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PUBLIC SERVICE COMMISSION

MS ELIZABETH O'DONNELL EXECUTIVE DIRECTOR
PUBLIC SERVICE COMISSION OF KENTUCKY
211 SOWER BOULEVARD
FRANKFORT KY 40602

## Re: Jackson Purchase Energy Corporation

 Case No. 2007-00116Dear Ms. O'Donnell:
Enclosed please find the original and 7 copies of Jackson Purchase Energy Corporation's Response to the Second Data Request from Commission Staff. Thank you for your consideration of this matter.

Sincerely,


Vickey L. Martin
Paralegal to
Melissa D. Yates
Attorney for Jackson Purchase Energy Corporation ("JPEC")
Enclosures
cc: Dennis G. Howard, Attorney General, via Federal Express

## JACKSON PURCHASE ENERGY )

CASE NO. 2007-00116

## JPEC'S RESPONSES TO SECOND REQUEST FOR DATA FROM COMMISSION STAFF

COMES Jackson Purchase Energy Corporation (hereinafter "JPEC"), through the undersigned counsel, and submits herein its responses to the Second Data Request of Commission Staff.

1. Jackson Purchase submitted its application for an increase in rates on December 5, 2007 wherein it proposed a test year ending December 31, 2006. Explain in detail why Jackson Purchase did not propose a test year that was more current than the proposed test year, which was 11 months old at the time the application was received.

RESPONSE: JPEC planned an earlier filing. It gave notice of its intent in March, 2007. Thereafter, a decision was made to submit significant changes to all regulatory tariffs, as well as rate tariffs. The research and rewriting process, with board involvement, took longer than anticipated. In addition, JPEC's rate study and depreciation experts were unable to complete their assignments as quickly as initially indicated due to personal workloads.

Witness: Kelly Nuckols.
2. Refer to Paragraph 12(a) of Jackson Purchase's Application. Provide copies of Jackson Purchase's Financial Policy and Equity Management Policy.

RESPONSE: The correct paragraph reference is (b). JPEC's Application for Rate Increase incorrectly stated that JPEC has a Financial Policy and Equity Management Policy; JPEC has no formal written policy(s). It is JPEC's long-standing practice to maintain TIER. This is reviewed on a monthly basis.

Witness: Kelly Nuckols.
3. In Paragraph 12(b) of the Application, Jackson Purchase states it has been duly notified by the Rural Utilities Service ("RUS") and the National Rural Utilities Cooperative Finance Corporation ("CFC") that it did not meet its minimum default mortgage requirements.
a. Provide copies of the correspondence from RUS and CFC notifying Jackson Purchase that it did not meet its mortgage requirements.
b. Provide copies of correspondence sent by Jackson Purchase to RUS and CFC in response to the notice.

## RESPONSE:

a. Please see Exhibit 1 attached hereto. Normally, CFC requires a 1.35

MDSC ratio; however, because the RUS is the predominate lender and because the Mortgage represents a joint Mortgage of the RUS, CFC and CoBank, CFC has agreed to the same requirements in the Mortgage to the same requirements of

RUS. See Section 2.01 (a)(1)(i) of the Mortgage.
"The Mortgagor shall have achieved for each of the two calendar years immediately preceding the issuance of such Additional Notes, a TIER of not less than 1.25 and a DSC of not less than 1.25;"

At the end of 2006, JPEC had a TIER of 0.96 , a DSC of 1.23 and a MDSC of
1.22. JPEC was also informed verbally by CFC Vice President of Regulatory

Affairs that it failed to meet its mortgage requirements.
b. Please see Exhibit 2 attached hereto.

Witness: Kelly Nuckols.
4. Paragraph 12(c) of the Application refers to its Times Interest Earned Ratios ("TIER") for the test year. Provide Jackson Purchase's income statements and TIERS for the 12month period ending December 31, 2007 as soon as it is available.

RESPONSE: For 2007 TIER is 1.31 and OTIER is 1.08 . These calculations were made from data contained in Exhibit 3 attached hereto.

Witness: Chuck Williamson.
5. Following Paragraph 39 of Jackson Purchase's application, the following statement appears, "Wherefore, Jackson Purchase requests that the Public Service Commission of Kentucky approve the requested increase as expeditiously as possible by authorizing Jackson Purchase to make the requested rates effective immediately through the issuance of an order." By this statement is Jackson Purchase requesting the Commission to schedule a hearing to determine whether the proposed rates or a portion thereof should becomes effective during the suspension period as provided in KRS 278.190?

RESPONSE: JPEC is not requesting that its rate be effective during the suspension period; JPEC desires a final rate decision at the earliest possible date.

Witness: Kelly Nuckols.
6. Provide a schedule comparing the proposed depreciation rates with Jackson Purchase's current depreciation rates and the depreciation rates established by RUS.

RESPONSE: Please see Exhibit 4 attached hereto.
Witness: Chuck Williamson.
7. Refer to Exhibit G, Schedule 5, of the Application. Provide the current interest rates on the long-term debt as of January 31, 2008.

RESPONSE: Please see Exhibit 5 attached hereto.
Witness: Chuck Williamson.
8. Refer to Exhibit G, Schedule 6, of the Application. Provide a copy of the "COMPensate Plan" prepared by the National Rural Electric Cooperatives Association for the calendar years 2005,2006 and 2007 when it becomes available.
a. Are wage and salary adjustments for the executive officers included in the COMPensate Plan?

RESPONSE: JPEC has requested guidance from NRECA regarding the COMPensate Plan. JPEC is informed that the Plan is copyrighted material and contains confidential information on a national level. JPEC has requested permission to provide a summary of the Plan. Upon receipt of NRECA's reply, a copy of same will be filed with the PSC.
a. All executive officers except CEOs are included in the Plan.

Witness: Kelly Nuckols.
9. Refer to Exhibit G, Schedule 8, page 2 of 5, of the Application. Does Jackson Purchase's contribution of 100 percent of medical insurance extend to family coverage? Explain the response.

RESPONSE: The NECA-IBEW Welfare Trust Fund is a single premium plan; JPEC does not have the option to purchase single or tiered amounts.

Witness: Kelly Nuckols.
10. Refer to Exhibit G, Schedule 9, of the Application. Provide a copy of the 2007 Post Retirement Benefits Valuation when it becomes available.

RESPONSE: FAS 106 requires a valuation only once every three years, assuming there have been no significant changes in assumptions, which there have not. This study (performed by NRECA) is expensive to complete and requires significant staff resources. As such, JPEC only updates the study every three years. A new valuation will not be available until the fourth quarter of 2009.

Witness: Chuck Williamson.
11. Refer to Exhibit G, Schedule 12, of the Application.
a. Refer to page 2 and 17 of 23 . Explain why Jackson Purchase removed the 2006 membership dues to the Kentucky Association of Electric Cooperatives on page 2 but did not remove the membership dues on page 17 .
b. Refer to page 3 through 7 of 23 . For all advertising identified as safety or conservation, explain why each expense item should be included for rate-making purposes pursuant to 807 KAR 5:016, Section 4.
c. Provide samples of the advertisements included as safety or conservation.

For radio and television advertisements, the text will be sufficient.
d. Explain the purpose and nature of the expenses referred to as "Networking" in the Distribution Description that appears throughout this schedule. Explain why the expenses should be included for rate-making purposes.
e. Refer to pages 11 through 14 of 23 . For the following expense items, explain why each item should be included for rate-making purposes.
(1) J \& S Vending - coffee supplies.
(2) Positive Promotions, Inc. - light let safety light.
(3) Jackson Purchase Energy - donuts for employee meeting.
f. Refer to page 15 of 23, line 34. Explain why Jackson Purchase removed the deposit for the annual meeting.
g. Refer to page 16 through 18 of 23 . For the following expense items, explain why each item should be included for rate-making purposes.
(1) Rural Cooperatives Credit Union - annual fee.
(2) Hultman Signs \& Screen Pt. Inc. $-3 \times 3$ banner $-\operatorname{logo}$.
(3) Hultman Signs \& Screen Pt. Inc. - shirts.
(4) Sam's Club - membership.
(5) Lee Wayne Corporation - pens.
(6) Visa - lunch with Jeff Voight, etc.
h. Refer to pages 17 and 19 of 23 . Explain the purpose and nature of the Teller Committee Pay expense. Explain why the expense should be included for rate-making purposes.
i. Refer to page 19 of 23 . Explain why the expenses for "shirts for annual meeting" should be included for rate-making purposes.

## RESPONSE:

a. KAEC membership dues were treated as "allowed" items in both schedules.

Witness: Chuck Williamson.
b. JPEC believes all advertising being claimed as safety or conservations qualifies under 807 KAR 5:016 Sections (a), (b), (c), (d), (e) and/or (f) based upon the content of the advertisement.

## Witness: Chuck Williamson.

c. Upon receipt of the Second Request for Data from Commission Staff, JPEC's Marketing Department attempted to reconstruct past data and information as is available to reconstruct. To the best of my knowledge and belief, the information is correct as reflected below.

Television - Jackson Purchase Energy's Television ads included five preproduced Touchstone Energy commercials that ran in equal rotation. Two of the five (20\%) are allowable for rate-making purposes. A summary of each spot is below.

Touchstone Energy Safety - This ad educates customers about the dangers of home improvement and overhead electric lines. It features the actor outside a home with a ladder on the side of the house and visible overhead electric lines. The actor warns this is extremely dangerous and encourages do-it-yourselfers to be cautious when working near electric lines.

Touchstone Energy Conservation/Wise Use - This ad features an actor outside a home on a cold day with an infra-red heat gun. The commercial shows the video from the infra-red gun which demonstrates all the places the home is losing heat. The actor then gives suggestions on how to correct this loss of energy by installing more insulation, weather stripping and energy efficient windows.

Radio - Jackson Purchase Energy's regularly runs two radio ads per month. These ads focus on a variety of topics, many of which are allowable for ratemaking purposes. Samples of radio scripts that are indicative of allowable content are below.

Radio Ad for 1/2-1/15 (:30 sec.) - We know Jackson Purchase Energy members lead busy lives. That's why information about your JPEC account is available online at jpenergy.com. You can review account information, check electric use along with three years of history and compare use to weather information. Online account information is one of the many reasons Jackson Purchase Energy is the region's Cooperative Partner by Choice and Your Touchstone Energy Partner. Radio Ad for 4/3-4/16 (:30 sec.) - April showers bring May flowers, but sometimes those showers are storms. Jackson Purchase Energy reminds you that a downed power line is not necessarily a dead one. If you see a downed line, don't touch it and contact JPEC. Lighting the way to safety - Jackson Purchase Energy is the region's Cooperative Partner by Choice and Your Touchstone Energy Partner.

Radio Ad for 8/21-9/3 (:30 sec.) - Jackson Purchase Energy wants you to keep you safe around electricity. When using an extension cord, always buy one that has at least a fifteen amp rating capacity. Make sure and use three-wire extension cords for appliances with three-pronged plugs and never snip off the third prong! Lighting the way to safety, we are Jackson Purchase Energy the region's Cooperative Partner by Choice and Your Touchstone Energy Partner.

Radio Ad for 12/4-12/17 (:30 sec.) - Holiday lights make the season brighter and Jackson Purchase Energy is proud to be part of the season. Play it safe with holiday lighting. Outside, only use lights rated for outdoor use. Never overload extension cords and never use frayed cords. Making the season brighter and lighting the way to safety - Jackson Purchase Energy - The region's Cooperative Partner by Choice and Your Touchstone Energy Partner.

Witness: Chuck Williamson.
d. Networking - "Networking" is a generic term for advertising and marketing efforts at JPEC. The specific payments noted as "networking" were identified and advertising or marketing efforts that contained safety or conservation information were noted and included.

Witness: Chuck Williamson.
e. (1) J \& S Vending - coffee supplies: JPEC furnishes coffee for its employees. This has been a long standing practice and JPEC believes the expense is more than recouped by the morale of its employees. During outages these supplies are essential for in aiding employees stay alert and safe.

Witness: Kelly Nuckols.
e. (2) Positive Promotions, Inc. - light let safety light: This expense was for "prizes" given to children during electrical safety programs given to children at local schools. JPEC believes these expenses are appropriately included because of their safety message. They imprint on the "prizes" also carried a safety message.

Witness: Kelly Nuckols.
e. (3) Jackson Purchase Energy - donuts for employee meeting: JPEC occasionally furnishes donuts for its employees at various times such as safety meetings or employee meetings, or when the workload is great. This is a long standing practice and JPEC believes the expense is more than recouped by the morale of its employees.

Witness: Kelly Nuckols.
f. This item was removed by mistake. JPEC believes it is in fact an includable item, but was inadvertently listed as excludable.

Witness: Kelly Nuckols.
g. (1) Rural Cooperatives Credit Union - annual fee: These fees are annual fees relating to company credit cards which are used by employees for overnight travel or supply purchases where a credit card is the only convenient method of payment. This fee is a necessary business expense.

Witness: Chuck Williamson.
(2) Hultman Signs \& Screen Printing - 3x3 banner - logo: This refers to banners with safety messages such as "buckle up" or "wear your hard hat" that are posted at the exit of JPEC's pole-yard. The banners are designed as safety reminders for field personnel. They include the JPEC logo.

Witness: Chuck Williamson.
(3) Hultman Signs \& Screen Printing - Shirts: These shirts include JPEC's company name and were ordered for employees who participate in community events. The logo helps members know who can assist them in an expedient manner.

Witness: Chuck Williamson.
(4) Sam's Club - membership fee: This is an annual fee that is required to "belong" to Sam's Club. JPEC purchases many items from this store because many necessary items are sold at more reasonable prices there than other locations. The fee must be paid for each employee authorized to make purchases for the cooperative.

Witness: Chuck Williamson.
(5) Lee Wayne Corporation - pens: Jackson Purchase Energy uses anywhere from 3,000 to 5,000 pens per year in the lobby and customer service area. The pens are necessary for customers to fill out forms, write checks, etc. These pens include JPEC's logo, phone number and website and are purchased in bulk. Pens would need to be provided by JPEC and the information on the pens aids in helping the members find contact information needed for emergency or customer service issues.

Witness: Chuck Williamson.
(6) Visa - lunch with Jeff Voight: This item was incorrectly described in JPEC's Application for Rate Increase. JPEC sponsors a hot air balloon for the Paducah Summer Festival and auctions off a balloon ride with proceeds going to charity. JPEC treats the winners and the hot air balloon crew to dinner as part of the package. This expense should have been listed as an excluded expense.

## Witness: Chuck Williamson.

h. JPEC's bylaws require a Teller Committee to oversee board elections and count ballots. The purpose is to ensure the integrity of balloting. This expense is mandated by JPEC's bylaws and should be included for rate-making purposes in a member-owned cooperative.

Witness: Kelly Nuckols.
i. Shirts are provided to clearly identify JPEC employees, so they may assist its members at the annual meeting.

Witness: Kelly Nuckols.
12. Refer to Exhibit F, Schedule 14, of the Application.
a. Refer to pages 8 through 19. Some directors attended a "Board Workshop." Provide a detailed description of what Jackson Purchase's Board Workshops entail. Include an explanation of why they are held so frequently. b. Did Jackson Purchase normalize the regular board meeting fee for directors? Would Jackson Purchase agree that the regular board meeting fee should reflect the attendance of the full board at all meetings? Explain the response.
c. Refer to page 19 of 19. Provide copies of the meeting agenda for the "Our World Beyond Electricity Seminar." Explain why the expense should be included for rate-making purposes.

## RESPONSE:

a. JPEC's Board of Directors has no standing committees. Therefore, it does not hold committee meetings, monthly or otherwise. JPEC utilizes workshops between required board meetings so that financial and operational matters may be discussed in greater detail. Topics such as capital expenditures, revenue, approval of work plans, budgeting and audit reviews are discussed and workshops include meeting with consultants, auditors, and engineers. The board believes the system is an effective and economic way for it to fulfill their duties as directors.

Witness: Kelly Nuckols.
b. JPEC did not normalize the fee. The directors are paid based on their individual attendance. If your question means that directors should be paid a reasonable fee for those meetings actually attended, we would agree. We understand other cooperatives may have different policies and have no comment regarding those policies.

Witness: Kelly Nuckols.
c. Please see Exhibit 6 attached hereto. Expenses for attendance should be included for rate-making purposes, as it led to an understanding of important legislation (HB 568) passed by the General Assembly. The presenters which included representatives of the Kentucky Public Service Commission, explained the statute, reporting and enforcement regulations, and answered questions regarding same.

Witness: Kelly Nuckols.
13. Refer to Exhibit H, Direct Testimony of G. Kelly Nuckols, page 3 of 8, of the Application. Mr. Nuckols states that Jackson Purchase's TIER has decreased consistently from 2003 through 2006. Explain the factors that caused Jackson Purchase's TIER to fall so dramatically from a 1.72 in 2005 to a .96 in 2006.

RESPONSE: As previously mentioned JPEC's wholesale cost of power and energy increased from $\$ 0.03582$ per kWh in 2005 to $\$ 0.03602$ per kWh in 2006. kWh sales in 2005 were greater than 2006; as 2005 was recorded as a climate year with greater cooling and heating degree-days from normal. 2005 was also a year of reduced operation and maintenance expenses as JPEC recorded lower than normal outages; thereby reducing overtime labor expenses. Interest
expense increased in 2006, above 2005 levels, as a result of increased borrowings from RUS and the effect of rising interest rates as some of JPEC's outstanding loans re-priced.

Individually the above items would not cause a significant change; but cumulatively, they resulted in the stated change in TIER.

Witness: Kelly Nuckols.
14. Refer to Exhibit $L$ of the Application.
a. Provide the rate base and capitalization as of test-year end. Provide the determination of all components.
b. Explain why average rate base and average capitalization were used in this exhibit.
c. Was Jackson Purchase aware that in a historic test year, the Commission utilizes test-year end rate base and capitalization? Explain the response.

## RESPONSE:

a. The year-end rate base and returns on year-end rate base and capitalizations are illustrated in Exhibit 7 attached hereto.
b. Average rate base was used in an attempt to better reflect the cost of capital in the test year. JPEC is not requesting relief based on the return on capital, but rather a 2.00 Net TIER ratio; therefore, the return on rate base is a comparative analysis. During the construction of the JPEC rate case CFC believed, as it does now, that the average rate base provides a better comparative result when compared to the TIER method which represents the expenses over the entire test year. Both the return on year-end rate base and year-end are less than what they are for an average rate base and average capitalization.
c. Neither JPEC nor CFC was aware that the Commission utilizes a test yearend rate base and capitalization for historical test years. JPEC is seeking relief based on a 2.00 Net TIER ratio and not on a return on rate base. JPEC wanted to file the return on rate base information for comparative purposes. CFC provided the determination of rate base and the computation as to the returns on rate base and capitalization. CFC recommended to JPEC that it use an average rate base and return capitalization to better match the rate base to the expenses in the test year.

Witness: Bill Edwards.
15. Refer to Exhibit M of the Application. Provide the monthly amounts included in the 13 -month averages.

RESPONSE: Please see Exhibit 8 attached hereto.
Witness: Chuck Williamson.
16. Refer to Exhibit P, page 2 of 29 , of the Application. Provide a copy of any written approvals from RUS for the proposed depreciation rates.

RESPONSE: On Exhibit P, page 2 of 29 (Volume III, document numbered 000721 of JPEC's Application for Rate Increase), the last paragraph gives approval of the annual rates for a period of five years. This is part of a three-page letter included in Exhibit $P$ from RUS Field Accountant, Anthony S. Bunch. JPEC is unaware of any other written approvals; however, JPEC has been verbally informed that RUS will not allow JPEC to accept the rates piecemeal; the rates must be accepted in their entirety or not at all.

Witness: Chuck Williamson.
17. Refer to Exhibit $Y$ of the Application.
a. Explain why Jackson Purchase does not have a formal Equity Management Plan.
b. Explain why Jackson Purchase has never paid capital credits.

## RESPONSE:

a. JPEC and its Board of Directors believes managing equity on a daily or monthly basis, as necessary, is the best practice as a cooperative.
b. Article VII, Section 2 of the Bylaws of JPEC (Volume 3, Exhibit V, documents numbered 000904-000905 of JPEC's Application for Rate Increase) provides in pertinent part:

> ". . . the Board shall determine that the financial condition of the Corporation will not be impaired thereby, the capital then credited to patrons' accounts may be retired in full or in part . . ."

Previous votes by JPEC's Board of Directors did not result in a majority vote to approve the retirement of patronage capital accounts.

Witness: Kelly Nuckols.
18. Refer to Exhibit 6, pages 3 through 6, of Jackson Purchase's response to the Staff's initial data request. For each line item, identify the expense as recurring or non-recurring. For each non-recurring item, explain why it should be included for rate-making purposes.

RESPONSE: Line items 1-27 reflect staking and line design expenses. Such work is recurring in varying amounts each year. Work performed by Electric Service Co., Inc., in 2006 is considered normal.

Line items 32-110 refer to legal services performed during 2006 by outside legal counsel, Denton \& Keuler. Legal expenses are a required and recurring item for JPEC. While exact services may vary from year to year, the general description of services reflects normal matters as does the total amount billed.

Line items $55,58,63,69,84$, and 90 reflect trademark research. Trademark matters are not normally involved in JPEC operations and, while necessary in 2006, may not be recurring expenses.

Witness: Kelly Nuckols.
19. Refer to Exhibit 7 of Jackson Purchase's response to the Staff's initial data request. Provide invoices or other supporting documentation for the actual rate case expenses included.

RESPONSE: Please see Exhibit 9 attached hereto.
Witness: Chuck Williamson.
20. Did Jackson Purchase normalize the PSC assessment? Would Jackson Purchase agree that the normalization should reflect the current PSC assessment rate? Explain the response.

RESPONSE: JPEC did not normalize the PSC assessment. JPEC agrees that normalization should reflect the current PSC assessment rate. JPEC did not normalize the assessment in its Application for Rate Increase because the difference is relatively minor. The PSC assessment for 2005 equated to a monthly rate of $\$ 3,383.22$, compared to the 2006 monthly rate of $\$ 3,559.57$.

Witness: Chuck Williamson.
21. Refer to Exhibit G, Schedule 3, of the Application. Based upon the 13 months beginning December 1, 2005 and ending December 31, 2006, provide an end-of-test-year customer adjustment schedule in the formation appended hereto as Appendix A.

RESPONSE: Please see Exhibit 10 attached hereto.
Witness: Gary Stephens
22. Refer to the Application, Exhibit H-2, pages 10-12 of the Direct Testimony of Charles G. Williamson. Jackson Purchase proposes to replace its budget billing program with a levelized billing program.
a. For the most recent available month, provide the number of customers presently participating in the budget billing program and the total number of customers eligible for the budget billing program.
b. Of those customers participating in the current budget billing program, how many customers allow Jackson Purchase to debit their back accounts for payment?
c. Has Jackson Purchase polled its members regarding their preference between the existing program and the proposed levelized billing program?
(1) If yes, provide the results of the poll.
(2) If no, explain why Jackson Purchase did not poll its membership on this issue.

## RESPONSE:

a. We currently have 1,654 accounts on budget billing. All residential customers with no past due balances are eligible for the program. This number is approximately 25,000 accounts.
b. Currently, 488 customers are paying by bank draft with an additional 88 paying by credit card draft.
c. JPEC did not poll its members on this issue due to the complexity and expense of conducting a survey. However, with budget billing, there have been instances where there is a balance due in the settlement month, which has occasionally made members unhappy. We also believe that a levelized billing program encourages members to conserve while keeping their payment affordable. We also have spoke with a sister cooperative that switched from budget billing to levelized billing and we understand from them that the program was well received. Please see the testimony of Chuck Williamson, Exhibit H-2, Pages 10 and 11, Volume II, documents numbered $000505 \& 00506$ of JPEC's Application for Rate Increase.

Witness: Chuck Williamson.
23. Refer to the Application, Exhibit H-4, page 13 of the Direct Testimony of Thomas E. Kandel. The difference between the current and proposed depreciation rate for Account 371 Installations on customer premises is considerably greater than the differences in the other accounts. Is Jackson Purchase aware of any particular reason for the disparity?

RESPONSE: Account 371 contains security lights and a standby generator. The generator included in this account was previously included in Account 372 in the prior study. As of December $31,2006, \$ 85,188$ of the $\$ 668,690$ in accumulated depreciation pertained to the standby generator and the remaining balance of $\$ 583,502$ pertained to security lights. While the average cost of newer security lights has been declining, the removal cost of the more expensive lights has been increasing since there have been only a limited number of retirements to date.

Witness: Thomas E. Kandel.
24. Refer to the Application, Exhibit H-6, pages 3-5 of the Direct Testimony of Tracy A. Bensley. Jackson Purchase proposes to change its Rules and Regulations to require a member to install a conduit system for use in installing Jackson Purchase's conductor when an underground facility is installed.
a. Has Jackson Purchase obtained estimates from contractors for performing this service if contracted by one of its members?
b. If the answer to 24(a) is no, explain how Jackson Purchase knows that the cost will be similar or less than the underground differential cost charged by Jackson Purchase.
c. If Jackson Purchase, upon its inspection determines that the conduit is not installed to its requirements, could the member be subject to considerably higher costs when correcting the problem? Explain the response.
d. Is Jackson Purchase satisfied that there is an adequate number of contractors qualified to do the conduit installations? Explain the response.

## RESPONSE:

a. No. We have used our construction contract pricing compared to our actual differential costs to determine that this change will have no significant impact on JPEC's revenue in relation to underground installation costs.
b. The actual average underground differential costs for JPEC in 2005 were $\$ 2.64$ per foot of underground installed while the cost to JPEC of installing a conduit system in 2005 averaged $\$ 2.78$ per foot based on contract pricing for that
year. Based on installed footage of approximately 72,000 feet, the increased revenue to JPEC would be approximately $\$ 10,000$.

The actual average underground differential costs for JPEC in 2006 were $\$ 3.73$ per foot of underground installed while the cost to JPEC of installing a conduit system in 2006 averaged $\$ 3.68$ per foot based on contract pricing for that year. Based on installed footage of approximately 70,000 feet, the decreased revenue to JPEC would be approximately $\$ 3,500$.
c. JPEC will work with local contractors and provide specifications to members and contractors prior to installations. Should the member contract to have the system installed, the contractor will be subject to additional costs in making corrections. The member should not have to pay for a contractor's failure to follow the contract specifications.
d. Yes. Several qualified contractors exist in JPEC's service territory. As an example, the West Kentucky Construction Association website lists 42 General Contractors and 26 Residential Contractors as members. JPEC's service territory includes areas near Paducah, Mayfield, Murray, Benton, LaCenter, Kevil, Smithland, and Salem to mention a few. All of these areas provide suitable contractors for this purpose.

Witness: Tracy A. Bensley.
25. Refer to Exhibit K of the Application. Revenue for each billing component for each revenue class (and each type of light in the outdoor lighting schedule) must be ascertainable from the exhibit. Provide a revenue analysis schedule including a billing analysis for Jackson Purchase for the test year ended December 31, 2006. Include all applicable billing determinates.

The schedule should be done in the format appended hereto as Appendix B and provide in both hard copy and on a CD in electronic form in Microsoft Excel 1997 through 2003 versions.

RESPONSE: Please see Exhibit 11 attached hereto in hard copy and on CD in electronic form attached hereto as Exhibit 12. (See also Volume 3, Exhibit K, documents numbered 000686 - 000693 of JPEC's Application for Rate Increase). However, the revenues for the individual rate classifications calculated in this Attachment do not agree with the revenues used in this filing. In preparation of this rate filing, I discussed these discrepancies with JPEC staff, and after considerable research, JPEC staff concluded that the numbers in their billing records were the proper revenues to use in this filing. JPEC staff felt that using billing determinants to calculate revenue does not take into account the hundreds of adjustments and their timing and that it would not be practical or possible to reconcile each adjustment.

Witness: Gary Stephens.
26. Refer to page 80 of Jackson Purchase's January 10, 2008 Supplemental Filing. Jackson Purchase's non-recurring fees are all shown as new charges. The non-recurring charges shown appear to match the charges that are included in Jackson Purchase's tariff that is currently in effect. Does Jackson Purchase propose any new changes to its non-recurring charges?

RESPONSE: JPEC is not proposing to change its non-recurring fees; only the presentation changed.

Witness: Kelly Nuckols.
27. Refer to Exhibit H, Gary C. Stephens Testimony ("Stephens Testimony"), of the Application. Provide a copy of the cost-of-service study worksheets and attachments on a CD in electronic form in Excel with the formulas intact.

RESPONSE: Please see CD containing Excel spreadsheet attached hereto as Exhibit 12. Also see Volume III, Exhibit T (documents numbered 000807-000861) of JPEC's Application for Rate Increase.

Witness: Gary Stephens.
28. Refer to Stephens Testimony. Explain whether or not Mr. Stephens has reviewed the cost of service study in Jackson Purchase's last rate case. If Mr. Stephens performed the last cost of service study, explain any changes in the methodology used in the study.

RESPONSE: Mr. Stephens did not perform the last cost of service study, nor has he reviewed it.

Witness: Gary Stephens.
29. Refer to Stephens Testimony at pages 7 and 8 of 19 and Attachments 2 and 3.
a. Explain what parts of the distribution system are allocated with the Primary Demand Allocation Factor.
b. Explain what parts of the distribution system are allocated with the Secondary Demand Allocation Factor.
c. Explain the estimation procedure for the average monthly coincident peak demand and for the non-coincident peak demand for each rate classification, including how the data was derived.
d. Explain whether the non-coincident peak demand data used in Attachment 2 is the same data used in Attachment 3.
e. Explain why the coincident and non-coincident peak demands were averaged together.
f. Explain how the monthly coincident demand for each rate classification was adjusted for losses and the loss adjustment used.
g. Explain why the Outdoor Lighting rate class only has entries for January, March and December.
h. How do the Primary and Secondary Demand Allocation Factors compare to a Peak and Average Allocation factor? Provide a side-by-side comparison and explain why the 12 CP method is more appropriate than the Peak and Average method.

## RESPONSE:

a. The Primary Demand Allocation Factors were used to allocate the distribution plant related to the primary lines to the individual customer classifications. The primary-related plant is the portion of the distribution plant that is on the company side of the transformer.

Witness: Gary C. Stephens.
b. The Secondary Demand Allocation Factors were used to allocate the distribution plant related to the secondary lines to the individual customer classifications. The secondary-related plant is the portion of the distribution plant that is on the customer side of the transformer.

Witness: Gary C. Stephens.
c. Actual meter readings were used for the industrial rate class. We deducted the industrial rate class values from the system peak values. We then utilized kWh information to determine the ratio of a rate class' usage to the system usage.

This ratio was applied to the system peak remaining after deducting the
industrial demands. Estimates for all other rate classes were obtained.
Witness: Tracy Bensley.
d. It is not.

Witness: Gary C. Stephens.
e. The primary distribution lines have characteristics of both transmission and distribution lines. Since transmission is allocated on the coincident peak demand and distribution is allocated on the non-coincident peak demand, it seems appropriate to allocate the primary distribution plant based on the average of those two values.

Witness: Gary C. Stephens.
f. The system demand was reduced by the known system loss amount of $5.25 \%$. We then applied the same estimation procedure as outlined in the answer to question 29 c above, with the exception of industrial accounts taking delivery directly from a substation. No loss factor was applied to these accounts.

Witness: Tracy Bensley.
g. We reviewed actual dawn and dusk information and compared it to the system peak date and time to determine if the lights were on during peak. If the system peak occurred during daylight hours, a zero value was entered for the lights' contribution to the system peak demand.

Witness: Tracy Bensley.
h. Since JPEC is billed monthly for demand, CFC believes that the average of the 12 monthly coincident peaks would be the appropriate allocation method for the distribution system. CFC did not perform a Peak and Average analysis. However,
since the Peak and Average method incorporates energy weighting into the treatment of plant costs, a review of the demand allocation factors and the energy allocation factors in the cost of service study suggests that the results of the Peak and Average method would not be too different. For the Residential classification, the demand values range between $59.498 \%$ and $60.668 \%$, while the energy allocation was 59.625 . Since these demand and energy values are similar, it is not believed that the different method would have an impact on the cost of service study.

Witness: Gary C. Stephens.
30. Refer to Stephens Testimony at Attachment 6 and Exhibit T, page 4 of 55, of the Application.
a. Provide pages 7 and 10 of 11 .
b. Explain how the numbers found in Exhibit T in the Total Company column lines 7-9 are tied back to Attachment 6 .
c. Explain how Accounts 360, 362, and 369 through 373 are treated and provide additional worksheets demonstrating how the costs were split out as being customer related.
d. In Attachment 6, the minimum system was used to functionalize and then allocate costs to the various rate groups. Explain how these results compare to costs obtained using the zero intercept method.

## RESPONSE:

a. Pages 7 and 10 of 11 from Attachment 6 are attached hereto as Exhibit 13, and the complete Attachment 6 in electronic form is contained on the $C D$ attached hereto as Exhibit 12.

Witness: Gary C. Stephens.
b. Attachment 6 consists of supporting worksheets that illustrates the calculations for the minimum size plant, the calculation of the distribution plant value, the determination of the general plant value, and the determination of the accumulated depreciation that is general plant-related. The minimum size plant factor was used to determine the amount of the distribution plant that was considered to be customer-related in Exhibit T, Page 4 of 55, Line 9. The total distribution plant value appears in Exhibit T, Page 4 of 55, Line 12. The accumulated depreciation that is general plant-related appears in Exhibit T, Page 5 of 55, Line 17

Witness: Gary C. Stephens.
c. Accounts 360,362 , and 369 were treated the same as the other distribution plant accounts - a portion of these dollars were allocated to the customer-related function based on the minimum size allocation factor. Account 373 was allocated $100 \%$ to the Outdoor Lighting rate classification.

Witness: Gary C. Stephens.
d. Comparative studies between the minimum size method and the zero intercept method show that the minimum size method generally produces a larger customer component (although the differences can be relatively small). CFC believes that the minimum size method is more appropriate for electric cooperatives - who generally have low density, low average usage per customer, and low proportion of commercial and industrial customers - because it provides more stable bills for the customers as well as more reliable income to the cooperative.

Witness: Gary C. Stephens.
31. Refer to Stephens Testimony at Attachment 6, pages 2 and 3 of 11.
a. For the 365 subaccounts, explain which are not being installed currently.
b. Explain why \#6 DPX was chosen as the conductor to be used in the minimum system calculation.

## RESPONSE:

a. Please see Exhibit 14, attached hereto.
b. We chose \#6 DPX because it is the minimum size conductor currently being installed by JPEC.

Witness: Tracy Bensley.
32. Refer to Stephens Testimony at Attachment 6, page 4 of 11.
a. Explain why the $3 / 4$ inch conduit was not used in the calculation.
b. Explain the differences in purpose and usage in the conduit in Accounts 366 and 369.

## RESPONSE:

a. The use of the 1 inch conduit was a judgment call based on discussions with JPEC staff and based on the number of units of each size. Since the quantity of the $3 / 4$ inch conduit represented just $0.1 \%$ of the total quantity, it was decided that the $3 / 4$ inch conduit would not be appropriate to use.

Witness: Gary Stephens.
b. Conduit in account 366 is used for primary and secondary lines and conduit in 369 is used for services. This accounting treatment is in accordance with RUS guidelines.

Witness: Chuck Williamson.
33. Refer to Stephens Testimony, Exhibit T, page 1 of 55, of the Application.
a. Explain what production plant Jackson Purchase operates.
b. Does the 12 CP allocation method mentioned in the notation refer to the Primary Demand Allocation Factor in Exhibit H-5, pages 7 and 8 of 19, and Attachment 2?

## RESPONSE:

a. That statement is in error and did not refer to any calculation or allocation in the JPEC cost of service model. The statement has been deleted from the electronic file requested in this data request (see Exhibit 12).
b. That statement is in error and did not refer to any calculation or allocation in the JPEC cost of service model. The statement has been deleted from the electronic file requested in this data request (see Exhibit 12)

Witness: Gary Stephens.
34. Refer to Stephens Testimony, page 7 of 19, and Exhibit T, page 2 of 55, lines 2 and 7. Provide a copy of the work papers and further explanation for how the numbers of customers were weighted.

RESPONSE: The numbers of weighted customers were based on discussions with JPEC staff and general assumptions about the costs of providing service to the different rate classifications. It was assumed that the costs for the Residential, Small Commercial (1 phase), and Small Commercial ( 3 phase) were similar, so these classifications were given a weighting of 1.0. The costs for Large Commercial (Existing) and Commercial and Industrial rate classifications were assumed to be twice the costs of the already mentioned rate classifications,
so they were given a weighting of 2.0 . It was also assumed that the costs associated with the Outdoor Lighting rate classification was less than the other rate classifications, so the Outdoor Lights were given a weighting of 0.25 .

Witness: Gary Stephens.
35. Refer to Stephens Testimony Exhibit T, page 3 of 55, lines 29 and 32. Explain how the Wages and Salaries for the Distribution and General categories allocator was derived and where the calculations are in the Exhibit.

RESPONSE: Wages and salaries in accounts 107 through 598 were considered to be $100 \%$ distribution-related. Wages and salaries in accounts 901 through 930 were considered to be $93.47 \%$ distribution-related and $6.53 \%$ general-related. These ratios were calculated using the respective dollars compared to the total utility plant in service dollars. The proportion that was considered to be distribution related was calculated by dividing the distribution plant dollars ( $\$ 98,386,830$ ) by the total utility plant in service dollars $(\$ 105,262,626)$, which yielded a ratio of $93.47 \%$. The proportion that was general-related was calculated by dividing the general related dollars $(\$ 6,875,796)$ by the total utility plant in service dollars $(\$ 105,262,626)$, which yielded a ratio of $6.53 \%$. Wages and salaries in account 935 were considered to be $100 \%$ general-related. The allocations are included in Volume II, Exhibit H-5, Attachment 5 (documents numbered 000660 - 000661) of JPEC's Application for Rate Increase.

Witness: Gary Stephens.
36. Refer to Exhibit H, Thomas E. Kandel Testimony ("Kandel Testimony"), TEK-3 page 1 of 29 , of the Application. The letter references time recording practices that incorrectly allocate labor between construction and retirement activities. In 2002, the practice had a significant impact on depreciation reserves. For the current depreciation study, Jackson Purchase
personnel had reverted to the incorrect time reporting practices despite being instructed to report its time correctly. Explain the impact on the results of the current depreciation study from Jackson Purchase's incorrect time practices.

RESPONSE: Jackson Purchase has reviewed its time reporting processes for recording the division of labor between retirement and construction on work order jobs. Crew leaders record time to retirement and construction on replacement jobs and those time records are approved by operation supervisors. Those supervisors have approved each time sheet for every individual charging time to retirement. Jackson Purchase does not believe that it is not now, nor has in the recent past (including periods covered by the test year) recorded retirement hours in a materially improper manner. Jackson Purchase Energy Corporation does not anticipate that it will materially change the manner in which it charges retirement labor or that the ratio of construction to retirement labor will change.

JPEC has consulted its independent auditor to see if that firm has observed any instances of retirement labor improperly charged. As part of the auditor's review, the firm compares the relationship of construction and retirement labor to total labor against industry averages. Those national averages are around $25 \%$ for construction and $5 \%$ for retirement. For 2006 and 2007 the ratios for JPEC are as follows:

JPEC does recognize that its retirement labor may appear high compared to other utilizes because it is one of the few utilities using a modified FIFO fixed asset system compared to the much more prevalent average cost system. Please reference the pre-filed testimony of Chuck

Williamson found in (Volume II, Exhibit H-2, documents numbered 000502 through 000504), Questions 24 through 35.

Witness: Chuck Williamson.
37. Refer to Kandel Testimony TEK-3 Exhibit A, page 23 of 29, of the Application.
a. Provide the work papers supporting the Exhibit.
b. If not included above, provide an explanation of S and J analysis methods.
c. If not included above, provide the Iowa curves and corresponding life tables that serve as the basis for the study.
d. If not included above, explain what the Conformance Index is, how it is calculated, and how it is used in the analysis.
e. If not included above, explain what the Retirement Experience Index is, how it is calculated, and how it is used in the analysis.

RESPONSE: See also Exhibits 15, 16, and 17 attached hereto.
a. Workpapers supporting Exhibit A, SPR (Simulated Plant Record)

Analysis, consist of the optimization calculation sheets and the data input sheets (please see accompanying workpapers). SPR analysis was necessary since vintage records were not available. Had vintage records been maintained, they would have shown the year units were installed and tracked those units throughout their lives to retirement. Average lives of plant for which vintage records are maintained can be calculated from that installation/retirement record. Though technology is now becoming more available, historically such a vintage record keeping system would have been cost prohibitive for most utilities. Vintage records are not required.

Average cost Continuing Property Records (CPRs) are required by the Rural Utilities Service (RUS) and have been maintained by Jackson Purchase.

With average cost CPRs, the annual additions, the total annual retirements, and the ending balance for each account are known. However, the year of installation of each retired unit is not known. Without the association of the year of installation to the retired units, the average lives of the plant cannot be readily calculated. Therefore, it was necessary to resort to SPR Analysis. Utilizing SPR Analysis, the available information was compared to existing models. The models used were the Iowa curves. The Iowa curves model life characteristics of mass industrial property and are a model generally accepted and utilized by utilities and commissions.

While (1) utilizing the yearly additions available in the CPRs; (2) substituting in vintage retirements based on the Iowa curves; (3) comparing the simulated ending account balance to the actual ending balances, which are known from the CPRs, and (4) repeatedly doing this by increasing or decreasing the average life, a best estimate of the plant lives for each curve was developed. Specifically, the best estimate was determined by comparing the sum of the squared differences between the simulated and actual account balances. Since an optimum life is calculated for each of the 31 Iowa curves, the Conformance Index and the Retirement Experience Index are used to measure the fit of the data to each of the curves and assist in the selection of the best curve and life.

The Conformance Index is calculated by dividing the Average Actual Balance by the Square Root of the Average Sum of Squared Deviations for each curve (see item d. below for further information).

The Retirement Experience Index is the percent of additions from the oldest vintage that would have retired by the end of the most recent test year if the additions had retired according to the retirement characteristics of each specified curve. The higher the Retirement Experience Index the longer the curve based on actual data versus model (see item e. below for further information).

The data input sheets consist of the annual additions and retirements, either by dollars or units for each of the plant groups used in the depreciation study. 1949 is the first year of data, although the first year actually consists of all additions and retirements prior to 1949. The software used only allows 58 years of entry so the early items had to be combined. This had little impact on the study because several cycles of plant lives have been included in the study. The optimization calculations are the computer generated calculations for each of the plant groups based on the data input of annual additions and retirements. The appropriate calculations are made for each curve (estimated life, squared error, etc.). Based on the data, the optimization calculation, and discussions with knowledgeable personnel of the cooperative, the best fit curve is selected for use in the study along with the estimated life.
b. Explanation of the terms S and $\mathrm{J}-\mathrm{S}$ is for simulation. The curve and estimated life were selected based on the computer calculated amounts per the optimization calculation sheet. J is for judgment. J is used only twice; for items
which did not present an optimization calculation sheet which contained meaningful, reliable data. Discussions were had with appropriate personnel and estimated lives were selected based on field observations.
c. The optimization calculations include the plotting of actual data for each Iowa curve for each plant group (see item a. above for additional information).
d. The computer model uses actual data to compute simulated data. The Conformance Index (CI) is a measure of the closeness of the fit of the simulated data to the actual data for each Iowa curve. Ideally, the CI will be 75 or higher, which indicates a close fit of the simulated data and actual data. As the CI becomes a number much lower than 75 , the fit of the simulated data and actual data has a high deviation from the curve model. For this study, several of the plant groups had a CI of less than 75. Although these low CIs indicate a relatively high deviation from the curve model, due to the acceptable Retirement Experience Index and reasonable life estimations they were deemed to be sufficient to produce valid study results.
e. The computer model also produces a measure of the amount of the lowa curve which was simulated, when not enough actual data was available. This measure is called the Retirement Experience Index (REI). Since 58 years of data was available for the study and was input into the computer model, most of the curve selections for each of the plant groups had REIs of close to 100 . This indicates a highly reliable curve selection since so much historical data was available.

Witness: Thomas E. Kandel.


I hereby certify that the foregoing has been served by mailing a true and correct copy to:

## EXECUTIVE DIRECTOR

KENTUCKY PUBLIC SERVICE COMMISSION
211 SOWER BLVD.
FRANKFORT KY 40602
DENNIS G HOWARD
OFFICE OF THE ATTORNEY GENERAL 1024 CAPITAL CENTER DRIVE SUITE 200
FRANKFORT KY 40601-8204


## 47F122007

Mr. G. Kelly Nuckols
President/CEO
Jackson Purchase Energy
Corporation
P.O. Box 4030

Paducah, Kentucky 42002-4030
Dear Mr. Nuckols:
We have completed our review of Jackson Purchase Energy Corporation's (Jackson Purchase), December 31, 2006, Form 7, Financial and Statistical Report, and note that Jackson Purchase did not meet the minimum Times Interest Eamed Ratio (TIER) or Debt Service Coverage (DSC) of 1.25 , or Operating TIER (OTIER) of 1.1, requirements outlined in Article V, Section 5.4, of the Loan Contract.

Please let us know what areas have had an adverse effect on Jackson Purchase's financial condition and outline the corrective measures that have been or will be implemented to correct the inadequate ratios. Include the projected TIER, OTIER, DSC, and Operating DSC for the year ending December 31, 2007.

We would appreciate receiving your response within 30 days from the date of this letter.

Sincerely,

BRIAN D. JENKINS

BRIAN D. JENKINS
Chief, Operations Branch
Northern Regional Division
Electric Programs
cc: NRD-OB Official File (KY 20)
GFR - Norman // NRD-OB Reading File // Loan Security File
RD:NRD:OB:WFrost:720-1381:hl:4/10/07:KentuckyIKY 20 INADEQ-TIER-OTIER-DSC2006 doc 4112107

July 25, 2007
Brian D. Jenkins
Chief, Operations Branch
Electric Programs
United States Department of Agriculture
Rural Development Utilities Programs
Northern Regional Division
Mail Stop 1566
1400 Independence Ave., S.W.
Washington, D.C. 20250-1566
Dear Mr. Jenkins:
In response to your letter of April 12, 2007 concerning JPEC's lack of meeting the minimum TIER and DSC requirements as outlined in Article V, Section 5.4 of the Loan Contract, JPEC has filed with the Kentucky Public Service Commission (KPSC) a notice of JPEC's intent to seek a rate adjustment (KPSC Case 2007-00116). JPEC intends to seek rate adjustments with a target TIER of 2.0, subject to KPSC review, adjustment and approval.

The KPSC required in support of the rate adjustment a depreciation study to be completed and submitted as a part of the rate filing. Through the work of RUS and JPEC the depreciation study and findings have been forwarded to CFC for inclusion in the cost-of-service analysis to support the adjustments in revenue and rates.

I am sorry for the late response, as your letter was filed without the proper response. I hope this information satisfies your request. If you need any additional information you may call, write or email.

Sincerely,

## G. Kelly Nuckols <br> President/CEO

# INITED STATES DEPARTMENTOF AGRICUITURE RURAL UTILIIES SERVICE 

## FINANCIAL AND STATISTICAL REPORT



| BORROWER DESIGNATION KYOO20 |  |
| :--- | :--- |
| PERIODENDED |  |
| December, 2007 | (Prepared with Audited Data) |
| BORROWERNAME |  |
| JACKSON PURCHASE ENERGY CORPORATION |  |

## CERTIFICATION

We recognize that statements contained herein concern a matier within the jurisdicion of an agency of the United States and the making of a false, fictitious or fraudulent statement may render the maker subject to prosecution under Title 18 , United States Code Section 1001.

We hereby certify that the entries in this report are in accordance with the accounts and other records of the system and reflect the status of the system to the best of our knowledge and belief

## ALL INSURANCE REQUIRED BY PART 1788 OF 7 CFR CHAPTER XVII. RUS, WAS IN FORCE DURING THE REPORTING PERIOD AND RENEWALS HAVE BEEN OBTAINED FOR ALL POLICIES

DURING THE PERIOD COVERED BY THIS REPORT PIUSUANT TOPART 1718 OF 7 CFR CHAPTERXVII (check one of the following)
$\square$ All of the obligations under the RUS loan documents have been fulfilled in all material respects.
(x) There has been a default in the fulfillment of the obligations under the RUS loan documents. Said default(s) is/are specifically described in Part D of this report

| PART A. STATEMENT OF OPERATIONS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | YEAR-TO-DATE |  |  |
| ITEM | LAST YEAR (a) | THIS YEAR <br> (b) | $\begin{aligned} & \text { BUDGET } \\ & \text { (c) } \end{aligned}$ | THIS MONTH <br> (d) |
| 1. Operating Revenue and Patronage Capital | 37,396,373 | 40,365,878 | 39,716,655 | 3,667,177 |
| 2. Power Production Expense | 0 | 0 | 0 | 0 |
| 3. Cost of Purchased Power | 23,655,944 | 25,264,491 | 24,293,649 | 2,126,672 |
| 4. Transmission Expense | 0 | 0 | 0 | 0 |
| 5. Distribution Expense - Operation | 1,761,777 | 1,904,431 | 1,863,800 | 225,744 |
| 6. Distribution Expense - Maintenance | 3,413,939 | 3,396,713 | 3,129,218 | 222,705 |
| 7. Customer Accounts Expense | 1,088,682 | 1,113,676 | 1,120,640 | 96.162 |
| 8. Customer Service and Informational Expense | 220,972 | 246,621 | 270,817 | 23, 392 |
| 9. Sales Expense | 56,695 | 27,111 | 46,204 | (3,985) |
| 10. Administrative and General Expense | 1,992,235 | 2,015,156 | 2,127,338 | 165,468 |
| 11. Total Operation \& Maintersance Expense (2 thru 10) | 32,290,244 | 33,968,199 | 32,851,666 | 2,856,158 |
| 12. Depreciation and Amortization Expense | 3,235,100 | 3,433,896 | 3,447,394 | 291,689 |
| 13. Tax Expense - Property \& Gross Receipts | 9 | 0 | 0 | 0 |
| 14. Tax Expense - Other | 41.657 | 43,167 | 43, 146 | 3,635 |
| 15. Interest on Long-Term Debi | 2,660,517 | 2,615,535 | 2,685,652 | 214,538 |
| 16. Interest Charged to Construction - Credit | 0 | 0 | 0 | 0 |
| 17. Interest Expense. Other | 66,910 | 81,495 | 203.368 | 9,306 |
| 18. Other Deductions | 1,424 | 1,395 | 0 | 0 |
| 19. Total Cost of Electric Service (1) thru 18) | 38,195,852 | 40,143,687 | 39,231,236 | 3,375,326 |
| 20. Patronage Capital \& Operating Margins (1 minus 19) | (799,479) | 222,191 | 485,419 | 291,851 |
| 21. Non Operating Margins - Interest | 593,283 | 424,045 | 364,800 | 28,659 |
| 22. Allowance for Funds Used During Construction | 0 | 0. | 0 | 0 |
| 23. Income (Loss) from Equity Investments | , | 0 | 0 | 0 |
| 24. Non Operating Margins $\cdots$ Other | (14, 573) | 40,022 | B,340 | 24,663 |
| 25. Generation and Transmission Capital Credits | 0 | 0 | 0 | 0 |
| 26. Other Capital Credits and Patronage Dividends | 113,229 | 133,805 | 112,900 | 0 |
| 27. Extraordinary lems | 0 | 0 | 0 | 0 |
| 28. Patronage Capital or Margins (20 thru 27) | (107,540) | 820,063 | 971.459 | 345.273 |

[^0]

| USDA-RUS | BORROWER DESIGNATION <br> KYOO2O |
| :---: | :--- |
| FINANCIAL AND STATISTICAL REPORT | PERIOD ENDED <br> December, 2007 |
| INSTRUCTIONS . See RUS BUlletin 77178-2 |  |

PART D. NOTES TO FINANCIAL STATEMENTS
An accurate estimate of Contributions in Aid of Construction on plant cannot be made. The amount shown reflects contributions made since inception of tracking.

The Corporation has collected GPS data and has electronically mapped its entire system. Data collection expense has been deferred into account 186 and is being amortized over an eight (8) year life.

The Corporation has not made it's TIER requirements for 2006 and 2007. The Corporation sought rate relief in 2007 with Case \#2007-00116 filed with the Kentucky Public Service Commission, currently in progress. The Corporation expects an order in this case in 2008.




| USDA-RUS <br> FINANCIAL AND STATISTICAL REPORT |  | BORROWER DESIGNATION KY0020 |  |
| :---: | :---: | :---: | :---: |
|  |  | PERIOD ENDED <br> December, 2007 |  |
| TVSTRUCTIONS - See RUS Bulletin 1717B-2 |  |  |  |
| PART M. ANNUAL MEETING AND BOARD DATA |  |  |  |
| 1. Date of Last Annual Meeting 6/5/2007 | 2. Total Number of Members $22,374$ | 3. Number of Members Present at Meeting | 4. Was Quorum Present? $y$ |
| 5. Number of Members Voting by Proxy or Mail <br> 0 | 6. Total Number of Board Members | 7. Total Amount of Fees and Expenses for Board Members ```$ 66,402``` | 8. Does Manager Have Written Contract? <br> N |

Exhibit 3

| FINANCIAL AND STATISTICAL REPORT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PART N. LONG-TERM DEBT AND DEBT SERVICE REQUIREMENTS |  |  |  |  |  |
| No | ITEM | BALANCE END OF YEAR <br> (a) | INTEREST (Billed This Year) (b) | PRINCIPAL (Billed This Year) (c) | TOTAI. <br> (Billed This Year) <br> (d) |
| 1 | Rural Utijities Service (Excludes RUS - Economic Development Loans) | 27,249,828 | 1,403,661 | 645,565 | 2,049,226 |
| 2 | National Rural Utilities Cooperative Finance Corporation | 743,349 | 44,042 | 46,664 | 90,706 |
| 3 | Bank for Cooperatives | 5,009,560 | 356,964 | 645,565 | 1,002,529 |
| 4 | Federal Financing Bank | 16,205,858 | 1,018,736 | 757,283 | 1,776,019 |
| 5 | RUS - Economic Development Loans | 0 |  |  |  |
| 6 | Payments Unapplied | 4,659,748 |  |  |  |
|  | Total | 44,548,847 | 2,823,403 | 2,095,077 | 4,918,480 |

FINANCIAL AND STATISTICAL REPORT INSTRUCTIONS - See RUJS Bulletin $1717 B-2$



| INSTRUCTIONS - See RUS Bulletin 17178-2 | FINAN | USDA-RUS <br> STATISTICAL <br> S - See RUS Bulletin | PORT |  | BORROWER DESIGNATION KYOO20 <br> PERIOD ENDED <br> December, 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PART II. LOAN GUARANTEES |  |  |  |  |  |
| No | ORGANIZATION <br> (a) | MATURITY DATE <br> (b) | ORIGINAL AMOUNT (\$) c) | LOAN BALANCE <br> (\$) | RURAL DEVELOPMENT <br> (e) |
|  | Total |  |  |  |  |
|  | TOTAL (Include Loan Guarantees Only) |  |  |  |  |


$\qquad$

\left.| 1 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2 | Jackson Purchase Energy Corporation |  |  |  |  |
| Case No. 2007-00116 |  |  |  |  |  |$\right)$


| 13 | 0B180 | 9/26/1972 | \$ | 11,638 | 2.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | 0B182 | 9/26/1972 |  | 11,643 | 2.00\% |
| 15 | 1 B 260 | 8/25/1982 |  | 472,505 | 5.00\% |
| 16 | 1 B 262 | 8/25/1982 |  | 472,506 | 5.00\% |
| 17 | 1B270/1B273 | 9/20/1984 |  | 1,861,615 | 5.00\% |
| 18 | 1B280 | 6/22/1988 |  | 1,036,808 | 5.00\% |
| 19 | 1B281/1B283 | 6/22/1988 |  | 1,065,788 | 5.00\% |
| 20 | 1B290/1B292 | 8/20/1991 |  | 2,250,765 | 5.00\% |
| 21 | 1B300/1B305 | 9/3/1993 |  | 3,700,387 | 5.00\% |
| 22 | 1B310/1B311 | 1/25/1996 |  | 4,263,044 | 5.00\% |
| 23 | 1 B 320 | 2/4/2000 |  | 6,249,653 | 5.00\% |
| 24 | 1 1330 | 7/24/2001 |  | 4,306,025 | 5.53\% |
| 25 | 1B331 | 6/3/2003 |  | 307,130 | 3.67\% |
| 26 | 18332 | 6/3/2003 |  | 2,782,022 | 3.67\% |
| 27 |  |  |  |  |  |
| 28 FFB Loans: |  |  |  |  |  |
| 29 | H0010 (FFB) | 6/3/2003 | \$ | 2,401,200 | 4.226\% |
| 30 | H0015 (FFB) | 6/17/2004 |  | 2,089,286 | 4.422\% |
| 31 | H0020 (FFB) | 6/17/2004 |  | 2,089,286 | 5.283\% |
| 32 | H0025 (FFB) | 9/29/2005 |  | 5,318,182 | 4.534\% |
| 33 | H0030 (FFB) | 3/7/2006 |  | 5,822,470 | 4.913\% |
| 34 |  |  |  |  |  |
| 35 CFC Loans: |  |  |  |  |  |
| 36 | 9001 (CFC) | 08/31/84 | \$ | 836,677 | 5.375\% (Effective) |
| 37 |  |  |  |  |  |
| 38 CoBank Loans: |  |  |  |  |  |
| 39 | ML0731T2 | 02/24/94 |  | \$1,638,614 | 4.97\% (Variable) |
| 40 | ML0731T3 | 08/27/91 |  | 1,092,192 | 4.97\% (Variable) |
| 41 | ML0731T5 | 06/15/88 |  | 1,052,930 | 4.97\% (Variable) |
| 42 | ML0731T6 | 09/02/03 |  | 2,515,862 | 4.78\% |

Jackson Purchase Energy Corporation Case No. 2007-00000
Schedule of Interest Rates on Long-Term Debt @ 1/31/08 December 31, 2006

| Type of | Date |
| :---: | :---: |
| Debt | of |
| Issued | Issue |
| (a) | (b) |

Balance
at

12/31/2006
(c)

$$
\begin{aligned}
& \text { Interest } \\
& \text { Rate } \\
& \text { @ } 1 / 31 / 2008 \\
& \text { (d) }
\end{aligned}
$$

## OUR WORLD BEYOND ELECTRICITY

A PROGRAM DEDICATED TO UNDERSTANDING THE ISSUES INVOLVED IN BOTH THE DECISION PROCESS AND THE OPERATIONAL ISSUES RELATED TO CO-OP ACTIVITY IN NON-ELECTRIC BUSINESSES. FUNDED BY CFC'S EDUCATIONAL FUNDS.

MARRIOTT EAST<br>EMBASSY SQUARE BOULEVARD<br>LOUISVILLE, KY<br>August 15-16, 2006<br>AGENDA

TOPIC
SPEAKER

## Day One

12:00 noon-1:00 p.m. LUNCH
1:00-1:30 p.m. Welcome and background
Ron Sheets, KAEC
The circumstances leading to our need to introduce House Bill 568 in the Kentucky General Assembly are significant. Even more significant was the strategy we established, and effectively executed, which led to the adoption of this historic legislation.

1:30-2:00 p.m. History of HB 568 Dan Yates, KAEC
Almost no legislation is easy to pass in the Kentucky General Assembly. Even the most simple resolutions oftentimes run into problems. The coalitions involved, both for and against HB 568 , represented a virtual who's who in the Kentucky legislature. Dan will outline the successful history leading to the passage of House Bill 568.

2:00-4:00 p.m. Provisions of the legislation (break included)

Sherman Goodpaster, Sr. Corporate Counsel, East Kentucky Power, and Jim Miller, Sullivan, Mountjoy, Stainback and Miller, and Corporate Counsel, Big Rivers Electric

Both Sherman Goodpaster and Jim Miller will examine, in some considerable detail, the actual provisions of the legislation focusing on those provisions which have the most significant impact on electric cooperatives from a statutory perspective. We anticipate several questions to be asked of the audience during this discussion.

4:00-4:45 p.m. ConnectKentucky
Brian Mefford, President And CEO

ConnectKentucky is an alliance of leaders in private industry, government and universities. They work together to develop the most effective technological infrastructure for Kentucky, including an aggressive schedule for providing broadband over power lines.

## Day Two

8:00-8:45 a.m. Reporting and enforcement Requirements

## Aaron Greenwell and Richard Raff, PSC

There are specific compliance reporting requirements mandates by the statutory provisions of House Bill 568, including the current provisions of the voluntary guidelines which we have been complying with since the year 2000 relative to cost allocation and other provisions. The Public Service Commission is in charge of enforcing the provisions of House Bill 568.

8:45-9:30 a.m. Staffing and operating an affiliate Mike Beer, Vice President,
Federal Regulations \& Policies, LG\&E

LG\&E has experienced considerable history relative to staffing and operating affiliate organizations. Mike Beers of the company will outline this history and will focus particularly on the process of allocating staff time and corporate resources between the electric and non-electric portions of the organizations.

9:30-10:00 a.m. Meade's experience with Wild Blue

Tim Gossett, Vice President Member Services and Marketing, Meade Co. RECC

Meade County RECC is the only co-op in Kentucky which provides Wild Blue services to its membership. Currently their service base is about 200 customers. Wild Blue employs a satellite technology and can be made available to co-op members throughout the state, although Meade County has focused on its immediate membership as a reasonable first step. Tim Gossett will talk about Meade County's experience with Wild Blue.

10:00-10:15 a.m. BREAK
10:15 a.m.-12:00 n Board evaluation, business models
Lynn Midgette, Vice President, Portfolio Management, CFC, and Allyn Amato, Assistant General Counsel, CFC

Lynn Midgette visited with the co-op managers at our Spring meeting in Lexington. She's coming back a second time, joined by Allyn Amato to focus specifically on what a board needs to consider before taking the action to become involved in affiliate activities. She will also address various business models and financing issues related to the operation of a non-electric activity within the electric co-op structure.
***Closing comments and adjournment**

Table 1
End-Of-Year Rate Base

| End-Of-Year Rate Base |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Acct No | Description | $\begin{gathered} \text { Balance } \\ \text { as of } \\ 12 / 31 / 2006 \end{gathered}$ | Adjustments | Adjusted Average |
| Plant |  |  |  |  |  |
| 1 | 360 | DIST. PLT - LAND AND LAND RIGHTS | \$235,871 |  | \$235,871 |
| 2 | 362 | DIST PLT. - STATION EQUIPMENT | \$12,008,367 |  | \$12,008,367 |
| 3 | 364 | DIST. PLT.- POLES, TOWERS, FIXTURES | \$28,486,552 |  | \$28,486,552 |
| 4 | 365 | DIST PLT. - O/H CONDUCT \& DEVICES | \$17,054,966 |  | \$17,054,966 |
| 5 | 366 | DIST. PL.T. - UNDERGROUND CONDUIT | \$4,106,735 |  | \$4,106,735 |
| 6 | 367 | DIST. PLT. - U/G CONDUCT. \& DEVICES | \$9,423,467 |  | \$9,423,467 |
| 7 | 368 | DIST. PLT. - LINE TRANSFORMERS | \$15,623,839 |  | \$15,623,839 |
| 8 | 369 | DIST. PLT. - SERVICES | \$6,468,811 |  | \$6,468,811 |
| 9 | 370 | DIST PLT. - METERS | \$2,934,243 |  | \$2,934,243 |
| 10 | 371 | DIST PLT - INSTAL. ON CUST. PREMISE | \$1,484,794 |  | \$1,484,794 |
| 11 | 372 | DIST PLT - LSD PROP ON CUST. PREM | \$1,048 |  | \$1,048 |
| 12 | 373 | DIST PLT-ST LIGHT. \& SIGN SYS. | \$558,138 |  | \$558,138 |
| 13 | 389 | GEN PLT - LAND AND LAND RIGHTS | \$86,866 |  | \$86,866 |
| 14 | 390 | GEN PLT - STRUCTURES \& IMPROVEMENTS | \$2,047,039 |  | \$2,047,039 |
| 15 | 391 | GEN PLT - OFFICE FURNITURE \& EQUIP | \$292,326 |  | \$292,326 |
| 16 | 391.1 | GEN PLT - COMPUTER EQUIP/ SOFTWARE | \$322,290 |  | \$322,290 |
| 17 | 392 | GEN PLT - UTILITY TRANSP. EQUIP. | \$2,079,856 |  | \$2,079,856 |
| 18 | 392.1 | GEN PLT - LIGHT DUTY TRANSP. EQUIP | \$375,930 |  | \$375,930 |
| 19 | 393 | GEN PLT - STORES EQUIPMENT | \$79,008 |  | \$79,008 |
| 20 | 394 | GEN PLT - TOOLS, SHOP, GARAGE EQUIP | \$451,976 |  | \$451,976 |
| 21 | 395 | GEN PLT - LABORATORY EQUIPMENT | \$169,060 |  | \$169,060 |
| 22 | 396 | GEN PLT - POWER OPERATED EQUIPMENT | \$287,695 |  | \$287,695 |
| 23 | 397 | GEN PLT-COMMUNICATIONS EQUIPMENT | \$589,509 |  | \$589,509 |
| 24 | 398 | GEN PLT - MISCELLANEOUS EQUIPMENT | \$94,242 |  | \$94,242 |
| 25 |  | Total Utility Plant In Service | \$105,262,626 | \$0 | \$105,262,626 |
| 26 |  | CWIP | \$3,204,054 |  | \$3,204,054 |
| 27 |  | Normalizing Adjustment |  | \$77,266 | \$77,266 |
| 28 |  | Total CWIP | \$3,204,054 | \$77,266 | \$3,281,320 |
| 29 |  | Total Utility Plant | \$108,466,680 | \$77,266 | \$108,543,946 |
|  |  | Accumulated Depreciation |  |  |  |
| 30 | 108.662 | ACCUM DEPR-STATION EQUIPMENT | \$1,264,923 |  | \$1,264,923 |
| 31 | 108.664 | ACCUM DEPR-POLES, TOWERS, \& FIXTURE | \$10,628,842 |  | \$10,628,842 |
| 32 | 108.665 | ACCUM DEPR-O/H CONDUCTOR \& DEVICES | \$5,642,593 |  | \$5,642,593 |
| 33 | 108.666 | ACCUM DEPR-UNDERGOUND CONDUIT | \$652,016 |  | \$652,016 |
| 34 | 108.667 | ACCUM DEPR-U/G CONDUCTOR \& DEVICES | \$2,448,411 |  | \$2,448,411 |
| 35 | 108.668 | ACCUM DEPR-LINE TRANSFORMERS | \$3,610,938 |  | \$3,610,938 |
| 36 | 108.669 | ACCUM DEPR- SERVICES | \$2,415,868 |  | \$2,415,868 |
| 37 | 108.67 | ACCUM DEPR-METERS | \$1,163,276 |  | \$1,163,276 |
| 38 | 108.671 | 1 ACCUM DEPR-INSTALLATIONS ON CUST PR | \$668,690 |  | \$668,690 |
| 39 | 108.672 | ACCUM DEPR-LEASED PROP CUST PREMISE | (\$101,973) |  | (\$101,973) |
| 40 | 108.673 | 3 ACCUM DEPR-STREET LIGHT \& SIGN | \$103,136 |  | \$103,136 |
| 41 | 10871 | ACCUM DEPR FOR OFFICE FURN. \& EQUIP | \$177,198 |  | \$177,198 |
| 42 | 108.711 | 1 ACC DEPR FOR COMPUTER EQUIP/SOFTVRE | \$242,531 |  | \$242,531 |
| 43 | 108.715 | CONTRA ACCUM DEPR -OFFICE FURNITURE | $(\$ 9,940)$ |  | $(\$ 9,940)$ |
| 44 | 108.716 | 6 CONTRA ACCUM DEPR - COMPUTERS | \$66,486 |  | \$66,486 |
| 45 | 108.72 | ACCUM DEPR - UTILITY TRANSP. EQUIP. | \$918,600 |  | \$918,600 |
| 46 | 108.721 | 1 ACCUM DEPR - LIGHT DUTY TRANS EQUIP | \$223,423 |  | \$223,423 |
| 47 | 108.723 | 3 ACCUM DEPR - CONTRA TRANSP EQUIP | (\$241,081) |  | (\$241,081) |
| 48 | 108.73 | ACCUM DEPR FOR STRUCTURES \& IMPROVE | \$1,203,593 |  | \$1,203,593 |
| 49 | 108.735 | 5 CONTRA - ACCUM DEPR STRUCT \& IMPRV | \$44,207 |  | \$44,207 |


| 50 | 108.74 | ACCUM DEPR FOR SHOP EQUIPMENT | \$310,883 |  | \$310,883 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 108745 | CONTRA - ACCUM DEPR - TOOLS, SHOP | $(\$ 33,107)$ |  | $(\$ 33,107)$ |
| 52 | 108.75 | ACCUM DEPR FOR LABORTORY EQUIPMENT | \$121,303 |  | \$121,303 |
| 53 | 108.755 | CONTRA ACCUM DEPR - LABORATORY | $(\$ 8,207)$ |  | $(\$ 8,207)$ |
| 54 | 108.76 | ACCUM DEPR FOR COMMUNICATIONS EQUIP | \$214,539 |  | \$214,539 |
| 55 | 108.765 | CONTRA ACCUM DEPR - COMMUNICATION | ( $\$ 278,584$ ) |  | $(\$ 278,584)$ |
| 56 | 108.77 | ACCUM DEPR FOR STORES EQUIPMENT | \$57,258 |  | \$57,258 |
| 57 | 108.775 | CONTRA ACCUM DEPR - STORES | $(\$ 4,114)$ |  | $(\$ 4,114)$ |
| 58 | 108.78 | ACCUM DEPR FOR MISCELLANEOUS EQUIP | \$57,973 |  | \$57,973 |
| 59 | 108.785 | CONTRA - ACCUM DEPR - MISC EQUIP. | $(\$ 6,217)$ |  | $(\$ 6,217)$ |
| 60 | 108.79 | ACCUM DEPR FOR POWER OPERATED EQUIP | \$48,826 |  | \$48,826 |
| 61 | 108.791 | ACCUM DEPR - PWR EQUIP TRENCHER,ETC | \$111,970 |  | \$111,970 |
| 62 | 108.795 | CONTRA ACCUM DEPR - POWER OPERATED | \$18 |  | \$18 |
| 63 | 108.8 | RETIRE. WIP-JPECC CREWS | \$0 |  | \$0 |
| 64 | 108.81 | RETIRE WIP-CONTRACTORS | \$0 |  | \$0 |
|  |  | NORMALIIING ADJUSTMENT FOR DEPR. | \$0 | \$594,580 | \$594,580 |
| 65 |  | Total Accumulated Depreciation | \$31,714,276 | \$594,580 | \$32,308,856 |
| 66 |  | Net Plant | \$76,752,404 | $(\$ 517,314)$ | \$76,235,090 |
|  |  | Materials \& Supplies |  |  |  |
| 67 | 154 | PLT MATERIALS \& OPERATING SUPPLIES | \$1,177,989 | \$0 | \$1,177,989 |
| 68 | 156 | OTHER MATERIALS AND SUPPLIES | \$5,107 | $(\$ 4,338)$ | $(\$ 4,338)$ |
|  |  | NORMALIZING ADJUSTMENT | \$0 | \$10,769 | \$10,769 |
| 69 |  |  | \$1,183,096 | \$6,431 | \$1,184,420 |
|  |  | Prepayments |  |  |  |
| 70 | 165.1 | PREPAYMENTS - INSURANCE | \$349,795 |  | \$349,795 |
| 71 | 165.15 | PREPAID HEALTH INSURANCE-BENEFIT | \$64,272 |  | \$64,272 |
| 72 | 165.2 | PREPAYMENTS - OTHER | \$43,857 |  | \$43,857 |
| 73 | 165.21 | PREPAID RETIREMENT FUND/CO PD BENE | (\$1) |  | (\$1) |
| 74 | 165.211 | PREPAID LIFE INSURANCE/CO PAID BEN | (\$182) |  | (\$182) |
| 75 | 165.22 | PREPAID LTD FUND/CO. PD BENEFIT | \$0 |  | \$0 |
| 76 | 165.24 | PREPAID SAVINGS PLAN/CO PD BENEFIT | $(\$ 1,422)$ |  | (\$1,422) |
| 77 | 165.25 | RETIREMENT FUND-IBEW/BARG CO PD BEN | (\$0) |  | (\$0) |
| 78 | 165.26 | PAST SERVICE LIABILITY FUND | \$0 |  | \$0 |
| 79 | 165.27 | PREPAID 401K LOAN REPAYMENTS | $(\$ 3,316)$ |  | (\$3,316) |
| 80 | 165.28 | PREPAID INSURANCE - RETIREES | \$1 |  | \$1 |
|  |  | NORMALIZING ADJUSTMENT | \$0 | \$7,271 | \$7,271 |
| 81 |  |  | \$453,005 | \$7,271 | \$460,276 |
| 80 |  | Cash Working Capital | \$1,059,701 |  | \$1,059,701 |
| 81 | 183 | Deferred Charges | \$1,291,215 | \$0 | \$1,291,215 |
|  |  | Customer Deposits |  |  |  |
| 82 | 235 | CUSTOMER DEPOSITS | (\$1,249,212) |  | (\$1,249,212) |
| 83 | 235.001 | ATHLETIC FIELD FEES | (\$1,590) |  | (\$1,590) |
| 84 | 235.11 | JPEC-GIFT CERTIFICATES | (\$245) |  | (\$245) |
| 85 |  |  | (\$1,251,047) | \$0 | (\$1,251,047) |
| 86 |  | Deferred Credits | (\$193,534) | \$0 | $(\$ 193,534)$ |
| 87 |  | Total Rate Base | \$79,294,840 | (\$503,612) | \$78,786,121 |

Table 2

## JPEC Earned \& Proposed Returns <br> On End-Of-Year Rate Base and Capitalization

| Line No. |  | $\begin{gathered} 2006 \\ \text { As Booked } \end{gathered}$ | $\begin{gathered} \text { Normalized } \\ 2006 \\ \text { W/O Increase } \end{gathered}$ | $\begin{gathered} \text { Normalized } \\ 2006 \\ \text { With Increase } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Net Margins | (\$107,540) | ( $\$ 840,021$ ) | \$2,714,043 |
| 2 | Non-Cash Patronage Dividends | \$0 | \$0 | \$0 |
| 3 | Interest On Long-Term Debt | \$2,660,517 | \$2,714,043 | \$2,714,043 |
| 4 |  | \$2,552,977 | \$1,874,022 | \$5,428,086 |
| 5 | End-of-Year Rate Base | \$79,294,840 | \$78,786,121 | \$78,786,121 |
| 6 | Rate of Return On Rate Base | 3.22\% | 2.38\% | 6.89\% |
| 7 | End-of-Year Capitalization | \$83,162,781 | \$83,162,781 | \$83,162,781 |
| 8 | Rate of Return On Capitalization | 3.07\% | 2.25\% | 6.53\% |
| 9 | Net TIER Coverage Ratio | 0.96 | 0.69 | 2.00 |
| 10 | Modified Debt Service Coverage Ratio | 1.23 | 1.21 | 1.96 |

## Jackson Purchase Energy Corporation Case No. 2007-00116 Calculation of 13-Month Averages of Various Accounts

Materials \&
Supplies

Prepayments

| Deferred | Customer | Deferred |
| :---: | :---: | :---: |
| Debits | Deposits | Credits |


| December, 2005 | $2,191,946$ | 428,072 | $1,489,863$ | 987,371 | 156,569 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| January, 2006 | $1,564,049$ | 399,188 | $1,483,438$ | 992,396 | 159,744 |
| February | $1,167,171$ | 326,059 | $1,451,244$ | $1,003,152$ | 166,521 |
| March | $1,206,223$ | 291,994 | $1,451,470$ | $1,021,316$ | 165,738 |
| April | $1,280,655$ | 442,949 | $1,430,795$ | $1,036,107$ | 171,013 |
| May | $1,341,463$ | 415,246 | $1,416,663$ | $1,040,697$ | 163,948 |
| June | $1,242,251$ | 434,898 | $1,397,770$ | $1,179,282$ | 169,942 |
| July | $1,223,818$ | 370,445 | $1,389,027$ | $1,205,490$ | 168,894 |
| August | $1,154,522$ | 297,082 | $1,364,703$ | $1,211,233$ | 219,820 |
| September | $1,230,265$ | 259,146 | $1,342,986$ | $1,224,505$ | 216,826 |
| October | $1,270,213$ | 491,403 | $1,320,188$ | $1,242,554$ | 216,517 |
| November | $1,209,823$ | 453,005 | $1,312,576$ | $1,247,414$ | 338,871 |
| December | $1,183,096$ | 406,755 | $1,291,418$ | $1,251,047$ | 193,534 |
| $\quad$ Total | $1,265,495$ | $5,016,242$ | $18,142,141$ | $14,64,564$ | $2,507,937$ |
| 13-Month Average | $1,328,115$ | 385,865 | $1,395,549$ | $1,126,351$ | 192,918 |

Source: Monthly Form 7
$\qquad$

| Jackson Purchase Energy Corporation <br> Case No. 2007-00116 <br> Rate Case Expenses <br> For Period Ending 1/11/2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Check <br> Number | Payee |  | Amount | Description |
| 4/27/2007 | 156235 | Denton \& Keuler | \$ | 682.50 | Legal Services Rendered |
| 5/4/2007 | 156362 | Denton \& Keuler |  | 422.50 | Legal Services Rendered |
| 6/30/2007 | 156596 | Denton \& Keuler |  | 162.50 | Legal Services Rendered |
| 10/19/2007 | 159145 | Denton \& Keuler |  | 67.50 | Legal Services Rendered |
| 11/30/2007 | 159711 | Denton \& Keuler |  | 2,828.75 | Legal Services Rendered |
| 12/31/2007 accrued |  | Denton \& Kueler |  | 18,161.08 | Legal expenses |
| 4/27/2007 | 156284 | Federal Express |  | 21.81 | mail |
| 10/26/2007 | 159374 | Federal Express |  | 27.49 | mail |
| 12/21/2007 | 159976 | Fedex |  | 55.64 | Postage |
| 5/4/2007 | 156354 | Jackson Purchase Energy/ Petty Cash |  | 13.35 | mileage |
| 12/7/2007 | 159782 | Jackson Purchase Energy/ Petty Cash |  | 14.56 | mileage |
| 5/18/2007 | 156523 | Sam's Club |  | 131.29 | 3" Binders for PSC Filing |
| 12/14/2007 | 159875 | Sam's Club |  | 95.99 | Binders for rate case |
| 1/11/2008 | 160135 | Sam's Club |  | 95.99 | Binders for rate case |
| 4/6/2007 | 156026 | Wilson Office Supply |  | 47.95 | Labels |
| 4/6/2007 | 156026 | Wilson Office Supply |  | 251.86 | Index Dividers |
| 4/20/2007 | 156162 | Wilson Office Supply |  | 38.15 | Ink Cartridge |
| 5/4/2007 | 156353 | Wilson Office Supply |  | 9.53 | Labels |
| 5/4/2007 | 156353 | Wilson Office Supply |  | 60.69 | Pressed Board Binders |
| 12/28/2007 | 159985 | Wilson Office Supply |  | 105.79 | Index Dividers |
| 12/28/2007 | 159985 | Wilson Office Supply |  | 52.89 | Index Dividers |
| 12/21/2007 | 159968 | Minuteman Press |  | 1,294.39 | 16 copies for rate case |
| 1/11/2008 | 160118 | The Paducah Sun |  | 2,435.67 | Official notice for rate case |
|  |  |  | \$ | 27,077.87 |  |

Jackson Purchase Energy Corporation

## Case No. 2007-00116

Rate Case Expenses
For Period Ending 1/11/2008

## Check\# 156235 Dated 4/27/07

$$
75027
$$

## W. DAVID DENTON

## LEGAL FEES

For legal services rendered Jackson Purchase Energy Corporation for the period beginning March 1, 2007 and ending March 31, 2007

| Faxes | $\$ 200$ |
| :--- | ---: |
| Travel | 000 |
| Westlaw | 000 |
| Long Distance | 120 |
| Fed Express | 000 |
|  | 000 |
| Services for 2150 hours @ $\$ 130$ hour | 2,79500 |
| TOTAL | $\$ 2,79820$ |

Ref Acct No $4262-88 \mathrm{M}$

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## W. DAVID DENTON

## LEGAL FEES

For legal services rendered Jackson Purchase Energy Corporation for the period beginning February 1, 2007 and ending February 28, 2007

| Faxes | $\$ 000$ |
| :--- | ---: |
| Travel | 000 |
| Westlaw | 000 |
| Long Distance | 000 |
| Fed Express | 000 |
|  | 000 |
| Services for 1050 hours @ $\$ 130$ hour | 1,36500 |
| TOTAL | $\$ 1,36500$ |



Check\# 156546 Dated 6/30/07

Date bull processed by JPEC $5 / 22 / 07$,

## $$
76214
$$ <br> <br> 76214

 <br> <br> 76214}
## W. DAVID DENTON

## LEGAL FEES

For legal services rendered Jackson Purchase Energy Corporation for the period beginning April 1, 2007 and ending Apnl 30, 2007

| Faxes | $\$ 100$ |
| :--- | ---: |
| Travel | 000 |
| Westlaw | 000 |
| Long Distance | 119 |
| Fed Express | 000 |
|  | 000 |
| Services for 24 50 hours @ \$130 hour | 3,18500 |
| TOTAL | $\$ 3,18719$ |

Ref Acct No 4262-88M




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$$

## W. DAVID DENTON

## LEGAL FEES

For legal services rendered Jackson Purchase Energy Corporation for the period beginning September 1, 2007 and ending September 30, 2007

| Faxes | $\$ 100$ |
| :--- | ---: |
| Copies | 000 |
| Postage | 000 |
|  |  |
| Services for 4000 hours @ \$135 hour | 5,40000 |
| TOTAL | $\$ 5,40100$ |

Ref Acct No $4262-88 \mathrm{M}$


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W. DAVID DENTON

LEGAL FEES

For legal services rendered Jackson Purchase Energy Corporation for the period beginning October 1, 2007 and ending October 31, 2007:

| Lexis/Nexis | $\$ 15.44$ |
| :--- | ---: |
| Loan Filing Fee | 20.00 |
| Mileage | 114.81 |
| Lien Searches | 287.50 |
| Ky State Treas - Article of Inc (for Rate Case) | 27.50 |
| Copies | 57.75 |
| Postage | 57.13 |
|  |  |
| Services for 58.75 hours @ \$135 hour | $7,931.25$ |
| TOTAL | $\$ 8,511.38$ |

PAlS
MON 30 cool JPEG
928.0001 Dq 52 $923.0001 D \$ 524.857 .19$ $186.200 \quad 2,828.75$

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## W. DAVID DENTON

## LEGAL FEES

For legal services rendered Jackson Purchase Energy Corporation for the period beginning November 1, 2007 and ending December 31, 2007:

| Recording Fees | $\$ 0.00$ |
| :--- | ---: |
| Ky State Fees | 35.00 |
| Mileage | 238.52 |
| Faxes | 11.00 |
| Fed-Ex | 0.00 |
| Copies | 544.10 |
| Postage | 18.71 |
|  |  |
| Services (128.25 hours @ \$135/hour) | $17,313.75$ |
| TOTAL | $\$ 18,161.08$ |

Rof:Acct No: 4262:88M


|  | Invoice Number | Invoice Date | Account Number | Page |
| :---: | :---: | :---: | :---: | :---: |
|  | 8-808-27121 | Apr 18, 2007 | 1911-9121-8 | 5 of 5 |

## FedEx Express Shıpment Detail By Payor Type (Orıgınal)

Droppedinlif Apr 1f 2007


Cust Rot. NO REFERENCE INFDRMATIOA Rel.

Raty
(1)

Exhibit 9 Page 8 of 24
Witness: Chuck Williamson

- Fual Surcharge FadExhas applied a fual surcharge of 1000\% to thes shipment.
- Distance Based Pricifa Zono 3
- FedExhas auditad this shipment for correct packages woight, and service Any changes made are reflactad in the invoice amount.

- Fuel Surcharge Fedex has appliged a fuel surcharge of $1000 \%$ to this shipment.
- Distance Besed Pricing Zone 4

| INET |  | Sender | Reciprent |  |
| :---: | :---: | :---: | :---: | :---: |
| Tracking ld | 791276198061 | Tracy Bensley | Bill Dorsau |  |
| Service Type | FedEx Standard Overnight | JACKSON PURCHASE ENERGY CORP | Booth \& Associates inc |  |
| Package Type | FadEx Envelope | 2900 IRVIN COBB DRIVE | 1011 Schaub Drve |  |
| Zone | 04 | PADUCAH KY 42003 US | RALEIGH NC 27606 US |  |
| Packagas | 1 |  |  |  |
| Ratad Weight | N/A |  |  |  |
| Delivered | Apr 1520071130 | Transportation Charge |  | 1680 |
| Sve Area | Al | Fual Surcharge |  | 111 |
| Signed by | J Watson | Discount |  | 571 |
| FodEx Usa | 000000000/00002221_ | Total Charge | USD | \$1220 |
|  |  |  | btotal USD | \$2181 |
|  |  |  | press USD | \$2181 |

156374

| Invoice Number | Invoice Date | Account Number |
| :---: | :---: | :---: | :---: |
| $2-308-09132$ | Oct 10, 2007 | Page |
| $1911-9121-8$ | 4 of 4 |  |

## FedEx Express Shipment Detail By Payor Type (Original)

Picked up Oct 03, 2007
Paper Shaper

Cuss Ref NO REFERENCE INFIRANATION
Ref \#\#3:

Rede tar
Fuel Surcharge FedEx has applied a fuel surcharge of $1400 \%$ to this shipment.

- Distance Based Pricing Zone 3
- Package Delivered to Recipient Address Release Authonzed

| Automation | INET |
| :--- | :--- |
| Tracking 10 | 799727589009 |
| Service Type | FedEx Standard Overnight |
| Package Type | FedEx Box |
| Zone | 03 |
| Packages | 1 |
| Hated Weight | 80 lbs 36 kgs |
| Delivered | 0 ct 04 2007 1139 |
| Sue Area | AA |
| Signed by | 9999999999999 |
| FedEx Use | $000000000 / 0001305 / 02$ |

## Sender

Chuck Williamson
Jackson Purchase Energy Corp 2900 Irvin Cobb Drive
PADUCAH KY 42003 US

| Transportation Charge |  | 2755 |
| :--- | ---: | ---: |
| Discount |  | 964 |
| Fuel Surcharge |  | 338 |
| Courier Pickup Charge |  | 400 |
| Residential Delivery |  | 220 |
| Total Charge |  | USO |
|  | Shipper Subtotal | USB |
|  | Total FedEx Express | USO |





FedEx Express Shipment Detail By Payor Type (Original)


- Fuel Surcharge - Fed Ex has applied a fuel surcharge of $17.50 \%$ to this shipment.
- Distance Based Pricing, Zona 5


Exhibit 9
Page 11 of 24 Witness: Chuck Williamson

Glace to San's for books for
Rate case. Seollia

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\text { Gine-wayp } & \begin{array}{r}
9 \cdot x \\
12 / 03 / 09
\end{array} \\
4 \cdot 37 *
\end{array}
$$

$$
\begin{array}{cc}
\text { Round dup } & 0 \cdot 485= \\
i 2 \mid 29107 & 10 \cdot 19 *
\end{array}
$$

$$
4 \cdot 37+
$$

$$
10 \cdot 19+
$$

$$
14 \cdot 56 *
$$

186.200


$03 / 21 / 07$
Lip to wal-mart a to Wilson office supply for cartridge for Rus.

Sonja Collier

$$
186.200
$$

Or to peeper

Petty Cash

Mileage to whiart 1862005.3 * Whereon Off. for Rus for PEc case

SonjiColvier
Petty Cash
Miteazfor Bundiss $186.200 \quad 8.0$ for PSC Case
SCenery
Sonja Collier
04123107

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\begin{aligned}
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& 0 \cdot 445= \\
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\end{aligned}
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Sonja Collier
mileage - Binders for PSC Case.


\# ITEMS SOLD 8
TC: 95240550551262921879

186.200

PAID
JAN 112008
JPEG
Birders for Rate Case


50.D TO 10141

JACKEDN PURCHASE ENERGY
P. 0 BDX 463 PRDLEAH

OLEPH KY 42062

DATE DF INUOICE • $03 / 15 / 07$

SHIP TO
JACKSON PURCHASE ENERGY


```
2908 IKUIN Cabs drive PAPACAH
KY 4203
```

FAX (270)442-5337 FHONE (2701442-7321


# INVOICE AGREES WITH P.O. 



FAX. ( 270 ) 44 E- 9 ACCOUNTING
DATE OF INUOICE $03 / 59 / 07$
SOLD TO 10141 JACRSON PIRCHASE EREREY
P. 1 BOX 4838 PRDUCLT

KY 42002

| IIWVOICE MO 79917-01 |
| :--- |
| IREF/PDA F-1663 |



SHIP 70.
74990
JACKSDN PURCHASE GXERGY
2900 IRUIN COBE DRIVE PAROCAH KY 42883


082337
Phone. 44i-000B Ext.

# INVOICE AGREES WITH P.O. 

PAID
APR 082007 JPEC




FAX (278) $442-5337$ PHONE (270) $442-7321$



PAYMENT TERMS DUE UPON RECEIPT:



# invoice Agrees WITH PRO. 

PAID
may 042007 JPEG


## 

0168


WILSON OFFICE SUPPLY

SOLD TO 10141
JACKSON PURCHASE ENERGY
P 0 BOX 4030
PRDACAH
KY $42 \mathrm{Cg} \mathrm{S}^{2}$


1

SHIP TI S
JACKSON PURCHASE ENERGY
2958 IRVIN COBB DRIVE
PADUCAH
KY 42003

FAX (270)442-5337 PHONE (270) 442-7321


186200

## INVOICE AGREES WITH PRO.

## PAID

MAY 042007
JPEG

RECEIVED BY.

SUB-TOTAL tax
57.15
tOTAL
$=\approx======$


SOLD T0: 270-442-7321
JACKSON PURCHASE ENERGY

## P. O. BOX 4030

PADUCAH
KY 42002

SHIP TO:
JACKSON PURCHASE ENERGY
2900 IRVIN COBB DRIVE
PADUCAH KY 42003


## PAID <br> Dec 282007 <br> JPEC

## INVOICE AGREES WITH P.O.

| Subtotal | Delivery | Tax | Tot |
| :--- | :---: | :---: | ---: |
| 99.80 | .00 | 5.99 | 105.79 |
| INVOICE: | 91368-0 |  |  |
| TOTAL AMOUNT DUE: | 105.79 |  |  |

Please remit payment to:
WILSON OFFICE SUPPLY
1625 KENTUCKY AVENUE
PADUCAH KY 42003

JACKSON PURCHASE ENERGY
Customer \# 10141
P:270 442-7321 F:270-442-5337


## PAID

DEC 282007
JPEC
INVOICE AGREES WITH P.O.

WILSON OFFICE SUPPLY
1625 KENTUCKY AVENUE
PADUCAH KY 42003

616 Broadway Paducah, KY 42001-0734
Serving the Paducah Area for Over 22 Years

Denton \& Keuler PoO. BOX 929
Paducah, Kentucky 42002-0929
Attn: Jan
Invoice Number: 19370
Invoice Date: 12/03/2007

Phone: 443-8253
Fax: 442-6000
Salesperson: Pam

## PAID DEC 212007 JPEC

16 copies of 4 pages of JPECColor57.60
(Order \#27705)
1163.52
16 copies of 909 pages of JPEC (Order \#27706)
Order Total ..... $\$ 1221.12$
Sales Tax Tax ..... 73.27
Total Tax ..... 73.27
Balance Due ..... \$ 1294.39

Terms:
Please pay from this invoice. No statements will be sent.
1.50\% interest per month on past-due invoices.

Thank You!!


Please Return This Portion With Your Remittance

If you desire to charge this amount to your credit card, please complete the following information and retum to the address above: [ ] VISA I ] Mastercard

Acct\# $\qquad$ Exp Date $\qquad$
Signalure $\qquad$

| Billod ADCOUNI Nane |
| :---: |
| ATTN JOHN PACE |
| DENTON AND KEULER |

Amount Reinitited:

THANK YOU FOR YOUR BUSINESS

| Reint To $: \quad$ The Paducah Sun / Sun Publishing |
| :---: |
| 408 Kentucky Avenue |
| FO Box 2300 |
| Paducah, KY 42002-2300 |

OUR TERMS ARE ṄET 15 DAYS


## JPEC

Response to Question No. 21 in the Second Data Request
End of Test Year Customer Adjustment

| Line <br> No. | Month | Residential | Small <br> Com (1 ph) | Small <br> Com (3 ph) | Lg Com <br> (Existing) |  <br> Industrial |
| :---: | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Dec 2005 | 25,317 | 2,004 | 172 | 2 | 690 |
| 2 | Jan 2006 | 25,322 | 2,027 | 177 | 2 | 739 |
| 3 | Feb 2006 | 25,354 | 2,023 | 175 | 2 | 739 |
| 4 | Mar 2006 | 25,391 | 2,030 | 176 | 2 | 739 |
| 5 | Apr 2006 | 25,425 | 1,987 | 176 | 2 | 739 |
| 6 | May 2006 | 25,427 | 2,007 | 177 | 2 | 739 |
| 7 | Jun 2006 | 25,467 | 2,007 | 177 | 2 | 740 |
| 8 | Jul 2006 | 25,501 | 2,006 | 177 | 2 | 740 |
| 9 | Aug 2006 | 25,538 | 2,018 | 182 | 2 | 740 |
| 10 | Sep 2006 | 25,501 | 2,028 | 180 | 2 | 740 |
| 11 | Oct 2006 | 25,540 | 2,046 | 181 | 2 | 740 |
| 12 | Nov 2006 | 25,513 | 2,040 | 182 | 2 | 740 |
| 13 | Dec 2006 | 25,556 | 2,034 | 176 | 2 | 740 |
| 14 | Average | 25,450 | 2,020 | 178 | 2 | 736 |
| 15 | Increase | 133 |  | 16 |  | 6 |

22 Increase in customers, times average use, times average rate, times 12 months, equals additional revenues
$23 \begin{array}{lllllll}\text { Increase in Rev } & \$ 126,807 & \$ 13,171 & \$ 9,618 & \$ 0 & \$ 583,288 & \$ 732,884\end{array}$

24 Increase in consumers, times average use, times average cost per KWH purchased, times 12 months,
25 equals additional power cost

| 26 | Inc in Power Cost | $\$ 73,143$ | $\$ 7,285$ | $\$ 5,570$ | $\$ 0$ | $\$ 410,598$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |

Page 1 of 7
Witness: Gary Stephens
COMPARISON OF RATES Cost of Service Study for the Twelve Months Ended December 31, 2006

|  | Billing <br> Determinants | Billing <br> Determinant | Actual |  | Proposed |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rate | Revenues | Rate | Revenues |
| Line | Customer Charge | 25,461 | \$7.00 | \$2,138,724 | \$9.00 | \$2,749,788 |
|  | Demand Charge |  | \$0.05729 | \$21,753,860 | \$0.06252 | \$23,739,769 |
| 3 | Energy Charge | 379,714,788 | \$0.05729 | \$21, 53,86 |  |  |
| $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | Billing Adj/Minimums <br> Total From Base Rates |  |  | \$23,892,584 |  | \$26,489,557 |
| 6 | Discount Adjustment |  |  |  |  |  |
| 7 | Total Revenues |  |  | \$23,892,584 |  | \$26,489,557 |
| 8 | Amount |  |  |  |  | \$2,596,972 |
|  | Percent |  |  |  |  | 10.87\% |

Exhibit 11
Witness: Gary Stephens

$$
\begin{aligned}
& \text { COMPARISON OF RATES } \\
& \text { JPEC } \\
& \text { Cost of Service Study for the Twelve Months Ended December 31, } 2006
\end{aligned}
$$

Exhibit 11
Page 3 of 7
Witness: Gary Stephens

> COMPARISON OF RATES
> Cost of Service Study for the Twelve Months Ended December 31, 2006
COMPARISON OF RATES
JPEC
Cost of Service Study for the Twelve Months Ended December 31, 2006

| Line | Billing <br> Determinants | Billing <br> Determinant | Actual |  | Proposed |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rate | Revenues | Rate | Revenues |
| Lin | Customer Charge | 2 | \$0.00 | \$0 | \$300.00 | \$7,200 |
| 2 | Demand Charge | 8,541 |  |  |  | \$828.000 |
| 3 | First 3,000 KW |  | \$10.48 | \$754,560 | \$11.50 | \$828,000 |
| 4 | Remaining KW |  | \$10.48 | \$319,577 | \$11.50 | \$350,681 |
| 5 | Energy Charge | 40,619,100 | \$0.01545 | \$627,646 | \$0.01735 | \$704,741 |
| 6 | Billing Adj/Minimums |  |  |  |  | \$1,890,622 |
| 7 | Total From Base Rates |  |  | \$1,701,783 |  | \$1,89,622 |
| 8 | Discount Adjustment |  |  |  |  |  |
| 9 | Total Revenues |  |  | \$1,701,783 |  | \$1,890,622 |
| 10 | Amount |  |  |  |  | \$188,839 |
| 11 | Percent |  |  |  |  | 11.10\% |


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| 6 ¢で8E¢ ¢ $¢$ | てZちE00\＄ | โt9＊ャ88＇を\＄ | LSLEO O\＄ | S0t＇L6E＇E0I | M $/$ HMX 00Z 1 SII d <br>  | $\varepsilon$ |
| をSガャてガヤ\＄ | 0¢＇9\＄ | $16 \varepsilon^{\prime} 69 \varepsilon^{\prime} \varepsilon \$$ | ¢6．${ }^{\circ}$ \＄ | もてL゙9s |  | て |
| 08で80を\＄ | $00^{\circ} \mathrm{S}$ ¢ | 00で0で\＄ | $00^{\circ} \mathrm{SZ} \$$ | $\checkmark \mathcal{L}$ |  | I |
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Witness: Gary Stephens

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& \text { Cost of Service Study for the Twelve Months Ended December 31, } 2006 \\
& \text { SMALL COMMERCIAL SINGLE PHASE }
\end{aligned}
$$

|  |  | S¢8＇Z | TVLOL | Dt |
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| L¢でも¢ऽ\＄ |  | \％668 | 6IL＇96t＇8 ${ }^{\text {d }}$ |  | カI |
|  | $\begin{gathered} \text { puәuisn!p\% } \\ \text { uоцеz!!euion } \end{gathered}$ | 1820LJo ұиәэләд |  |  | $\begin{gathered} \cdot_{0} \mathrm{~N} \\ \text { әu! } \end{gathered}$ |


| 911 0808 ¢ ${ }^{\text {d }}$ | 6IL＇96t＇82\＄ | $666^{\prime}+6 S^{\prime} 92$ \＄ | TVLOL | $\varepsilon I$ |
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| 8EL＇66\＄ | 9EI＇E0I\＄ | 0ャE＇96\＄ |  | II |
| （920＇zol\＄） | （EL6＇101\＄） | （8L0＇20I\＄） | Kıado．${ }_{\text {d paseat }}^{\text {LL9 }}$ \％0I | 01 |
| 6LL＇ャワ9\＄ | 069＇899\＄ | L98．029\＄ |  | 6 |
| 6t0＇SII＇IS | 9Lでと91「I\＄ | Iz8＊990＇i\＄ | Sİtan 0L9．801 | 8 |
| 18L＇七ऽ¢＇z\＄ | 898＊乌Iガて\＄ | ャ69＇と6でて\＄ | sұuenug poinias 69980I | $L$ |
| 085＇685‘を\＄ | 8\＆6＇019＇を\＄ | Iてで89く「を\＄ | srəumoysuex 899801 | 9 |
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| LIL゙んI9\＄ | 910＇て59\＄ | LIt＇と8s\＄ |  | $\dagger$ |
|  | ¢6S＇スナ9＇¢\＄ | 9¢カ＇¢¢でく\＄ |  | $\varepsilon$ |
| 6Lロ゙カロで01\＄ | てャ8＊8て9「01\＄ | LII＇098＇6\＄ | səimxid＇sİMOL splod $\dagger 99.801$ | $\tau$ |
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| Line No. | Account Number | Description |
| :---: | :---: | :---: |
| 1 | 365.100 | 2/0 ACSR |
| 2 | 365.101 | 4 ACSR |
| 8 | 365.107 | 397.5 AAAC |
| 9 | 365.110 | 652.4 MCM |
| 10 | 365.111 | STD C |
| 11 | 365.120 | STATIC WIRE |
| 12 | 365.123 | CWC |
| 13 | 365.129 | 4 TPX |
| 17 | 365.133 | 2/0 TPX |
| 18 | 365.134 | 3/0 TPX |
| 21 | 365.142 | 2 QUAD |
| 23 | 365.144 | 2/0 QUAD |
| 24 | 365.145 | 3/0 QUAD |
| 27 | 365.150 | 8 WEATHERPROOF |
| 28 | 365.178 | 500 MCM ALUMINUM |
| 29 | 365.179 | 6 SOLID BARE COPPER |
| 30 | 365.180 | 6 HARD DRAWN COPPER |
| 31 | 365.181 | 6A STEEL |
| 32 | 365.183 | 3\#6 AWC |
| 33 | 365.184 | 7 ALUMINUM |
| 34 | 365.200 | 12 TW |
| 37 | 365.417 | 336.4 AERIAL |



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& i+6
\end{aligned}
$$


Sower at lat t fisc


Selected Lo curve ot 34.9 year selected 41 prior study

| Curve | Curve | Estimated | Squared Error | Index of Conformation Retirement |
| :---: | :---: | :---: | :---: | :---: |
| umber | Type | Life |  | Variation |



Selected G1 Curve st y i ty yeti


| Turve umber | Curve Type | Estimated Life | Squared Exror | Index of Variation | Conformation Index | Retirement Experience |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | L 0 | 36.90 | . $2371000922 E+8$ | 21.98 | 45.50 | 80.56 |
| 27 | L. 0.5 | 35.40 | . $2947486822 \mathrm{E}+8$ | 24.50 | 40.82 | 84.66 |
| 19 | S C | 35.30 | . $3476589204 \mathrm{E}+8$ | 26.61 | 37.58 | 81.40 |
| 24 | S-. 5 | 34.10 | . $3517532709 \mathrm{E}+8$ | 26.77 | 37.36 | 88.08 |
| 2 | L. 1 | 34.10 | . $4839734998 \mathrm{E}+8$ | 31.40 | 31.85 | 88.58 |
| 22 | $\bigcirc 3$ | 51.20 | . $5343044840 \mathrm{E}+8$ | 32.99 | 30.31 | 68.39 |
| 7 | S 0 | 33.10 | . $6458406947 \mathrm{E}+8$ | 36.27 | 27.57 | 93.98 |
| 23 | 04 | 65.60 | . $7039816583 \mathrm{E}+8$ | 37.87 | 26.41 | 64.43 |
| 14 | 9 R 1 | 32.90 | $.7635307985 \mathrm{E}+8$ | 39.44 | 25.35 | 96.33 |
| 28 | I. 1.5 | 33.30 | $.8296229015 \mathrm{E}+8$ | 41.11 | 24.32 | 91.54 |
| 21 | 02 | 27.60 | . $8500482413 \mathrm{E}+8$ | 41.61 | 24.03 | 88.62 |
| 25 | S 0.5 | 32.50 | . $1035211295 \mathrm{E}+9$ | 45.92 | 21.78 | 96.83 |
| 29 | R 1.5 | 32.30 | $.1238827384 \mathrm{E}+9$ | 50.24 | 19.90 | 98.56 |
| 3 | L 2 | 32.50 | . $1314917671 \mathrm{E}+9$ | 51.76 | 19.32 | 94.33 |
| 8 | S 1 | 32.00 | . $1557431816 \mathrm{E}+9$ | 56.33 | 17.75 | 98.90 |
| 15 | R 2 | 31.80 | . $1889408044 \mathrm{E}+9$ | 62.04 | 16.12 | 99.97 |
| 26 | S 1.5 | 31.70 | $.2085951778 \mathrm{E}+9$ | 65.19 | 15.34 | 99.52 |
| 30 | R 2.5 | 31.40 | . $2519570176 \mathrm{E}+9$ | 71.64 | 13.96 | 100.00 |
| 4 | L 3 | 31.50 | . $2555242474 \mathrm{E}+9$ | 72.15 | 13.86 | 98.39 |
| 9 | S 2 | 31.20 | . $2691580653 \mathrm{E}+9$ | 74.05 | 13.50 | 99.96 |
| 16 | R 3 | 31.00 | . $3259429534 \mathrm{E}+9$ | 81.49 | 12.27 | 100.00 |
| 10 | S 3 | 30.80 | . $3776803735 \mathrm{E}+9$ | 87.72 | 11.40 | 100.00 |
| 5 | L 4 | 30.70 | . $4099211944 \mathrm{E}+9$ | 91.38 | 10.94 | 99.97 |
| 1.7 | R 4 | 30.60 | . $4480811035 \mathrm{E}+9$ | 95.54 | 10.47 | 100.00 |
| 11 | S 4 | 30.40 | $.5016530843 \mathrm{E}+9$ | 101.09 | 9.89 | 100.00 |
| 6 | L 5 | 30.40 | . $5302056197 \mathrm{E}+9$ | 103.93 | 9.62 | 100.00 |
| 18 | R 5 | 30.30 | . $5765624342 \mathrm{E}+9$ | 108.38 | 9.23 | 100.00 |
| 12 | S 5 | 30.20 | . $6054912544 \mathrm{t}+9$ | 111.06 | 9.00 | 100.00 |
| 13 | S 6 | 30.10 | .6820631777E+9 | 117.88 | 8.48 | 100.00 |
| 20 | $S Q$ | 28.50 | $.8086248930 \mathrm{E}+9$ | 128.35 | 7.79 | 100.00 |
|  |  |  | $\operatorname{ta} 6<$ <br>  ) $+\infty \times$ | サe om $\pi=0$ |  |  |


picked 13 wave at 22.8 years
3 years aden because of bat intoners
 Sane curve as ictitio.

Page
1


$$
\text { Selected } 51.5 \text { or } 30.10 \text { years }
$$

Switch frow :3 last time
51.5 mech better ft this theme

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& \text { and whtion fare family. } \\
& \text { Page }
\end{aligned}
$$

| ?.urve umber | Curve Type | Estimated Life | Squared Error | Index of Variation | Conformation Index | Retirement Experience |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.9 | SC | 57.80 | . $331590249 \mathrm{E}+10$ | 54.37 | 18.39 | 30.70 |
| 23 | 04 | 129.50 | . $332832638 \mathrm{E}+10$ | 54.47 | 18.36 | 28.80 |
| 22 | 03 | 98.50 | . $335187807 \mathrm{E}+10$ | 54.66 | 18.29 | 28.51 |
| 24 | S -. 5 | 42.10 | . $345507564 \mathrm{E}+10$ | 55.50 | 18.02 | 40.71 |
| 14 | R 1 | 36.50 | . $346025927 \mathrm{E}+10$ | 55.54 | 18.01 | 45.05 |
| 1 | L 0 | 45.90 | . $356224669 \mathrm{E}+10$ | 56.35 | 17.75 | 42.14 |
| 29 | R 1.5 | 30.90 | . $361814293 \mathrm{E}+10$ | 56.79 | 17.61 | 60.14 |
| 27 | L 0.5 | 38.40 | $.364230219 \mathrm{E}+10$ | 56.98 | 17.55 | 50.05 |
| 7 | S 0 | 32.40 | . $374976390 \mathrm{E}+10$ | 57.82 | 17.30 | 56.66 |
| 2 | L 1 | 31.90 | . $378018923 \mathrm{E}+10$ | 58.05 | 17.23 | 61.58 |
| 25 | S 0.5 | 28.70 | . $388152707 \mathrm{E}+10$ | 58.82 | 17.00 | 68.44 |
| 15 | R 2 | 26.70 | . $388267654 \mathrm{E}+10$ | 58.83 | 17.00 | 80.46 |
| 28 | L 1.5 | 28.30 | . $392047651 \mathrm{E}+10$ | 59.12 | 16.91 | 72.02 |
| 21 | $\bigcirc 2$ | 21.60 | . $395675529 \mathrm{E}+10$ | 59.39 | 16.84 | 78.38 |
| 3 | L 2 | 25.50 | . $405064848 \mathrm{E}+10$ | 60.09 | 16.64 | 81.46 |
| 8 | S 1 | 25.50 | . $405706341 \mathrm{E}+10$ | 60.14 | 16.63 | 82.39 |
| 30 | R 2.5 | 24.20 | . $413919459 \mathrm{E}+10$ | 60.75 | 16.46 | 94.15 |
| 26 | S 1.5 | 23.80 | . $416870224 \mathrm{E}+10$ | 60.96 | 16.40 | 91.35 |
| 4 | L 3 | 22.20 | . $423801462 \mathrm{E}+10$ | 61.47 | 16.27 | 94.12 |
| 9 | S 2 | 22.30 | . $425739395 \mathrm{E}+10$ | 61.68 | 16.21 | 97.52 |
| 10 |  | 20.80 | - $440646037 \mathrm{E}+10$ | 62.68 | 15.95 | 99.94 |
| 16 | R 3 | 22.30 | . $440650536 \mathrm{E}+10$ | 62.68 | 15.95 | 99.82 |
| 5 | L 4 | 20.40 | . $451220859 \mathrm{E}+10$ | 63.42 | 15.77 | 99.75 |
| 11 | S 4 | 19.70 | . $462740768 \mathrm{E}+10$ | 64.23 | 15.57 | 100.00 |
| 17 | R 4 | 20.50 | . $467537313 \mathrm{E}+10$ | 64.56 | 15.49 | 100.00 |
| 6 | L 5 | 19.50 | . $472830919 \mathrm{E}+10$ | 64.92 | 15.40 | 100.00 |
| 18 | R 5 | 19.50 | . $492456416 \mathrm{E}+10$ | 66.26 | 15.09 | 100.00 |
| 12 | S 5 | 19.20 | - $495976454 \mathrm{E}+10$ | 66.49 | 15.04 | 100.00 |
| 13 | S 6 | 19.00 | . $525124253 \mathrm{E}+10$ | 68.42 | 14.62 | 100.00 |
| 20 | S 0 | 17.50 | . $600568041 \mathrm{E}+10$ | 73.17 | 13.67 | 100.00 |

Page

Optimization Calculations

| " Surve umber | Curve Type | $\begin{gathered} \text { Estimated } \\ \text { Life } \end{gathered}$ | Squared Error | Index of Variation | Conformation Index | Retirement Experience |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | S C | 3.90 | . $6806737549 E+5$ | 373.39 | 2.68 | 100.00 |
| 1 | L 0 | 3.90 | . $7042357056 \mathrm{E}+5$ | 379.80 | 2.63 | 100.00 |
| 24 | S -. 5 | 3.90 | . $7323317581 \mathrm{E}+5$ | 387.30 | 2.58 | 100.00 |
| 27 | L 0.5 | 3.90 | . $7324385304 \mathrm{E}+5$ | 387.33 | 2.58 | iōo. 00 |
| 2 | L 1 | 3.90 | . $7744112010 \mathrm{E}+5$ | 398.28 | 2.51 | 100.00 |
| 14 | R 1 | 3.90 | . $7996115550 \mathrm{E}+5$ | 404.70 | 2.47 | 100.00 |
| 7 | 50 | 3.90 | . $8005996324 \mathrm{E}+5$ | 404.95 | 2.47 | 100.00 |
| 21 | $\bigcirc 2$ | 3.20 | . $8241421670 \mathrm{E}+5$ | 410.87 | 2.43 | 100.00 |
| 28 | L 1.5 | 3.90 | . $8252893974 \mathrm{E}+5$ | 411.15 | 2.43 | 100.00 |
| 25 | S 0.5 | 3.90 | . $8545529277 \mathrm{E}+5$ | 418.38 | 2.39 | 100.00 |
| 29 | R 1.5 | 3.90 | . $8618270008 \mathrm{E}+5$ | 420.15 | 2.38 | 100.00 |
| 3 | L 2 | 3.90 | . $885553134952 \mathrm{E}+5$ | $4 \overline{4} 5 . \overline{8} 9$ | 2.35 | 100.00 |
| 22 | 03 | 4.00 | . $8866021748 \mathrm{E}+5$ | 426.15 | 2.35 | 100.00 |
| 8 | S 1 | 3.90 | -91576658.33E+5 | 433.10 | 2.31 | 100.00 |
| 15 | R 2 | 3.90 | . $9335441141 \mathrm{E}+5$ | 437.29 | 2.29 | 100.00 |
| 26 | S 1.5 | 3.90 | . $9670908205 \mathrm{E}+5$ | 445.07 | 2.25 | 100.00 |
| 30 | R 2.5 | 3.90 | . $9926143336 \mathrm{E}+5$ | 450.91 | 2.22 | 100.00 |
| 4 | L 3 | 3.90 | -1005993149E+6 | 453.94 | 2.20 | 100.00 |
| 9 | S 2 | 3.90 | -1022918293E+6 | 457.74 | 2.18 | 100.00 |
| 16 | R 3 | 3.90 | . $1057217127 \mathrm{E}+6$ | 465.35 | 2.15 | 100.00 |
| 10 | S 3 | 3.90 | . $1106932906 \mathrm{E}+6$ | 476.17 | 2.10 | 100.00 |
| 5 | L 4 | 3.90 | . $1124406923 \mathrm{E}+6$ | 479.91 | 2.08 | 100.00 |
| 23 | 04 | 4.30 | . $1146427083 \mathrm{E}+6$ | 484.59 | 2.06 | 100.00 |
| 17 | R 4 | 3.90 | $.1148113953 \mathrm{E}+6$ | 484.94 | 2.06 | 100.00 |
| 11 | S 4 | 3.90 | . $1184461502 \mathrm{E}+6$ | 492.56 | 2.03 | 100.00 |
| 6 | $\pm 5$ | 3.80 | . $1200147284 \mathrm{E}+6$ | 495.81 | 2.02 | 100.00 |
| 18 | R 5 | 3.90 | . $1228335151 \mathrm{E}+6$ | 501.60 | 1.99 | 100.00 |
| 12 | S 5 | 3.80 | . $1241665535 \mathrm{E}+6$ | 504.31 | 1.98 | 100.00 |
| 13 | S 6 | 3.70 | . $1271261955 \mathrm{E}+6$ | 510.29 | 1.96 | 100.00 |
| 20 | 5 Q | 2.50 | . $1842910000 \mathrm{E}+6$ | 614.40 | 1.63 | 100.00 |


| Curve | Curve | Estimated | Squared Error | Index of | Conformation Retirement |
| :--- | :---: | :---: | :---: | :---: | :---: |
| lumber | Type | Life |  | Variation | Index |


| 28 | L 1.5 |  |
| ---: | ---: | ---: |
| 30 | R | 2.5 |
| 8 |  | S 1 |
| 25 | S | 0.5 |
| 26 | S 1.5 |  |

$\begin{array}{rl} & L \\ \text { L } & 1.5 \\ \text { R } & 2.5 \\ & S \\ S & 0 . \\ S & 1 .\end{array}$
L 1
R 3
L 3
S 0
R 2
S 2
L 0.5
02
S 3
L 0
L 4
R 1.5
54
R 4
S -. 5
R 1
L 5
SC
R 5
S 5
$\circ 3$
S 6
SQ
04
40.00
33.00
35.30
40.90
32.30
46.40
29.40
29.60
48.20
37.80
29.70
57.90
29.40
27.10
$.188256423 \mathrm{E}+10$
$71.00 .195259028 \mathrm{E}+10$
26.70 . $200823796 \mathrm{E}+10$
47.20 . $206678150 \mathrm{E}+10$
25.60
$.221361460 \mathrm{E}+10$
26.50
$.223156594 \mathrm{E}+10$
$.223975482 \mathrm{E}+10$
$.231906523 \mathrm{E}+10$
$.242104639 \mathrm{E}+10$
$.258409254 \mathrm{E}+10$
$.286529000 \mathrm{E}+10$
$.286704616 \mathrm{E}+10$
$-296211849 \mathrm{E}+10$
$.373302755 \mathrm{E}+10$
$.139986430 \mathrm{E}+11$
$.202972598 \mathrm{E}+11$
9.11
9.13
9.27
9.29
9.34
9.39
106.50
105.93
104.49
104.28
103.41
102.56
81.71
32.90
63.51
95.77
27.88
95.46
31.77
99.90
99.92
24.89
24.54
99.60
19.20
100.00
100.00
20.61
100.00 100.00
27.09

Switched to 51 carve st 35.3 years used 54 curve last fine

| Surve amiber | Curve Type | Estimated ェife | Squared Error | Index of Variation | Conformation Inciex | Retirement Kxperience |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | $S \mathrm{C}$ | 43.30 | . $4047481202 \mathrm{E}+5$ | 15.16 | 65.96 | 39.80 |
| 22 | $\bigcirc 3$ | 72.40 | . $4263420970 \mathrm{E}+5$ | 15.56 | 64.27 | 36.76 |
| 23 | 04 | 101.40 | . $5308496936 \pm+5$ | 17.40 | 57.27 | 34.77 |
| 14 | R 1 | 28.00 | . $6081304904 \mathrm{E}+5$ | 18.59 | 53.79 | 65.00 |
| 24 | S -. 5 | 32.30 | . $6598504447 \mathrm{E}+5$ | 19.36 | 51.65 | 54.06 |
| 29 | R 1.5 | 23.40 | $.8568514022 \mathrm{E}+5$ | 22.06 | 45.33 | 87.00 |
| 1 | I. 0 | 35.40 | . $9005938694 \mathrm{E}+5$ | 22.62 | 44.21 | 53.74 |
| 27 | L 0.5 | 29.40 | . $1185435013 \mathrm{E}+6$ | 25.95 | 38.54 | 64.81 |
| 7 | S 0 | 25.10 | . $1415661935 \mathrm{E}+6$ | 28.36 | 35.26 | 75.08 |
| 15 | R 2 | 20.00 | . $1440518062 \mathrm{E}+6$ | 28.61 | 34.95 | 99.50 |
| 25 | 50.5 | 22.10 | . $1892555735 \mathrm{E}+6$ | 32.79 | 30.50 | 88.95 |
| 2 | L 1 | 24.90 | . $1929103289 \mathrm{E}+6$ | 33.11 | 30.20 | 76.74 |
| 30 | R 2.5 | 17.90 | . $2151428031 \mathrm{E}+6$ | 34.96 | 28.60 | 100.00 |
| 28 | L 1.5 | 21.90 | . $2449337194 \mathrm{E}+6$ | 37.30 | 26.81 | 86.88 |
| 8 | 51 | 19.60 | .2824860213E+6 | 40.06 | 24.96 | 98.30 |
| 26 | S 1.5 | 18.20 | . $3457368851 \mathrm{E}+6$ | 44.32 | 22.56 | 99.91 |
| $\cdots 16$ | R 3 | 16.40 | . $3552035778 \mathrm{E}+6$ | 44.92 | 22.26 | 100.00 |
| 3 | L 2 | 19.60 | . $3621150807 \mathrm{E}+6$ | 45.36 | 22.05 | 94.11 |
| 5 | 52 | 16.90 | . $4630816812 \mathrm{E}+6$ | 51.29 | 19.50 | 100.00 |
| 21 | $\bigcirc 2$ | 17.10 | . $5042809785 \mathrm{E}+6$ | 53.53 | 18.68 | 87.48 |
| 4 | L 3 | 16.80 | . $5524034539 E+6$ | 56.02 | 17.85 | 99.81 |
| 17 | R 4 | 15.00 | . $6423610833 E+6$ | 60.41 | 16.55 | 100.00 |
| 10 | 53 | 15.50 | - $6592059051 \mathrm{E}+6$ | 61.20 | 16.34 | 100.00 |
| 5 | I 4 | 15.20 | . $7501606448 \mathrm{E}+6$ | 65.28 | 15.32 | 100.00 |
| 11 | S 4 | 14.50 | . $8888213883 \mathrm{E}+6$ | 71.06 | 14.07 | 100.00 |
| 6 | L 5 | 14.40 | . $9546913616 \mathrm{E}+6$ | 73.65 | 13.58 | 100.00 |
| 18 | K 5 | 14.20 | . $9744630002 \mathrm{E}+6$ | 74.41 | 13.44 | 100.00 |
| 12 | S 5 | 14.10 | $.1053617679 \mathrm{E}+7$ | 77.37 | 12.92 | 100.00 |
| 13 | S 6 | 13.80 | . 1142939717E+7 | 80.58 | 12.41 | 100.00 |
| 20 | $S$ Q | 12.50 | $.1350006000 \mathrm{E}+7$ | 87.58 | 11.42 | 100.00 |
| \% |  | $\begin{array}{r} y=0 \\ 30+2 \end{array}$ | $R 1 \text { curve }$ curve as | $\begin{aligned} & 2 x \quad y=8 \\ & 3+7 \end{aligned}$ | $\therefore x$ |  |


| Curve <br> umber | Curve | Estimated | Squared Error | Index of | Conformation Retirement |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Variation | Index |  |  |  |  |

17

S 1.5
R 4
R 5
S 4
L 5
S 5
L 4
S 3
R 3
S 6
L 3
S 2
R 2.5
SC
03
04
S-. 5
R 1
L 2

R 1.5
I. 0

L 0.5
K 2
S 0
L 1
S 0.5
S 1
02
$S Q$ better te tan ire shown by ivitoyt
15.20
15.40
15.40
15.20
15.80
15.80
16.40
15.10
16.70
16.50
17.10
27.30
43.30
57.80
23.10
20.80
18.20
17.20
19.40
19.20
25.80
23.00
17.90
20.30
20.80
19.00
17.90
15.50
13.50
$.7953812973 \mathrm{E}+2$
$.7998268647 \mathrm{E}+2$
$.8887084071 \mathrm{E}+2$
$.9512096845 \mathrm{E}+2$
$.1003536987 \mathrm{E}+3$
$.1036299409 \mathrm{E}+3$
$.1170961228 \mathrm{E}+3$
$.1319811596 \mathrm{E}+3$
$.1330616735 \mathrm{E}+3$
$.1390445443 \mathrm{E}+3$
$.1527480496 \mathrm{E}+3$
$.1540640842 \mathrm{E}+3$
$.1585992780 \mathrm{E}+3$
$.1 .588341756 \mathrm{E}+3$
$.1593948914 \mathrm{E}+3$
$.1610048528 \mathrm{E}+3$
$.1612628075 \mathrm{E}+3$
$.1621988896 \mathrm{E}+3$
$.1630129896 \mathrm{E}+3$
$.1647623356 \mathrm{E}+3$
$.1647713067 \mathrm{E}+3$
$.1648719102 \mathrm{E}+3$
$.1654670479 \mathrm{E}+3$
$.1658872410 \mathrm{E}+3$
$.1701832378 \mathrm{E}+3$
$.1709616282 \mathrm{E}+3$
$.1710057073 \mathrm{E}+3$
$.1722577382 \mathrm{E}+3$
$.1853849628 \mathrm{E}+3$
$.4090000000 \mathrm{E}+3$
$.7953812973 \mathrm{E}+2$
$.7998268647 E+2$
$.8887084071 \mathrm{E}+2$
512096845E+2
$.1036299409 \mathrm{E}+3$
$.1170961228 \mathrm{E}+3$
$.1330616735 \mathrm{E}+3$
$.1390445443 \mathrm{E}+3$
$.1540640842 \mathrm{E}+3$
. $1585992780 \mathrm{E}+3$
. $1593948914 \mathrm{E}+3$
$.1610048528 \mathrm{E}+3$
$.1621988896 \mathrm{E}+3$
$.1630129896 \mathrm{E}+3$
. $1647713067 \mathrm{E}+3$
$.1648719102 \mathrm{E}+3$
$.1658872410 \mathrm{E}+3$
$.1701832378 \mathrm{E}+3$
$1709616282 \mathrm{E}+3$

Kit wave at Sown w.

| 26.23 | 38.12 | 100.00 |
| :--- | :--- | ---: |
| 26.30 | 38.02 | 100.00 |
| 27.73 | 36.06 | 100.00 |
| 28.68 | 34.87 | 100.00 |
| 29.46 | 33.94 | 100.00 |
| 29.94 | 33.40 | 99.90 |
| 31.83 | 31.42 | 100.00 |
| 33.79 | 29.59 | 100.00 |
| 33.93 | 29.47 | 100.00 |
| 34.68 | 28.84 | 96.58 |
| 36.35 | 27.51 | 99.53 |
| 36.51 | 27.39 | 99.29 |
| 37.04 | 27.00 | 52.20 |
| 37.07 | 26.98 | 48.19 |
| 37.13 | 26.93 | 46.54 |
| 37.32 | 26.80 | 63.87 |
| 37.35 | 26.77 | 75.52 |
| 37.46 | 26.70 | 88.59 |
| 37.55 | 26.63 | 97.20 |
| 37.75 | 26.49 | 82.75 |
| 37.75 | 26.49 | 87.61 |
| 37.76 | 26.48 | 60.74 |
| 37.83 | 26.43 | 68.31 |
| 37.88 | 26.40 | 96.62 |
| 38.37 | 26.06 | 76.93 |
| 38.46 | 26.00 | 75.96 |
| 38.46 | 26.00 | 85.73 |
| 38.60 | 25.91 | 93.29 |
| 40.04 | 24.98 | 83.78 |
| 59.48 | 100.00 |  |
| 37 |  | 161 |

Page


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\end{aligned}
$$



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& \text { Save ar last cent }
\end{aligned}
$$

Curve Curve Estimated Squared Error Index of Conformation Retirement
Number Type Life Variation Index Experience



$$
\begin{aligned}
& \text { Same at last year }
\end{aligned}
$$

Account Data --

Curve Curve Estimated umber Type Life

Index of Conformation Retirement Variation Index Experience

picked 40 -rue at yo yea
Dole cervices not being retired Sane as last year

Page

| Turve | Curve | Estimated |
| :---: | :---: | :---: |
| umber | Type | Life |

Squared Error Variation Conformation Index Retirement Life


| Curve Curve | Estimated | Squared Error | Index of Conformation Retirement |  |
| :--- | :---: | :---: | :---: | :---: |
| Number | Type | Life |  | Variation |

23


| 42.40 | 23.58 | 60.79 |
| :--- | :--- | :--- |
| 42.97 | 23.27 | 64.53 |
| 44.89 | 22.28 | 77.50 |
| 47.56 | 21.03 | 80.28 |
| 48.30 | 20.70 | 88.82 |
| 49.44 | 20.23 | 86.21 |
| 50.11 | 19.96 | 98.39 |
| 51.48 | 19.43 | 19.36 |

Selected R2. 5 at 27.6 years Same as last time


Geledte 5 cover 24 fer

$$
5 \operatorname{san}+5 \quad \text { at }+\cos
$$

Account Data
KY20373
Optimization Calculations

Street ligh
 Selected R2 at 43.9 years. Same as last year

|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1949 \\ 2006 \\ 58 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1949 | 15,267,184.000 | 144,564.000 | 15,122,620.000 | 0.02 | 372,088.31 |
| 1950 | $1,743,002.000$ | 69,840.000 | 16,795,782.000 | 0.03 | $435,738.83$ |
| 1951 | 844,964.000 | 142,220.000 | 17,498,526.000 | 0.03 | 463,641.75 |
| 1952 | 5,975,984.000 | 0.000 | 23,474,510.000 | 0.03 | 695,196.81 |
| 1953 | 1,120,278.000 | 317,088.000 | 24,277,700.000 | 0.03 | 733,276.85 |
| 1954 | 2,644,352.000 | 383,776.000 | 26,538,276.000 | 0.03 | 854,013.69 |
| 1955 | 519,006.000 | 353,170.000 | 26,704,112.000 | 0.03 | 865,151.65 |
| 1956 | 170,682.000 | 119,184.000 | 26,755,610.000 | 0.03 | 869,135.83 |
| 1957 | 218,304.000 | 108,104.000 | $26,865,810.000$ | 0.03 | 879,369.95 |
| 1958 | 207,528.000 | 172,738.000 | 26,900,600.000 | 0.03 | 883,112.75 |
| 1959 | $154,390.000$ | 203,446.000 | 26,851,544.000 | 0.03 | $881,175.53$ |
| 1960 | 227,386.000 | 308,932.000 | 26,769,998.000 | 0.03 | 881,481.38 |
| 1961 | 232,304.000 | 235,128.000 | $26,767,174.000$ | 0.03 | 887.332.87 |
| 1962 | 411,990.000 | 194,237.000 | 26,984,927.000 | 0.03 | $900,199.91$ |
| 1963 | 254,906.000 | 101,364.000 | 27,138,469.000 | 0.03 | $910,546.31$ |
| 1964 | 487,068.000 | 1,187,170.000 | 26,438,367.000 | 0.03 | 879,240.87 |
| 1965 | $377,740.000$ | 1,567,762.000 | $25,248,345.000$ | 0.03 | 844,040.68 |
| 1966 | 149,798.000 | 199,262.000 | $25,198,881.000$ | 0.03 | 842,719.03 |
| 1967 | 148,161.000 | 196,734.000 | 25,150,308.000 | 0.03 | 840,473.94 |
| 1968 | 244,448.000 | 1,187,472.000 | 24,207,284.000 | 0.03 | 808,532.88 |
| 1969 | 449,525.000 | 1,180,347.000 | 23,476,462.000 | 0.03 | 792,642.59 |
| 1970 | 172,290.000 | 527.092 .000 | 23,121,660.000 | 0.03 | 781,802.43 |
| 3971 | 34,866.000 | 145,670.000 | 23,010,856.000 | 0.03 | 779,807.06 |
| 1972 | 55,901.000 | $735,872.000$ | 22,330,825.000 | 0.03 | 760,023.23 |
| 1973 | 226,014.000 | $589,924.000$ | 21,966,975.000 | 0.03 | 730,204.86 |
| 1974 | 67,557,000 | 2,044,316.000 | 19,990,216.000 | 0.03 | 677,372.95 |
| 1975 | 0.000 | 19,826.000 | 19,970,390.000 | 0.03 | 674,662.71. |
| 1976 | 0.000 | 0.000 | 19,970,390.000 | 0.03 | 669,763.67 |
| 1977 | 19,531.000 | 360,678.000 | 19,629,243.000 | 0.03 | 659,532.18 |
| 1978 | 3,114.000 | 558,194.000 | 19,074,163.000 | 0.03 | $638,316.74$ |
| 1979 | 312.056.000 | 397,982.000 | 18,988,237.000 | 0.03 | 640,032.66 |


|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1949 \\ 2006 \\ 58 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1980 | 26,022.000 | 1,285,488.000 | 17,728,771.000 | 0.03 | 609,152.14 |
| 1.981 | 14,216.000 | 210,248,000 | 17,532,739,000 | 0.03 | 602,741.48 |
| 1982 | 1,488.000 | 219,238.000 | 17,314,989.000 | 0.03 | 595,265.88 |
| 1983 | 1,389,220.000 | 247,632.000 | 18, $556,577.000$ | 0.04 | 658,376.48 |
| 1984 | 19,582.000 | 1,150,764.000 | 17,325,395.000 | 0.04 | $621,893.22$ |
| 1985 | 4,832.000 | 1,375,993.000 | 15,954,234.000 | 0.04 | 570,076.75 |
| 1986 | 15,788.000 | 239,404.000 | 15,730,618.000 | 0.04 | 567.252 .92 |
| 1987 | 6,036.000 | 272,175.000 | 15,464,478.000 | 0.04 | $556,606.26$ |
| 1988 | 8,650.000 | 663,048.000 | 14,810,080.000 | 0.04 | $532,345.32$ |
| 1989 | 6,555.000 | 266,431.000 | 14,550,204.000 | 0.04 | $596,451.85$ |
| 1990 | $2,480.000$ | 234,594.000 | 14,318,090.000 | 0.02 | 345,712.35 |
| 1991 | 4,336.000 | 720,065.000 | 13,602,361.000 | 0.02 | 310,842.09 |
| 1992 | 1,847.000 | 675,053.000 | 12,929,155.000 | 0.02 | 274,205.02 |
| 1993 | 260.000 | $521,336.000$ | 12,408,079.000 | 0.02 | 248,677.60 |
| 1994 | 124.000 | $388,501.000$ | 12,019,702.000 | 0.02 | 229,292.96 |
| 1995 | 1,284.000 | 333,863.000 | $11,687,123.000$ | 0.02 | 212,794.18 |
| 1996 | 114.000 | 144,221.000 | 11,543,016.000 | 0.02 | 205,149.99 |
| 1997 | 174.000 | 315,257.000 | 11,227,933.000 | 0.02 | 190,274.37 |
| 1998 | 0.000 | 416,763.000 | 10,811,170.000 | 0.02 | 170,343.52 |
| 1999 | 335,720.000 | 440,922.000 | 10,705,968.000 | 0.02 | 188,038.58 |
| 2000 | 11.000 | 190,726.000 | $10,515,253.000$ | 0.02 | 178,753.08 |
| 2001 | 0.000 | 226,283.000 | 10,288,970.000 | 0.02 | 167,860.49 |
| 2002 | 204.000 | 128,498.000 | 10,160,676.000 | 0.06 | 161,965.99 |
| 2003 | 140.000 | 75,747.000 | 10,084,069.000 | 0.06 | 158,266.90 |
| 2004 | 0.000 | 119,175.000 | 9,964,894.000 | 0.06 | 152,698.24 |
| 2005 | 648.000 | 106,627.000 | 9,858,915.000 | 0.06 | 148,189.71 |
| 2006 | 0.000 | 57,963.000 | 9,800,952.000 | 0.06 | 145,453.44 |

Page


| Account Data -- | KY36502 | ACSR |
| ---: | :--- | ---: |
|  |   <br>  The First Year of Data is <br> The Last Year of Data is 1.952 <br>  Total Observations are | 2006 |
|  | 55 |  |


| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollat Balance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1983 | 363,081.000 | 101,729.000 | 17,329,898.000 | 0.62 | 3,192,096.32 |
| 1984 | 1,099,125.000 | 370,472.000 | 18,058,551.000 | 0.46 | 3,624,553.74 |
| 1985 | 905.417.000 | 104,012.000 | 18,859,956.000 | 0.44 | 3,999,945.28 |
| 1986 | 293,993.000 | 44;342:000 | 19,109,607:000 | 0.43 | $4,115,910.77$ |
| 1987 | 344,240.000 | 107,257.000 | 19,346,590.000 | 0.45 | 4,243,212.19 |
| 1988 | $513,218.000$ | 107,969.000 | 19,751,839.000 | 0.47 | 4,465,559.28 |
| 1989 | 433,704.000 | 104,567.000 | 20,080,976.000 | 1.07 | 4,905,832.21 |
| 1990 | 391,561.000 | 135:524:000 | 20,337,013:000 | 0.62 | $5,116,629: 68$ |
| 1991 | 798,408.000 | 148,114.000 | 20,387,307.000 | 0.56 | 5,529,116.79 |
| 1992 | 758,075.000 | 187,463.000 | 21,557,919.000 | 0.56 | 5,907, 632.40 |
| 1993 | 683,347.000 | 166,487.000 | 22,074,779.000 | 0.66 | 5,311,934,84 |
| 1994 | 593,898.000 | 143;039.000 | 22,525,638,000 | 0.85 | 6;776;042,85 |
| 1995 | 626,004.000 | 174,494,000 | 22,377,148.000 | 0.80 | 7,222,111.53 |
| 1996 | 395,201.000 | 100,976.000 | 23,271,373.000 | 0.92 | 7,552,779.35 |
| 1997 | 653.112 .000 | 136,495.000 | 23,787,990.000 | 0.76 | $8,003,078.53$ |
| 1998 | 738, 416.000 | 123,600:000 | $24 ; 402 ; 806: 000$ | 0.73 | 8; 498; 299:60 |
| 1.999 | 749,541.000 | 127,340.000 | 25,025,007.000 | 0.70 | 8,982,221.39 |
| 2000 | 683,334.000 | 152,360.000 | 25,545,981.000 | 0.66 | 9,377,479.72 |
| 2001 | 492,671.000 | 117.135 .000 | $25,921,517.000$ | 0.62 | 9,641,553.80 |
| 2002 | $343,451.000$ | 117,729:000 | 26,147;239.000 | 0. 38 | 9,900,434:38 |
| 2003 | 273,532.000 | 74,960.000 | 26,345,811.000 | 0.39 | 10,143, 964.37 |
| 2004 | 364,330.000 | 111,508.000 | 26,598,633.000 | 0.39 | 10,359,066.66 |
| 2005 | 355,198.000 | $117,961.000$ | 26,835,870.000 | 0.40 | 10,586,775.64 |
| 2006 | 375,230:000 | 131;459:000 | 27;079;641:000 | 0.41 | 11,064,496.48 |

Account Data -- KY36503 GroundsOH -- Unit Basis

|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1949 \\ 2006 \\ 58 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollax Balance |
| 1949 | 5,703.000 | 27.000 | 5,676.000 | 2.95 | 16,745.49 |
| 1950 | 1,047.000 | 32.000 | 6,691.000 | 3.04 | 20,332.23 |
| 1951 | 435.000 | 58.000 | 7,068.000 | 3.06 | 21,607.92 |
| 1952 | 3,270.000 | 0.000 | 10,338,000 | 3.36 | 34,707.67 |
| 1953 | 754.000 | 31.000 | 11,061.000 | 3.43 | 37,911.43 |
| 1954 | 2,877.000 | 148.000 | 13,790.000 | 3.98 | 54,861.51 |
| 1955 | 1,169.000 | 145.000 | 14,814.000 | 4.15 | 61,490.44 |
| 1956 | 869.000 | 110.000 | 15,573.000 | 4.20 | 65,481.41 |
| 1957 | 699.000 | 76.000 | 16,196.000 | 4.27 | 69,076.39 |
| 1958 | 411.000 | 80.000 | 16,527.000 | 4.32 | 71,478.90 |
| 1959 | 462.000 | 112.000 | 16,877.000 | 4.40 | 74,276.30 |
| 1960 | 514.000 | 142.000 | 17,249.000 | 4.47 | 77,040.09 |
| 1961 | 410.000 | 74.000 | 17,585.000 | 4.55 | 80,019.31 |
| 1962 | 563.000 | 92.000 | 18,056.000 | 4.64 | 83,829.86 |
| 1963 | 1,071.000 | 87.000 | 19,040.000 | 4.73 | 90,009.29 |
| 1964 | 1,302.000 | 506.000 | 19,836.000 | 4.93 | 97,692.86 |
| 1965 | 1,775.000 | 1,058.000 | 20,553.000 | 5.37 | 110,284.26 |
| 1966 | 631.000 | 135.000 | 21,049.000 | 5.47 | 115,087.99 |
| 1967 | 698.000 | 218.000 | 21,529.000 | 5.65 | 121,546.98 |
| 1968 | 1.572 .000 | 619.000 | 22,482.000 | 6.04 | 135,822.21 |
| 1969 | 1,672.000 | 695.000 | 23,459.000 | 6.44 | 150,963.39 |
| 1970 | 1,221.000 | 326.000 | 24,354.000 | 6.68 | 162,647.05 |
| 1971 | 1,106.000 | 229.000 | 25,231.000 | 7.11 | 179,276.02 |
| 1972 | 1,366.000 | 1,367.000 | $25,230.000$ | 7.97 | 201,127.50 |
| 1973 | 1,407.000 | 532.000 | 26,105.000 | 8.48 | 221,498.96 |
| 1974 | 1,563.000 | 497.000 | 27,171.000 | 9.37 | 254,501.84 |
| 1975 | 1,563.000 | 497.000 | 28,237.000 | 10.20 | 287,955.72 |
| 1976 | 1,564.000 | 497.000 | 29,304.000 | 10.95 | 320,967.58 |
| 1977 | 1,126.000 | 319.000 | 30,111.000 | 11.52 | 347,020.41 |
| 1978 | 1,508.000 | 506.000 | 31,113.000 | 12.37 | 384,936.97 |
| 1979 | 1,486.000 | 725.000 | 31,874.000 | 13.77 | 439,028.78 |

Page

|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1949 \\ 2006 \\ 58 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1980 | 1,733.000 | 860.000 | 32,747.000 | 14.82 | 485,359.04 |
| 1981 | 904.000 | 425.000 | 33,226.000 | 15.74 | 522,907.71 |
| 1982 | 727.000 | 420.000 | 33,533.000 | 16.49 | 553,053.61 |
| 1983 | 803.000 | 355.000 | 33,981.000 | 17.37 | 590,397.79 |
| 1984 | 1,557.000 | 871.000 | 34,667.000 | 18.60 | 644,693.83 |
| 1985 | 1,573.000 | 850.000 | 35,390.000 | 19.63 | 694,568.67 |
| 1986 | 1,055.000 | 431.000 | 36,014.000 | 20.58 | 741,186.11 |
| 1987 | 1,277.000 | 770.000 | 36,521.000 | 21.53 | 786,374.50 |
| 1988 | 1,201.000 | 635.000 | 37,087.000 | 22.94 | 850,637.79 |
| 1989 | 899.000 | 426.000 | 37,560.000 | 23.37 | 877,727.44 |
| 1990 | 1,002.000 | 607.000 | 37,955.000 | 23.82 | 903,908.96 |
| 1991 | 1,746.000 | 1,362.000 | 38,339.000 | 24.52 | 939,950.72 |
| 1992 | 1,720.000 | 1,386.000 | 38,673.000 | 25.09 | 970,370.89 |
| 1993 | 1,563.000 | 1,042.000 | 39,194.000 | 25.83 | 1,012,456.99 |
| 1994 | 1,713.000 | 1,035.000 | 39,872.000 | 26.86 | 1,070,776.31. |
| 1995 | 2.072 .000 | 1,369.000 | 40,575.000 | 27.74 | $1,125,370.92$ |
| 1996 | 1,509.000 | 811.000 | 41,273.000 | 28.54 | 1,177,787.21 |
| 1997 | 1,570.000 | 824.000 | 42,019.000 | 29.26 | 1,229,315.45 |
| 1998 | 1,553.000 | 1,100.000 | 42,472.000 | 30.46 | 1,293,668.10 |
| 1999 | 1,612.000 | 997.000 | 43,087.000 | 31.01 | 1,336,268.84 |
| 2000 | 1,428.000 | 657.000 | 43,858.000 | 31.32 | 1,373,818.29 |
| 2001 | 1,256.000 | 810.000 | 44,304.000 | 31.89 | 1,412,772.16 |
| 2002 | 1,035.000 | 557.000 | 44,782.000 | 32.45 | 1,453,504.42 |
| 2003 | 1,050.000 | 506.000 | 45,326.000 | 33.08 | 1,499,926.84 |
| 2004 | 1,345.000 | 545.000 | 46,126.000 | 33.77 | 1,558,254.65 |
| 2005 | 1,504.000 | 682.000 | 46,948. 000 | 34.75 | 1,631,673.17 |
| 2006 | 1,146.000 | 879.000 | 47,615.000 | 36.07 | $1,717,982.11$ |



|  | Additions | rst Year of Da st Year of Da Observations a |  | $\begin{array}{r} 1949 \\ 2006 \\ 58 \end{array}$ | Dollar Balance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  | Retirements | Unit Balance | Unit Cost |  |
| 1980 | 1.120 .000 | 618.000 | 20,878.000 | 30.89 | 644,850.27 |
| 1981 | 643.000 | 289.000 | 21,232.000 | 33.66 | 714,597.12 |
| 1982 | 397.000 | 181.000 | 21,448.000 | 35.52 | 761,872.25 |
| 1983 | 406.000 | 212.000 | 21,642.000 | 37.48 | 811,076.50 |
| 1984 | 739.000 | 526.000 | 21,855.000 | 40.38 | $882,618.08$ |
| 1985 | 884.000 | 643.000 | 22,096.000 | 42.37 | 936,227.36 |
| 1986 | 914.000 | 820.000 | 22,590.000 | 44.93 | 1,015,028.10 |
| 1987 | 1,051.000 | 504.000 | 23,137.000 | 48.08 | $1,112,563.26$ |
| 1988 | 2,950.000 | 553.000 | 25,534.000 | 47.33 | 1,208,692.85 |
| 1989 | 770.000 | 884.000 | $25,420.000$ | 47.72 | 1,213,246.43 |
| 1990 | 1,010.000 | 386.000 | 26,044.000 | 47.55 | $1,238,526.55$ |
| 1991 | 1,433.000 | 1,063.000 | 26,414.000 | 47.93 | 1,266,077.53 |
| 1992 | 2,156.000 | 862.000 | 27,708.000 | 47.94 | 1,328,506,12 |
| 1993 | 3,944.000 | 3,223.000 | 28,429.000 | 48.45 | 1,377,588.18 |
| 1994 | 1,779.000 | 1,298.000 | 28,910.000 | 49.47 | 1,430,393.60 |
| 1995 | 2,714.000 | 1,778.000 | 29,846.000 | 50.03 | 1,493,434.18 |
| 1996 | 1,660.000 | 797.000 | 30,709.000 | 50.11 | 1,538,987.87 |
| 1997 | 1,662.000 | 1,812.000 | 30,559.000 | 51.41 | $1,571,057.07$ |
| 1998 | 1,383.000 | 670.000 | 31,272.000 | 51.77 | $1,618,931.67$ |
| 1999 | 1,249.000 | 687.000 | 31,834.000 | 51.82 | 1,649,601.33 |
| 2000 | 1,245.000 | 452.000 | 32,627.000 | 52.73 | $1,720,553.41$ |
| 2001 | 1,262.000 | 677.000 | 33,212.000 | 56.36 | 1,871,848.42 |
| 2002 | 1,014.000 | 584.000 | $33,642.000$ | 59.80 | 2,011,853.10 |
| 2003 | 969.000 | 600.000 | 34,011.000 | 49.78 | $1,693,033.65$ |
| 2004 | 1,109.000 | 551.000 | 34,569.000 | 53.63 | 1,854,007,10 |
| 2005 | 1,025.000 | 564.000 | 35,030.000 | 54.04 | 1,893,031.48 |
| 2006 | 997.000 | 486.000 | 35,541.000 | 54.25 | 1,928,239.42 |

Page
Account_Data --

| KY36505 | Switches |  |
| ---: | :--- | ---: |
|  | The First Year of Data is | 1962 |
| The Last Year of Data is | 2006 |  |
| Total Observations are | 45 |  |


| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1962 | 615.000 | 0.000 | 615.000 | 1.00 | 615.00 |
| 1963 | 984.000 | 0.000 | 1,599.000 | 1.00 | 1,599.00 |
| 1964 | 89,180.880 | 0.000 | 90,779.880 | 1.00 | 90,779.88 |
| 1965 | 13,401.790 | 0.000 | 104,181.670 | 1.00 | 104,181.67 |
| 1966 | 15,353.180 | 0.000 | 119,534.850 | 1.00 | 119,534.85 |
| 1967 | 15,090.020 | 0.000 | 134,624.870 | 1.00 | 134,624.87 |
| 1968 | 10,765.170 | 4,223.200 | 141,166.840 | 1.00 | 141,166.84 |
| 1969 | 1,034.130 | 0.000 | 142,200.970 | 1.00 | 142,200.97 |
| 1970 | 17,039.330 | 0.000 | 159,240.300 | 1.00 | 159,240.30 |
| 1971 | 13,706.500 | 6,276.900 | 166,669.900 | 1.00 | 166,669.90 |
| 1972 | 8,528,380 | 0.000 | 175,198.280 | 1.00 | 175,198.28 |
| 1973 | 955.310 | 0.000 | 176,153.590 | 1.00 | 176,153.59 |
| 1974 | 7,233.380 | 0.000 | 183,386.970 | 1.00 | 183,386.97 |
| 1975 | 23,876.650 | 0.000 | 207,263.620 | 1.00 | 207,263.62 |
| 1976 | 49,841.830 | 0.000 | 257,105.450 | 1.00 | 257,105.45 |
| 1977 | 7,353.710 | 0.000 | 264,459.160 | 1.00 | 264,459.16 |
| 1978 | 38,642.910 | 0.000 | 303,102.070 | 1.00 | 303,102.07 |
| 1979 | 51,430.960 | 429.270 | 354,103.760 | 1.00 | 354,103.76 |
| 1980 | 13,198.200 | 658.260 | 366,643.700 | 1.00 | 366,643.70 |
| 1981 | 67,302.740 | 0.000 | 433,946.440 | 1.00 | 433,946.64 |
| 1982 | 57,520.270 | 52.620 | 491,414.090 | 1.00 | 491,414.29 |
| 1983 | 62,261,610 | 4,384.070 | 549,291.630 | 1.00 | 549,291.63 |
| 1984 | 48,088.640 | 8,090.420 | 589,289.850 | 1.00 | 589,289.85 |
| 1985 | 63,564.980 | 0.000 | 652,854.830 | 1.00 | 652,854.83 |
| 1986 | 39,324.070 | 451.600 | 691,727.300 | 1.00 | 691,727.30 |
| 1987 | 12,880.800 | 130.910 | 704,477.190 | 1.00 | 704,477.19 |
| 1988 | 32,211.410 | 2,949.680 | 733,738.920 | 1.00 | 733,738.92 |
| 1989 | 38,913.440 | 47,890.590 | 724,761.770 | 1.00 | 724,761.77 |
| 1990 | 92,610.120 | 7,093.210 | 810,278.680 | 1.00 | 810,278.68 |
| 1991 | 33,698.380 | $7,120.720$ | 836,856.340 | 1.00 | 836,856.34 |
| 1992 | 34,693.790 | 14,309.900 | 857,240.230 | 1.00 | 857,240.23 |




Page $\quad 1$

Exhibit 16 Page 11 of 24 Witness: Thomas E. Kandel

|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1971 \\ 2006 \\ 36 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 2002 | 46,114.000 | 48.000 | 535,381.000 | 6.75 | 3,232,215.80 |
| 2003 | 32,893.000 | 0.000 | 568,274.000 | 6.46 | 3,306,036.88 |
| 2004 | 46,420.000 | 150.000 | 514,544.000 | 6.10 | 3,405,771.43 |
| 2005 | 43,231.000 | 415.000 | 657,360.000 | 5.92 | 3,555,007.19 |
| 2006 | 75,286.000 | 352.000 | 732,294.000 | 5.69 | 3,848,148.05 |



Page

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Account Data -- KY36701 URD Cable -- Unit Basis
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|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1968 \\ 2006 \\ 39 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1968 | 5,400.000 | 0.000 | 5,400.000 | 0.70 | 3,771.04 |
| 1969 | 0.000 | 0.000 | 5,400.000 | 0.99 | 5,370.66 |
| 1970 | 0.000 | 0.000 | 5,400.000 | 0.99 | 5,370.66 |
| 1971 | 13,918.000 | 0.000 | 19,318.000 | 0.67 | 12,962.17 |
| 1972 | 2,329.000 | 0.000 | 21,647.000 | 0.38 | 8,304.77 |
| 1.973 | 5,882.000 | 0.000 | 27,529.000 | 1.63 | 44,837.22 |
| 1974 | 0.000 | 0.000 | 27,529.000 | 2.78 | 76,644.15 |
| 1975 | 0.000 | 220.000 | 27,309.000 | 2.80 | 76,353.74 |
| 1976 | 51,590.000 | 0.000 | 78,899.000 | 0.53 | 41,908.04 |
| 1977 | 3,469.000 | 0.000 | 82,368,000 | 0.56 | 46,204.98 |
| 1978 | 18,039.000 | 0.000 | 100,407.000 | 0.73 | 72,903.01 |
| 1979 | 29,447.000 | 268.000 | 129,586.000 | 0.83 | 107,400.78 |
| 1980 | 24.001.000 | 0.000 | 153,587.000 | 0.87 | 133,997.27 |
| 1981 | 1,965.000 | 0.000 | 155,552.000 | 0.83 | 128,584.00 |
| 1982 | 20,291.000 | 195.000 | 175,648.000 | 0.82 | 143,522.33 |
| 1983 | 38,296.000 | 537.000 | 213,407.000 | 1.11 | 236,418.79 |
| 1984 | 9.762 .000 | 0.000 | 223.169.000 | 1.13 | 251,322.15 |
| 1985 | 10,444.000 | 0.000 | 233,613.000 | 1.08 | 252,791.15 |
| 1986 | 15,812.000 | 5,870.000 | 243,555.000 | 1.09 | 265,575.62 |
| 1987 | 91,003.000 | 100.000 | 334,458.000 | 1.06 | 355,981.36 |
| 1988 | 60,457.000 | 0.000 | 394,915.000 | 1.10 | 436,177.88 |
| 1989 | $32,877.000$ | 366.000 | 427.426.000 | 1.28 | 548,211.22 |
| 1990 | 69,857.000 | 1,824.000 | 495,459.000 | 1.44 | 712,440.57 |
| 1991 | 56,232.000 | 403.000 | 551,288.000 | 1.47 | 812,977.17 |
| 1992 | 103,997.000 | 827.000 | 654,458.000 | 1.56 | 1,022,404.80 |
| 1993 | 101,804.000 | 600.000 | 755,662.000 | 1.70 | $1,285,591.47$ |
| 1994 | 219,292.000 | 6,746.000 | 968,208.000 | 2.07 | 2,006,829.73 |
| 1995 | 117,580.000 | 1,916.000 | 1,083,872.000 | 2.11 | 2,290,084.25 |
| 1996 | 146,889.000 | 7,599.000 | 1,223,162.000 | 2.20 | 2,696,064.32 |
| 1997 | 128,771.000 | 4,198.000 | 1,347,735.000 | 2.28 | 3,069,161.64 |
| 1998 | 115,351.000 | 10,727.000 | 1,452,359.000 | 2.29 | 3,325,809.94 |






Page

|  | The First Year of Data is The Iast Year of Data is Total Observations are |  |  | $\begin{array}{r} 1971 \\ 2006 \\ 36 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Yeax | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1971 | 9.000 | 0.000 | 9.000 | 28.23 | 254.06 |
| 1972 | 48.000 | 0.000 | 57.000 | 20.93 | 1,192.73 |
| 1973 | 14.000 | 0.000 | 71.000 | 19.83 | 1,407.97 |
| 1974 | 30.000 | 0.000 | 101.000 | 20.27 | 2,047.19 |
| 1975 | 1.000 | 0.000 | 102.000 | 20.60 | 2,100.96 |
| 1976 | 34.000 | 0.000 | 136.000 | 19.98 | 2,717.89 |
| 1977 | 2.000 | 0.000 | 138.000 | 19.26 | 2,658.56 |
| 1978 | 12.000 | 0.000 | 150.000 | 21.61 | 3,240.94 |
| 1979 | 6.000 | 1.000 | 155.000 | 22.75 | 3,525.93 |
| 1980 | 5.000 | 0.000 | 160.000 | 25.00 | 3,999.47 |
| 1981 | 0.000 | 0.000 | 160.000 | 25.00 | 3,999.47 |
| 1982 | 1.000 | 0.000 | 161.000 | 25.91 | 4,171.41 |
| 1983 | 27.000 | 0.000 | 188.000 | 25.58 | 4,808.40 |
| 1984 | 17.000 | 0.000 | 205.000 | 38.28 | 7,848.22 |
| 1985 | 4.000 | 0.000 | 209.000 | 41.90 | 8,756.34 |
| 1986 | 11.000 | 1.000 | 219.000 | 47.63 | 10,431.57 |
| 1987 | 34.000 | 0.000 | 253.000 | 64.92 | 16,424.60 |
| 1988 | 74.000 | 0.000 | 327.000 | 91.23 | 29,833.49 |
| 1989 | 20.000 | 0.000 | 347.000 | 95.12 | 33,005.31 |
| 1990 | 33.000 | 2.000 | 378.000 | 99.61 | 37,652.10 |
| 1991 | 12.000 | 4.000 | 386.000 | 101.97 | 39,360.32 |
| 1992 | 94.000 | 4.000 | 476.000 | 122.10 | 58,119.62 |
| 1993 | 104.000 | 4.000 | 576.000 | 143.26 | 82,520.24 |
| 1994 | 612.000 | 21.000 | 1,167.000 | 175.61 | 204,941.79 |
| 1995 | 308.000 | 31.000 | 1,444.000 | 191.48 | 276,496.15 |
| 1996 | 488.000 | 13.000 | 1,919.000 | 204.97 | 393,329.75 |
| 1997 | 288.000 | 18.000 | 2,189.000 | 214. 22 | 468,934.99 |
| 1998 | 403.000 | 18.000 | 2,574.000 | 218.48 | 562,378.69 |
| 1999 | 275.000 | 54.000 | 2,795.000 | 215.46 | 602,201.82 |
| 2000 | 232.000 | 18.000 | 3,009.000 | 214.03 | 644,006.68 |
| 2001 | 157.000 | 12.000 | 3,154.000 | 216.80 | 683,773.42 |

Page

| Accou | ta -- KY36704 |  | Arrestors and $P$ |  | Unit Basis |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | The The Tot | rst Year of $D$ st Year of D Observations |  | $\begin{array}{r} 1971 \\ 2006 \\ 36 \end{array}$ |  |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 2002 | 284.000 | 51.000 | 3,387.000 | 217.32 | 736,064.57 |
| 2003 | 301.000 | 31.000 | 3,657.000 | 228.12 | 834,220.52 |
| 2004 | 427.000 | 33.000 | 4,051.000 | 213.42 | 864,575.42 |
| 2005 | 248.000 | 71.000 | 4,228.000 | 219.09 | 926,300.87 |
| 2006 | 272.000 | 24.000 | 4,476.000 | 225.95 | 1,011,367.36 |


|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1949 \\ 2006 \\ 58 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1949 | 1,288,242.000 | 51,874.000 | 1,236,368.000 | 0.03 | $37,761.19$ |
| 1950 | $467,367.000$ | 25,374.000 | 1,678,361.000 | 0.03 | 54,579.99 |
| 1951 | 131,552.000 | 29,903.000 | 1,780,010.000 | 0.03 | 59.315.91 |
| 1952 | 622,919.000 | 0.000 | 2,402,929.000 | 0.04 | 93,418.60 |
| 1953 | 389,579.000 | 1.61,839.000 | 2,630,669.000 | 0.04 | 109.575.96 |
| 1954 | 1,050,148.000 | 106,056.000 | 3,574,761.000 | 0.05 | 175,816.97 |
| 1955 | 215,966.000 | $72,689.000$ | 3,718,038.000 | 0.05 | 186,446.33 |
| 1956 | 159,039.000 | 134,185.000 | 3,742,892.000 | 0.05 | 191,284.45 |
| 1957 | 73,885.000 | 47,372.000 | 3,769,405.000 | 0.05 | 195,643.33 |
| 1958 | $87,205.000$ | 65,594.000 | 3,791,016.000 | 0.05 | 200,525.93 |
| 1959 | 90,606.000 | 62,937.000 | $3,818,685.000$ | 0.05 | 205,060.16 |
| 1960 | 105,150.000 | $62,336.000$ | 3,861,499.000 | 0.05 | 210,608.25 |
| 1961 | 84,121.000 | 67,204.000 | $3,878,416.000$ | 0.06 | 215,195.10 |
| 1962 | 192,932.000 | 99,287.000 | 3,972,061.000 | 0.06 | 230,054.10 |
| 1963 | 129.962.000 | 57,629.000 | 4,044,394.000 | 0.06 | 238,262.99 |
| 1964 | 71,560.000 | 71,984.000 | 4,043,970.000 | 0.06 | 246,828.89 |
| 1965 | 145,040.000 | 105,034.000 | 4,083,976.000 | 0.06 | 257,306.66 |
| 1966 | 87,590.000 | 82,255.000 | 4,089,311.000 | 0.07 | 269,343.71 |
| 1967 | 121,233.000 | $88,673.000$ | $4,121,871.000$ | 0.07 | 282,580.00 |
| 1968 | 137,831.000 | 115,534.000 | 4,144,168.000 | 0.07 | 298,506.18 |
| 1969 | 136,593.000 | 124,244.000 | $4,156,517.000$ | 0.08 | 312,927.83 |
| 1970 | 138,994.000 | 100,756.000 | 4,194,755.000 | 0.08 | 328,141.42 |
| 1971 | 126,153.000 | 85,745.000 | 4,235,163.000 | 0.08 | 348,935.43 |
| 1972 | 147,081.000 | 109,054.000 | $4,273,190.000$ | 0.09 | 386,117.48 |
| 1973 | 143,930.000 | 123,058.000 | $4,294,062.000$ | 0.10 | 423,266.26 |
| 1974 | 128,591.000 | 141,433.000 | 4,281,220.000 | 0.11 | 473,023.26 |
| 1975 | 128,591.000 | 141,433.000 | 4,268,378.000 | 0.12 | 522,780.26 |
| 1976 | 128,591.000 | $141,434.000$ | $4,255,535.000$ | 0.13 | $572,538.11$ |
| 1977 | $130,918.000$ | 103,450.000 | A,283,003.000 | 0.15 | 627,260.51 |
| 1978 | -2,546.000 | 127,006.000 | 4,153,451.000 | 0.17 | 696,717.31 |
| - 1979 | 132,105.000 | 131,918.000 | 4,153,638.000 | 0.18 | 747,994.20 |

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|  | The First Year of Data is The Last Year of Data is Total Observations are |  |  | $\begin{array}{r} 1967 \\ 2006 \\ 40 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Additions | Retirements | Unit Balance | Unit Cost | Dollar Balance |
| 1967 | 364.000 | 0.000 | 364.000 | 0.43 | 201.83 |
| 1968 | 1,720.000 | 0.000 | 2,084.000 | 0.54 | 1,188.74 |
| 1969 | 2,305.000 | 0.000 | 4,389.000 | 0.61 | 2,727.20 |
| 1970 | 13,133.000 | 55.000 | 17.467.000 | 0.52 | 9,198.42 |
| 1971 | 8,749.000 | 122.000 | 26,094.000 | 0.53 | 13,997.36 |
| 1972 | 13,046.000 | 405.000 | 38,735.000 | 0.59 | 22,857.88 |
| 1973 | 6,205.000 | 0.000 | 44,940.000 | 0.61 | 27,445.79 |
| 1974 | 22,577.000 | 105.000 | 67,412.000 | 0.53 | 35,681.84 |
| 1975 | 22,577.000 | 100.000 | 89,889.000 | 0.49 | 43,917.89 |
| 1976 | 22,577.000 | 100.000 | 112,366.000 | 0.46 | 52,153.94 |
| 1977 | 41,502.000 | 12,029.000 | 141,839.000 | 0.40 | 57,121.92 |
| 1978 | 61,638.000 | 130.000 | 203,347,000 | 0.52 | 106,702.37 |
| 1979 | 38,308.000 | 673.000 | 240,982.000 | 0.54 | 131,249.88 |
| 1980 | 24,479.000 | 872.000 | 264,589.000 | 0.56 | 147,424.41 |
| 1981 | 17,840.000 | 787.000 | 281,642.000 | 0.57 | 161,908.22 |
| 1982 | 12,457.000 | 845.000 | 293,254.000 | 0.59 | 173,162.77 |
| 1983 | 19,267.000 | 1,333.000 | 311,188.000 | 0.60 | 186,648.10 |
| 1984 | 20,704.000 | 656.000 | 331,236.000 | 0.65 | 214,579.49 |
| 1985 | 22,617.000 | 328.000 | 353,525.000 | 0.67 | 236,881.61 |
| 1986 | 45,189.000 | 284.000 | 398,430.000 | 0.70 | 279,380.23 |
| 1987 | 42,846.000 | 341.000 | 440,935,000 | 0.76 | 333,540.42 |
| 1988 | 35,144.000 | 210.000 | 475,869.000 | 0.80 | 378,763.03 |
| 1989 | 31,483.000 | 604.000 | 506,748.000 | 0.99 | 501,121.80 |
| 1990 | 36,410.000 | 316.000 | 542,842.000 | 1.12 | 608,832.21 |
| 1991 | 37,293.000 | 404.000 | 579,731.000 | 1.23 | 714,031.39 |
| 1992 | 48,673.000 | 525.000 | $627,879.000$ | 1.37 | 862,796.23 |
| 1993 | 47,467.000 | 712.000 | 674,634.000 | 1.54 | 1,036,271.74 |
| 1994 | $60,125.000$ | 2,417.000 | 732,342.000 | 1.75 | 1,279,958.81 |
| 1995 | $60,785.000$ | 1,041.000 | 792,086.000 | 1.88 | 1,487,816.07 |
| 1996 | 70,169.000 | 1,070.000 | 861,185.000 | 2.02 | 1,735,741.15 |
| 1997 | 66,487.000 | 665.000 | 927,007.000 | 2.17 | 2,015,843.88 |

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Figure 3. Right Modal or "R" lowa Type Survivor Curves and Retirement Frequency Curves

Source: Gannett Fleming.


Figure 2. Symmetrical or " $S^{n}$ lowa Type Survivor Curves

Source: Gannett Fleming.


Figure 1. Left Modal or "L" lowa Type Survivor Curves and Retirement Frequency Curves

Source: Plotted by Gannett Fleming Valuation and Rate Consultants, Inc.

The revised edition of Bulletin 125, published in 1967, contains four additional curves that were developed by Couch for his Masters of Science at Iowa State. These curves were termed the $\mathbb{O}$ curves because their modal age is at the origin (see Figure 4). For this curve family, the mode and dispersion are directly related, i.e., the higher the mode, the greater the dispersion.


Figure 4. Origin Modal or " O " lowa Type Survivor Curves and Retirement Frequency Curves

Source: Gannett Fleming.


[^0]:    RUS Form 7

