BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the matter of the investigation of steam service rendered by Kansas City Power & Light Company.	)))	Case No. HO-86-139

AFFIDAVIT OF GARY A. KUENSTING

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Gary A. Kuensting, of lawful age, on his oath states: That he has participated in the preparation of the attached written testimony and attached appendices/schedules in question and answer form, consisting of 14 pages of testimony to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Gary A. Kuensting
Gary A. Kuensting

Subscribed and sworn to before me this 20th day of February, 1987.

Joyce C. Neuner
Notary Public

My Commission expires June 18, 1989

Joyce C. Neuner, Notary Public
Osage County, State of Missouri
My Commission Expires June 18, 1989

PREPARED TESTIMONY

OF

GARY A. KUENSTING

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. HO-86-139

Q. Please state your name and business address.

A. Gary A. Kuensting, University Towers II, 800 East Eighth Street, Kansas City, Missouri 64106.

Q. By whom are you employed?

A. I am a Regulatory Auditor for the Missouri Public Service Commission.

Q. Please describe your educational background.

A. I attended Lincoln University, Jefferson City, Missouri, from which I received a Bachelor of Science degree in Accounting in May, 1982.

Q. What has been the nature of your duties while employed by the Missouri Public Service Commission?

A. I have assisted with audits and examinations of the books and records of public transportation companies in regard to proposed rate increases and compliance to the Uniform System of Accounts, under the direction of the Transportation Manager of Audits. In August, 1984, I transferred from the Transportation Division and under the direction of the Chief Accountant, Utility Division, assisted with the audit and examination of the books and records of public utilities in regard to proposed rate increases.

Q. Have you previously testified before this Commission?

A. Yes, I have filed testimony in transportation rate cases concerning the audits of the books and records of motor carriers. The

following is a listing of these cases: Richard E. Werning, Case No. B-53,447; Motor Carriers Service Traffic Bureau Inc., Case No. T-52,745; and Middlewest Motor Freight Bureau, Case No. T-56-443.

In regard to public utilities, I have filed testimony in Kansas City Power and Light Company (KCPL or Company), Case Nos. ER-85-128 and EO-85-185, concerning the Wolf Creek Nuclear Generating Station, and KPL Gas Service Company, Case No. GR-86-76.

Q. Have you made an investigation of the books and records of Kansas City Power & Light Company in regard to Case No. HO-86-139?

A. Yes, with the assistance of other members of the Commission Staff.

Q. What are your areas of responsibility in Case No. HO-86-139?

A. I determined the appppropriate level of fuel inventories which should be included in KCPL's steam rate base, determined the annualized level of fuel expense, and quantified the allocation of electric plant and expenses to the steam utility operations.

Q. What Accounting Schedules and Accounting Adjustments are you sponsoring?

A. I am sponsoring Accounting Schedule No. 10, Fuel Inventories, and Accounting Adjustments S-3.2 and S-3.3.

Q. Briefly explain Accounting Adjustment No. S-3.2.

A. Accounting Adjustment No. S-3.2 annualizes the downtown steam customers' fuel expense consistent with Staff's annualized pounds of steam sales using fuel prices as of December 31, 1985. This is the most current fuel price available. The annualized pounds of steam sales were determined by Staff witness Sharon K. White. Also included in the downtown customers' fuel expense adjustment is the annualization of the associated fuel handling costs.

Q. Has Staff witness White provided you with the annualized pounds of steam sales associated with National Starch?

A. Yes. I have annualized the fuel expense associated with National Starch's annualized pounds of steam sales. I provided Staff witness White with the dollar amount associated with National Starch's fuel expense, so that the annualized fuel expense can be netted against the annualized National Starch revenues and Corn Products Corporation (CPC) cancellation fees to arrive at the National Starch contribution margin. This is included in Accounting Adjustment S-2.1, sponsored by Staff witness White.

Q. What fuel mix for the fuel burn has Staff used to arrive at Staff's downtown customers' fuel annualization?

A. Staff used a fuel mix of almost 100% gas with only 451 barrels of oil for testing and training. Staff analyzed historical data and found that the oil burn for a three year period averaged 176 barrels of oil per year. The three year period comprises the test year December, 1986 in which zero barrels were burned, calendar year 1985 in which 451 barrels were burned, and calendar year 1984 in which 78 barrels were burned. The Company states that oil will be used at Grand Avenue for only emergencies, testing and training. In analyzing the oil burn, historical data is helpful but may not reflect the changes that are taking place, i.e. converting to a gas only operation. Staff believes that the calendar year 1985 oil burn of 451 barrels of oil will be representative of the amount of fuel oil burned.

Q. How did Staff develop the level of fuel handling costs included in the downtown customers' annualized fuel expense?

A. Staff has included in its fuel expense annualization only three costs associated with fuel handling for oil and gas.

Q. What is the fuel mix for National Starch's fuel expense provided to Staff witness White in her determination of the National Starch contribution margin?

A. The National Starch fuel mix is 100% gas.

Q. Is the burning of only gas as a fuel source at Grand Avenue different than what has been done in the past?

A. Yes. In the past, the station's primary fuels were coal and gas. Coal was used during peak demand months in which demand exceeded the minimum coal load requirement of 125,000 pounds per hour and gas when demand fell short of this level. Because of the decline in the steam load, it will be more economical in the future to operate Grand Avenue as a gas only operation. A study performed by KCPL dated June 10, 1986, entitled "Grand Avenue Steam, Gas vs. Coal Breakeven Cost Study, 1986-1990", provided in response to Staff Data Information Request No. 367 and attached as Schedule 1, confirms this.

Q. Please explain Accounting Adjustment S-3.3.

A. Accounting Adjustment S-3.3 reverses from the steam books the "Steam Transferred Credit" for both fuel and non-fuel costs incurred in the production of steam transferred from Grand Avenue electric production to the steam heat production. This adjustment will no longer be made to the steam operation because of the retirement of electric operations at Grand Avenue Station on October 31, 1985.

Q. Have circumstances changed concerning the operation of Grand Avenue Station.

A. Yes. In October, 1985, when Grand Avenue was retired from electric generation, steam operation became the sole generating purpose of the [illegible]. The retirement of electric generation at Grand Avenue Station decreased the cost of steam utility operations as a result

of the Company's electric operations no longer being allocated any of Grand Avenue costs. These increased costs are, and will be, charged to a shrinking customer base and decreasing steam heat demand to the point where these increased costs will threaten the economic viability of continuing steam generation. This is because the steam heating costs under KCPL's operation are becoming uncompetitive with alternative heating sources. Any dollar savings that result in changes to Grand Avenue's operations should be reflected in the determination of revenue requirement in this case.

Q. What type of fuel sources does KCPL use to run Grand Avenue?

A. Although Grand Avenue has the capability of using coal, natural gas and oil as fuel sources to generate steam, KCPL made the decision to convert to an all gas operation in June, 1986, with oil used only for emergencies, training and testing. KCPL does not anticipate burning coal as a fuel source.

Company response to Staff Data Information Request No. 466, attached as Schedule 2, stated that "[i]t would be necessary to operate Grand Avenue using coal as a fuel source only if the natural gas supply was interrupted for any reason and the demand at the time exceeded the capacity of one A [sic] boiler operating on oil."

Q. Why has KCPL decided to convert to an all-gas operation at Grand Avenue?

A. KCPL's decision to convert to an all-gas operation at Grand Avenue is economic and an eventual necessity. The study performed by KCPL dated June 10, 1986, entitled, "Grand Avenue Steam, Gas vs. Coal Breakeven Cost Study, 1986-1990", attached as Schedule 3, examined the economic feasibility of converting Grand Avenue Station operations from a coal and natural gas combination to an all-natural gas operation. The study shows

that the expected savings from the conversion of Grand Avenue Station to an all-gas operation range from $3,603,000 to $5,741,000 for the period 1987-1990.

Further, out of necessity, KCPL will have to burn gas more often as the minimum load level at which coal can be burned will be reached less often due to the shrinking steam heat loads. Company response to Staff Data Information Request No. 518, attached as Schedule 3, states that "[u]sing gas or oil as a fuel, the station could be operated safely, though very inefficiently, as low as 1000 lb/hr. Burning coal only, 150,000 lb/hr would be the lowest safe minimum load and 100,000 lb/hr load is needed to burn coal in combination with gas or oil."

Q. Would you please describe Accounting Schedule No. 10?

A. Accounting Schedule No. 10 is the steam heat fuel inventory. It reflects a two day level of oil, priced at average costs. No steam heat coal inventory is reflected because of the Company's conversion to a gas only operation. Also reflected in Schedule 10 are the electric indirect fuel inventory amounts associated with electric operations being allocated to the steam operations. The "Total Company" amounts reflected in Schedule 10, Column E for the indirect fuel inventory are the total Company electric costs from Case Nos. EO-85-185 and EO-85-224.

Q. How was the two day level of fuel oil inventories allowed in the steam utility rate base determined?

A. Staff is proposing to include in its steam utility rate base a two day inventory based upon an average daily fuel burn per million B.T.U. (MMBTU) during the test year ending December, 1986.

Q. Why did Staff not use a thirteen month average for oil inventories?

A. Staff did not use a thirteen month average because Staff believes a historical inventory level would overstate the inventory level needed at Grand Avenue in its reduced operating mode. The reduced operating mode results from Grand Avenue being no longer an electric generating station and the fact that steam demand is continuing to deteriorate. This reduced operating mode necessitates a reduced fuel requirement.

Q. Is there sufficient oil as an alternative fuel source to provide for an emergency situation?

A. Yes. Company response to Staff Data Request No. 654, attached as Schedule 4, indicates that it would take one day, at most, to deliver oil to Grand Avenue once the bid is awarded. Staff's inventory level gives consideration to the level of burn at Grand Avenue and the desire to recognize dollar savings relating to the change in operations at that generating station. Also, Staff believes that it is highly probable that gas supplies over the next several year period will be firm.

Q. When was the last time gas was curtailed at Grand Avenue?

A. In December, 1983 during an extremely cold period. Since this time no curtailments have occurred.

Q. What is the likelihood of a gas curtailment in the future?

A. The prospect of a future curtailment is unlikely. Both gas prices and gas supply are predicted to be relatively firm. The study contained in Schedule 1 confirms this. Further, the Company stated in response to Staff Data Information Request No. 302, attached as Schedule 5, that it perceives "a low likelihood or probability of gas supplies at Grand Avenue being discontinued or curtailed in the near future."

Q. What is the outlook for gas availability at Grand Avenue?

A. Schedule 1 states that "[t]he gas supply over the next several year period is expected to be relatively firm with very few if any expected curtailments."

Q. Why did Staff not include coal inventories at Grand Avenue in the steam utility rate base?

A. Staff did not include coal inventories in the steam utility rate base because the Company decided to convert to an all gas operation at Grand Avenue.

The conclusion of the "Grand Avenue Steam, Gas vs. Coal Breakeven Cost Study", contained in Schedule 1 recommended converting Grand Avenue to an all gas operation. Consequently, KCPL does not intend to use coal in the future at Grand Avenue.

ALLOCATIONS

Q. Please describe the method Staff used in allocating the total electric indirect plant and expenses attributable to the steam service.

A. Schedule 6 contains Staff's allocation analysis of the indirect electric plant and expenses assigned to steam heat operations and the allocation factors used by Staff. The total Company electric jurisdiction plant and expenses determined by the Commission in the recent KCPL Wolf Creek Report and Order Case Nos. EO-85-185 and EO-85-224 were used by Staff for allocation to steam utility operations.

Schedule 6 contains the total Company electric department plant-in-service, accumulated provision for depreciation and amortization, and operating income statement. The "Total Company" amounts appearing in Column C of Schedule 6 were developed by taking the Commission's Report and Order "Adjusted Jurisdictional" (Missouri) amounts, contained in Column A, which reflect jurisdictional adjustments and factoring this

amount up by the "Jurisdictional Factor" contained in Column B as determined by the Commission in Case Nos. EO-85-185 and EO-85-224. Staff applied the steam "Jurisdiction Factors", contained in Column D, to the "Total Company" electric jurisdiction amounts to arrive at the electric indirect plant and expenses, Column E, attributable and/or allocable to steam utility operations.

Q. Why did Staff use the total Company plant and expenses established by the Commission Report and Order in KCPL Case Nos. EO-85-185 and EO-85-224?

A. Staff used this data because the Company's 1985 test year per book numbers did not reflect the Commission's findings in its Report and Order in Case Nos. EO-85-185 and EO-84-224 establishing the Wolf Creek investment and cost disallowances and the KCPL electric jurisdiction ratemaking adjustments. Also, the Report and Order reflects plant and expenses as of September, 1985, which is only a three month difference from the Company's December 31, 1985 test year.

Had Staff not used the Commission's recent Report and Order in Case Nos. EO-85-185 and EO-85-224 establishing the appropriate level of electric plant and expenses, Staff would have had to conduct a total Company audit including the electric operations to reflect the Wolf Creek disallowances and ratemaking adjustments as of December 31, 1985 and updated through December 31, 1986.

Not using the Commission's recent Report and Order or performing a Staff electric jurisdiction audit on a December 31, 1985 test year and updated through December 31, 1986, Staff would have inadvertently allowed the steam jurisdiction to be allocated electric plant and expenses that the Commission disallowed for ratemaking purposes thereby resulting in the

steam customers having to pay for disallowed plant and expenses that the electric ratepayers are not paying for through electric rates.

Q. Why are allocations of electric plant and expenses to the steam jurisdiction necessary?

A. The allocation of electric plant and expenses to the steam jurisdiction is necessary in order to determine the costs that are incurred by KCPL in providing steam service. For those facilities dedicated to and those expenses incurred solely for steam service, no allocation is necessary because a specific, direct assignment of 100% of the costs attributable to the steam jurisdiction can be identified.

The need for allocations arises from the inability to specifically identify plant committed and expenses incurred by KCPL in providing service on a total Company basis or jurisdictional basis which may benefit both the steam and electric operations or only the steam operation.

In those cases where costs cannot be directly assigned to either operation, allocation factors have been developed which measure the cost responsibility of the steam operation on a common basis with the relationship to either plant, revenues or expenses.

Q. How did Staff develop the allocation factors utilized to assign the indirect electric costs to support steam utility operations?

A. The allocation factors Staff used in this proceeding are set forth in Schedule ?. A description of each follows.

Q. What is the basis for the allocation of electric production and transmission plant to the steam operation?

A. For the purposes of this filing only, Staff is using the Company's updated production and transmission allocation factors to determine the indirect electric production and transmission plant and

expenses allocated to the steam utility operation. These allocators were provided by the Company in response to Data Information Request No. 689 and reflect updated information as of December, 1986. Staff is using Company's factors only because the allocation is such a small piece of the revenue requirement and the complex philosophical issue regarding methods of allocations was deemed more appropriate for the Company's next electric rate case. Staff's use of Company's allocators in this case should not be interpreted as a waiver of its right to present different jurisdictional production and transmission plant allocators in future cases.

The allocation of electric production and transmission plant is necessary since Grand Avenue Station's electricity need for auxiliary power is supplied from the electric operation.

Q. What is the basis for not allocating electric distribution plant and associated operation and maintenance expenses?

A. Per conversation with Ron Kite, KCPL Rate Department Supervisor, no allocation is necessary because the transmission of Grand Avenue Station's electrical auxiliary needs are received directly at the station with no use of distribution facilities required.

Q. What is the basis for the allocation of general and intangible plant?

A. Schedule 7, page 2, Factor 3, shows the calculation of the general plant allocation factor. This was developed by dividing the total Company plant-in-service, excluding general plant and intangible plant, contained in Column A, into the steam jurisdictional plant-in-service for both direct and indirect steam plant, excluding steam general plant, contained in Column B. The general plant allocator is also used for the Company's intangible plant.

General and intangible plant serve the total KCPL system and necessitate allocation of a share of plant costs to the steam jurisdiction. These plant investments support both steam and electric utility operations.

Q. How did Staff determine the net plant and gross plant allocators.

A. Schedule 7, page 3, Factors 4 and 5, shows the calculation of the net plant and gross plant allocators. The net plant allocator was calculated by dividing the "Steam Heat (Jurisdiction) Net Plant", contained in Column F, by the "Total Company Net Plant", contained in Column E.

The gross plant allocator was calculated by dividing the "Steam Heat Jurisdiction" gross plant, contained in Column B, by the "Total Company (Gross) Plant", contained in Column A.

Q. What is the basis for the allocation to steam service of the electric production and transmission operation and maintenance (O&M) expenses?

A. The allocation basis for these expenses, except the fuel expense incurred by the Company to serve its own load, is that "expenses follow plant". The production and transmission plant allocators are used for the production and transmission O&M expenses.

Q. Is the concept that "expenses follow plant" Staff's traditional approach?

A. Yes. Staff has filed testimony in at least the last three KCPL electric rate case proceedings before this Commission addressing this matter. The most recent testimony concerning this methodology is contained in the last KCPL case presented before the Commission, Case Nos. [redacted] and [redacted]. The surrebuttal testimony of Staff witness

Robert E. Schallenberg responds to the rebuttal testimony of Company witness Sullivan regarding the appropriate methodology for allocating production O&M expenses between the Company's operations. Staff witness Schallenberg in his testimony states, "[c]onsistent with its traditional approach, Staff believes that for jurisdictional allocation purposes, all production O&M expenses, except the fuel expense incurred by the Company to serve its own load, should be considered fixed in nature and allocated on the basis of Staff's production demand allocator."

Q. What is the basis for the allocation of electric fuel costs?

A. Staff has used the Company's energy allocator less the Armco non-firm and electric boiler megawatt hours (MWH) in arriving at Staff's energy allocator (Schedule 7, page 4, Factor 6).

Q. Why has Staff omitted the Armco non-firm and the electric boiler MWH's in its energy allocator?

A. Omitting the Armco non-firm MWH is consistent with past Staff treatment and prior Commission determinations in that interruptible load should not have plant and expenses allocated to it. The most recent Commission determination being KCPL's last rate case, Case No. EO-85-185. Staff's exclusion of the electric boiler MWH is consistent with Staff's position in this proceeding as addressed by Staff witnesses White and Ketter that the electric boiler customers are electric customers.

Q. What is the basis for the allocation factor for customer accounts?

A. The allocation factor is based upon the number of steam customers to total Company customers as of December 31, 1988 (Schedule 7, page 4, Factor 7).

Q. What is the basis for the direct labor allocator?

A. This allocation factor is based upon Staff's annualized number of direct steam employees to the total number of direct Company employees (Schedule 7, page 4, Factory 8).

Q. What is the basis of the sales revenue allocator?

A. The sales revenue allocator was determined by dividing annualized steam revenue by the total Company revenue (Schedule 7, page 4, Factor 10).

Q. Have you supplied other Staff witnesses with allocation factors to be used in their respective areas?

A. Yes. I have supplied other Staff witnesses allocation factors concerning total electric rate base items in Case Nos. EO-85-185 and EO-85-224 to arrive at the indirect electric rate base amounts to be allocated to steam heat rate base.

Schedule 7 details the allocation factors used for total Company electric plant investment and expenses including other components of rate base such as materials and supplies, prepayments and deferred taxes. Schedule 7, page 5, Factors 11 and 12, shows the specific allocators used in calculating the indirect electric rate base for those working capital items that factors 1-10 were not used.

Q. Does this conclude your testimony?

A. Yes, it does.

— KUENSTING

No. 367

Class

NOV 13 1996

Data Information Request
Kansas City Power & Light Company
Case No. HO-96-139

Sue Bolt 11/20/96

Requested From: Steve Cottrum

Date Requested: 11/13/96

Information Requested: 1) At what point is it economical to convert from using gas versus coal as a fuel source at 52nd Avenue. Please provide support.

2) Does the Company anticipate using Coal as a fuel source in the future at 52nd Avenue? If so, when?

Requested By: Gary A. Kuenstling

Information Provided: See attached

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. HO-96-139 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the KCP&L Kansas City, Missouri office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g., book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title, number, author, date of publication and publisher, addressee, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, tape media, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronouns "you" or "your" refers to Kansas City Power & Light Company and its employees, contractors, agents or others employed by or acting in its behalf.

Signed By: [signature] 11/20/96

Date Received: 11-21-96

— SCHEDULE 1-1

KUENSTING

RESPONSE TO D.R. #367

CASE NO. HO-86-139

REQUEST:

At what point in time is it economical to convert from using gas versus coal as a fuel source at Grand Avenue? Please provide support.

RESPONSE:

The attached study determined an estimated breakeven cost of natural gas below which the total cost of operation using gas only was less than the cost of firing both gas and coal. The point in time at which it becomes less expensive to convert to a gas only operation was projected generally in the 1986-87 time period. The study concluded that from that time on into the future gas-firing would be less expensive having analyzed all reasonable scenarios. Note that the study entitled "Downtown Steam System Conversion Study" referenced in part 1 of the assumptions of the attached study was provided in the direct testimony of Mr. Bernard J. Beaudoin, in this case.

REQUEST:

Does the Company anticipate using coal as a fuel source in the future at Grand Avenue? If so, when?

As concluded in the attached study, the Company does not anticipate any combination of increased customer load and/or fuel prices wherein operation of Grand Avenue utilizing coal as a fuel source would be less costly than utilizing solely natural gas for its operation.

[illegible]
11/25/86

SCHEDULE D-2

KUENSTING

GRAND AVENUE STEAM SYSTEM
GAS VS. COAL BREAKEVEN COST STUDY
1986 - 1990

June 10, 1986

KUENSTING

Grand Avenue Steam System
Gas vs. Coal Breakeven Cost Study
1986 - 1990

Grand Avenue Station currently supplies steam heat and process steam to over 100 downtown customers. The station's primary fuels are coal and natural gas. The purpose of this study is to determine the economic feasibility of converting Grand Avenue Station operation from the current coal and natural gas combination to an all-natural gas operation.

This opportunity exists because of two developments. First, is the existence of relatively low priced natural gas. The price of gas has been declining over the past two years to the present price of $2.87/MMBTU, and is projected to remain at a relatively low level for the next five years. The gas price may fall even more as new wheeling tarrifs are filed which would allow companies to purchase gas directly from the wellhead. Second, KCPL has announced its plan to phase out central station steam heat service so that Grand Avenue will be retired by year-end 1990. This gradual phase out will result in decreasing steam heat loads in the years ahead which will reduce the coal-fired portion of the coal/gas fuel mix.

During the winter heating period December 1985 through March 1986 a mixture of about 81% coal and 19% gas (on an MMBTU basis) was burned at Grand Avenue. However, since that time a major steam customer has reduced its operation by about 100,000 lbs of steam per hour. This reduction, the conversion of some customers to electrode boilers, and attrition will

SCHEDULE 3-4

continue to permanently reduce loads and therefore reduce the amount of fuel burned. The percent of coal burned will also continue to decline due to the fact that the minimum load level at which coal can be burned, 125,000 lbs/hr, will be reached less often.

The gas supply over the next several year period is expected to be relatively firm with very few if any expected curtailments. In the event of a curtailment, oil and/or coal could be used as emergency backup fuels. Oil can be used for igniting the boilers, for flame stability, and as the primary fuel in boiler 1A. If gas is curtailed, boiler 1A fired on oil could serve most of the current load and by 1989 the entire load. The coal handling equipment at Grand Avenue is in relatively good condition and could provide emergency backup service with additional labor. The current usable coal inventory at Grand Avenue is about 5,000 tons which equates to a 15 - 30 day supply.

Having determined that Grand Avenue could operate reliably on gas or coal, an evaluation of the economics of coal/gas and gas only operations is the key factor in determining the desired mode of operation.

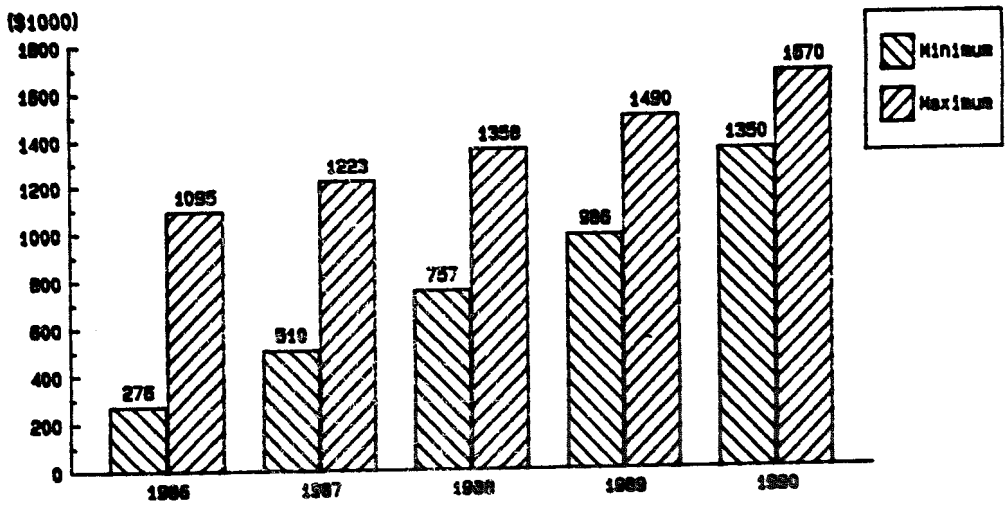
The 1986 budgeted Manpower level at Grand Avenue is 71 personnel and assumes operation of the plant on both coal and gas. Conversion to an all-gas operation will allow O&M savings by reducing the manpower level to 34 personnel ($1,177,165 savings), reducing electrical auxiliaries by approximately $61,600 per year, and reducing other operation and maintenance expenses by about $306,000 per year. Total Plant O&M savings firing gas only is projected to be approximately $1,504,765 a year in 1986 dollars.

The two modes of operation can be evaluated by considering fuel expenditures and non-fuel operations and maintenance expenditures. Expenditures in the coal/gas mode were calculated for various mixtures of coal and gas to allow for uncertain loads. Breakeven curves were then constructed showing the price of gas necessary for the all-gas operation cost to equal the coal/gas operation cost at various fuel mixtures. Thus, any gas price below the breakeven cost would allow a more economical operation of Grand Avenue Station on gas only.

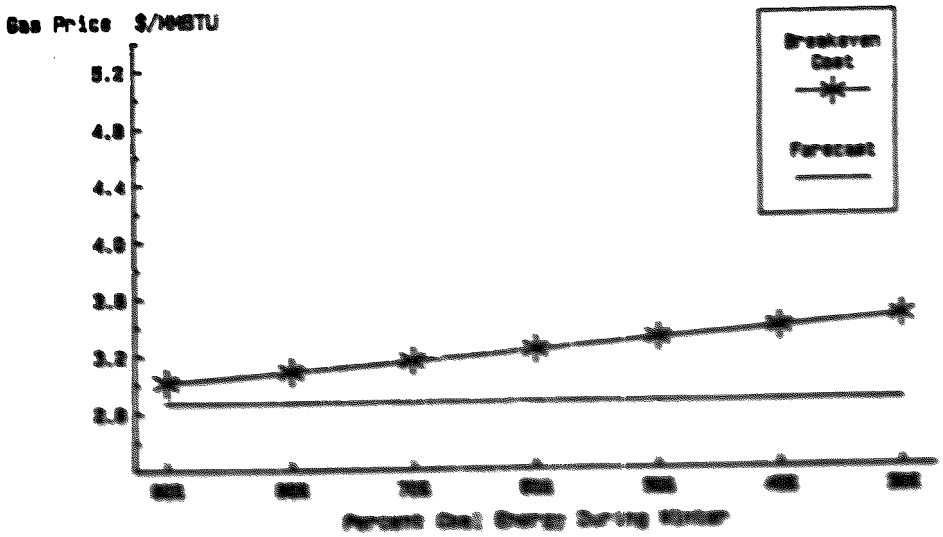
Results of the study are attached in graphic and tabular form and show that expected savings from the conversion of Grand Avenue Station to an all-gas operation range from $3,603,000 to $5,741,000 for the period 1987-1990. Minimum benefits occur when assuming a 90%/10% mixture of coal and gas during the winter months and a maximum benefit occurs when a 30%/70% mixture is projected. Also shown in the attachment are the forecast gas prices which are clearly below the calculated breakeven costs of gas for each year of the study period.

From this economic analysis, it is recommended that Grand Avenue Station convert from its current coal/gas operation to an all-gas operation. It is also recommended that the Fuels Department begin discussions with the Gas Service Company with regard to the price and reliability of a gas supply agreement extending thru 1990.

Grand Ave Savings
(All Gas Operation)

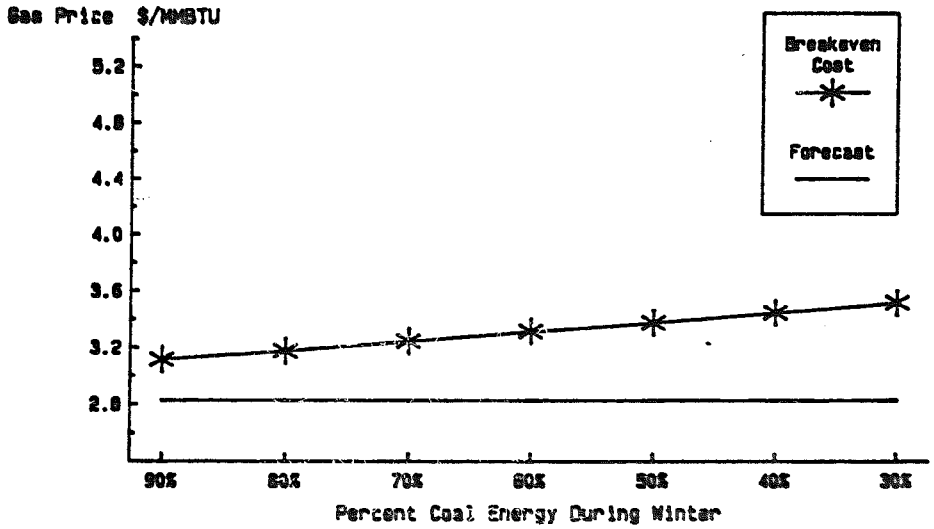


Grand Ave Gas Breakeven Price
(1986)

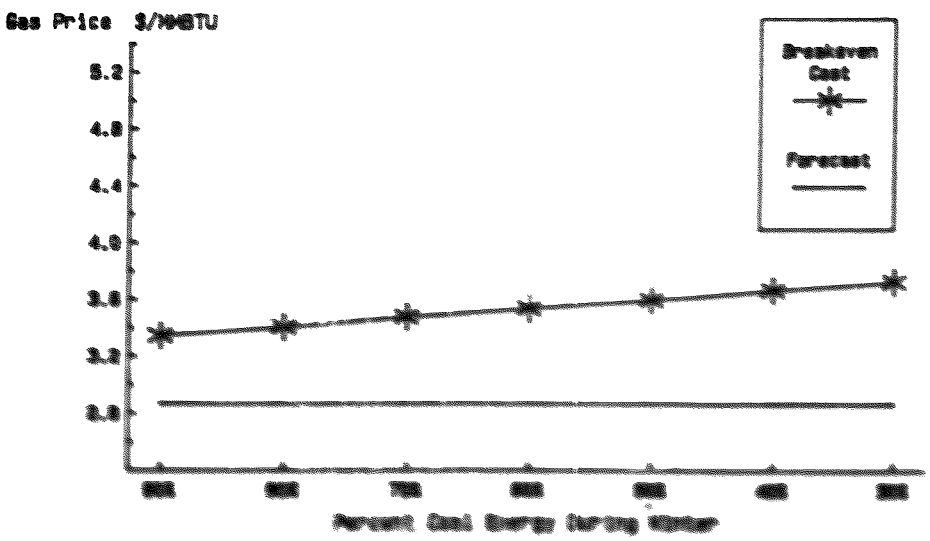


KUENSTING

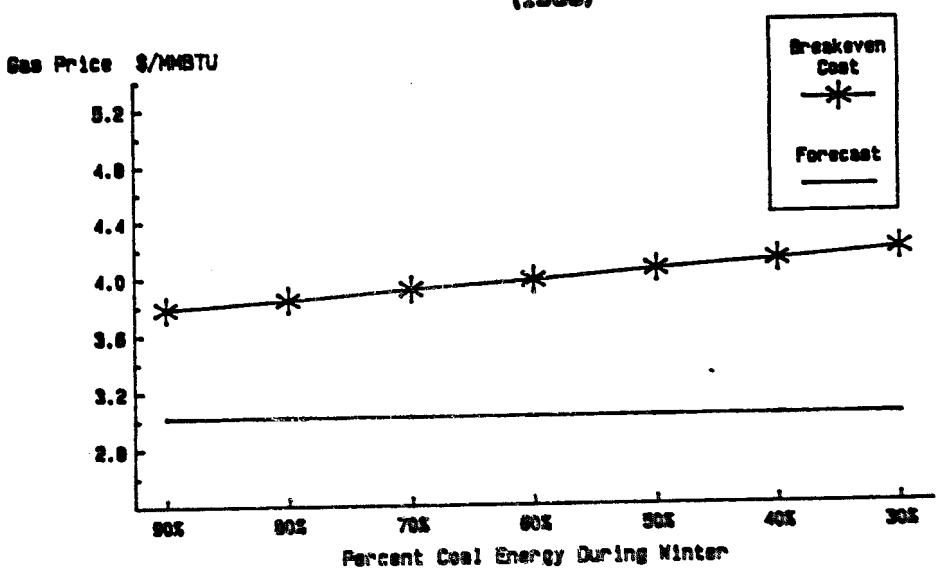
Grand Ave Gas Breakeven Price (1997)



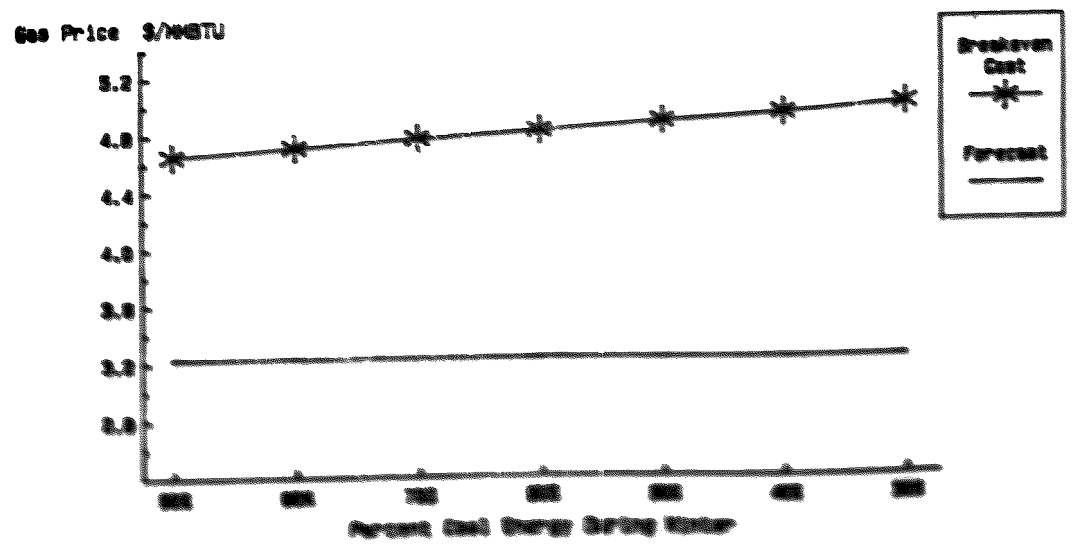
Grand Ave Gas Breakeven Price (1998)



Grand Ave Gas Breakeven Price (1989)



Grand Ave Gas Breakeven Price (1990)



KUENSTING

GRAND AVENUE COAL VS. GAS BREAKEVEN COST
($/MMBTU)

Breakeven Cost of Gas

Year	90% Coal	80% Coal	70% Coal	60% Coal	50% Coal	40% Coal	30% Coal
1986	$3.02	$3.09	$3.16	$3.23	$3.31	$3.38	$3.45
1987	$3.12	$3.18	$3.25	$3.32	$3.38	$3.45	$3.52
1988	$3.35	$3.41	$3.48	$3.54	$3.60	$3.67	$3.73
1989	$3.79	$3.85	$3.92	$3.98	$4.05	$4.11	$4.18
1990	$4.66	$4.72	$4.78	$4.83	$4.89	$4.94	$5.00

Forecast Gas Price

Year	
1986	$2.87
1987	$2.83
1988	$2.87
1989	$3.02
1990	$3.23

ASSUMPTIONS

1. STEAM LOADS - (Per Fuels Management Dept.)

   Rates and Regulations Department (7/31/85) forecast modified to reflect reductions in customer base (Electro-boiler conversion). This forecast was utilized in the "Downtown Steam System Conversion Study" by Corporate Planning 12/31/85. The exception is 15,000 MLBS of steam used for space heat at the station was added for the winter months based on an estimate of the winter average.

2. BOILER EFFICIENCY - (Per Fuels Management Dept.)

   Assumed 74% therefore the conversion from steam required to MMBTU required is:

   Energy MMBTU = 1.61 (MLBS Steam)

   The multiplier is based on (1195 BTU/LB)/74% = 1.61 MMBTU/MLBS

3. Back-up Boiler Costs + Gas Related O&M are approximately equal for all cases.

4. COST ESCALATION - (Excluding fuel prices)

   5%/YR (Per Corporate Planning Dept.)

   Electrical Auxiliaries (Per Fuels Management Dept.)

Coal/gas	18,433 MWH/Year
100% Gas	14,810 MWH/Year
Difference	3,623 MWH/Year

$17 $/MWH x 3,623 = $62,000/Yr additional cost for Coal/gas operation

5. Coal and gas prices (Per Fossil Fuels Department) dtd. 4-9-86

6. CURRENT OPERATION -

Coal may be utilized as a fuel if loads exceeds 125 Mlbs/hr, usually during January, February, March, and December. These are the winter months. Natural gas is used during the remaining 8 months, during other llow load periods, and for flame stability.

7. MISCELLANEOUS EXPENSES -

Miscellaneous expenses, $1,504,765, include annual O&M savings plus electrical auxiliaries reductions. O&M savings include a reduction in labor from the budgeted 71 personnel for coal/gas operation to 34 personnel for gas only operation ($1,177,165) plus other coal related savings ($266,000) totaling $1,443,165. Electrical auxiliaries reductions are estimated to be $61,600 per year.

8. Equation for Breakeven Cost of Natural Gas

[Gas Breakeven Cost ($/MMBTU)] x [Annual Load (MMBTU)] = [Projected Winter Load (MMBTU) x % Coal x Coal Price ($/MMBTU)] + [Projected Winter Load (MMBTU) x % Gas x Forecast Gas Price ($/MMBTU)] + [Remaining 8 Month Load (MMBTU) x Forecast Gas Price ($/MMBTU)] + [Miscellaneous Expenses]

KUENSTING

No. 466

Class

DEC 11 1986

Data Information Request
Kansas City Power & Light Company
Case No. HO-86-139

Requested From: Steve Cottron

Date Requested: 12/11/86

Information Requested: Respecting the operations at Grand Avenue to provide steam service ① how long would it take to operate the station's boilers on coal?

② Does the Company maintain the coal handling equipment on a periodic basis?

③ Does the Company test the coal handling equipment? If so, how often.

④ Where would the Company get the necessary manpower to operate Grand Avenue on coal?

⑤ Why would it be necessary the operate Grand Avenue using coal as fuel source?

Requested By: Gary Kuensting for SC

Information Provided:
See Attached.

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. HO-86-139 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the KCP&L Kansas City, Missouri office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g., book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title, number, author, date of publication and publisher, addressee, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "documents" includes publication of any nature, workpapers, letters, memoranda, notes, reports, analyses, computer printouts, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronouns "you" or "your" refer to Kansas City Power & Light Company and its employees, contractors, agents or others employed by or acting in its behalf.

Signed By:
Jerrol Lee Loyd
12/15/86

Date Received:
12-22-86 KMK

SCHEDULE 2-1

KUENSTING

Data Information Request No. 466
Case No. HO-86-139

1. It is estimated that it would require 16 to 24 hours to establish coal as the primary fuel for steam operations at Grand Avenue Station. This time could be reduced if personnel contacts could be made expeditiously, the coal pile had not been subjected to adverse weather conditions such as snow and/or ice covering, and ambient temperatures were not excessively low.

2. The coal handling equipment is maintained at a level to provide structural integrity only with parts being replaced only when indicated necessary by periodic testing.

3. The coal conveying and pulverizing equipment is tested on a monthly basis.

4. Personnel qualified to operate the coal dozer, conveying system, ash handling equipment and related boiler auxiliary would be recalled from Hawthorn Station. This would necessitate filling the vacated positions at Hawthorn on an overtime basis in most instances.

5. It would be necessary to operate Grand Avenue using coal as a fuel source only if the natural gas supply was interrupted for any reason and the demand at the time exceeded the capacity of one A boiler operating on oil.

JLB:slm

SCHEDULE D-2

KUENSTING
DEC 30 1986

No. 518
Class

Data Information Request
Kansas City Power & Light Company
Case No. HO-86-139

Requested From: Steve Cattron
Date Requested: 12/30/86
Information Requested: What is the lowest MPH's per hour that Grand Avenue can function at safely

Requested By: Gary Kuensting
Information Provided: All attached

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. HO-86-139 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

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Signed By: [signature] 1/5/87

Date Received: 1/5/87

SCHEDULE 3-1

KUENSTING

RESPONSE TO DATA REQUEST #518
Case No. HO-86-139

Using gas or oil as a fuel, the station could be operated safely, though very inefficiently, as low as 1000 lb/hr.

Burning coal only, 150,000 lb/hr would be the lowest safe minimum load and 100,000 lb/hr load is needed to burn coal in combination with gas or oil.

KUENSTING FEB 2 1987

ASAP
BY 2/6/87

No. 654

Class

Data Information Request
Kansas City Power & Light Company
Case No. HO-86-139

Requested From: Steve Catron / Ed Blunk

Date Requested: 2/2/87

Information Requested: Per phone conversation with Mr. Blunk concerning Data Request NO. 504, the asked question, "What length of time does it take to order oil and have it delivered to Grand Avenue?"

Please provide written confirmation explaining how long it would take to deliver oil to Grand Avenue Station after the four hours to solicit bids.

(Per the conversation, Staff understands it would take less than one day (24 Hour period), as oil is bid and delivered on an around the clock basis.)

Requested By: Gary Kuenating

Information Provided:

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. HO-86-139 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the KCP&L Kansas City, Missouri office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g., book, letter, memorandum, report) and state the following information as applicable for the particular document: nature, title, number, author, date of publication and publisher, addressee, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes information of any format, workpapers, letters, memoranda, notes, reports, analyses, computer readouts, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronouns "you" or "your" refers to Kansas City Power & Light Company and its employees, contractors, agents or others employed by or acting in its behalf.

Signed By:

Date Received:

2/9/87 Ca. 9.

SCHEDULE 6-1

KUENSTING

02/05/87

KANSAS CITY POWER & LIGHT COMPANY

MPSC STAFF DATA REQUEST
CASE NO. HO-86-139
REPLY TO DATA REQUEST NO. 654

REQUEST: Per phone conversation with Mr. Blunk concerning Data Request No. 504, the asked question, "What length of time does it take to order oil and have it delivered to Grand Avenue?"

Please provide written confirmation explaining how long it would take to deliver oil to Grand Avenue Station after the four hours to solicit bids.

(Per the conversation, Staff understands it would take less than one day (24 hour period), as oil is bid and delivered on an around the clock basis.)

RESPONSE: When KCPL purchases oil (for boiler fuel), the first truck delivering oil typically arrives at a station between 12:00 a.m. and 9:00 a.m. of the day following the bid award. For example, if the bid was awarded at 4:00 p.m. on Monday, the first truck might arrive at Grand Avenue at 3:00 a.m. Tuesday, that is 11 hours after the bid award.

SCHEDULE 4-4

KUENSTING

No. 502

Class

Data Information Request
Kansas City Power & Light Company
Case No. HO-86-139

DEC 23 1986

Requested From: Anne Cottiers

Date Requested: 12-22-86

Information Requested:

What is the likelihood or probability of gas supplies at Hood Avenue being discontinued or curtailed in the future?

Requested By: Gary Kuensting

Information Provided:

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. HO-86-139 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the KCP&L Kansas City, Missouri office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g., book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title, number, author, date of publication and publisher, addressee, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronouns "you" or "your" when in Kansas City Power & Light Company and its employees, contractors, agents or others employed by or acting in its behalf.

Signed By:

Date Received:

1-7-87

SCHEDULE 3-1

KUENSTING

01/06/87

MISSOURI PUBLIC SERVICE COMMISSION
Case No. HO-86-139
Data Request No. 502

REQUEST: What is the likelihood or probability of gas supplies at Grand Avenue being discontinued or curtailed in the future?

RESPONSE: We currently perceive there is a low likelihood or probability of gas supplies at Grand Avenue being discontinued or curtailed in the near future.

KURNSTING

KANSAS CITY POWER AND LIGHT COMPANY — File: KCPLMCS1 — 12:48 PM

MO-86-139

TOTAL PLANT IN SERVICE TAKEN FROM SD-85-185

ACCOUNT NO.	PLANT IN SERVICE	(1) ADJUSTED JURISDICTIONAL	(1) JURISDICTIONAL FACTOR	(2) TOTAL COMPANY	(3) MO-86-139 JURISDICTIONAL FACTOR	(4) MO-86-139 JURISDICTIONAL PLANT
		(A)	(B)	(C)	(D)	(E)
	PRODUCTION					
310	LAND AND LAND RIGHTS	$4,308,000	65.7820%	$6,549,103	0.0514%	$3,366
311	STRUCTURES AND IMPROVEMENTS	$34,387,000	65.7600%	$52,154,158	0.0514%	$26,887
312	BOILER PLANT EQUIPMENT-OTHER	$284,047,000	65.7800%	$425,732,746	0.0514%	$218,827
312	BOILER PLANT EQUIPMENT-TRAINS	$9,100,000	65.7800%	$13,846,154	0.0514%	$7,117
312	BOILER PLANT EQUIPMENT-ACC.	$18,718,000	65.7800%	$28,455,458	0.0514%	$14,626
314	TURBOGENERATOR UNITS	$86,993,000	65.7800%	$132,248,404	0.0514%	$67,976
315	ACCESSORY ELECTRIC EQUIPMENT	$31,576,000	65.7800%	$48,002,432	0.0514%	$24,673
316	MISC. POWER PLANT EQUIPMENT	$4,646,000	65.7800%	$7,062,937	0.0514%	$3,630
	TOTAL PRODUCTION PLANT	$469,783,000		$714,051,383		$367,022
	OTHER PRODUCTION					
340	LAND AND LAND RIGHTS	$90,000	65.7800%	$136,820	0.0514%	$70
342	FUEL HOLDERS, PRODUCERS, ACC.	$724,000	65.7800%	$1,100,638	0.0514%	$566
344	GENERATORS	$23,839,000	65.7800%	$35,024,224	0.0514%	$18,323
345	ACCESSORY ELEC. EQUIPMENT	$3,040,000	65.7820%	$4,621,465	0.0514%	$2,375
	TOTAL OTHER PRODUCTION PLANT	$26,893,000		$40,883,247		$21,014
	TRANSMISSION					
350	LAND AND LAND RIGHTS	$9,881,000	59.8900%	$16,365,083	0.0464%	$7,593
352	STRUCTURES AND IMPROVEMENTS	$1,681,000	59.8900%	$2,673,234	0.0464%	$1,240
353	STATION EQUIPMENT	$20,254,000	59.8900%	$33,818,656	0.0464%	$15,692
354	TOWERS AND FIXTURES	$2,256,000	59.8900%	$3,766,986	0.0464%	$1,748
355	POLES AND FIXTURES	$19,297,000	59.8900%	$32,220,738	0.0464%	$14,950
356	OVER-HEAD CONDUCTORS AND DEVICES	$17,251,000	59.8900%	$28,804,475	0.0464%	$13,365
357	UNDERGROUND CONDUIT	$1,496,000	59.8900%	$2,497,913	0.0464%	$1,159
358	UNDERGROUND COND. & DEVICES	$1,544,000	59.8900%	$2,578,060	0.0464%	$1,196
	TOTAL TRANSMISSION	$73,520,000		$122,724,595		$55,944
	DISTRIBUTION					
360	LAND AND LAND RIGHTS	$6,178,000	63.7800%	$9,688,587	0.2282%	$0
361	STRUCTURES AND IMPROVEMENTS	$2,199,000	64.5800%	$3,384,118	0.2282%	$0
362	STATION EQUIPMENT	$51,853,000	68.3400%	$74,724,419	0.2282%	$0
364	POLES TOWERS AND DEVICES	$38,763,000	57.8200%	$67,981,418	0.2282%	$0
365	OVER-HEAD CONDUCTORS AND DEVICES	$32,976,000	56.7500%	$58,097,252	0.2282%	$0
366	UNDERGROUND CONDUIT	$23,568,000	73.8100%	$32,259,352	0.2282%	$0
367	UNDERGROUND COND. & DEVICES	$47,395,000	61.5500%	$77,282,437	0.2282%	$0
368	LINE TRANSFORMERS	$51,154,000	63.3200%	$80,786,461	0.2282%	$0
369	SERVICES	$15,481,000	54.2100%	$28,489,837	0.2282%	$0
370	METERS	$18,362,000	61.6300%	$29,793,932	0.2282%	$0
371	CUSTOMER INSTALLATIONS	$1,716,000	72.8800%	$2,353,890	0.2282%	$0
373	STREET LIGHTS & SIGNAL SYSTEMS	$23,461,000	69.2400%	$33,912,478	0.0000%	$0
	TOTAL DISTRIBUTION	$312,240,000		$498,448,444		$0
	GENERAL					
389	LAND AND LAND RIGHTS	$1,138,000	63.1612%	$1,801,739	0.5882%	$10,177
390	STRUCTURES AND IMPROVEMENTS	$8,779,000	63.1612%	$13,899,356	0.5882%	$78,138
391	OFFICE FURNITURE AND EQUIPMENT	$2,565,000	63.1612%	$4,062,702	0.5882%	$23,041
392	TRANSPORTATION EQUIPMENT	$2,749,000	63.1612%	$4,353,456	0.5882%	$24,681
393	STORES EQUIPMENT	$248,000	63.1612%	$392,646	0.5882%	$2,226
394	TOOLS SHOP & GARAGE EQUIPMENT	$981,000	63.1612%	$1,553,324	0.5882%	$8,810
395	LABORATORY EQUIPMENT	$823,000	63.1612%	$1,303,230	0.5882%	$7,393
396	POWER OPERATED EQUIPMENT	$774,000	63.1612%	$1,225,641	0.5882%	$6,953
397	COMMUNICATION EQUIPMENT	$4,633,000	63.1612%	$7,335,494	0.5882%	$41,611
398	MISCELLANEOUS EQUIPMENT	$153,000	63.1612%	$242,264	0.5882%	$1,374
	TOTAL GENERAL	$22,351,000		$35,389,853		$200,753
	INTANGIBLE					
	INTANGIBLE PLANT	$22,000	63.1612%	$34,840	0.5882%	$198
	TOTAL INTANGIBLE	$22,000		$34,840		$198
	ELECTRIC PLANT INCLUDED PLANT NOT INCLUDED	$929,309,000		$1,411,532,312		$644,130

1. [illegible]

SCHEDULE 6-1

KUENSTING

KANSAS CITY POWER AND LIGHT COMPANY
MO-86-139
TOTAL PLANT IN SERVICE TAKEN FROM ER-85-128

ACCOUNT NO.	PLANT IN SERVICE	(1) ADJUSTED JURISDICTIONAL	(3) JURISDICTIONAL FACTOR	(4) TOTAL COMPANY	(6) MO-86-139 JURISDICTIONAL FACTOR	(7) MO-86-139 JURISDICTIONAL PLANT
		(A)	(B)	(C)	(D)	(E)
ELECTRIC PLANT (NUCLEAR PLANT NOT INCLUDED)		$904,789,000 (2)		$1,411,608,793 (7)		$768,100 (8)
GENERAL PLANT ALLOCATOR CHANGE ER-85-128		$743,000	100.0000%	$0	0.0000%	$0
INCLUSION OF WOLF CREEK TRANSMISSION PLANT		$3,289,000	59.8900%	$5,491,735	0.0464%	$2,548
	WOLF CREEK GENERATING STATION					
	ARCHITECT/ENGINEER	$42,384,000	65.7820%	$64,432,958	0.0514%	$33,119
	PREOPERATIONAL COSTS	$39,394,000	65.7820%	$59,887,584	0.0514%	$30,782
	DIRECT MATERIALS	$71,234,000	65.7820%	$108,291,274	0.0514%	$55,662
	INDIRECT NON-MANUAL	$42,514,000	65.7820%	$64,630,587	0.0514%	$33,220
	INDIRECT MANUAL LABOR	$19,284,000	65.7820%	$29,194,284	0.0514%	$15,006
	INDIRECT MATERIAL	$48,628,000	65.7820%	$73,913,043	0.0514%	$37,991
	DANIEL HOME OFFICE	$9,300,000	65.7500%	$14,138,036	0.0514%	$7,267
	INDIRECT SUBCONTRACT	($829,000)	65.7500%	($1,260,261)	0.0514%	($648)
	DIRECT SUBCONTRACT	$23,168,000	65.7820%	$35,220,432	0.0514%	$18,103
	DANIEL DIRECT LABOR	$58,151,000	65.7500%	$88,402,250	0.0514%	$45,439
	OWNER CHARGES	$74,344,000	65.7300%	$113,019,155	0.0514%	$58,092
	OWNER'S DIRECT CONST. COSTS	$78,464,000	65.7600%	$119,282,457	0.0514%	$61,311
	TAXES-W.C. STATION TOTAL	$13,026,000	65.7800%	$19,802,372	0.0514%	$10,178
	AFUDC-W.C. STATION TOTAL-NET	$198,025,000	65.7820%	$302,259,045	0.0514%	$155,361
	AFUDC-GROSS	$68,244,000	100.0000%	$68,244,000	0.0000%	$0
	EDUCATION CENTER	$3,647,000	65.7800%	$5,544,238	0.0514%	$2,850
	TAXES EDUCATION CENTER	$50,000	65.7320%	$76,011	0.0514%	$39
	AFUDC EDUCATION CENTER	$1,304,000	65.7600%	$1,982,365	0.0514%	$1,019
	SUBSTATION	$3,593,000	65.7500%	$5,462,147	0.0514%	$2,808
	TAXES SUBSTATION	$97,000	65.7800%	$147,461	0.0514%	$76
	AFUDC SUBSTATION	$2,085,000	65.7800%	$3,169,656	0.0514%	$1,629
	LAND	$1,858,000	65.7820%	$2,825,375	0.0514%	$1,453
	LAND RIGHTS AND EASEMENTS	$328,000	65.7800%	$498,632	0.0514%	$256
TOTAL WOLF CREEK GENERATING STATION		$798,946,000		$1,179,823,021		$571,843
TOTAL ELECTRIC PLANT		$1,707,667,000		$2,596,123,549		$1,341,692

1. ADJUSTED JURISDICTIONAL AMOUNTS TAKEN FROM ER-85-128 MISSOURI CASE C, ACCOUNTING SCHEDULE C-3-A EXCEPT FOR THE $743,000 FIGURE AND THE $3,289,000 FIGURE WHICH CAME FROM ACCOUNTING SCHEDULE C-4-A.
2. THIS AMOUNT TIES TO THE TOTAL IN THE FIRST ADJUSTED JURISDICTIONAL COLUMN FROM STAFF WORKPAPER ED 1000.
3. JURISDICTIONAL FACTORS TAKEN FROM ER-85-128 MISSOURI CASE C, ACCOUNTING SCHEDULE C-3-A EXCEPT FOR THE 59.8900% WHICH CAME FROM ACCOUNTING SCHEDULE B-3-A REFERENCED ON STAFF WORKPAPER ED 1000 AND THE 100.0000% WHICH WAS USED BECAUSE THE ADJUSTMENT WAS MADE ONLY TO REFLECT A CHANGE IN THE ALLOCATION PERCENTAGE.
4. TOTAL COMPANY AMOUNT ARRIVED AT BY TAKING THE ADJUSTED JURISDICTIONAL COLUMN AND DIVIDING EACH BY THE RESPECTIVE JURISDICTIONAL FACTORS.
5. THIS AMOUNT TIES TO THE TOTAL IN THE TOTAL COMPANY COLUMN ON STAFF WORKPAPER ED 1000.
6. MISSOURI STEAM JURISDICTIONAL FACTORS MO-86-139.
7. JURISDICTIONAL PLANT ARRIVED AT BY TAKING TOTAL COMPANY AND MULTIPLYING THAT BY THE JURISDICTIONAL FACTORS.
8. THIS AMOUNT TIES TO THE TOTAL IN THE JURISDICTIONAL PLANT COLUMN ON STAFF WORKPAPER ED 1000.

SCHEDULE B-2

KUENSTING

KANSAS CITY POWER AND LIGHT COMPANY — File: KCPLAC81 — 12:48 PM — 02/19/87
HO-86-139
TOTAL DEPRECIATION RESERVE FROM ED-85-185

ACCOUNT NO.	DEPRECIATION RESERVE	(1) ADJUSTED JURISDICTIONAL	(2) JURISDICTIONAL FACTOR	(3) TOTAL COMPANY	(4) HO-86-139 JURISDICTIONAL FACTOR	(5) HO-86-139 JURISDICTIONAL RESERVE
		(A)	(B)	(C)	(D)	(E)
	PRODUCTION					
310	LAND AND LAND RIGHTS	$0	65.7888%	$0	0.8514%	$0
311	STRUCTURES AND IMPROVEMENTS	$10,851,200	65.7888%	$15,279,720	0.8514%	$7,654
312	BOILER PLANT EQUIPMENT-OTHER	$94,957,200	65.7888%	$144,355,427	0.8514%	$74,199
312	BOILER PLANT EQUIPMENT-TRAINS	$4,502,000	65.7888%	$6,844,026	0.8514%	$3,518
312	BOILER PLANT EQUIPMENT-ACC.	$20,881,202	65.7888%	$31,622,074	0.8514%	$16,254
314	TURBOGENERATOR UNITS	$28,240,020	65.7888%	$42,626,938	0.8514%	$21,910
315	ACCESSORY ELECTRIC EQUIPMENT	$9,975,200	65.7888%	$15,164,184	0.8514%	$7,794
316	MISC. POWER PLANT EQUIPMENT	$1,478,200	65.7888%	$2,246,884	0.8514%	$1,155
	TOTAL PRODUCTION PLANT	$169,924,200		$258,139,252		$132,684
	OTHER PRODUCTION					
340	LAND AND LAND RIGHTS	$0	65.7888%	$0	0.8514%	$0
342	FUEL HOLDERS, PRODUCERS, ACC.	$482,220	65.7888%	$732,746	0.8514%	$377
344	GENERATORS	$9,431,220	65.7888%	$14,337,185	0.8514%	$7,369
345	ACCESSORY ELEC. EQUIPMENT	$1,039,200	65.7888%	$1,579,587	0.8514%	$812
	TOTAL OTHER PRODUCTION PLANT	$10,952,220		$16,649,438		$8,558
	TRANSMISSION					
350	LAND AND LAND RIGHTS	$749,220	59.9528%	$1,250,626	0.8464%	$580
352	STRUCTURES AND IMPROVEMENTS	$329,200	59.9528%	$515,946	0.8464%	$235
353	STATION EQUIPMENT	$9,313,200	59.8928%	$15,550,175	0.8464%	$7,215
354	TOWERS AND FIXTURES	$942,020	59.8928%	$1,572,884	0.8464%	$730
355	POLES AND FIXTURES	$9,614,220	59.8528%	$16,052,753	0.8464%	$7,448
356	OVERHEAD CONDUCTORS AND DEVICE	$8,573,220	59.8922%	$14,314,577	0.8464%	$6,642
357	UNDERGROUND CONDUIT	$583,220	59.8928%	$973,451	0.8464%	$452
358	UNDERGROUND CONDUCTORS AND DEV	$457,220	59.8928%	$763,366	0.8464%	$354
	TOTAL TRANSMISSION	$38,548,260		$58,993,488		$23,661
	DISTRIBUTION					
362	LAND AND LAND RIGHTS	$319,220	63.7888%	$500,785	0.8288%	$0
361	STRUCTURES AND IMPROVEMENTS	$743,220	64.9888%	$1,143,429	0.8288%	$0
362	STATION EQUIPMENT	$18,185,200	68.3488%	$26,609,599	0.8288%	$0
364	POLES TOWERS AND DEVICES	$15,937,260	57.8288%	$27,932,384	0.8288%	$0
365	OVERHEAD CONDUCTORS AND DEVICE	$9,234,222	55.7628%	$16,858,499	0.8288%	$0
366	UNDERGROUND CONDUIT	$7,956,220	73.3188%	$10,551,324	0.8288%	$0
367	UNDERGROUND CONDUCTORS AND DEV	$13,196,200	61.5288%	$21,439,460	0.8288%	$0
368	LINE TRANSFORMERS	$17,675,200	63.3288%	$27,913,771	0.8288%	$0
369	SERVICES	$3,595,220	54.2188%	$6,817,930	0.8288%	$0
370	METERS	$2,385,240	61.6388%	$4,746,865	0.8288%	$0
371	CUSTOMER INSTALLATIONS	$628,220	72.8888%	$862,537	0.8288%	$0
373	STREET LIGHTS AND SIGNAL SYSTE	$6,545,240	68.2488%	$9,589,570	0.8288%	$0
	TOTAL DISTRIBUTION	$97,333,260		$135,216,283		$0
	GENERAL					
389	LAND AND LAND RIGHTS	$0	63.1488%	$0	0.5888%	$0
390	STRUCTURES AND IMPROVEMENTS	$2,32[illegible]	63.1488%	$3,[illegible]	0.5888%	$[illegible]
391	OFFICE FURNITURE AND EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
392	TRANSPORTATION EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
393	STORES EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
394	TOOLS SHOP AND GARAGE EQUIPMEN	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
395	LABORATORY EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
396	POWER OPERATED EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
397	COMMUNICATION EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
398	MISCELLANEOUS EQUIPMENT	$[illegible]	63.1488%	$[illegible]	0.5888%	$[illegible]
	TOTAL GENERAL	$[illegible]		$[illegible]		$[illegible]
	INTANGIBLE					
	INTANGIBLE PLANT	$0	63.1488%	$0	0.5888%	$0
	TOTAL INTANGIBLE	$0		$0		$0
	ELEC. RESERVE (ALLOC RESERVE NT INCLUDED	$[illegible]		$[illegible]		$[illegible]

[illegible]

SCHEDULE D-3

KUENSTING

KANSAS CITY POWER AND LIGHT COMPANY
HO-86-139
TOTAL DEPRECIATION RESERVE FROM ER-85-128

ACCOUNT NO. DEPRECIATION RESERVE	(1) ADJUSTED JURISDICTIONAL	(3) JURISDICTIONAL FACTOR	(4) TOTAL COMPANY	(6) HO-86-139 JURISDICTIONAL FACTOR	(7) HO-86-139 JURISDICTIONAL RESERVE
	(A)	(B)	(C)	(D)	(E)
ELEC. RESERVE (NUCLEAR RESERVE NOT INCLUDED)	$317,269,000(2)		$494,432,215(5)		$289,283(8)
GENERAL PLANT ALLOCATOR CHANGE ER-85-128	$272,000	100.0000%	$0	0.0000%	$0
INCLUSION OF WOLF CREEK TRANSMISSION PLANT	$52,000	58.4270%	$89,000	0.0464%	$41
WOLF CREEK GENERATING STATION					
TOTAL RESERVE	$12,359,000	67.7546%	$15,238,999	0.0514%	$7,859
TOTAL ELECTRIC RESERVE	$327,952,000		$509,660,213		$297,183

1. ADJUSTED JURISDICTIONAL AMOUNTS TAKEN FROM ER-85-128 MISSOURI CASE C, ACCOUNTING SCHEDULE C-5-A EXCEPT FOR THE $272,000 FIGURE AND THE $52,000 FIGURE WHICH COME FROM ACCOUNTING SCHEDULE C-6-A.
2. THIS AMOUNT TIES TO THE TOTAL IN THE FIRST ADJUSTED JURISDICTIONAL COLUMN FROM STAFF WORKPAPER RB 1002.
3. JURISDICTIONAL FACTORS TAKEN FROM ER-85-128 MISSOURI CASE C, ACCOUNTING SCHEDULE C-5-A EXCEPT FOR THE 58.4270% WHICH WAS ARRIVED AT BY TAKING THE MISSOURI JURISDICTIONAL ADJUSTMENT OF $52,000 AND DIVIDING BY THE TOTAL COMPANY ADJUSTMENT OF $89,000 WHICH COMES FROM ACCOUNTING SCHEDULE C-6, INCLUDED IN THE TOTAL COMPANY CASE C COMPUTER RUN. THE 100.0000% WAS USED BECAUSE THE ADJUSTMENT WAS MADE ONLY TO REFLECT A CHANGE IN THE ALLOCATION PERCENTAGE.
4. TOTAL COMPANY AMOUNT ARRIVED AT BY TAKING THE ADJUSTED JURISDICTIONAL COLUMN AND DIVIDING EACH BY THE RESPECTIVE JURISDICTIONAL FACTORS.
5. THIS AMOUNT TIES TO THE TOTAL IN THE TOTAL COMPANY COLUMN ON STAFF WORKPAPER RB 1002.
6. MISSOURI STEAM JURISDICTIONAL FACTORS HO-86-139.
7. JURISDICTIONAL RESERVE ARRIVED AT BY TAKING TOTAL COMPANY AND MULTIPLYING THIS BY THE JURISDICTIONAL FACTORS.
8. THIS AMOUNT TIES TO THE TOTAL IN THE JURISDICTIONAL RESERVE COLUMN ON STAFF WORKPAPER RB 1002.

SCHEDULE B-4

KUKENSTING

KANSAS CITY POWER AND LIGHT COMPANY File: KCPLWCS1 12:32 PM 02/19/87
MO-86-139
INCOME STATEMENT TAKEN FROM ED-85-185

	(:) ADJUSTED JURISDICTIONAL	(:) JURISDICTIONAL FACTOR	TOTAL COMPANY	MO-86-139 JURISDICTIONAL FACTOR	MO-86-139 JURISDICTIONAL AMOUNT
OPERATING REVENUES	(A)	(B)	(C)	(D)	(E)
OPERATING REVENUES-MISSOURI	$355,901,000	100.0000%	$355,501,000	0.0000%	$0
OTHER REVENUES	$1,918,000	100.0000%	$1,918,000	0.0000%	$0
TOTAL OPERATING REVENUE	$357,819,000		$357,819,000		$0
OPERATING EXPENSES					
OPERATION AND MAINTENANCE EXPENSE					
PRODUCTION					
FUEL (ACCT.401- 501,518.547)	$73,012,000	69.1048%	$125,654,221	0.1383%	$146,120
OTHER (ACCT.401- 520 TO 557)	$28,256,000	65.7800%	$42,955,386	0.0514%	$22,079
OTHER POWER SUPPLY					
PURCHASED POWER (ACCT.401-555)	$6,704,000	69.1048%	$9,731,207	0.1383%	$13,417
PURCHASES FOR RESALE (ACCT.401-555)	$4,861,000	59.8900%	$8,116,547	0.0464%	$3,766
SALES-TRANSMISSION SERVICE (ACCT.401-555)	($5,431,000)	59.8900%	($9,065,232)	0.0464%	($4,208)
SALES (ACCT.401-555)	($779,000)	69.1048%	($1,127,273)	0.1383%	($1,559)
SYS. CONTR., LOAD DISP.,ETC. (ACCT.401- 556,557)	$1,014,000	69.1048%	$1,467,337	0.1383%	$2,029
NUCLEAR POWER GENERATION (ACCT.401-555)	$16,098,000	65.7800%	$24,472,464	0.0514%	$12,579
TRANSMISSION					
OPERATION					
SUPERVISION/ENGINEERING (ACCT.401-560)	$369,000	62.9660%	$585,831	0.2486%	$286
LOAD DISPATCHING (ACCT.401-561)	$189,000	65.7800%	$287,321	0.0514%	$148
STATION EXPENSES (ACCT.401-562)	$211,000	59.8900%	$352,313	0.0464%	$163
OVERHEAD LINE EXPENSE (ACCT.401-563)	$57,000	59.8900%	$95,174	0.0464%	$44
UNDERGROUND LINE EXPENSE (ACCT.401-564)	$1,000	59.8900%	$1,670	0.0464%	$1
TRANS. OF ELEC. BY OTHERS (ACCT.401-565)	$87,000	65.7800%	$132,259	0.0514%	$68
MISC. TRANSMISSION EXPENSE (ACCT.401-566)	$14,000	59.8900%	$23,375	0.0464%	$11
RENT (ACCT.401-567)	$1,571,000	65.7800%	$2,388,264	0.0514%	$1,228
MAINTENANCE					
SUPERVISION/ENGINEERING (ACCT.402-568)	$42,000	59.8900%	$70,129	0.0464%	$33
STRUCTURES (ACCT.402-569)	$66,000	59.8900%	$110,232	0.0464%	$51
STATION EXPENSES (ACCT.402-570)	$664,000	59.8900%	$1,108,699	0.0464%	$514
OVERHEAD LINE EXPENSE (ACCT. 402-571)	$317,000	59.8900%	$529,324	0.0464%	$246
UNDERGROUND LINE EXPENSE (ACCT.402-572)	$11,000	59.8900%	$18,367	0.0464%	$9
DISTRIBUTION					
OPERATIONS					
SUPERVISION/ENGINEERING (ACCT.401-580)	$1,977,000	62.4725%	$3,164,237	0.0000%	$0
LOAD DISPATCHING (ACCT.401-581)	$388,000	65.7800%	$589,724	0.0000%	$0
STATION EXPENSES (ACCT.401-582)	$317,000	69.3400%	$444,445	0.0000%	$0
OVERHEAD LINE EXPENSE (ACCT.401-583)	$1,194,000	65.7800%	$2,026,418	0.0000%	$0
UNDERGROUND LINE EXPENSE (ACCT.401-584)	$178,000	69.8100%	$255,498	0.0000%	$0
STR. LIGHT & SIGNAL SYS. (ACCT.401-585)	$181,000	69.2400%	$261,264	0.0000%	$0
METER (ACCT.401-586)	$746,000	69.1300%	$1,078,949	0.0000%	$0
CUSTOMER INSTALLATION (ACCT.401-587)	$688,000	70.8000%	$967,363	0.0000%	$0
MISCELLANEOUS (ACCT.401-588)	$1,707,000	69.5400%	$2,454,634	0.0000%	$0
RENTS (ACCT.401-589)	$53,000	65.7800%	$80,494	0.0000%	$0
MAINTENANCE					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SCHEDULE 6-3

KUENSTING

KANSAS CITY POWER AND LIGHT COMPANY — File: KCPLWCS1 — 12:32 PM — 02/19/87
MO-86-139
INCOME STATEMENT TAKEN FROM ER-85-185

	(A) ADJUSTED JURISDICTIONAL	(B) JURISDICTIONAL FACTOR	(C) TOTAL COMPANY	(D) MO-86-139 JURISDICTIONAL FACTOR	(E) MO-86-139 JURISDICTIONAL AMOUNT
CUSTOMER ACCOUNTS					
CUSTOMER ACCOUNTS EXPENSE					
SUPERVISION (ACCT.401-901)	$288,000	64.9684%	$443,292	0.0319%	$141
METER READING (ACCT.401-902)	$1,521,000	64.9684%	$2,341,138	0.0319%	$747
BILLING AND RECORDS (ACCT.401-903)	$4,517,000	64.9684%	$6,952,611	0.0319%	$2,218
UNCOLLECTIBLE ACCOUNTS (ACCT.401-904)	$1,320,000	66.4200%	$1,929,260	0.0319%	$615
MISC. CUST. ACC. EXP. (ACCT.401-905)	$0	100.0000%	$0	0.0000%	$0
CUSTOMER SERVICES EXPENSE					
SUPERVISION (ACCT.401-907)	$238,000	64.9684%	$354,318	0.0319%	$113
CUSTOMER ASSISTANCE (ACCT.401-908)	$939,000	64.9684%	$1,445,318	0.0319%	$461
INFORMATION (ACCT.401-909)	$84,000	64.9684%	$129,294	0.0319%	$41
MISC. CUST. SERVICE EXP. (ACCT.401-910)	$0	100.0000%	$0	0.0000%	$0
SALES EXPENSE (ACCT.401- 911 TO 916)	$20,000	69.1483%	$28,923	1.6015%	$463
ADMINISTRATIVE AND GENERAL EXPENSE					
A&G SALARIES (ACCT.401-920)	$7,451,000	61.8518%	$12,284,558	2.2789%	$278,129
OFFICE SUPPLIES AND EXP. (ACCT.401-921)	$2,028,000	61.8518%	$3,321,813	2.2789%	$75,701
ADM. EXP. TRANSF.-CR. (ACCT.401-922)	($521,000)	61.8518%	($853,385)	0.0000%	$0
OUTSIDE SERVICES (ACCT.401-923)	$1,538,000	64.4400%	$2,366,716	2.2789%	$54,391
PROPERTY INSURANCE (ACCT.401-924)	$622,000	66.2284%	$939,174	0.2674%	$2,511
INJURIES AND DAMAGES (ACCT.401-925)	$941,000	61.8518%	$1,541,334	2.2789%	$35,125
EMPL. PENSIONS AND BENEFITS (ACCT.401-926)	$5,355,000	61.8518%	$10,410,958	2.2789%	$237,256
FRANCHISE REQ. (ACCT.401-927)	$0	100.0000%	$0	0.0000%	$0
REG. COMM. EXP. (ACCT.401-928)	$1,125,000	64.4400%	$1,745,810	0.0000%	$0
DUPLICATE CHARGES-CR. (ACCT.401-929)	($1,353,000)	63.9596%	($2,115,396)	2.2789%	($48,208)
GENERAL ADV. EXPENSES (ACCT.401-930.1)	$23,000	61.8518%	$37,673	0.0000%	$0
MISC.-GEN. ASSOC. DUES (ACCT.401-930.2)	$51,000	61.8518%	$83,537	2.2789%	$1,904
MISC.-FEES TO EEI (ACCT.401-930.3)	$0	61.8518%	$0	2.2789%	$0
MISC.-EPRI RESEARCH (ACCT.401-930.4)	$1,086,000	61.8518%	$1,778,841	2.2789%	$40,538
MISC.-OTHER (ACCT.401-930.5)	$1,071,000	61.8518%	$1,754,271	2.2789%	$39,978
RENTS (ACCT.401-931)	$2,128,000	64.3532%	$3,306,751	0.9089%	$30,057
MAINT. OF GEN. PLANT (ACCT.402-935)	$1,948,000	55.2523%	$2,985,335	0.9089%	$27,135
TOTAL O & M EXPENSES	$180,458,000		$273,586,358		$976,340
OTHER OPERATING EXPENSES					
DEPRECIATION AND AMORTIZATION	$48,883,000	65.8734%	$74,886,858	0.9091%	$673,519
TAXES OTHER THAN INCOME TAXES					
PROPERTY TAXES					
PRODUCTION	$10,921,000	65.7389%	$16,620,311	0.8514%	$8,534
TRANSMISSION	$951,000	59.8588%	$1,588,848	0.8464%	$769
DISTRIBUTION	$3,302,000	62.5488%	$5,271,186	0.0000%	$0
GENERAL	$389,000	65.2513%	$641,246	0.5889%	$3,747
FUEL	$237,000	69.1488%	$342,557	0.1383%	$474
OTHER MBS	$167,000	58.8288%	$283,778	0.2574%	$729
PAYROLL & OCCUPATIONAL TAXES	$2,756,000	61.8518%	$4,379,778	2.2789%	$104,369
OTHER TAXES	$143,000	65.2523%	$219,249	0.2574%	$565
TOTAL OTHER OPERATING EXPENSES	$68,251,000		$104,435,489		$792,756
TOTAL OPERATING EXPENSES	$242,791,000		$378,841,847		$1,769,097
NET INCOME BEFORE TAXES	$175,118,000		($28,833,847)		($1,769,097)
CURRENT INCOME TAXES	$94,547,000	65.8258%	$143,638,337	0.9091%	$613,349
DEFERRED INCOME TAX					
DEFERRED FIT	$0	65.8258%	$0	0.9091%	$0
DEFERRED INVESTMENT CREDIT	($2,889,000)	65.8258%	($4,389,788)	0.9091%	($39,904)
DEFERRED INCOME TAX OTHER	$42,551,000	65.8258%	$64,637,860	0.9091%	$587,580
DEFERRED SIT OTHER	$42,342,000	65.8258%	$64,321,048	0.9091%	$584,685
TOTAL INCOME TAX	$176,551,000		$268,208,458		$1,645,710
NET OPERATING INCOME	$66,240,000		($96,833,306)		($3,414,807)

SCHEDULE 6-6

KUENSTING

KCPL
STEAM HEAT CASE HO-86-139
SCHEDULE OF ALLOCATION FACTORS

FACTOR NO.	DESCRIPTION OF ALLOCATOR	ALLOCATION FACTOR	ALLOCATION PERCENTAGE
1	PRODUCTION DEMAND	0.000514	0.0514%
2	TRANSMISSION DEMAND	0.000464	0.0464%
3	GENERAL AND INTANGIBLE PLANT	0.009089	0.9089%
4	NET PLANT	0.002674	0.2674%
5	GROSS PLANT	0.009091	0.9091%
6	ENERGY	0.001383	0.1383%
7	CUSTOMER ACCOUNT	0.000319	0.0319%
8	DIRECT LABOR	0.002789	0.2789%
9	ACCT. 401-568 SUPERVISION AND ENGINEERING	0.000488	0.0488%
10	SALES REVENUE	0.016813	1.6813%
	[illegible]		
11	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]

[illegible] SCHEDULE J-4

KUENSTING

KCPL
STEAM HEAT CASE HO-86-139
GENERAL PLANT AND INTANGIBLE PLANT ALLOCATOR - FACTOR 3

	TOTAL COMPANY (NOTE 1)	STEAM HEAT JURISDICTION (NOTE 2)
	(A)	(B)
PRODUCTION	$1,933,957,652	$959,080
TRANSMISSION	$128,216,731	$59,493
DISTRIBUTION	$498,400,444	$0
DIRECT STEAM:		
PROD.	$16,725,917	$16,725,917
DISTRI.	$5,733,960	$5,733,960
	$2,583,034,723	$23,478,449
GENERAL PLANT ALLOCATOR		0.0090894827

NOTE 1: PLANT BALANCES FROM COMMISSION REPORT AND ORDER CASE NOS. EO-85-185 AND EO-85-224.
NOTE 2: DIRECT STEAM PLANT BALANCES AS OF 12-31-86.

SCHEDULE 3-8

KUENSTING

KCPL
STEAM HEAT CASE NO-86-139
NET PLANT ALLOCATOR AND GROSS PLANT ALLOCATOR - FACTORS 4 & 5

	TOTAL COMPANY PLANT (NOTE 1)	STEAM HEAT JURISDICTION (NOTE 2)	TOTAL CO. DEPR. RES. (NOTE 1)	STEAM HEAT DEPR. RES. (NOTE 2)	NET PLANT TOTAL CO. (A-C)	NET PLANT STEAM HEAT (B-D)
	(A)	(B)	(C)	(D)	(E)	(F)
PRODUCTION	$1,533,357,652	$959,388	($258,877,668)	($149,128)	$1,643,373,963	$809,960
TRANSMISSION	$128,216,731	$59,493	($51,282,438)	($23,782)	$77,134,243	$35,730
DISTRIBUTION	$498,488,444	$0	($155,216,983)	$0	$343,364,441	$0
GENERAL	$35,453,729	$322,255	($13,684,234)	($124,381)	$21,769,694	$197,875
INTANGIBLE	$34,995	$863	$0	$0	$34,995	$863
TOTAL ELECTRIC	$2,596,123,549	$1,341,692	($529,563,213)	($297,183)	$2,266,263,336	$1,044,589
DIRECT STEAM:						
PROD.	$16,725,917	$16,725,917	($14,931,341)	($14,931,341)	$1,794,576	$1,794,576
DISTRI.	$5,733,962	$5,733,962	($2,981,485)	($2,981,485)	$2,752,474	$2,752,474
GENERAL	$4,298	$4,298	($5,530)	($5,530)	($1,432)	($1,432)
TOTAL STEAM	$22,463,975	$22,463,975	($17,918,357)	($17,918,357)	$4,545,618	$4,545,618
TOTAL COMPANY	$2,618,587,524	$23,805,667	($547,778,570)	($18,215,540)	$2,270,808,954	$5,590,127

NET PLANT ALLOCATOR [redacted] FACTOR 4

GROSS PLANT ALLOCATOR [redacted] FACTOR 5

NOTE 1: [redacted]
NOTE 2: [redacted]

KUENSTING

KCPL
STEAM HEAT CASE MO-86-139

ENERGY ALLOCATOR - FACTOR 6

1.	GRAND AVENUE STATION MWH (12/86)	13,673
2.	TOTAL SYSTEM MWH (12/86)	9,865,488
	FACTOR (1/2)	0.001383

CUSTOMER ACCOUNT ALLOCATOR - FACTOR 7

1.	STEAM CUSTOMERS (12/86)	123
2.	TOTAL COMPANY CUSTOMERS (12/86)	385,211
	FACTOR (1/2)	0.000319

DIRECT LABOR ALLOCATOR - FACTOR 8

1.	ANNUALIZED STEAM BARGAINING EMPLOYEES (12/86)	42.25
2.	TOTAL COMPANY BARGAINING EMPLOYEES (12/86 KC30)	1,854
	FACTOR (1/2)	0.022789

ACCT. 401-560 SUPERVISION AND ENGR. ALLOCATOR - FACTOR 9

1.	(COMPOSITES OF ACCOUNTS 401 - 561 TO 566, SCH. 6, COL. C & E) STEAM JURISDICTION AMOUNT	9435
2.	TOTAL COMPANY AMOUNT	9852,113
	FACTOR (1/2)	0.[illegible]

SALES REVENUE ALLOCATOR - FACTOR 12

1.	ANNUALIZED STEAM REVENUE (12/86)	[illegible]
2.	TOTAL COMPANY AMOUNT (12/86) (NOTE 1)	[illegible]
	FACTOR (1/2)	0.[illegible]

NOTE 1:
[illegible]

SCHEDULE 3-4

KUENSTING

KCPL
STEAM HEAT CASE NO-86-139

WORKING CAPITAL
GENERAL MATERIALS & SUPPLIES ALLOCATOR - FACTOR 11

(COMPOSITE OF AMOUNTS IN SCHEDULE 6, COL. C & D)

	DESCRIPTION OF PLANT	TOTAL COMPANY	STEAM JURIS.
		(A)	(B)
1.	TRANSMISSION	$122,724,955	$55,544
2.	DISTRIBUTION	$498,420,444	$2
3.	GENERAL	$35,453,728	$322,255
4.	TOTAL	$656,579,168	$379,208
	FACTOR (A/B)		0.228578

CASH WORKING CAPITAL
CASH VOUCHERS - OTHER O&M EXPENSE ALLOCATOR - FACTOR 12

(COMPOSITE OF AMOUNTS IN SCHEDULE 6, COL. C & D)

	DESCRIPTION OF EXPENSE	TOTAL COMPANY	STEAM JURIS.
		(A)	(B)
1.	PRODUCTION	$162,171,337	$154,223
2.	TRANSMISSION	$5,783,189	$1,872
3.	DISTRIBUTION	$32,552,385	$0
4.	TOTAL	$223,434,511	$157,825
	FACTOR (A/B)		0.000694

SCHEDULE 7-3