,335,980.97 | 20,378.00 | 0.00080 | 0.99920 | 80.73 |
| 18.5 | 13,378,864.52 | 526,644.00 | 0.03936 | 0.96064 | 80.67 |
| 19.5 | 12,848,036.52 | 3,550.00 | 0.00028 | 0.99972 | 77.49 |
| 20.5 | 12,866,758.52 | 7,530.00 | 0.00059 | 0.99941 | 77.47 |
| 21.5 | 12,850,929.77 | 103,307.00 | 0.00804 | 0.99196 | 77.42 |
| 22.5 | 12,741,787.77 | 8,906,128.00 | 0.69897 | 0.30103 | 76.80 |
| 23.5 | 3,846,517.77 | 4,892.00 | 0.00127 | 0.99873 | 23.12 |
| 24.5 | 4,170,066.77 | 14,620.00 | 0.00351 | 0.99649 | 23.09 |
| 25.5 | 4,147,978.77 | 1,907.00 | 0.00046 | 0.99954 | 23.01 |
| 26.5 | 4,139,014.77 | 175,590.00 | 0.04242 | 0.95758 | 23.00 |
| 27.5 | 233,395.00 | 1,775.00 | 0.00761 | 0.99239 | 22.02 |
| 28.5 | 221,225.00 | 141,208.00 | 0.63830 | 0.36170 | 21.85 |
| 29.5 | 121,130.00 | 387.00 | 0.00319 | 0.99681 | 7.90 |
| 30.5 | 139,290.00 | 4,735.00 | 0.03399 | 0.96601 | 7.87 |
| 31.5 | 141,084.00 | 499.00 | 0.00354 | 0.99646 | 7.60 |
| 32.5 | 141,756.00 | 1,562.00 | 0.01102 | 0.98898 | 7.57 |
| 33.5 | 156,660.00 | 37,541.00 | 0.23963 | 0.76037 | 7.49 |
| 34.5 | 116,644.00 | 735.00 | 0.00630 | 0.99370 | 5.70 |
| 35.5 | 114,246.00 | 6,392.00 | 0.05595 | 0.94405 | 5.66 |
| 36.5 | 108,647.00 | 6,670.00 | 0.06139 | 0.93861 | 5.34 |
| 37.5 | 102,437.00 | 551.00 | 0.00538 | 0.99462 | 5.01 |
| 38.5 | 132,048.00 | 9,675.00 | 0.07327 | 0.92673 | 4.98 |
| 39.5 | 175,915.00 | 30,779.00 | 0.17497 | 0.82503 | 4.62 |
| 40.5 | 111,964.00 | 4,432.00 | 0.03958 | 0.96042 | 3.81 |
| 41.5 | 102,618.00 | 2,389.00 | 0.02328 | 0.97672 | 3.66 |
| 42.5 | 202,072.00 | 71,514.00 | 0.35390 | 0.64610 | 3.57 |
| 43.5 | 130,558.00 | 12.00 | 0.00009 | 0.99991 | 2.31 |
| 44.5 | 130,546.00 | 867.00 | 0.00664 | 0.99336 | 2.31 |
| 45.5 | 129,703.00 | 100.00 | 0.00077 | 0.99923 | 2.29 |
| 46.5 | 129,801.00 | 59,911.00 | 0.46156 | 0.53844 | 2.29 |
| 47.5 | 69,442.00 | 1,170.00 | 0.01685 | 0.98315 | 1.23 |
| 48.5 | 53,331.00 | 44,849.00 | 0.84096 | 0.15904 | 1.21 |
| 49.5 | 2,694.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 50.5 | 2,705.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 51.5 | 2,558.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 52.5 | 2,558.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |

Observed Life Table

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1999 - 2008

| Age at Beginning of Interval | Exposures at Beginning of Interval | Retirements During Interval | Retirment Ratio | Survivor Ratio | Percent Surv at Beginning of Interval |
|---|---|---|---|---|---|
| 53.5 | 2,992.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 54.5 | 3,314.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 55.5 | 2,809.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 56.5 | 4,596.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 57.5 | 4,713.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 58.5 | 4,839.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 59.5 | 4,065.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 60.5 | 47,635.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 61.5 | 47,635.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 62.5 | 47,635.00 | 368.00 | 0.00773 | 0.99227 | 0.19 |
| 63.5 | 46,833.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 64.5 | 46,511.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 65.5 | 46,511.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 66.5 | 44,627.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 67.5 | 44,510.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 68.5 | 44,080.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 69.5 | 43,738.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |
| 70.5 | 0.00 | 0.00 | 0.00000 | 1.00000 | 0.19 |

Surviving Percent Report



Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1999- 2008

| Age | Actual | R3 22.55 | L3 28.00 |
|---|---|---|---|
| 0.0 | 100.00 | 100.00 | 100.00 |
| 0.5 | 100.00 | 99.97 | 100.00 |
| 1.5 | 100.00 | 99.89 | 100.00 |
| 2.5 | 100.00 | 99.74 | 100.00 |
| 3.5 | 98.19 | 99.58 | 100.00 |
| 4.5 | 97.81 | 99.36 | 99.98 |
| 5.5 | 97.13 | 99.01 | 99.94 |
| 6.5 | 95.47 | 98.63 | 99.84 |
| 7.5 | 95.40 | 98.04 | 99.71 |
| 8.5 | 90.45 | 97.43 | 99.45 |
| 9.5 | 90.01 | 96.49 | 99.18 |
| 10.5 | 89.86 | 95.57 | 98.70 |
| 11.5 | 83.75 | 94.47 | 98.06 |
| 12.5 | 81.14 | 92.81 | 97.45 |
| 13.5 | 81.13 | 91.23 | 96.44 |
| 14.5 | 80.87 | 88.90 | 95.49 |
| 15.5 | 80.81 | 86.71 | 93.89 |
| 16.5 | 80.78 | 83.51 | 92.39 |
| 17.5 | 80.72 | 80.53 | 89.89 |
| 18.5 | 80.66 | 76.22 | 86.76 |
| 19.5 | 77.48 | 72.27 | 83.98 |
| 20.5 | 77.46 | 67.84 | 79.70 |
| 21.5 | 77.41 | 61.64 | 76.12 |
| 22.5 | 76.79 | 56.17 | 70.93 |
| 23.5 | 23.12 | 48.83 | 66.83 |
| 24.5 | 23.09 | 42.71 | 61.22 |
| 25.5 | 23.01 | 35.01 | 55.61 |
| 26.5 | 23.00 | 29.03 | 51.51 |
| 27.5 | 22.02 | 23.42 | 46.29 |
| 28.5 | 21.85 | 17.18 | 42.61 |
| 29.5 | 7.90 | 12.93 | 38.06 |
| 30.5 | 7.88 | 8.60 | 34.92 |
| 31.5 | 7.61 | 5.91 | 31.11 |
| 32.5 | 7.58 | 3.41 | 27.68 |
| 33.5 | 7.50 | 2.00 | 25.35 |
| 34.5 | 5.70 | 1.04 | 22.51 |
| 35.5 | 5.67 | 0.35 | 20.57 |
| 36.5 | 5.35 | 0.09 | 18.18 |
| 37.5 | 5.02 | 0 | 16.54 |
| 38.5 | 4.99 | 0 | 14.51 |
| 39.5 | 4.63 | 0 | 12.65 |
| 40.5 | 3.82 | | 11.36 |
| 41.5 | 3.67 | | 9.78 |
| 42.5 | 3.58 | | 8.69 |
| 43.5 | 2.31 | | 7.35 |
| 44.5 | 2.31 | | 6.45 |
| 45.5 | 2.30 | | 5.35 |
| 46.5 | 2.30 | | 4.38 |
| 47.5 | 1.24 | | 3.74 |
| 48.5 | 1.22 | | 2.99 |
| 49.5 | 0.19 | | 2.49 |
| 50.5 | 0.19 | | 1.93 |
| 51.5 | 0.19 | | 1.57 |
| 52.5 | 0.19 | | 1.17 |
| 53.5 | 0.19 | | 0.84 |

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Surviving Percent Report

Scenario: KEPCO ACCT 390 2008
Account: KEPCo 101/6 390 - KY
Placement Band: 1918 - 2008 Observation Band: 1999- 2008

| Age | Actual | R3 22.55 | L3 28.00 |
|---|---|---|---|
| 54.5 | 0.19 | | 0.65 |
| 55.5 | 0.19 | | 0.44 |
| 56.5 | 0.19 | | 0.32 |
| 57.5 | 0.19 | | 0.20 |
| 58.5 | 0.19 | | 0.14 |
| 59.5 | 0.19 | | 0.08 |
| 60.5 | 0.19 | | 0.04 |
| 61.5 | 0.19 | | 0.02 |
| 62.5 | 0.19 | | 0.01 |
| 63.5 | 0.19 | | 0 |
| 64.5 | 0.19 | | 0 |
| 65.5 | 0.19 | | 0 |
| 66.5 | 0.19 | | 0 |
| 67.5 | 0.19 | | |
| 68.5 | 0.19 | | |
| 69.5 | 0.19 | | |
| 70.5 | 0.19 | | |
| 71.5 | 0.19 | | |
| 72.5 | 0.19 | | |
| 73.5 | 0.19 | | |
| 74.5 | 0.19 | | |
| 75.5 | 0.19 | | |
| 76.5 | 0.19 | | |
| 77.5 | 0.19 | | |
| 78.5 | 0.19 | | |
| 79.5 | 0.19 | | |
| 80.5 | 0.19 | | |
| 81.5 | 0.19 | | |
| 82.5 | 0.19 | | |
| 83.5 | 0.19 | | |
| 84.5 | 0.19 | | |
| 85.5 | 0.19 | | |
| 86.5 | 0.19 | | |
| 87.5 | 0.19 | | |
| 88.5 | 0.19 | | |
| 89.5 | 0.19 | | |
| 90.5 | 0.19 | | |

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 391 OFFICE FURNITURE AND EQUIPMENT | |
| Depreciable Balance | $1,312,821 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 35 | 35 |
| Iowa Curve | RO.5 | RO.5 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 10% | 0% |

**************************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

There would be little if any salvage expected from the retirement of office furniture and equipment.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 392 TRANSPORTATION EQUIPMENT | |
| Depreciable Balance | $9,655 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 30 | 30 |
| Iowa Curve | R3.0 | R3.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

************************************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

Due to the minimal investment in this account, no salvage or removal costs are expected.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 393 STORES EQUIPMENT | |
| Depreciable Balance | $142,851 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 30 | 30 |
| Iowa Curve | R1.0 | R1.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 5% |
| Net Salvage % | 0% | 5% |

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

A minimal amount of scrap value could result in a small amount of salvage. No removal costs are anticipated.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 394 TOOLS, SHOP AND GARAGE EQUIPMENT | |
| Depreciable Balance | $2,579,396 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 30 | 30 |
| Iowa Curve | RO.5 | RO.5 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 5% |
| Net Salvage % | 0% | 5% |

**********************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

The disposal of tools shop and garage equipment may result in salvage. No removal costs are expected.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 395 LABORATORY EQUIPMENT | |
| Depreciable Balance | $262,378 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 30 | 30 |
| Iowa Curve | L5.0 | L5.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 5% |
| Net Salvage % | 0% | 5% |

****************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

Scrap sales may result in salvage for the equipment. Minimal removal cost is expected.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 396 TRANSPORTATION EQUIPMENT | |
| Depreciable Balance | $5,931 | |
| | Current | Recommended |
| Average Service Life (Yrs) | | |
| Iowa Curve | | |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | | 0% |

*****************************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

Due to the minimal investment in this account, no removal or salvage is expected.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

| | | |
|---|---|---|
| Account | 397 COMMUNICATION EQUIPMENT | |
| Depreciable Balance | $6,755,008 | |
| | Current | Recommended |
| Average Service Life (Yrs) | 22 | 22 |
| Iowa Curve | L3.0 | L3.0 |
| Gross Removal, % | | 2% |
| Gross Salvage, % | | 10% |
| Net Salvage % | 0% | 8% |

**********************************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

The removal and replacement of communication equipment is expected to result in labor removal costs being incurred. Some salvage could be expected from the scrap sales of the equipment.

KENTUCKY POWER COMPANY
Depreciation Study as of December 31, 2008
General Plant

Account 398 MISCELLANEOUS EQUIPMENT

Depreciable Balance $974,320

| | Current | Recommended |
|---|---|---|
| Average Service Life (Yrs) | 20 | 20 |
| Iowa Curve | S5.0 | S5.0 |
| Gross Removal, % | | 0% |
| Gross Salvage, % | | 0% |
| Net Salvage % | 0% | 0% |

************************************************************************************************

No life analysis was conducted for this account since retirements are base on age in accordance with FERC Accounting Release 15. This Accounting Release was adopted by Kentucky Power in June 1998 business.

No salvage or removal costs are seen for the investments in this account.

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# GENERAL PLANT WORKPAPERS

## SALVAGE AND REMOVAL ANALYSIS

KENTUCKY POWER COMPANY
General Plant Gross Removal Test

21-Oct-09

Original Cost Retired by Plant Account

| Year | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | Total | Removal % | Functional Gross Removal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 8,581 | 1,147 | 0 | 3,479 | 0 | 0 | 0 | 18,899 | 2,416 | 34,522 | 2% | 804 |
| 1995 | 0 | 6,412 | 0 | 0 | 1,329 | 0 | 0 | 523 | 0 | 8,264 | 580% | 47,957 |
| 1996 | 290,552 | 4,438 | 0 | 0 | 734 | 7,565 | 0 | 157,954 | 63,224 | 524,467 | -13% | -70,222 |
| 1997 | 0 | 1,923 | 0 | 0 | 1,113 | 0 | 0 | 219,173 | 14,210 | 236,419 | 11% | 27,111 |
| 1998 | 3,693 | 81,954 | 11,241 | 1,690 | 25,510 | 29,020 | 0 | 982,587 | 34,504 | 1,170,199 | 0% | 524 |
| 1999 | 26,757 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26,757 | 1% | 393 |
| 2000 | 0 | 15,335 | 0 | 0 | 2,272 | 5,215 | 0 | 0 | 0 | 22,822 | -155% | -35,438 |
| 2001 | 182,029 | 0 | 0 | 0 | 0 | 0 | 0 | 47,157 | 0 | 229,186 | -98% | -223,628 |
| 2002 | 160,071 | 0 | 0 | 0 | 0 | 0 | 0 | 51,409 | 0 | 211,480 | 17% | 35,368 |
| 2003 | 1,426,227 | 5,790 | 38,129 | 7,347 | 5,105 | 2,558 | 0 | 244,213 | 0 | 1,729,369 | 8% | 138,350 |
| 2004 | 10,330,436 | 3,747 | 0 | 779 | 3,477 | 3,405 | 0 | 874,410 | 0 | 11,216,254 | 0% | 0 |
| 2005 | 149,701 | 561,105 | 0 | 76,004 | 243,042 | 103,242 | 0 | 496,756 | 77,967 | 1,707,817 | 3% | 49,533 |
| 2006 | 4,747 | 36,455 | 0 | 2,061 | 81,850 | 19,296 | | 87,741 | 16,572 | 248,722 | 1% | 2,951 |
| 2007 | 7,133 | 4,666 | 0 | 0 | 7,054 | 3,352 | 0 | 13,974 | 8,732 | 44,911 | 91% | 40,915 |
| 2008 | 19,618 | 15,821 | 0 | 14,160 | 75,087 | 19,393 | 0 | 16,506 | 2,038 | 162,623 | 16% | 25,536 |
| TOTAL | 12,609,545 | 738,793 | 49,370 | 105,520 | 446,573 | 193,046 | 0 | 3,211,302 | 219,663 | 17,573,812 | 0% | 40,154 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Retmts | 12,609,545 | 738,793 | 49,370 | 105,520 | 446,573 | 193,046 | 0 | 3,211,302 | 219,663 | 17,354,149 |
| Gross Removal, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Gross Removal $ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64,226 | 0 | 64,226 |

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KENTUCKY POWER COMPANY
General Plant Gross Salvage Test

21-Oct-09

Original Cost Retired by Plant Account

| Year | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | Total | Salvage % | Functional Gross Salvage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 8,581 | 1,147 | 0 | 3,479 | 0 | 0 | 0 | 18,899 | 2,416 | 34,522 | 108% | 37,443 |
| 1995 | 0 | 6,412 | 0 | 0 | 1,329 | 0 | 0 | 523 | 0 | 8,264 | 134% | 11,107 |
| 1996 | 290,552 | 4,438 | 0 | 0 | 734 | 7,565 | 0 | 157,954 | 63,224 | 524,467 | 1% | 4,006 |
| 1997 | 0 | 1,923 | 0 | 0 | 1,113 | 0 | 0 | 219,173 | 14,210 | 236,419 | 29% | 68,605 |
| 1998 | 3,693 | 81,954 | 11,241 | 1,690 | 25,510 | 29,020 | 0 | 982,587 | 34,504 | 1,170,199 | 0% | 0 |
| 1999 | 26,757 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26,757 | -35% | -9,336 |
| 2000 | 0 | 15,335 | 0 | 0 | 2,272 | 5,215 | 0 | 0 | 0 | 22,822 | 0% | 0 |
| 2001 | 182,029 | 0 | 0 | 0 | 0 | 0 | 0 | 47,157 | 0 | 229,186 | 0% | 0 |
| 2002 | 160,071 | 0 | 0 | 0 | 0 | 0 | 0 | 51,409 | 0 | 211,480 | 113% | 239,760 |
| 2003 | 1,426,227 | 5,790 | 38,129 | 7,347 | 5,105 | 2,558 | 0 | 244,213 | 0 | 1,729,369 | -6% | -100,160 |
| 2004 | 10,330,436 | 3,747 | 0 | 779 | 3,477 | 3,405 | 0 | 874,410 | 0 | 11,216,254 | 9% | 1,065,490 |
| 2005 | 149,701 | 561,105 | 0 | 76,004 | 243,042 | 103,242 | 0 | 496,756 | 77,967 | 1,707,817 | 14% | 233,742 |
| 2006 | 4,747 | 36,455 | 0 | 2,061 | 81,850 | 19,296 | | 87,741 | 16,572 | 248,722 | 0% | 0 |
| 2007 | 7,133 | 4,666 | 0 | 0 | 7,054 | 3,352 | 0 | 13,974 | 8,732 | 44,911 | 244% | 109,452 |
| 2008 | 19,618 | 15,821 | 0 | 14,160 | 75,087 | 19,393 | 0 | 16,506 | 2,038 | 162,623 | 29% | 47,146 |
| TOTAL | 12,609,545 | 738,793 | 49,370 | 105,520 | 446,573 | 193,046 | 0 | 3,211,302 | 219,663 | 17,573,812 | 10% | 1,707,255 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Retmts | 12,609,545 | 738,793 | 49,370 | 105,520 | 446,573 | 193,046 | 0 | 3,211,302 | 219,663 | 17,354,149 |
| Gross Salvage, % | 11 | 0 | 0 | 5 | 5 | 5 | 0 | 10 | 0 | 10 |
| Gross Salvage $ | 1,387,050 | 0 | 0 | 5,276 | 22,329 | 9,652 | 0 | 321,130 | 0 | 1,745,437 |

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KENTUCKY POWER COMPANY
General Plant Net Salvage Test

21-Oct-09

Original Cost Retired by Account

| Year | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | Total | Salvage % | Functional Net Salvage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1994 | 8,581 | 1,147 | 0 | 3,479 | 0 | 0 | 0 | 18,899 | 2,416 | 34,522 | 106% | 36,639 |
| 1995 | 0 | 6,412 | 0 | 0 | 1,329 | 0 | 0 | 523 | 0 | 8,264 | -446% | -36,850 |
| 1996 | 290,552 | 4,438 | 0 | 0 | 734 | 7,565 | 0 | 157,954 | 63,224 | 524,467 | 14% | 74,228 |
| 1997 | 0 | 1,923 | 0 | 0 | 1,113 | 0 | 0 | 219,173 | 14,210 | 236,419 | 18% | 41,494 |
| 1998 | 3,693 | 81,954 | 11,241 | 1,690 | 25,510 | 29,020 | 0 | 982,587 | 34,504 | 1,170,199 | 0% | -524 |
| 1999 | 26,757 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26,757 | -36% | -9,729 |
| 2000 | 0 | 15,335 | 0 | 0 | 2,272 | 5,215 | 0 | 0 | 0 | 22,822 | 155% | 35,438 |
| 2001 | 182,029 | 0 | 0 | 0 | 0 | 0 | 0 | 47,157 | 0 | 229,186 | 98% | 223,628 |
| 2002 | 160,071 | 0 | 0 | 0 | 0 | 0 | 0 | 51,409 | 0 | 211,480 | 97% | 204,392 |
| 2003 | 1,426,227 | 5,790 | 38,129 | 7,347 | 5,105 | 2,558 | 0 | 244,213 | 0 | 1,729,369 | -14% | -238,510 |
| 2004 | 10,330,436 | 3,747 | 0 | 779 | 3,477 | 3,405 | 0 | 874,410 | 0 | 11,216,254 | 9% | 1,065,490 |
| 2005 | 149,701 | 561,105 | 0 | 76,004 | 243,042 | 103,242 | 0 | 496,756 | 77,967 | 1,707,817 | 11% | 184,209 |
| 2006 | 4,747 | 36,455 | 0 | 2,061 | 81,850 | 19,296 | | 87,741 | 16,572 | 248,722 | -1% | -2,951 |
| 2007 | 7,133 | 4,666 | 0 | 0 | 7,054 | 3,352 | 0 | 13,974 | 8,732 | 44,911 | 153% | 68,537 |
| 2008 | 19,618 | 15,821 | 0 | 14,160 | 75,087 | 19,393 | 0 | 16,506 | 2,038 | 162,623 | 13% | 21,610 |
| TOTAL | 12,609,545 | 738,793 | 49,370 | 105,520 | 446,573 | 193,046 | 0 | 3,211,302 | 219,663 | 17,573,812 | 9% | 1,667,101 |

EVALUATION BASED ON 1994-2008 ACTUAL

| | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Reirnts | 12,609,545 | 738,793 | 49,370 | 105,520 | 446,573 | 193,046 | 0 | 3,211,302 | 219,663 | 17,354,149 |
| Net Salvage, % | 11 | 0 | 0 | 5 | 5 | 5 | 0 | 8 | 0 | 10 |
| Net Salvage $ | 1,387,050 | 0 | 0 | 5,276 | 22,329 | 9,652 | 0 | 256,904 | 0 | 1,681,211 |

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY AS OF 12-31-08

# GENERAL PLANT WORKPAPERS

## CALCULATED RESERVE

Depreciation Reserve Summary



Account: KEPCo 101/6 389 Land Rights - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 75 - R4

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $219,614.69 | $6,414.75 | 0.0292 | $213,199.94 | 0.9708 |
| Computed | $219,614.69 | $13,110.32 | 0.0597 | $206,504.37 | 0.9403 |
| Difference | | ($6,695.57) | -0.0305 | $6,695.57 | 0.0305 |

Generation Arrangement Report



Account: KEPCo 101/6 389 Land Rights - KY
Dispersion: 75.00 - R4

erage Net Salvage Rate: 0.00%
.ure Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2007 | 1.50 | $182,230.82 | 75.00 | 73.50 | 0.9800 | 1.0000 | $178,589.81 | $2,429.74 |
| 2003 | 5.50 | $9,137.87 | 75.00 | 69.51 | 0.9268 | 1.0000 | $8,468.64 | $121.84 |
| 1986 | 22.50 | $22,442.00 | 75.00 | 52.66 | 0.7021 | 1.0000 | $15,756.75 | $299.23 |
| 1985 | 23.50 | $1,227.00 | 75.00 | 51.68 | 0.6891 | 1.0000 | $845.50 | $16.36 |
| 1984 | 24.50 | $678.00 | 75.00 | 50.71 | 0.6761 | 1.0000 | $458.38 | $9.04 |
| 1979 | 29.50 | $3,899.00 | 75.00 | 45.88 | 0.6118 | 1.0000 | $2,385.28 | $51.99 |
| | | $219,614.69 | 75.00 | 70.52 | 0.9403 | 1.0000 | $206,504.37 | $2,928.20 |

Depreciation Reserve Summary

Page 332 of 350

Account: KEPCo 101/6 390 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 28 - L3

rage Net Salvage Rate: 11.00%
Future Net Salvage Rate: 11.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $19,910,321.83 | $4,906,914.02 | 0.2465 | $12,813,272.41 | 0.6435 |
| Computed | $19,910,321.83 | $10,028,638.52 | 0.5037 | $7,691,547.91 | 0.3863 |
| Difference | | ($5,121,724.50) | -0.2572 | $5,121,724.50 | 0.2572 |

Generation Arrangement Report

Page 333 of 350

Account: KEPCo 101/6 390 - KY
Dispersion: 28.00 - L3

erage Net Salvage Rate: 11.00%
.ture Net Salvage Rate: 11.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $38,561.62 | 28.00 | 27.50 | 0.8741 | 1.0000 | $33,706.99 | $1,226.71 |
| 2007 | 1.50 | $37,635.02 | 28.00 | 26.50 | 0.8423 | 1.0000 | $31,700.78 | $1,196.26 |
| 2006 | 2.50 | $446,601.36 | 28.00 | 25.50 | 0.8105 | 1.0000 | $361,986.35 | $14,195.54 |
| 2005 | 3.50 | $272,727.32 | 28.00 | 24.50 | 0.7788 | 1.0000 | $212,392.90 | $8,668.83 |
| 2004 | 4.50 | $143,885.60 | 28.00 | 23.51 | 0.7471 | 1.0000 | $107,502.40 | $4,573.51 |
| 2002 | 6.50 | $4,456.24 | 28.00 | 21.54 | 0.6846 | 1.0000 | $3,050.83 | $141.64 |
| 2001 | 7.50 | $11,474.83 | 28.00 | 20.57 | 0.6539 | 1.0000 | $7,503.72 | $364.74 |
| 2000 | 8.50 | $393,113.43 | 28.00 | 19.62 | 0.6237 | 1.0000 | $245,195.20 | $12,495.39 |
| 1998 | 10.50 | $75,664.00 | 28.00 | 17.77 | 0.5649 | 1.0000 | $42,741.60 | $2,405.03 |
| 1997 | 11.50 | $317,803.00 | 28.00 | 16.87 | 0.5364 | 1.0000 | $170,462.94 | $10,101.60 |
| 1996 | 12.50 | $1,112,926.44 | 28.00 | 16.00 | 0.5085 | 1.0000 | $565,931.59 | $35,375.16 |
| 1995 | 13.50 | $484,522.00 | 28.00 | 15.15 | 0.4815 | 1.0000 | $233,288.40 | $15,400.88 |
| 1994 | 14.50 | $29,461.00 | 28.00 | 14.33 | 0.4554 | 1.0000 | $13,416.30 | $936.44 |
| 1993 | 15.50 | $19,258.00 | 28.00 | 13.55 | 0.4306 | 1.0000 | $8,292.36 | $612.13 |
| 1992 | 16.50 | $159,014.00 | 28.00 | 12.81 | 0.4072 | 1.0000 | $64,755.14 | $5,054.37 |
| 1991 | 17.50 | $389,833.00 | 28.00 | 12.13 | 0.3855 | 1.0000 | $150,299.43 | $12,391.12 |
| 1990 | 18.50 | $11,957,452.45 | 28.00 | 11.51 | 0.3659 | 1.0000 | $4,375,574.95 | $380,076.17 |
| 1989 | 19.50 | $21,105.00 | 28.00 | 10.96 | 0.3482 | 1.0000 | $7,349.40 | $670.84 |
| 1988 | 20.50 | $2,929.00 | 28.00 | 10.47 | 0.3327 | 1.0000 | $974.48 | $93.10 |
| 1987 | 21.50 | $11,487.75 | 28.00 | 10.04 | 0.3191 | 1.0000 | $3,666.09 | $365.15 |
| 1986 | 22.50 | $12,571.00 | 28.00 | 9.67 | 0.3075 | 1.0000 | $3,865.79 | $399.58 |
| 1985 | 23.50 | $2,504.00 | 28.00 | 9.36 | 0.2976 | 1.0000 | $745.18 | $79.59 |
| 1983 | 25.50 | $12,063.00 | 28.00 | 8.87 | 0.2820 | 1.0000 | $3,401.90 | $383.43 |
| 1982 | 26.50 | $7,057.00 | 28.00 | 8.68 | 0.2758 | 1.0000 | $1,946.21 | $224.31 |
| 1981 | 27.50 | $3,730,029.77 | 28.00 | 8.50 | 0.2701 | 1.0000 | $1,007,537.03 | $118,561.66 |
| 1980 | 28.50 | $14,163.00 | 28.00 | 8.33 | 0.2648 | 1.0000 | $3,750.84 | $450.18 |
| 1979 | 29.50 | $15,014.00 | 28.00 | 8.16 | 0.2595 | 1.0000 | $3,896.26 | $477.23 |
| 1978 | 30.50 | $16,821.00 | 28.00 | 7.99 | 0.2541 | 1.0000 | $4,273.75 | $534.67 |
| 1977 | 31.50 | $1,414.00 | 28.00 | 7.81 | 0.2483 | 1.0000 | $351.12 | $44.95 |
| 1976 | 32.50 | $6,155.00 | 28.00 | 7.61 | 0.2420 | 1.0000 | $1,489.28 | $195.64 |
| 1975 | 33.50 | $12,975.00 | 28.00 | 7.40 | 0.2353 | 1.0000 | $3,052.43 | $412.42 |
| 1974 | 34.50 | $14,153.00 | 28.00 | 7.17 | 0.2280 | 1.0000 | $3,226.55 | $449.86 |
| 1973 | 35.50 | $4,096.00 | 28.00 | 6.93 | 0.2204 | 1.0000 | $902.75 | $130.19 |

Generation Arrangement Report

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Account: KEPCo 101/6 390 - KY
Dispersion: 28.00 - L3

erage Net Salvage Rate: 11.00%
ture Net Salvage Rate: 11.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 1970 | 38.50 | $2,206.00 | 28.00 | 6.17 | 0.1962 | 1.0000 | $432.74 | $70.12 |
| 1969 | 39.50 | $12,870.00 | 28.00 | 5.91 | 0.1878 | 1.0000 | $2,417.42 | $409.08 |
| 1968 | 40.50 | $34,056.00 | 28.00 | 5.65 | 0.1796 | 1.0000 | $6,117.77 | $1,082.49 |
| 1967 | 41.50 | $6,231.00 | 28.00 | 5.39 | 0.1714 | 1.0000 | $1,068.24 | $198.06 |
| 1966 | 42.50 | $1,664.00 | 28.00 | 5.14 | 0.1634 | 1.0000 | $271.94 | $52.89 |
| 1963 | 45.50 | $481.00 | 28.00 | 4.41 | 0.1402 | 1.0000 | $67.42 | $15.29 |
| 1962 | 46.50 | $793.00 | 28.00 | 4.17 | 0.1326 | 1.0000 | $105.16 | $25.21 |
| 1961 | 47.50 | $448.00 | 28.00 | 3.94 | 0.1253 | 1.0000 | $56.16 | $14.24 |
| 1960 | 48.50 | $15,245.00 | 28.00 | 3.71 | 0.1181 | 1.0000 | $1,800.02 | $484.57 |
| 1959 | 49.50 | $6,904.00 | 28.00 | 3.49 | 0.1111 | 1.0000 | $766.83 | $219.45 |
| 1958 | 50.50 | $525.00 | 28.00 | 3.27 | 0.1041 | 1.0000 | $54.63 | $16.69 |
| 1957 | 51.50 | $147.00 | 28.00 | 3.06 | 0.0973 | 1.0000 | $14.30 | $4.67 |
| 1953 | 55.50 | $505.00 | 28.00 | 2.24 | 0.0712 | 1.0000 | $35.95 | $16.05 |
| 1952 | 56.50 | $97.00 | 28.00 | 2.05 | 0.0650 | 1.0000 | $6.31 | $3.08 |
| 1950 | 58.50 | $304.00 | 28.00 | 1.66 | 0.0527 | 1.0000 | $16.02 | $9.66 |
| 1949 | 59.50 | $1,116.00 | 28.00 | 1.48 | 0.0470 | 1.0000 | $52.46 | $35.47 |
| 1948 | 60.50 | $536.00 | 28.00 | 1.29 | 0.0409 | 1.0000 | $21.93 | $17.04 |
| 1945 | 63.50 | $434.00 | 28.00 | 0.68 | 0.0215 | 1.0000 | $9.33 | $13.80 |
| 1944 | 64.50 | $322.00 | 28.00 | 0.23 | 0.0073 | 1.0000 | $2.35 | $10.24 |
| 1942 | 66.50 | $1,884.00 | 28.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1941 | 67.50 | $117.00 | 28.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1940 | 68.50 | $430.00 | 28.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1939 | 69.50 | $342.00 | 28.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1938 | 70.50 | $43,738.00 | 28.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| | | $19,910,321.83 | 28.00 | 12.15 | 0.3863 | 1.0000 | $7,691,547.91 | $631,385.42 |

Depreciation Reserve Summary

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Account: KEPCo 101/6 391 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 35 - SQ

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $1,312,821.14 | $145,379.54 | 0.1107 | $1,167,441.60 | 0.8893 |
| Computed | $1,312,821.14 | $297,123.38 | 0.2263 | $1,015,697.76 | 0.7737 |
| Difference | | ($151,743.84) | -0.1156 | $151,743.84 | 0.1156 |

Generation Arrangement Report



Account: KEPCo 101/6 391 - KY
Dispersion: 35.00 - SQ

erage Net Salvage Rate: 0.00%
.ture Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $3,650.88 | 35.00 | 34.50 | 0.9857 | 1.0000 | $3,598.72 | $104.31 |
| 2007 | 1.50 | $163,270.19 | 35.00 | 33.50 | 0.9571 | 1.0000 | $156,272.90 | $4,664.86 |
| 2005 | 3.50 | $26,368.25 | 35.00 | 31.50 | 0.9000 | 1.0000 | $23,731.43 | $753.38 |
| 2004 | 4.50 | $278,932.15 | 35.00 | 30.50 | 0.8714 | 1.0000 | $243,069.45 | $7,969.49 |
| 2002 | 6.50 | $379,083.62 | 35.00 | 28.50 | 0.8143 | 1.0000 | $308,682.38 | $10,830.96 |
| 2001 | 7.50 | $108,531.78 | 35.00 | 27.50 | 0.7857 | 1.0000 | $85,274.97 | $3,100.91 |
| 2000 | 8.50 | $4,468.27 | 35.00 | 26.50 | 0.7571 | 1.0000 | $3,383.12 | $127.66 |
| 1999 | 9.50 | $127,468.00 | 35.00 | 25.50 | 0.7286 | 1.0000 | $92,869.54 | $3,641.94 |
| 1998 | 10.50 | $54,995.00 | 35.00 | 24.50 | 0.7000 | 1.0000 | $38,496.50 | $1,571.29 |
| 1994 | 14.50 | $6,656.00 | 35.00 | 20.50 | 0.5857 | 1.0000 | $3,898.51 | $190.17 |
| 1986 | 22.50 | $141,643.00 | 35.00 | 12.50 | 0.3571 | 1.0000 | $50,586.79 | $4,046.94 |
| 1985 | 23.50 | $17,754.00 | 35.00 | 11.50 | 0.3286 | 1.0000 | $5,833.46 | $507.26 |
| | | $1,312,821.14 | 35.00 | 27.08 | 0.7737 | 1.0000 | $1,015,697.76 | $37,509.18 |

Depreciation Reserve Summary



Account: KEPCo 101/6 392 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 30 - SQ

.age Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $9,654.90 | $900.57 | 0.0933 | $8,754.33 | 0.9067 |
| Computed | $9,654.90 | $1,840.56 | 0.1906 | $7,814.34 | 0.8094 |
| Difference | | ($939.99) | -0.0974 | $939.99 | 0.0974 |

Generation Arrangement Report



Account: KEPCo 101/6 392 - KY
Dispersion: 30.00 - SQ

rage Net Salvage Rate: 0.00%
ure Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2007 | 1.50 | $3,835.70 | 30.00 | 28.50 | 0.9500 | 1.0000 | $3,643.91 | $127.86 |
| 2000 | 8.50 | $5,819.20 | 30.00 | 21.50 | 0.7167 | 1.0000 | $4,170.43 | $193.97 |
| | | $9,654.90 | 30.00 | 24.28 | 0.8094 | 1.0000 | $7,814.34 | $321.83 |

Depreciation Reserve Summary

Page 339 of 350

Account: KEPCo 101/6 393 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 30 - SQ

rage Net Salvage Rate: 5.00%
Future Net Salvage Rate: 5.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $142,851.30 | $16,184.25 | 0.1133 | $119,524.48 | 0.8367 |
| Computed | $142,851.30 | $33,077.00 | 0.2315 | $102,631.73 | 0.7185 |
| Difference | | ($16,892.75) | -0.1183 | $16,892.75 | 0.1183 |



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Generation Arrangement Report

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Account: KEPCo 101/6 393 - KY
Dispersion: 30.00 - SQ

ɿrage Net Salvage Rate: 5.00%
.ure Net Salvage Rate: 5.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $35,994.81 | 30.00 | 29.50 | 0.9342 | 1.0000 | $33,625.15 | $1,139.84 |
| 2006 | 2.50 | $9,819.85 | 30.00 | 27.50 | 0.8708 | 1.0000 | $8,551.45 | $310.96 |
| 2004 | 4.50 | $39,480.64 | 30.00 | 25.50 | 0.8075 | 1.0000 | $31,880.62 | $1,250.22 |
| 1995 | 13.50 | $25,233.00 | 30.00 | 16.50 | 0.5225 | 1.0000 | $13,184.24 | $799.05 |
| 1994 | 14.50 | $27,200.00 | 30.00 | 15.50 | 0.4908 | 1.0000 | $13,350.67 | $861.33 |
| 1992 | 16.50 | $4,331.00 | 30.00 | 13.50 | 0.4275 | 1.0000 | $1,851.50 | $137.15 |
| 1986 | 22.50 | $792.00 | 30.00 | 7.50 | 0.2375 | 1.0000 | $188.10 | $25.08 |
| | | $142,851.30 | 30.00 | 22.69 | 0.7185 | 1.0000 | $102,631.73 | $4,523.62 |

Depreciation Reserve Summary

Page 341 of 350

Account: KEPCo 101/6 394 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 30 - SQ

rage Net Salvage Rate: 5.00%
Future Net Salvage Rate: 5.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $2,579,395.57 | $259,151.36 | 0.1005 | $2,191,274.43 | 0.8495 |
| Computed | $2,579,395.57 | $529,647.62 | 0.2053 | $1,920,778.17 | 0.7447 |
| Difference | | ($270,496.26) | -0.1049 | $270,496.26 | 0.1049 |

Generation Arrangement Report

Page 342 of 350

Account: KEPCo 101/6 394 - KY
Dispersion: 30.00 - SQ

erage Net Salvage Rate: 5.00%
ture Net Salvage Rate: 5.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $624,981.66 | 30.00 | 29.50 | 0.9342 | 1.0000 | $583,837.03 | $19,791.09 |
| 2007 | 1.50 | $142,821.02 | 30.00 | 28.50 | 0.9025 | 1.0000 | $128,895.97 | $4,522.67 |
| 2006 | 2.50 | $30,324.75 | 30.00 | 27.50 | 0.8708 | 1.0000 | $26,407.80 | $960.28 |
| 2005 | 3.50 | $139,568.65 | 30.00 | 26.50 | 0.8392 | 1.0000 | $117,121.36 | $4,419.67 |
| 2004 | 4.50 | $401,347.62 | 30.00 | 25.50 | 0.8075 | 1.0000 | $324,088.20 | $12,709.34 |
| 2003 | 5.50 | $108,886.81 | 30.00 | 24.50 | 0.7758 | 1.0000 | $84,478.02 | $3,448.08 |
| 2002 | 6.50 | $8,900.52 | 30.00 | 23.50 | 0.7442 | 1.0000 | $6,623.47 | $281.85 |
| 2001 | 7.50 | $154,805.23 | 30.00 | 22.50 | 0.7125 | 1.0000 | $110,298.73 | $4,902.17 |
| 2000 | 8.50 | $209,912.86 | 30.00 | 21.50 | 0.6808 | 1.0000 | $142,915.67 | $6,647.24 |
| 1999 | 9.50 | $242,443.45 | 30.00 | 20.50 | 0.6492 | 1.0000 | $157,386.21 | $7,677.38 |
| 1998 | 10.50 | $135,419.00 | 30.00 | 19.50 | 0.6175 | 1.0000 | $83,621.23 | $4,288.27 |
| 1997 | 11.50 | $113,910.00 | 30.00 | 18.50 | 0.5858 | 1.0000 | $66,732.27 | $3,607.15 |
| 1996 | 12.50 | $26,579.00 | 30.00 | 17.50 | 0.5542 | 1.0000 | $14,729.20 | $841.67 |
| 1994 | 14.50 | $2,744.00 | 30.00 | 15.50 | 0.4908 | 1.0000 | $1,346.85 | $86.89 |
| 1992 | 16.50 | $21,422.00 | 30.00 | 13.50 | 0.4275 | 1.0000 | $9,157.91 | $678.36 |
| 1991 | 17.50 | $65,186.00 | 30.00 | 12.50 | 0.3958 | 1.0000 | $25,802.79 | $2,064.22 |
| 1990 | 18.50 | $23,112.00 | 30.00 | 11.50 | 0.3642 | 1.0000 | $8,416.62 | $731.88 |
| 1987 | 21.50 | $8,923.00 | 30.00 | 8.50 | 0.2692 | 1.0000 | $2,401.77 | $282.56 |
| 1986 | 22.50 | $69,679.00 | 30.00 | 7.50 | 0.2375 | 1.0000 | $16,548.76 | $2,206.50 |
| 1985 | 23.50 | $48,429.00 | 30.00 | 6.50 | 0.2058 | 1.0000 | $9,968.30 | $1,533.59 |
| | | $2,579,395.57 | 30.00 | 23.52 | 0.7447 | 1.0000 | $1,920,778.17 | $81,680.86 |

Depreciation Reserve Summary



Account: KEPCo 101/6 395 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 30 - SQ

rage Net Salvage Rate: 5.00%
Future Net Salvage Rate: 5.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $262,378.70 | $72,215.81 | 0.2752 | $177,043.96 | 0.6748 |
| Computed | $262,378.70 | $147,593.02 | 0.5625 | $101,666.75 | 0.3875 |
| Difference | | ($75,377.21) | -0.2873 | $75,377.21 | 0.2873 |

Generation Arrangement Report

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Account: KEPCo 101/6 395 - KY
Dispersion: 30.00 - SQ

erage Net Salvage Rate: 5.00%
.ture Net Salvage Rate: 5.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2005 | 3.50 | $1,833.80 | 30.00 | 26.50 | 0.8392 | 1.0000 | $1,538.86 | $58.07 |
| 2004 | 4.50 | $11,433.43 | 30.00 | 25.50 | 0.8075 | 1.0000 | $9,232.49 | $362.06 |
| 2002 | 6.50 | $7,357.47 | 30.00 | 23.50 | 0.7442 | 1.0000 | $5,475.18 | $232.99 |
| 1999 | 9.50 | $3,800.00 | 30.00 | 20.50 | 0.6492 | 1.0000 | $2,466.83 | $120.33 |
| 1998 | 10.50 | $9,244.00 | 30.00 | 19.50 | 0.6175 | 1.0000 | $5,708.17 | $292.73 |
| 1996 | 12.50 | $28,363.00 | 30.00 | 17.50 | 0.5542 | 1.0000 | $15,717.83 | $898.16 |
| 1992 | 16.50 | $23,978.00 | 30.00 | 13.50 | 0.4276 | 1.0000 | $10,250.59 | $759.30 |
| 1991 | 17.50 | $31,455.00 | 30.00 | 12.50 | 0.3958 | 1.0000 | $12,450.94 | $996.08 |
| 1990 | 18.50 | $24,300.00 | 30.00 | 11.50 | 0.3642 | 1.0000 | $8,849.25 | $769.50 |
| 1987 | 21.50 | $55,513.00 | 30.00 | 8.50 | 0.2692 | 1.0000 | $14,942.25 | $1,757.91 |
| 1986 | 22.50 | $51,612.00 | 30.00 | 7.50 | 0.2375 | 1.0000 | $12,257.85 | $1,634.38 |
| 1985 | 23.50 | $13,489.00 | 30.00 | 6.50 | 0.2058 | 1.0000 | $2,776.49 | $427.15 |
| | | $262,378.70 | 30.00 | 12.24 | 0.3875 | 1.0000 | $101,666.74 | $8,308.66 |

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## Depreciation Reserve Summary

Account: KEPCo 101/6 396 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 8 - SQ

'age Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $5,931.29 | $2,357.97 | 0.3975 | $3,573.32 | 0.6025 |
| Computed | $5,931.29 | $4,819.17 | 0.8125 | $1,112.12 | 0.1875 |
| Difference | | ($2,461.20) | -0.4150 | $2,461.20 | 0.4150 |

Generation Arrangement Report



Account: KEPCo 101/6 396 - KY
Dispersion: 8.00 - SQ

erage Net Salvage Rate: 0.00%
ıture Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2002 | 6.50 | $5,931.29 | 8.00 | 1.50 | 0.1875 | 1.0000 | $1,112.12 | $741.41 |
| | | $5,931.29 | 8.00 | 1.50 | 0.1875 | 1.0000 | $1,112.12 | $741.41 |

Depreciation Reserve Summary



Account: KEPCo 101/6 397 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 22 - SQ

rage Net Salvage Rate: 8.00%
Future Net Salvage Rate: 8.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $6,755,007.87 | $1,042,002.19 | 0.1543 | $5,172,605.05 | 0.7657 |
| Computed | $6,755,007.87 | $2,129,620.22 | 0.3153 | $4,084,987.02 | 0.6047 |
| Difference | | ($1,087,618.03) | -0.1610 | $1,087,618.03 | 0.1610 |

 

Generation Arrangement Report



Account: KEPCo 101/6 397 - KY
*Dispersion:* 22.00 - SQ

erage Net Salvage Rate: 8.00%
.ture Net Salvage Rate: 8.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $1,305,400.97 | 22.00 | 21.50 | 0.8991 | 1.0000 | $1,173,674.14 | $54,589.50 |
| 2007 | 1.50 | $187,516.91 | 22.00 | 20.50 | 0.8573 | 1.0000 | $160,753.13 | $7,841.62 |
| 2006 | 2.50 | $818,515.02 | 22.00 | 19.50 | 0.8155 | 1.0000 | $667,461.79 | $34,228.81 |
| 2005 | 3.50 | $373,813.79 | 22.00 | 18.50 | 0.7736 | 1.0000 | $289,195.94 | $15,632.21 |
| 2004 | 4.50 | $505,781.69 | 22.00 | 17.50 | 0.7318 | 1.0000 | $370,140.24 | $21,150.87 |
| 2003 | 5.50 | $370,198.37 | 22.00 | 16.50 | 0.6900 | 1.0000 | $255,436.88 | $15,481.02 |
| 2002 | 6.50 | $54,039.58 | 22.00 | 15.50 | 0.6482 | 1.0000 | $35,027.47 | $2,259.84 |
| 2001 | 7.50 | $55,586.09 | 22.00 | 14.50 | 0.6064 | 1.0000 | $33,705.38 | $2,324.51 |
| 2000 | 8.50 | $152,600.66 | 22.00 | 13.50 | 0.5645 | 1.0000 | $86,150.01 | $6,381.48 |
| 1999 | 9.50 | $22,735.79 | 22.00 | 12.50 | 0.5227 | 1.0000 | $11,884.62 | $950.77 |
| 1998 | 10.50 | $1,604,245.00 | 22.00 | 11.50 | 0.4809 | 1.0000 | $771,496.00 | $67,086.61 |
| 1997 | 11.50 | $65,864.00 | 22.00 | 10.50 | 0.4391 | 1.0000 | $28,920.28 | $2,754.31 |
| 1996 | 12.50 | $82,417.00 | 22.00 | 9.50 | 0.3973 | 1.0000 | $32,742.03 | $3,446.53 |
| 1995 | 13.50 | $40,376.00 | 22.00 | 8.50 | 0.3555 | 1.0000 | $14,351.83 | $1,688.45 |
| 1994 | 14.50 | $69,705.00 | 22.00 | 7.50 | 0.3136 | 1.0000 | $21,862.02 | $2,914.94 |
| 1993 | 15.50 | $62,827.00 | 22.00 | 6.50 | 0.2718 | 1.0000 | $17,077.52 | $2,627.31 |
| 1992 | 16.50 | $89,029.00 | 22.00 | 5.50 | 0.2300 | 1.0000 | $20,476.67 | $3,723.03 |
| 1991 | 17.50 | $381,669.00 | 22.00 | 4.50 | 0.1882 | 1.0000 | $71,823.17 | $15,960.70 |
| 1990 | 18.50 | $43,721.00 | 22.00 | 3.50 | 0.1464 | 1.0000 | $6,399.16 | $1,828.33 |
| 1989 | 19.50 | $63,095.00 | 22.00 | 2.50 | 0.1045 | 1.0000 | $6,596.30 | $2,638.52 |
| 1988 | 20.50 | $106,507.00 | 22.00 | 1.50 | 0.0627 | 1.0000 | $6,680.89 | $4,453.93 |
| 1987 | 21.50 | $149,769.00 | 22.00 | 0.50 | 0.0209 | 1.0000 | $3,131.53 | $6,263.07 |
| 1986 | 22.50 | $73,742.00 | 22.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1985 | 23.50 | $75,853.00 | 22.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| | | $6,755,007.87 | 22.00 | 14.46 | 0.6047 | 1.0000 | $4,084,987.02 | $276,226.36 |

Depreciation Reserve Summary

Account: KEPCo 101/6 398 - KY
Scenario: KEPCO GENERAL 2008
Dispersion: 20 - SQ

rage Net Salvage Rate: 0.00%
Future Net Salvage Rate: 0.00%

Broad Group Procedure

January 1 , 2009

| | | Depreciation Reserve | | Net Plant | |
|---|---|---|---|---|---|
| | Plant Amt | Amount | Ratio | Amount | Ratio |
| Recorded | $974,319.73 | $129,027.54 | 0.1324 | $845,292.19 | 0.8676 |
| Computed | $974,319.73 | $263,703.53 | 0.2707 | $710,616.20 | 0.7293 |
| Difference | | ($134,675.99) | -0.1382 | $134,675.99 | 0.1382 |

Generation Arrangement Report

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Account: KEPCo 101/6 398 - KY
Dispersion: 20.00 - SQ

erage Net Salvage Rate: 0.00%
ure Net Salvage Rate: 0.00%

Broad Group Procedure

January 1, 2009

| Vintage | Age | Surviving Plant | Avg Life | Remaining Life | Net Plant Ratio | Alloc Factor | Computed Net Plant | Accrual |
|---|---|---|---|---|---|---|---|---|
| 2008 | 0.50 | $41,951.41 | 20.00 | 19.50 | 0.9750 | 1.0000 | $40,902.62 | $2,097.57 |
| 2007 | 1.50 | $169,092.56 | 20.00 | 18.50 | 0.9250 | 1.0000 | $156,410.62 | $8,454.63 |
| 2006 | 2.50 | $59,954.48 | 20.00 | 17.50 | 0.8750 | 1.0000 | $52,460.17 | $2,997.72 |
| 2005 | 3.50 | $30,390.25 | 20.00 | 16.50 | 0.8250 | 1.0000 | $25,071.96 | $1,519.51 |
| 2004 | 4.50 | $272,496.51 | 20.00 | 15.50 | 0.7750 | 1.0000 | $211,184.80 | $13,624.83 |
| 2002 | 6.50 | $305,030.32 | 20.00 | 13.50 | 0.6750 | 1.0000 | $205,895.47 | $15,251.52 |
| 2001 | 7.50 | $15,126.03 | 20.00 | 12.50 | 0.6250 | 1.0000 | $9,453.77 | $756.30 |
| 2000 | 8.50 | $13,951.17 | 20.00 | 11.50 | 0.5750 | 1.0000 | $8,021.92 | $697.56 |
| 1997 | 11.50 | $1,166.00 | 20.00 | 8.50 | 0.4250 | 1.0000 | $495.55 | $58.30 |
| 1993 | 15.50 | $1,822.00 | 20.00 | 4.50 | 0.2250 | 1.0000 | $409.95 | $91.10 |
| 1991 | 17.50 | $2,475.00 | 20.00 | 2.50 | 0.1250 | 1.0000 | $309.38 | $123.75 |
| 1988 | 20.50 | $4,764.00 | 20.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1987 | 21.50 | $2,110.00 | 20.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1986 | 22.50 | $49,620.00 | 20.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| 1985 | 23.50 | $4,370.00 | 20.00 | 0.00 | 0.0000 | 0.0000 | $0.00 | $0.00 |
| | | $974,319.73 | 20.00 | 14.59 | 0.7293 | 1.0000 | $710,616.20 | $45,672.79 |

## Kentucky Power Company

### REQUEST

Refer to Kentucky Power's response to the AG's Initial Data Request ("AG's First Request"), Item 16.

a. Explain whether Kentucky Power or AEP has had prior experience with Alstom on any major projects.

b. If the answer to part a. of this request is yes, describe the results from having used Alstom and provide the expectations for the proposed project.

c. If the Alstom Novel Integrated Desulphurization technology had been used in Europe since 1995, explain whether this technology was a consideration in the 2004-2006 preliminary Scrubber analysis referenced in Exhibit LPM-1 of the Application.

### RESPONSE

a. Alstom was the provider of the flue gas desulfurization technology on AEP's 1300 MW Mountaineer Plant as well as an Original Equipment Manufacturer (OEM) partner on AEP's carbon capture and storage technology demonstration at the same facility. In addition, Alstom has in the past and continues to provide major turbine/generator components and associated professional services across the AEP fleet.

b. Alstom's performance on the FGD project at Mountaineer was in full accord with the contractual requirements for cost and schedule and the FDG itself met all operational guarantees. In all cases across the varying services they provide AEP, Alstom has always addressed any warranty issues without hesitation. AEP and KPCo would expect nothing less of Alstom on the Big Sandy Unit 2 FGD project.

c. In the early 1990's, Alstom began NID-related pilot scale laboratory R&D work in Sweden. In the mid 1990's, Alstom began marketing the technology in Europe and China to the iron and steel industries and to the waste energy industry as a dry scrubbing technology capable of 80-90% $SO_2$ capture. The first commercial scale NID unit was built in Poland in 1995.

During the 2004-05 timeframe, Alstom's first application of the technology in North America was marketed for Circulating Fluid Bed boilers as a "polishing" dry scrubbing technology and installed at the Spurlock and Seward Plants.

Following the experience gained on the Spurlock and Seward installations, Alstom began investigating the enhancement of the capability of the technology to achieve 95-98% $SO_2$ capture for application on boilers burning high sulfur fuels. In late 2008, Alstom made their first US commercial offering for a unit burning 4.5 lb $SO_2$/mmBTU, at 96% $SO_2$ removal.

As can be seen from this history of the technology development, Alstom was not in a position to offer the NID system in the US market during the 2004-2006 timeframe. Thus, it was not considered for application on Big Sandy Unit 2.

**WITNESS:** Robert L Walton

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to the AG's First Request, Item 22, Attachment 8.

a. If AEP or Kentucky Power had purchased the Riverside Generating ("RG") natural gas plant in Zelda, Kentucky at the initial non-binding offer made on March 09, 2010, provide and describe the financial impact on Off-System Sales ("OSS"), pool capacity costs, and PJM capacity costs to:

(1) Kentucky Power as a member of the East Pool Agreement;

(2) The other members of the East Pool Agreement;

(3) The members of the contemplated three member pool; and

(4) The members of any other agreement between the AEP subsidiaries of the East Pool Agreement.

b. Provide a further explanation of why AEP or Kentucky Power did not purchase the RG natural gas plant considering the capability of conversion to a 2x1 combined cycle ("CC") and 3x1 CC which would enhance the capacity of the facility.

c. Prepare an analysis of the purchase of the RG natural gas plant as an option scenario and compare to Options 1 through 4, using the same modeling as used for those four options. Include revenues from OSS, pool capacity costs, PJM capacity costs, and the financial impact to the current East Pool Agreement and the proposed three member pool.

d. Explain whether AEP or Kentucky Power considered including other utilities in a possible purchase/conversion of the RG natural gas plant as a way to offset the excess capacity and mitigate costs.

## RESPONSE

a. The Company has not conducted such a study.