STATE OF MISSOURI
PUBLIC SERVICE COMMISSION
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CASE NO. HO-86-139

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Enclosed find certified copy of ORDER in the above-numbered case(s).

Sincerely,

Harvey G. Hubbs

Harvey G. Hubbs
Secretary

uncertified copy:

Bernard J. Beaudoin, Vice President-Finance, Kansas City Power & Light Co., 1330 Baltimore Avenue, Kansas City, Missouri 64105

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

CASE NO. HO-86-139

In the matter of the investigation of
steam service rendered by Kansas City
Power & Light Company.

APPEARANCES: Mark G. English, Counsel, and Jeannie Sell Latz, Attorney at Law, 1330 Baltimore Avenue, Kansas City, Missouri 64105, for Kansas City Power & Light Company.

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Darry Gene Sands, Attorney at Law, and Ilus W. Davis, Attorney at Law, 1700 City Center Square, Kansas City, Missouri 64105, for Customer Intervenors.

Carrol C. Kennett, Assistant City Attorney, 2800 City Hall, 414 East 12th Street, Kansas City, Missouri 64106, for the City of Kansas City, Missouri.

Jeremiah D. Finnegan, Attorney at Law, Finnegan & Kopp, 4225 Baltimore Avenue, Suite 101, Kansas City, Missouri 64111, for the County of Jackson, Missouri.

William C. Kelly, Assistant Attorney General, P. O. Box 899, Jefferson City, Missouri 65102, for the State of Missouri.

Carol L. Bjelland and Curtis G. Hanrahan, Assistants Public Counsel, P. O. Box 7800, Jefferson City, Missouri 65102, for the Office of the Public Counsel and the Public.

Mary Ann Young, Deputy General Counsel, and Douglas C. Walther, Assistant General Counsel, P. O. Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

REPORT AND ORDER

In its Report and Order in Case Nos. EO-85-185 and EO-85-224, the Commission created the instant docket for the purpose of investigating the future of

Kansas City Power & Light Company's (KCPL) steam service, the appropriateness of its electric boiler program and the proper pricing of steam service. In the same Report and Order, KCPL was ordered to file its steam service plan with the Commission. In addition, the Commission stated in that Report and Order that based upon KCPL's commitment to no increase in steam rates prior to 1987, KCPL should not file steam tariffs until 1987.

On June 2, 1986, KCPL filed its steam service plan, which proposes a phase out of the steam system by December 31, 1990, and the conversion of steam service customers to on-site electric boilers or electric space heating. Attached to its steam service plan, KCPL filed forms of revised tariffs and alternate phase-in tariffs related to steam service.

By order issued June 27, 1986, the Commission issued an order directing KCPL to file its proposed steam tariffs in connection with the steam service plan bearing an effective date of January 1, 1987.

In response to the Commission's June 27, 1986 order, KCPL filed on July 7, 1986, tariffs reflecting revised rate schedules of increased steam service rates, alternative phase-in rate schedules of increased steam service rates, and a conversion schedule related to converting steam customers to on-site electric boilers or electric space heating. The proposed tariffs bore a requested effective date of January 1, 1987. The proposed tariffs are designed to phase out the steam system by December 31, 1990, and convert the steam service customers to on-site electric boilers or electric space heating. The revised tariffs are designed to increase annual steam revenues by approximately 120 percent ($5,871,000) in charges for steam services. Alternatively, the proposed phase-in schedules are designed to phase in revenue increases of 22 percent per year for four consecutive years.

On August 25, 1986, the Commission issued its Suspension Order and Notice of Proceedings suspending the effective date of the tariffs to May 1, 1987, and setting a procedural schedule.

Applications to intervene in this proceeding have been granted to the following parties: Boatmen's First National Bank of Kansas City, Kansas City Southern Industries, Inc., Cathedral of Immaculate Conception, Denson One Hour Optical, Inc., The Ashley Building Partnership, Gailoyd Enterprises, Corp., John A. Marshall Co., Safety Federal Savings and Loan Association, MIMA Properties, Centerre Bank of Kansas City, Missouri, Performing Arts Foundation/Folly Theater, Inc., (Customer Intervenors), the State of Missouri, the City of Kansas City, Missouri, the County of Jackson, Missouri, and Kansas Power and Light Company (KPL Gas Service).

An early prehearing conference was held on October 1 and 21, 1986. The prehearing conference was convened on March 23, 1987, and a local public hearing was held in Kansas City, Missouri, in the City Council Chambers on March 30, 1987. Formal evidentiary hearings took place at the Commission's offices in Jefferson City the week of April 6, 1987. By Order dated April 17, 1987, the Commission suspended the proposed tariffs an additional six months to November 1, 1987. Initial briefs were filed by KCPL, the Customer Intervenors, KPL Gas Service, and the Staff of the Missouri Public Service Commission. Reply briefs were filed by KCPL, KPL Gas Service, and the Staff.

Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact:

I. Introduction

KCPL proposes to discontinue its steam service from Grand Avenue Station by December 31, 1990. This date coincides with the termination of the steam service agreement with National Starch, KCPL's largest steam customer.

Upon Commission approval of its plan, KCPL intends to begin phasing out steam distribution service. The Company has divided its steam customers into eleven groups or phases based upon geographic proximity along the steam system. Each of the eleven groups is scheduled to be phased out by a date certain. However, KCPL states that it will attempt to accommodate to the extent practicable each customer's conversion schedule as the phase-out progresses.

In each phase-out distribution area, KCPL proposes to offer each customer on-site heating equipment. Under the proposal, the customers would be offered the option of receiving either electric steam boilers or electric space heating equipment. The electric steam boilers would be offered at no cost to the customer. If the customer chooses space heating equipment and it is more expensive than the corresponding boiler, the customer would reimburse KCPL for the difference in capital cost.

The plan provides that KCPL will own, install, and maintain the electric steam boiler and those customers would continue to be steam customers under the applicable steam tariffs. During the course of the hearing, KCPL proposed an alternative whereby electric steam boiler customers would be charged the applicable electric rate.

KCPL would own and install the electric space heating equipment, but the customers would be responsible for maintenance. The customers with electric space heating equipment would be served under the applicable electric space heating tariffs.

Ownership of both the electric steam boilers and all electric heating equipment would pass to the customers as of December 31, 1995. However, the customers would have the option of earlier purchase of the boilers or equipment at depreciated original cost.

The Company provides building energy use studies at the facilities of each steam customer to determine the appropriate sizing of the on-site equipment. Under the plan, KCPL would continue to provide these energy audits.

In conjunction with its conversion plan, KCPL has filed revised tariffs for steam service seeking approximately $5.8 million or a 120 percent increase on an annual basis. During the prehearing conference KCPL and Staff stipulated to a $3.2 million revenue requirement (66 percent). Contingent upon the acceptance of the conversion plan, KCPL proposes to phase in the revenue increase over four years at approximately 13.5 percent per year with no deferral or carrying charge.

The Staff opposes the Company's plan on the ground that KCPL did not adequately evaluate the available alternatives to the discontinuance of steam service. Specifically, Staff contends that KCPL did not adequately consider the sale of the system or the use of natural gas fired boilers as an alternative for its steam customers. In addition, the Staff contends that the Company's plan to provide electric boilers or space heating equipment violates the Promotional Practices Rule and masks the true cost of conversion to electric heat. Staff contends that KCPL has not made an effort to market steam service in its downtown steam loop and KCPL has neglected the management and maintenance of the system. The Office of the Public Counsel, the City of Kansas City and Jackson County support the Staff.

The Customer Intervenors support the disconnection of the downtown steam distribution system and also support the provision of electric boilers or space heating equipment.

The State of Missouri takes the position that if the Commission authorizes termination of KCPL's central station steam distribution service, any phase out/conversion plan must afford steam service customers adequate time to make and form choices from among the various alternative heating sources and to implement such decisions. Further, the State contends that the conversion plan should not discriminate between steam customers as regards the dates at which they must incur capital costs and other expenses associated with their conversion to another heat source. Finally, the State contends that KCPL should be required to accommodate each customer's conversion situation so long as such conversion is fully completed by the date established for complete termination of the steam distribution system.

KPL Gas Service maintains that KCPL's proposal to install electric steam boilers violates the Commission's Promotional Practices Rule. However, if the proposal is approved, KPL Gas Service contends that it should be allowed to install on-site gas boilers and chillers and to charge rates equivalent on a BTU basis to those set by the Commission for KCPL's steam service through 1995.

The issues to be determined in this proceeding are threefold: 1) whether KCPL should be authorized to terminate its obligation to provide central system steam service; 2) whether KCPL should be authorized to offer electric boilers or electric space heating equipment to its steam customers; and 3) what ratemaking treatment should be afforded steam service.

II. Termination of Steam Service

A. History and Current Condition of the System

The distribution of steam for the purpose of heating the downtown district commenced operations in Kansas City in 1888 as a by-product of electric generation. This service was provided by the Kansas City Electric Light Company (a predecessor of KCPL) from a generating station located at 6th and Baltimore (Heating Station No. 1). As demand increased, two additional plants were constructed at 13th and Baltimore (Heating Station No. 2). The Grand Avenue Station (formerly the Missouri River Power House) was purchased from the Kansas City Transit Company in 1927. At that time, Heating Station No. 1 was converted to a pressure reduction plant and connected to Grand Avenue with a new high pressure (185 PSI) main.

In 1930 a high pressure main was built from the Grand Avenue plant to 10th and McGee and by 1954 it was further extended to a pressure reduction plant at 13th and Wyandotte (Heating Station No. 3). Heating Station No. 2 was abandoned in 1958, since a second high pressure main had been built from Grand Avenue to Heating Station No. 1 continuing up Wyandotte to Heating Station No. 3.

The system, as it exists today, extends generally from 3rd Street south to 14th Street and from Oak Street west to Broadway. It consists of two high pressure (185 PSI) underground steam distribution mains which extend from Grand Avenue Station and loop the service area to serve Heating Stations No. 1 and 3; a short intermediate pressure (105 PSI) distribution system and the low pressure (15 PSI) distribution system. The steam system serves approximately 130 customers. Twenty customers are served directly from the high pressure system, one customer is connected to the intermediate pressure system and the remaining customers are connected to the low pressure system.

From 1918 to 1982, the total length of steam main increased from 26,000 feet to over 61,000 feet. The bulk of this increase occurred in 1930, 1954 and 1958, when the high pressure system was extended from Grand Avenue to the south end of the system. Much of the low pressure piping was built by KCPL's predecessor in 1905. Since 1982, approximately 5,457 feet of pipe have been disconnected due to an increasing number of customers leaving the system.

The Grand Avenue Station consists of three large boilers fired by coal or natural gas and one small package boiler fired by natural gas or oil. Since the boilers were designed to produce electricity at a higher temperature and pressure than required for steam, the utilization of these boilers solely for the production of steam introduces thermal inefficiency in the steam heat cycle.

Since the Grand Avenue Station was retired from electricity production in 1985, the boiler design limits the burning of coal to high steam load periods, requiring natural gas to be burned during lower load periods. With the reduction in steam load over the last few years, natural gas is used almost exclusively to generate steam. The operation of the large boilers are labor intensive requiring increasing maintenance costs.

The high and intermediate pressure steam distribution systems appear to be in reasonably good condition. Only 436 feet of high pressure pipe was installed during the period 1983 through 1986. The maintenance problems to the high pressure system have been confined primarily to the failure of expansion joints. The relatively good condition of the high pressure system appears to be due to the fact that approximately 75 percent of the pipe has been installed since 1950 and its welded design is not as susceptible to failure as the flanged design of the older sections of the low pressure system.

The low pressure system is in poor condition. Approximately 4,952 feet of pipe was installed during the 1983 through the 1986 period. The cause of the condition of the low pressure system is related to the age of the pipe. Forty-six percent of it was installed during the period 1900 to 1920. Water enters the pipe enclosure resulting in corrosion and leaking pipes. For district heating to continue, the low pressure system must be replaced or completely rehabilitated.

In 1970 annual downtown steam sales hit a peak of 1,220,016 MLBs serving 283 customers. The 1986 downtown sales of 427,964 MLBs was 35 percent of 1970 sales. In addition, 547,164 MLBs were sold to National Starch in 1986. During the period 1982 through 1986, 84 customers left the system. Eight converted to electric heat, 27 converted to natural gas, 40 departures were the result of razed buildings and 9 were the result of closed or vacant buildings.

In the period 1977 through 1982, KCPL was granted steam rate increases of 11 percent (1977), 6 percent (1978), 10 percent (1980) and 19 percent (1982). Despite these increases, KCPL did not cover its steam operating costs between the years 1978 through 1983.

B. Management of the System

Until 1982 the management of the system was largely decentralized. KCPL's transmission and distribution system operations department (T and D) managed both the electric and steam operations. T and D spent approximately 10 percent of its time on steam operations. Until KCPL initiated studies in 1981, no long range plan for the district heating system existed. Consequently, KCPL had no systematic planned maintenance program for the system. The Company's maintenance program consisted mainly of reacting to emergency situations and repairing leaks as they occurred.

During the period 1979 through 1981, KCPL experienced large losses on its system. In response to the situation, KCPL centralized its steam management and began an intensive maintenance program in 1982.

Staff contends that the current condition of the steam system is caused by the Company's mismanagement and neglect of system maintenance.

Although it is true that KCPL took a "patchwork" approach toward maintenance of the system in the 1970s, the Commission is unable to find that this amounts to mismanagement or imprudence. During the period in question customers were leaving the system, the percentage allocation of Grand Avenue to electric operations was diminishing and rates were increasing. Thus, the future of the system was uncertain. A systematic replacement program would have been costly, resulting in even higher rates and would have been likely to force more customers off the system. In addition, KCPL took steps in 1982 to correct the problems encountered in the 1979-1981 period.

C. Marketing of Steam Service

The record reflects that KCPL has not aggressively marketed steam. KCPL uses the same individuals to market steam and electric service. These marketing efforts consist of providing rate schedules and comparions upon request. In 1972, KCPL officials told the builder for the Mercantile Bank building that steam may not be available and that the all-electric option should be considered. KCPL's internal memos suggest that KCPL considered refusing service to the Jackson County Jail and was reluctant to provide service to the new Vista Hotel. The record also demonstrates an initial reluctance on the part of KCPL to expand its service territory in order to serve Corn Products Corporation (CPC), National Starch's predecessor.

Staff contends that KCPL's inadequate marketing of steam and resulting rumors about the future of steam service contributed to declining steam customers from 1980 forward.

Although it is true KCPL did not aggressively market steam during the period in question and KCPL has a greater incentive to market off-peak electric usage than steam usage, the Commission finds no imprudence or impropriety with respect to KCPL's steam marketing efforts.

The steam system is old, customers have been leaving the system because of abandoned or razed buildings or because the future of steam was uncertain as a competitive energy source given the inevitable future increase in steam rates. KCPL produced evidence showing that the acquisition of all possible heating customers in the steam service area would produce 255,989 MLBs in sales annually. KCPL estimates that additional load would result in an average price per MLB of $13.65, a substantial increase over current rates. KCPL estimates that the acquisition of all new buildings added in downtown Kansas City since 1977 would produce only 38,288 additional MLBs in sales annually.

In the Commission's opinion, Staff's allegation that KCPL has inadequately marketed steam and has discouraged customers from taking steam service and caused the decline of the steam system is unfounded. The Company's 1982 study recognized that if a large customer could not be secured customer additions after 1985 should be discouraged. KCPL did in fact secure a large customer (CPC) which resulted in profitable operations for two years. National Starch's demand is less than that of CPC. The National Starch contract terminates December 31, 1990. Given the fact that National Starch represents more than one-half of KCPL's steam load, it is not unreasonable for KCPL to convey to its customers that the future of steam service after 1990 is in doubt. The Commission rejects Staff's contention that KCPL's marketing efforts have caused the decline of the system.

D. <u>Economic Feasibility of Steam Service</u>

In the late 1970s, KCPL initiated studies with respect to the future of the steam business. The first formal study, a Study of KCPL's Steam Heat Business, was completed in 1981. The second study, KCPL Long Range Steam Planning Study, was completed in 1982. These studies contained various recommendations for the steam system. Both studies recommended that the Company investigate the possibility of large customer additions. The 1981 study suggested the sale of the system as a possible alternative. However, the 1982 report recommended that if a large customer could not be secured, new customers should not be added after 1985 and customer conversion to electric heat should be promoted.

In 1982, KCPL filed a steam rate case (HR-83-245) and concurrently began negotiating a steam contract with CPC. It was estimated that this customer could triple KCPL's annual steam load. The agreement was signed August 8, 1983, and KCPL withdrew its steam filing. CPC sold its facilities to National Starch in 1985. KCPL negotiated an agreement with National Starch effective December, 1985, but National Starch's estimated steam heat requirement was about one-fourth of the CPC initial estimate.

The lower steam demand for National Starch coupled with the 100 percent allocation of the Grand Avenue Station to steam production has increased the cost of steam heat and has created operating losses for KCPL's steam business. It is because of these conditions that KCPL has filed the instant case.

In August of 1984, KCPL initiated a study which resulted in the Downtown Steam System Conversion Study (Exhibit 12, Schedule 1). This study was completed on March 1, 1986, and forms the basis for KCPL's downtown steam service plan as proposed in this case.

The study analyzed the projected economic and cost of service impact of 29 steam supply and distribution options. The best steam supply options are based on the following assumptions:

1. G1A Retube the boilers at Grand Avenue Station, replace the distribution system, continue central steam distribution and maintain current customer level to the year 2000.

2. G1C Same as G1A except 60 percent of customer sales are lost by the year 1990.

3. C1A Discontinue central steam distribution, install electric boilers on customer's premises by the year 1990 and maintain the current customer level to the year 2000.

4. C1C Same as C1A except 60 percent of the steam sales are lost by 1990.

These estimates suggest that continuing current operations at Grand Avenue would be less expensive on an annual basis than on-site production assuming current sales levels. However, as sales decline, on-site production of steam is progressively less expensive annually than maintaining a central steam station and an underground steam distribution system. This is because the on-site production option avoids the risk of incurring the large fixed cost which would prevail under the district heating option where customers continue to leave the system.

KCPL estimates the capital cost of converting to steam boilers at $23 million assuming 100 percent steam customer participation. In addition, at least $3 million of downtown electric distribution system construction would have to be advanced to the 1985 to 1990 period under the boiler option. In contrast, the capital expenditures estimated to rehabilitate Grand Avenue and the distribution system is $17.3 million assuming 100 percent customer participation.

The Staff criticizes KCPL's conversion study because (1) it rejects the sale of the system as an option; (2) it does not consider the installation of natural gas-fired package boilers at Grand Avenue Station; and (3) it does not consider on-site natural gas boilers for the production of steam service.

Staff witness Miller performed an analysis estimating the cost of returning the steam system to an acceptable long-range operating condition. Mr. Miller concluded that the best long-term alternative is to install new package gas/oil fired boilers at Grand Avenue Station, extend the high pressure system to serve the low pressure customers, and repair the high pressure system at a total cost of $11.8 million. Mr. Miller also estimated the cost of a short-term rehabilitation option at $2.6 million. However, Mr. Miller conceded that the short-term estimates were understated.

Based upon Miller's long-term rehabilitation estimate, witness Dahlen calculated the 1987 cost of steam at $11.75 MLB, including National Starch and $14.50 MLB without National Starch. The current cost of steam is approximately $10.50 per MLB. The Commission is persuaded by Company witness Levesque's arguments that these estimates are understated as they include no return of or on existing plant and understate natural gas prices. Adjusting for these two items, would add approximately $5.58 per MLB, increasing the 1987 cost of steam under the long-term rehabilitation scenario to $17.26 per MLB. The Commission notes that these estimates assume the retention of the existing steam load.

Excluding the consideration of capital costs required to convert from steam to another energy course, the current steam rate at $10.50 per MLB is very close to the current electric space heating rate of 3.7 cents per KWH. $10.50 per MLB is roughly equivalent to 3.5 cents per KWH. Under the Company's test boiler program, only one of four customers would have paid higher rates had they been charged the electric rather than the steam rates. The natural gas rate is lower than both the steam and electric rates. The record reflects that $4.80 per MCF is equivalent to $6.00 per MLB. At the time of the hearing KPL Gas Service charged a commercial rate of $4.23 per MCF. Thus, when capital conversion costs are excluded natural gas is the lowest cost option with electric being very close to current steam costs.

The only comparisons of the cost of steam produced by central distribution steam, on-site gas boilers and on-site electric boilers expressed in terms of dollars per MLB is contained in Staff witness Dahlen's testimony. These figures were adjusted in Company witness Levesque's testimony. Witness Levesque adjusted the figures for what he considered to be understated gas prices, gas boiler costs and overstated electric boiler costs. The following table shows the 1987 cost per MLB for the three alteruatives comparing the estimates of witness Dahlen and witness Levesque.

	Dahlen	Levesque
District Heating (Long-Term Rehab w/Nat'l Starch)	$11.75	$19.18
District Heating (Long-Term Rehab w/o Nat'l Starch)	$14.50	$21.78
Individual Natural Gas Boilers (200 BHP)	$10.56	$22.27
Individual Electric Boilers (200 BHP)	$26.69	$24.58

These figures suggest that steam produced from the central system is the lowest cost of the three alternatives and that electric boiler production is the highest cost alternative. These estimates are consistent with KCPL's downtown steam conversion study which shows central steam production from Grand Avenue to be lower in cost than on-site electric boiler production of steam, considering both capital costs and annual operating costs and assuming retention of current customer load.

It is important to note that under both Staff's rehabilitation plan and Company's rehabilitation scenario for central steam production, current customer load must be retained in order to keep central steam service competitive. As customer sales decline the cost of central steam increases and the cost of on-site production declines. This is because the capital costs associated with central steam distribution does not vary substantially given fewer customers or lower sales. As customer sales decline, the costs must be spread among fewer customers and the cost per MLB increases.

In the Commission's opinion, for steam service to be successful its price must be competitive with other energy alternatives. The current cost of steam is barely competitive with the electric and natural gas alternatives. This is evidenced by the fact that customers have been leaving the system in favor of electric and natural gas alternatives at the current steam rates. Company and Staff have stipulated to a revenue requirement of $3.2 million, a 66 percent increase based on the current condition of the system. It is only reasonable to assume that more customers will leave the system if faced with a 66 percent rate increase. The only way central steam service can be competitive and economically successful is if customer load increases. If the existing system requires a 66 percent increase, keeping the price at current levels would require an increase in steam sales. Estimates to rehabilitate the system range from $11 to $17 million. Such an investment would require even higher rate increases unless customer sales increased substantially.

It is generally true that district heating has not expanded in cities beyond the core areas where there is adequate load density. Because of the high cost of the underground distribution system, adequate load density (steam sales per foot of main) is essential to support the cost of the system. This is the reason systems tend to serve only the downtown commercial and industrial areas of cities.

In the Commission's opinion, it is unlikely that a regulated utility can turn central district steam operations into a profitable venture. Even the Staff concedes that KCPL can't succeed in the steam business. In fact, Staff admits that it does not know if a regulated utility can provide steam service on a profitable basis.

A governmental entity or a cooperative, willing to offer the service on a nonprofit basis might be able to successfully operate the steam business. An entrepreneurial enterprise would have to be willing to invest large amounts of capital to rehabilitate the system, freeze rates, and forego a return on the investment in the early years with the aim of increasing sales and initiate an aggressive marketing campaign.

In the Commission's opinion it would be unreasonable to require KCPL to engage in an extensive rehabilitation project, charge noncompensatory rates and engage in an aggressive marketing campaign with the hope of revitalizing the steam system. As noted above, customers are continuing to leave the system and more than half of the customers who have left the system since 1982 have done so because of abandoned or razed buildings. KCPL has no control over abandoned buildings. The Commission suspects that the future of steam service depends as much on the success of revitalization of the downtown area as on marketing campaigns.

KCPL has kept the price of steam stable since 1982. The addition of CPC in 1983 added vitality and hope to the future of steam service. Unfortunately National Starch's load is not high enough to stabilize the system and its contract expires in 1990. The record reflects that National Starch has indicated that $7 per MLB is too expensive for steam service. KCPL has been unable to attract other high load customers to its system as its inquiries revealed that customers located north of the river are not interested in connecting to the National Starch extension.

Based on the foregoing considerations, the Commission determines that the central steam district service is no longer viable as a regulated utility service in downtown Kansas City and, therefore, KCPL should be relieved of its obligation to provide steam service as of December 31, 1990.

E. Sale of the System

KCPL has chosen not to offer the system for sale based on the assertion that the system can't be salvaged. KCPL contends that a new operator would have to raise rates forcing more customers off the system. Finally, KCPL argues that if a new operator goes out of business the remaining customers will have to obtain an alternate heating source and it is unknown if compensation would be offered.

Staff contends that KCPL should not be permitted to abandon its central steam business without first exploring the option of the sale of the system to another entity. Staff maintains that only the market can determine if an entity exists which is willing to make a viable business of the downtown steam business.

Other central district heating systems in the United States are succeeding and nine major district heating systems have been sold since 1979. The central district heating system in downtown St. Louis was recently sold and is experiencing successful operations. This sale was approved by the Commission in Case No. HM-84-38, 26 Mo. P.S.C. (N.S.) 616 (1984).

KCPL has received inquiries expressing interest in purchasing the system. Nevertheless KCPL is determined that it will not consider sale of the system despite the fact that its 1981 study recommended that the sale option be investigated.

Although the Commission has determined that KCPL can't succeed in the steam business, it is unknown if another entity could make a success of it. As noted above, success requires a willingness to charge noncompensatory rates at the outset and the ability to commence an aggressive marketing campaign to increase sales volume.

The Commission agrees with Staff that only the market will determine whether an entity exists with the expertise and interest required to make a successful business of central steam operations.

The Commission does not believe that steam service as a heating option for Kansas City customers should disappear without first exploring whether or not a reliable purchaser exists who is willing and able to operate the business on a successful basis.

Based on the foregoing, the Commission determines that KCPL should make a good faith effort to sell the system. The Company should solicit its proposals for sale or transfer of the system and conduct negotiations with respect to purchasers and report to the Commission as to its progress. The Commission determines that KCPL should prepare a request for proposals (RFP). The RFP shall require that each proposal contain: (1) the proposer's qualifications; (2) the sale price; (3) the approach to providing steam service; (4) steam rates to be charged; and (5) the disposition of the Grand Avenue Station. KCPL should prepare its request for proposal as soon as reasonably practicable and shall report to the Commission the results of its sale efforts, on or before January 1, 1989.

KCPL witness Beaudoin stated that the solicitation process would take about three months. Therefore, it would not cause undue delay with respect to KCPL's plans to terminate service. The Commission recognizes KCPL's interest in terminating steam service. However, the crucial date for termination is December 31, 1990, the date for the expiration of the National Starch contract. On the other hand, the Commission does not believe protracted negotiations concerning the sale of the system would serve any useful purpose. Such a delay would not be in the public interest as it would only add to the uncertainty concerning the future of steam service.

III. Conversion to Heating Equipment

Staff and KPL Gas Service contend that the KCPL plan to offer boilers or space heating equipment to customers at no charge is a violation of the Promotional Practices rule. 4 CSR 240-14.010(5)(G) defines Promotional Practices as follows:

> ... any consideration offered or granted by a public utility or its affiliate to any person for the purpose, express or implied, of inducing such person to select or use the service or additional service of such utility, or to select or install any appliance or equipment designed to use such utility service.

"Appliance or Equipment" is defined as "... any device which consumes electric or gas energy and any ancillary device required for its operation." 4 CSR 240-14.010(5)(B).

As is pertinent to the issues in this case, 4 CSR 240-14.020(5) and (6) set forth the following prohibited promotional practices:

> (5) The provision of free, or less than cost or value, wiring, piping, appliances or equipment to any other person is prohibited, provided that a utility, engaged in an appliance merchandising sales program, shall not be precluded from conducting legitimate closeouts of appliances, clearance sales, and sales of damaged or returned appliances.

> (6) The provision of free, or less than cost or value, installation, operation, repair, modification or maintenance of appliances, equipment, wiring or piping of any other person is prohibited.

KCPL contends that its equipment offer is not a "promotional practice" on the ground that the offer is not one of inducement, but rather an offer of compensation to KCPL's steam customers, whose steam service is being terminated.

In the alternative, should the Commission find that the ordinary application of the Promotional Practices rule prohibits the equipment offer, KCPL requests an exemption from the rule, based on unusual circumstances.

In the Commission's opinion there is no question that KCPL's equipment offer is for the purpose of inducing KCPL's steam customers to select electric service upon termination of steam service. KCPL has stated that it desires to retain these customers as electric customers. In addition, KCPL's 1984 report addressing conversion of the district steam system acknowledges that electricity could not be competitive with natural gas (for customers who can be converted to natural gas) if the customer has to sustain the conversion costs.

It is true that one of the goals of the plan is to provide assistance to steam customers for the purpose of converting to an alternate heating source. Nevertheless, the fact remains that the equipment offer induces the customer to convert to electric service. A true compensation plan would offer the cost of alternative heating equipment which would avoid the "inducement" problem.

The Commission finds that KCPL's equipment offer is clearly a prohibited promotional practice under both 4 CSR 240-14.020(5) and (6), as it constitutes the provision of free or less than cost equipment and the provision of free or less than cost installation and maintenance of equipment.

The Commission believes that although the termination of steam service is an extraordinary circumstance, the equipment offer constitutes the kind of practice that the Promotional Practices rule was designed to prohibit. The offer masks the true cost of conversion to the customer and may result in a choice which is not in the customer's economic best interest over the long term.

The record reflects that KCPL intends to request a depreciation authority order allowing it to depreciate the equipment by 1995. Accordingly, KCPL may seek to recover the depreciation expense associated with the equipment in rates. In addition, it is unclear whether KCPL will later request ratemaking treatment for this equipment in future rate cases. Ratemaking treatment of the equipment provision to steam customers raises cross-subsidization issues.

In order for KPL Gas Service to compete with KCPL for heating customers, it requests the opportunity to offer heating equipment to steam customers if the Commission approves KCPL's conversion plan. This approach puts KPL Gas Service in the position of providing "compensation" to KCPL's steam customers in order to acquire their business. If KPL Gas Service is allowed to offer free heating equipment to former KCPL steam loop customers, should not other new KPL Gas Service customers outside the downtown area also seek free heating equipment? This raises discrimination issues. In addition, KPL Gas Service would surely seek ratemaking treatment for its equipment offer, which also raises cross-subsidization issues.

A variance to the Promotional Practices rule can be granted to a utility upon a "... proper showing by it that it is faced with and must meet unregulated competition..." 4 CSR 240-14.010(2). No such showing has been made in the instant case.

Based on the foregoing, the Commission finds that KCPL shall not offer heating equipment to its steam customers under its proposed conversion plan.

In addition, with respect to KCPL's test boiler program, KCPL shall offer customers who have had boilers installed on the premises the option to purchase the equipment or be reconnected to the steam system. The equipment must be transferred or the customers must be reconnected to the steam system within twelve (12) months of the effective date of this Report and Order. Customers who purchase the boilers should be charged the appropriate electric rate for electric service to those boilers.

IV. Ratemaking Treatment

As noted above, KCPL and Staff have stipulated to a $3.2 million revenue requirement (66 percent). Under its proposed conversion plan, KCPL requests to phase in the revenue requirement over four years at approximately 13.5 percent with no deferrals or carrying charges.

However, if the Commission approves KCPL's request to terminate service by 1991, but does not authorize KCPL to furnish electric heating equipment, KCPL is willing to forgo any steam rate increase for the remaining lifetime of steam service as compensation to its steam customers.

In the Commission's opinion freezing rates pending the termination of service is reasonable, so long as no service is terminated prior to December 31, 1990. The Commission has already recognized that the crucial date for the termination of steam service is December 31, 1990, the expiration date of the National Starch contract. If there is no conversion program, there is no necessity to phase out the steam service as customers are converted to electric equipment.

Under this approach, the steam customer will have received service based upon the rate established in 1982 and thus will receive a form of compensation for the inconvenience and expense of changing to another heating service. The customers will not be forced off the system by increased rates pending the sale of the system. Such preservation of the customer base could increase the possibility of a sale. Finally, the steam customers would be given the assurance that steam service would be available at current rates until sale of the system or until abandonment.

In short, this approach would allow customers time to seek the most advantageous heating alternative, would compensate them with stable below-cost rates until the steam system is sold or abandoned, and would give KCPL an incentive to find a buyer, if one exists. Based on the foregoing, the Commission determines that KCPL shall not terminate steam service to any of its customers prior to December 31, 1990, and that KCPL shall continue to offer steam service at current rates until the system is sold or abandoned as of December 31, 1990.

V. Summary

The Commission has found that KCPL shall be authorized to abandon central steam distribution service as of December 31, 1990. However, KCPL shall make a good faith effort to sell the system and shall not terminate service to any customer until abandonment. KCPL shall solicit proposals for sale or transfer of the system as soon as reasonably practicable and shall report to the Commission as to the outcome of its efforts on or before January 1, 1989. KCPL shall freeze rates at current levels until the system is sold or abandoned.

Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law:

KCPL is a public utility providing steam heat and electric service in the Kansas City area and as such is subject to the jurisdiction of this Commission pursuant to Chapters 386 and 393, RSMo 1986.

> In cases involving the abandonment of public utility service, the general rule is that a public utility has no right to discontinue or abandon its service or any part of its property devoted to public use or to impair its ability to perform its public duties except with the consent of the State; and the mere fact that the enterprise or particular service is unprofitable does not justify the utility in ceasing or refusing to perform its duties. 73B C.J.S. Section 9, page 146.

The Commission has addressed abandonment of service in railroad abandonments as well as abandonments involving, gas, electric and telephone utilities. The Commission has adjudicated two steam abandonment cases involving the St. Joseph Light & Power Company.

The Missouri courts have adopted the general rule that a public utility may not abandon service without Commission approval. State ex rel. City of Kirkwood v. P.S.C., 50 S.W.2d 114, 118 (Mo. banc 1932). The Supreme Court has stated that to determine reasonableness, the question of the expenditures necessary to make improvements and cost of operating lines were "potent" factors. City of Kirkwood, at 120. City of Kirkwood involved the abandonment of a spur of a street railroad.

The standard generally utilized by the Commission in abandonment cases is the converse of that applied in the grant of a certificate of public convenience and necessity: the public convenience and necessity no longer require the operation of the service in question. Re: St. Joseph Light & Power Company, 22 Mo. P.S.C. (N.S.) 180, 182, (1978). The standard is met by applying a balancing test, weighing the losses incurred by the utility against any public need for the service. The essential factors to be considered are: (1) the cost of providing the service; (2) whether the service can be operated at a profit; (3) the customer demand for the service; (4) whether an alternative service is available.

The Commission has found that the long-term provision of steam service would require substantial capital investment requiring increased rates. The Commission has also found that the provision of service absent any large rehabilitation effort would require a 66 percent rate increase. The Commission has found that customers continue to leave the system and given the inevitability of increased rates continued defections are to be expected. The Commission has found that an alternative service is available to steam customers, either in the form of continued steam service if the system is sold or conversion to electric or natural gas service.

Based on the foregoing considerations, the Commission concludes that the public convenience and necessity no longer require that KCPL continue the provision of central steam distribution service in downtown Kansas City. Therefore, the Commission concludes that KCPL shall be authorized to discontinue steam service under the conditions set forth in this Report and Order.

The Commission has found that KCPL's proposal to convert steam customers to electric heating equipment should be rejected as it violates 4 CSR 240-14.020(5) and (6).

KCPL's tariffs which are the subject matter of this proceeding were suspended pursuant to the authority vested in this Commission by Section 393.150, RSMo 1978, and the burden of proof to show that the increased rates are just and reasonable is upon KCPL.

The Commission may consider all facts which in its judgment have any bearing upon the proper determination of the setting of fair and reasonable rates. The Commission has found that KCPL's rates shall remain at current levels until the system is abandoned or sold.

It is, therefore,

ORDERED: 1. That Kansas City Power & Light Company shall make a good faith effort to sell its central distribution steam system and shall prepare a request for proposals as set out in this Report and Order.

ORDERED: 2. That Kansas City Power & Light Company shall report to the Commission on or before January 1, 1989, as to the results of its efforts to sell the system.

ORDERED: 3. That Kansas City Power & Light Company shall be authorized to abandon central district steam service as of December 31, 1990.

ORDERED: 4. That Kansas City Power & Light Company shall not terminate service to any steam customer until a transfer of the system or until December 31, 1990, if the sale effort is not successful.

ORDERED: 5. That Kansas City Power & Light Company's proposal to convert its steam customers to electric heating equipment be, and it is, hereby rejected.

ORDERED: 6. That Kansas City Power & Light Company shall offer customers which have had test boilers installed on their premises the option to purchase the boilers or be reconnected to the steam system. The transfer of equipment or reconnection must be completed within twelve (12) months of the effective date of this Report and Order.

ORDERED: 7. That the tariffs filed herein by Kansas City Power & Light Company be, and they are, hereby disallowed and Kansas City Power & Light Company shall continue to provide service at current rates pending sale or abandonment.

ORDERED: 8. That late-filed Exhibit No. 58 is hereby received into evidence.

ORDERED: 9. That this Report and Order shall become effective on the 30th day of October, 1987.

BY THE COMMISSION

Harvey G. Hubbs

Harvey G. Hubbs
Secretary

(S E A L)

Steinmeier, Chm., Mueller, Hendren,
and Fischer, CC., Concur.
Musgrave, C., Dissents with separate
opinion and certify compliance with
the provisions of
Section 536.080, RSMo 1986.

Dated at Jefferson City, Missouri,
this 7th day of October, 1987.

STATE OF MISSOURI

PUBLIC SERVICE COMMISSION

Case No. HO-86-139

In the matter of the investigation of steam service rendered by Kansas City Power & Light Company.

DISSENTING OPINION OF COMMISSIONER CHARLOTTE MUSGRAVE

I respectfully dissent from the majority in this case concerning the applicability of the Commission's "Promotional Practices Rule" to KCPL's offer to place free boilers on the premises of steam loop customers. KCPL's equipment offer is not for the purpose of "inducing" customers to use KCPL's service or additional service. These customers are existing customers of KCPL and therefore are already using KCPL service. The equipment offer merely assists steam customers to convert to an electric heating source, and this compensates them for the inconvenience associated with steam service termination. These customers have been using steam service for many years. One of the advantages of steam service is that customers need not incur the capital costs associated with installing a heating plant on the premises. With the termination of steam service these customers would be without heating service, in effect stranded customers. Given the high cost of conversion, it is not unreasonable to predict more abandoned buildings in the downtown area if customers must pay conversion costs.

A prohibition of KCPL's boiler plan would work a hardship on the utility customers and would benefit KPL Gas Service to the extent customers can convert to gas service. Approval of KCPL's equipment plan would benefit steam customers and would also benefit KCPL with increased electric sales. In this Commissioner's opinion to require these customers to pay for electric conversion when KCPL is willing to provide these up front costs would be unreasonable and inequitable and not in the public interest.

In my opinion the Promotional Practices rule was not designed to prohibit customer assistance provided by a utility where public utility customers are suddenly left without utility service because the service in question is abandoned. Therefore, I would find the offer of heating equipment in the instant case does not come within the Promotional Practices rule.

Because the abandonment of the steam system results in a unique situation, I believe that KCPL should be allowed to offer equipment at no cost to its steam customers if its efforts to sell the system are not successful. This program should be approved on the condition that KCPL does not seek to recover the cost of service of this equipment in any form (depreciation expense or rate base inclusion) in future rates. I also believe that KPL Gas Service should be allowed to offer natural gas fired boilers at no cost to existing steam customers at stockholder expense so long as it does not seek to recover these costs in future rates and charges the appropriate natural gas rate for the service. The offer of equipment by either company should be permissible only if central steam distribution is abandoned altogether.

Respectfully submitted,

Charlotte Musgrave

Commissioner

Dated at Jefferson City, Missouri,
on this 7th day of October, 1987.

HO-86-139
KCPL Steam

CASE NO.

Chairman

Commissioner

G.G.M.

Commissioner

Commissioner

Commissioner

3. 1584c

A.H.

STATE OF MISSOURI

OFFICE OF THE PUBLIC SERVICE COMMISSION

I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.

WITNESS my hand and seal of the Public Service Commission, at Jefferson City, Missouri, this 7th day of October, 1987.

Harvey G. Hubbs
Secretary