KANSAS CITY POWER & LIGHT COMPANY
1330 BALTIMORE AVENUE
P.O. BOX 418679
KANSAS CITY, MISSOURI 64141-9679

LAW DEPARTMENT
(816) 556-2785

December 30, 1988

Mr. Harvey G. Hubbs
Secretary
Missouri Public Service Commission
P. O. Box 360
Jefferson City, Missouri 65102

RE: Case No. HO-86-139; Report of Kansas City Power & Light Company Regarding its Good Faith Efforts to Sell its Kansas City, Missouri, Steam Distribution System.

Dear Mr. Hubbs:

In its October 7, 1987, Report and Order in this case, the Commission directed Kansas City Power & Light Company (KCPL) to make a good faith effort to sell its Kansas City, Missouri, central station steam distribution system, and to report to the Commission by January 1, 1989, the results of that effort.

I thus enclose for filing the original and fourteen copies of the Report of Kansas City Power & Light Company Regarding its Good Faith Efforts to Sell its Kansas City, Missouri, Steam Distribution System. Briefly, the Report details (a) the efforts KCPL put into creating an RFP for the steam system and the wide advertising of its availability, (b) the four submissions received, (c) the choosing of Kinetic's proposal to purchase the steam distribution piping and associated assets for $4 million, (d) negotiations with Kinetic on sales documentation, and (e) the failure of the proposed transaction due to inability to secure financing.

KCPL has, therefore, complied with the Report and Order, and shall terminate utility steam service, as authorized, as of December 31, 1990. Because of the impact of this matter on KCPL's steam customers, KCPL today sent to each of them a copy of the Report (minus the attachments) and a copy of the enclosed press release.

Would you please bring this to the Commission's attention.

Mark G. English

MGE:cg
Enc.
cc: All Parties of Record

HD

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

REPORT OF KANSAS CITY POWER & LIGHT
REGARDING ITS GOOD FAITH EFFORTS TO SELL ITS
KANSAS CITY, MISSOURI, STEAM DISTRIBUTION SYSTEM

I. Introduction and Overview.

In its October 7, 1987, Report and Order in this case, the Commission directed that Kansas City Power & Light Company (KCPL) make a good faith effort to sell its Kansas City, Missouri, central station steam distribution system, and to report to the Commission by January 1, 1989, the results of its efforts to sell the system.

KCPL fully complied with the Commission's requirement to seek a purchaser for the system. A project team was appointed by KCPL's President to compile a Request for Proposals (RFP), and the resulting RFP was issued on January 25, 1988. Prior to the RFP issuance date, KCPL advertised the fact that the RFP was to be issued and invited interested parties to request a copy of the RFP. KCPL also reviewed the RFP with the Staff, for informational purposes only, prior to the issuance date. Requests for copies were received from approximately forty parties, and the RFP was mailed to all requesting parties on January 25, 1988. The due date for proposals was set for March 25, 1988.

Two informational meetings were held on February 8 and February 12, and tours of the system were conducted after the

meetings. KCPL responded to numerous requests for additional information, RFP language clarifications and supplementary inspections of the system.

On March 25, KCPL received two proposals (from Kinetic Energy Development Corporation and Catalyst Thermal Energy Corporation) which were in substantial compliance with the RFP terms. KCPL also received two submissions (from LMSL, Inc. and Strange and Coleman) which failed to conform in any significant respect to the RFP terms. The Kinetic and Catalyst proposals were irrevocable for thirty days, and KCPL had an option to extend the irrevocable period an additional thirty days. KCPL exercised this option, to allow sufficient time to request additional information from both Catalyst and Kinetic and to analyze the competing proposals.

On May 24, 1988, KCPL selected Kinetic's proposal to purchase the steam distribution piping and associated items for four million dollars ($4,000,000), subject to the successful negotiation of sales documents and acquisition of necessary consents, permits, franchises and other authorities. The only exception Kinetic took to any of the RFP terms was the one requiring an earnest money deposit of $100,000; Kinetic proposed to furnish the earnest money when the sales documents were signed.

KCPL first met with Kinetic on June 16, to commence negotiations and to establish a schedule for the transaction. The schedule agreed upon by the parties set September 15 as the filing date with the Commission for the requisite applications by KCPL and Kinetic, and December 30, 1988, as the closing date. The

first draft of the sales documentation was provided to Kinetic on July 5, and several meetings were held to negotiate the terms of the documents. The documents were placed in final form on September 12, and a meeting was scheduled for that date to sign the documents so they could be presented to KCPL's Board of Directors the next day. However, Kinetic declined to sign the documents, because of difficulties in acquiring financing. In a showing of good faith, KCPL management went ahead and presented the transaction documents to its Board on September 13, and received approval to sign the transaction documents in substantially the form presented.

KCPL received a telephone call from Kinetic on October 26, stating that financing for the transaction had been arranged, but that the financing party wanted modifications to the transaction documents. A meeting was held on November 9 among KCPL, Kinetic, Harbert Corporation (the financing party) and its lawyers, at which time KCPL answered numerous questions regarding the documents, and agreed to consider certain modifications to the documents. KCPL attempted to contact Harbert's lawyers on numerous occasions, and faxed proposed language changes to them; but KCPL never received a response. During this time, Kinetic did not contact KCPL.

On December 2, KCPL wrote a letter to Kinetic, expressing concern regarding the status of the transaction and stating KCPL's position that if the sales documentation was not signed by December 30, the conditions upon which Kinetic's bid was accepted would be deemed not to have been met and KCPL would so report to

the Commission. On December 8, Kinetic called and requested a meeting, which was held on December 15. At that meeting, Kinetic represented that its potential financing parties required further modification to the sales documentation. KCPL responded the same day with proposed modifications, accommodating the expressed concerns to the extent practicable and consistent with KCPL's legitimate business and public utility concerns. On December 19, KCPL received a letter from Kinetic's lawyer, requesting three more changes to the documentation; KCPL agreed to the substance of all three changes the next day. On December 22, Kinetic requested another change to the documentation (to which KCPL agreed). On December 27, KCPL sent to Kinetic a current version of the sales documentation.

KCPL has received no response from Kinetic to date. KCPL has now granted Kinetic over three and one half months' additional time from the original document signing date to acquire financing, and has repeatedly responded favorably to Kinetic-requested modifications to RFP terms that Kinetic had previously agreed to in its proposal. The available time for negotiating any sale of the steam system, prior to the service termination date of December 31, 1990, has elapsed, and KCPL has notified Kinetic today that the conditions underlying the acceptance of its proposal have not been satisfied and the proposed sale is ended.

KCPL's concern regarding the impact of steam service termination on its steam customers has been continually expressed throughout this proceeding, and the customers' interests dictated

that negotiations cease at this time. Two years now remain before steam service is terminated, which is sufficient for the remaining customers to decide upon, plan, finance and install alternative space heating equipment. Some of KCPL's steam customers, such as governmental entities, may require all of that two year period in order to make the transition. But the steam customers, understandably, probably will not begin to make the commitment to alternative sources until the fate of the steam system is clear. There is thus no time to initiate another round of proposal solicitation, or to otherwise solicit bids, for the steam system. There can be no assurance that a sale can be struck with another party, and approval obtained from the Commission; if KCPL expends part of the remaining two years in this manner, and no sale is consummated, the remaining steam customers will be hard-pressed to meet, or meet at all, the December 31, 1990, steam service termination date. The Commission recognized in its Report and Order that a good faith effort to seek a buyer did not require KCPL to make repeated attempts to sell the system:

> 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. (Id at 18).

In summary, KCPL has made a good faith attempt to find a willing and able buyer for its steam system. It has negotiated in good faith with Kinetic, but Kinetic was unable to acquire

financing for its proposal that it submitted in March, 1988. It would not be in the public interest to continue the uncertain status of the steam system any further. KCPL has therefore discharged its obligations to seek a purchaser, and shall terminate public utility steam service on December 31, 1990.

Following is a more detailed report on KCPL's actions in preparing the RFP, responding to interested parties, analyzing the proposals and negotiating with Kinetic.

II. The RFP Process.

When KCPL received the Report and Order, President Drue Jennings created an RFP project team, reporting directly to him. Members of the team were drawn from the Regulatory Accounting, Law, Customer Service, Finance, System Operations, Engineering, Real Estate and Insurance areas of the company. The team was charged with drafting an RFP that would describe the steam distribution system and propose reasonable sales terms and conditions which would at the same time protect the interests of KCPL and its customers.

KCPL wanted to advertise the RFP to all persons who might have an interest in the steam system. It was decided to place advertisements prior to the date of the RFP issuance. In this way, the effect of the differences in the publication dates would be minimized, and interested parties would have the entire period from issuance to the proposal due date to analyze the RFP and decide whether to submit a proposal. These advertisements were placed in The Wall Street Journal, Public Utilities Fortnightly, ASHRAE (American Society of Heating, Refrigeration and

Airconditioning Engineers) Journal, Electrical World and the Journal of the International District Heating and Cooling Association. Approximately forty parties requested copies, which were delivered on January 25, 1988. A copy of the RFP is attached for information.

Prior to issuing the RFP, KCPL requested a meeting with the Staff to share the contents of the RFP and to answer any questions of the Staff. The purpose of the meeting was not to secure the Staff's approval of the RFP, but rather to apprise Staff of the elements of the RFP and to consider any comments that the Staff made.

Briefly, the RFP requested proposals to purchase the physical assets comprising KCPL's steam system--Grand Avenue Station, two desuperheating and pressure reducing stations, piping, inventories, other equipment and associated easements. Because there is a substantial quantity of electrical transmission and distribution equipment in Grand Avenue, KCPL proposed to retain certain portions of the premises for that purpose. Proposals were due to be submitted on March 25, 1988, with earnest money of $100,000 (which would be refunded in full to unsuccessful bidders). All proposals as well had to address the proposal elements set forth in the Commission's Report and Order.

Pains were taken to give an accurate description of the steam system; however, it was anticipated that various parties would have questions or information requests. Two informational meetings were therefore scheduled for February 8 and 12, and the scheduling of the meetings was announced in the RFP. Summary

accounting information on the operation of the steam system was provided at the meetings, and a variety of questions were answered. After each meeting, a tour of the steam system (including the desuperheating station at 1319 Wyandotte and Grand Avenue Station) was offered. Staff attended both of the meetings, and went on the tour of the facilities.

Aside from these meetings and tours, various parties requested further information and additional tours of the facilities, all of which were provided by KCPL.

III. The Proposals.

On March 25, KCPL received four responses to the RFP; none of them fully complied with the terms and conditions of the RFP. A copy of each of these responses is attached, and can be briefly summarized as follows:

1. LMSL, Inc. No proposal to purchase the system was made. Rather, this consulting firm stated that a local law firm and Stone & Webster would shortly present a "business opportunity". No indication of the structure of the "opportunity" was given.

2. Strange and Coleman. No proposal to purchase the system was made. The firm stated that a decision of the price to be paid would be determined after it operated the system for a period of time. The firm also took exception to almost all of the terms and conditions of the RFP.

3. Kinetic Energy Development Corporation (Kinetic). Kinetic made two alternative proposals; it offered $6 million for the entire system, or $4 million for the system less Grand Avenue

Station. The only exception to the RFP was the earnest money. Kinetic stated that it would provide the $100,000 after sales documentation was signed. Kinetic announced that its lawyer was Jeremiah Finnegan, and its financing would be arranged by B. C. Christopher.

4. Catalyst Thermal Energy Corporation (Catalyst). Catalyst offered $2.782 million for the entire system. The only exception to the RFP concerned the cogeneration covenant; Catalyst wished to be able to generate electricity at Grand Avenue Station. Copies of these four responses were provided to the Staff.

The first two responses were rejected because they were not in substantial conformance with the RFP. The proposals of Catalyst and Kinetic were analyzed using the following considerations: price offered; anticipated additional investment in the system; business and financial qualifications for acquiring and operating the steam system; approach to providing steam service; rates to be charged; and RFP exceptions. Both Kinetic and Catalyst were requested to provide additional information to assist KCPL in making this analysis. The proposal expiration date was also extended by KCPL to May 24.

Based upon this analysis, KCPL determined to accept the Kinetic proposal to purchase the system (less Grand Avenue Station), conditioned upon reaching acceptable sales documents and receipt of all necessary approvals, franchises and certificates. Factors influencing the choosing of Kinetic included avoidance of

a book loss upon sale and retaining all of Grand Avenue Station for electrical distribution and transmission purposes. Kinetic was informed that it was the successful bidder on May 24.

IV. Negotiations with Kinetic.

The RFP project team, having done its tasks, was dissolved, and a negotiation team was appointed, consisting of L. C. Rasmussen (Executive Vice President-Finance), J. M. Evans (Senior Vice President, System Operations) and R. G. Wasson (Vice President, Administrative Services). KCPL first met with Kinetic on June 16, to commence negotiations and to establish a schedule for the transaction. The schedule agreed upon by the parties set September 1 as the signing date for the documentation, September 15 as the filing date with the Commission for the requisite applications by KCPL and Kinetic, and December 30, 1988, as the closing date. The first draft of the sales documentation was prepared by KCPL, based upon the terms and conditions of the RFP, which had been accepted by Kinetic in full (save for the earnest money). This draft was provided to Kinetic on July 5, and several further meetings were held to negotiate the terms of the documents.

The major topic of discussion throughout the negotiations was a steam service agreement between KCPL and Kinetic. Since Kinetic wasn't purchasing Grand Avenue, it needed a steam source for a period of time until its own steam supply was constructed. The focal point was the price of steam to be paid by Kinetic; KCPL ultimately accepted Kinetic's position on that matter.

The documents were placed in signature form on September 12, and a meeting was scheduled for that date to sign the documents so they could be presented to KCPL's Board of Directors the next day. However, Kinetic declined to sign the documents, because of difficulties in acquiring financing. In a showing of good faith, KCPL management went ahead and presented the transaction documents to its Board on September 13, and received approval to sign the documents in substantially the form presented.

In a show of good faith in this matter, and desiring to sell the steam system to Kinetic on the agreed-upon terms, KCPL did not terminate the proposed sale when Kinetic did not appear on September 12 to sign the documents. KCPL allowed Kinetic additional time to seek financing.

KCPL received a telephone call from Kinetic on October 26, stating that financing for the transaction had been arranged, but that the financing party wanted modifications to the transaction documents. A meeting was held on November 9 among KCPL, Kinetic and its lawyer , Harbert Corporation (the financing party) and its lawyers. Harbert and its lawyer asked many questions regarding the contents and interpretation of the sales documents, which KCPL answered. Harbert also wanted certain changes to be made in the cogeneration covenant; Harbert was of the opinion that the covenant as written could impede its cogeneration activities in other states. Although KCPL did not construe the covenant in that way, it agreed to consider modifying the covenant. The meeting was concluded with the understanding that the lawyers for KCPL and Harbert would talk the next week about the changes Harbert wanted,

and about any other questions Harbert had. KCPL's lawyer attempted to contact Harbert's lawyer on numerous occasions. Harbert's lawyer had surgery that took her out of the office for some weeks; even though she is reportedly back at work, she never returned phone calls. In her absence, proposed changes to the covenant were faxed to one of her associates, but KCPL never received a response.

As time passed, KCPL's concern for its steam customers continued to grow. KCPL was willing to absorb the additional steam operating losses resulting from Kinetic's apparent inability to acquire financing, in order to afford Kinetic more time to find financing--KCPL's losses would cease on or before December 31, 1990, the date the Commission fixed for termination of KCPL's public utility steam service obligation. However, there was no assurance that Kinetic would ever find sufficient financing, and if the proposed sale fell through, the remaining steam customers would have to have sufficient time to plan, finance and construct alternative space heating systems. KCPL's Customer Service personnel, through contacts with HVAC contractors, estimated that some of the larger customers would require up to two years to make the conversion. This imposed a time limitation of December 31, 1988, to have a signed agreement with Kinetic.

That this two-year time period was none too generous for some steam customers was attested to by a representative of the building services function of the State of Missouri, who called KCPL on December 1, asking about the status of the sale. He stated that budgeting would have to begin now for conversion of

State buildings by 1991. He was referred to Kinetic for answers to his questions regarding the status of the sale, since Kinetic was in the best position to answer them.

Thus, on December 2, KCPL wrote a letter to Kinetic, expressing concern regarding the status of the transaction and stating KCPL's position that if the sales documentation was not signed by December 30, the conditions upon which Kinetic's bid was selected would be deemed not to have been met and KCPL would so report to the Commission. On December 8, Kinetic called and requested a meeting, which was held on December 15. At that meeting, Kinetic represented that its potential financing parties required further modification to the cogeneration covenant. KCPL responded the same day with proposed modifications hand-delivered to Mr. Finnegan and faxed to Kinetic, further limiting the geographical scope of the covenant. Mr. Finnegan responded by letter of December 19, requesting three additional changes to the cogeneration covenant; KCPL agreed in substance to all of them the next day. On December 22, a representative of Kinetic called to request another change in the sales documentation (which was agreed to by KCPL), and to request monthly customer billing information for the past five years. KCPL sent the requested information, along with a current version of the sales documentation, to Kinetic on December 27. Kinetic has not contacted KCPL regarding its plans for this transaction since that time. Therefore, KCPL notified Kinetic on December 30, that its proposal was rejected, because of the failure of the conditions

underlying KCPL's acceptance--specifically, Kinetic's failure to acquire the financing for the price it bid for the system nine months earlier.

If the interests of its steam customers were not adversely affected by Kinetic's unsuccessful financing search over the nine months since its bid was submitted, KCPL still would be able to allow Kinetic only a bit more time. Since Kinetic's proposal is to replace Grand Avenue Station as the system steam source, Kinetic is required to plan, permit, finance and construct an alternate steam source by December 31, 1990. Although Kinetic has not shared its specific plans for such an alternate steam source with KCPL, KCPL personnel estimate that it would require roughly about two years to have an appropriately sized facility in place. Thus, the longer the delay in signing the documents, the less likely that Kinetic will be able to have its steam source operational by December 31, 1990.

Every additional day granted to Kinetic takes away a day from the time period in which the steam customers have to switch to an alternative heating source. KCPL believes that in order to give its steam customers adequate time to make alternate arrangements for heating, Kinetic's proposal had to be rejected on December 30, 1988.

Because of the two-year conversion period needed by KCPL's steam customers, there is no time to go through the RFP process again, or even to attempt to negotiate with any of the parties responding to the first RFP. There is no proposal now open from

any of the other parties; KCPL has previously rejected those responses, and there is no assurance that acceptable sales terms could be negotiated.

KCPL will therefore inform its remaining steam customers that there will be no sale of the steam system, and that KCPL will terminate public utility steam service on December 31, 1990.

Respectfully submitted,

KANSAS CITY POWER & LIGHT COMPANY

By _____

Mark G. English
Deputy General Counsel
1330 Baltimore Ave., 8th Floor
Kansas City, Missouri 64105
(816) 556-2784

ATTORNEY FOR
KANSAS CITY POWER & LIGHT COMPANY

KANSAS CITY POWER & LIGHT CO.
Public Affairs Division
P. O. Box 418679
Kansas City, MO 64141-9679

CONTACT: David Martin
816/556-2897

Steam/2636
December 30, 1988

FOR IMMEDIATE RELEASE

Kansas City Power & Light Company today notified the Missouri Public Service Commission that efforts to sell the utility's steam system to Kinetic Energy Development Corporation of St. Louis have ended. A sale agreement was negotiated and ready for signing by September, but was never finalized because Kinetic was unable to secure the financing for its purchase and operation of the steam distribution system.

In October 1987, the Public Service Commission authorized KCPL to discontinue its steam utility operations by the end of 1990. The Commission also required KCPL to make a good faith effort to sell the system. Saying that protracted negotiations would serve no useful purpose, the Commission imposed a January 1, 1989, deadline for KCPL to report back on its efforts.

In its report today, KCPL emphasized that the 115 steam customers will need the next two years to complete their conversion to other forms of heating before utility steam service is discontinued. At the time it authorized KCPL to terminate steam operations, the Commission also said

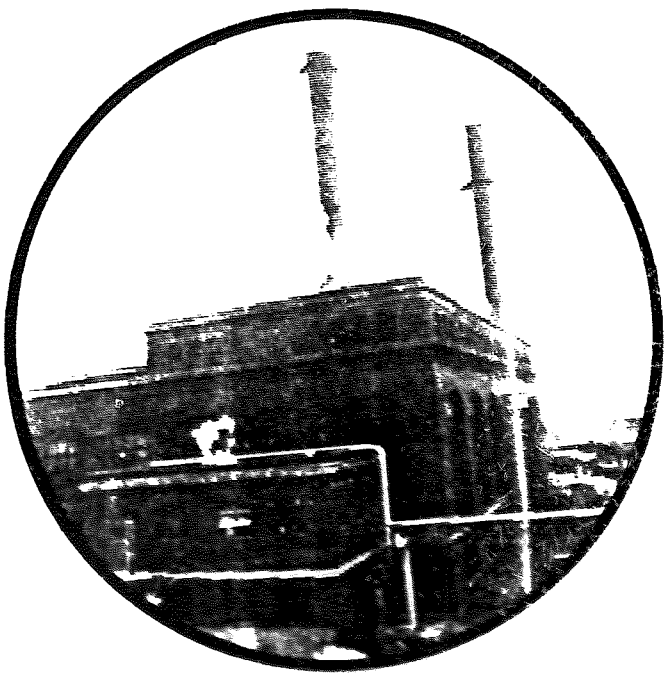
customers would be compensated for their inconvenience and expense of conversion by continuing to pay below-cost base steam rates which have remained unchanged since 1982.

KCPL officials say the utility will offer to review the energy audits it has previously conducted for its steam customers and be available to explain their heating options. Meantime, the Company pledges to work closely with those customers to provide satisfactory steam service.

######

Kansas City Power & Light Company

Request for Proposals



Purchase of Downtown Kansas City, Missouri Central Station Steam Distribution System

Proposals Due Mar. 25, 1988

KANSAS CITY POWER & LIGHT COMPANY

REQUEST FOR PROPOSALS

DOWNTOWN KANSAS CITY, MISSOURI, CENTRAL STATION STEAM DISTRIBUTION BUSINESS

January 25, 1988

Proposals must be received by March 25, 1988, at 3 p.m. and addressed to:

Kansas City Power & Light Company
8th Floor
1330 Baltimore Avenue
Kansas City, Missouri 64105

Attention: Mark G. English
Steam Business Proposal

INDEX

REQUEST FOR PROPOSALS

FOR THE PURCHASE OF KANSAS CITY POWER & LIGHT COMPANY'S
DOWNTOWN KANSAS CITY, MISSOURI CENTRAL STATION
STEAM DISTRIBUTION BUSINESS

Pursuant to an order of the Missouri Public Service Commission (Commission), KCPL has issued this Request for Proposals (RFP) for the sale of its public utility steam heating business (Business) as an ongoing concern. Under Missouri law, any purchaser (except governmental entities) of the Business shall thereby become a public utility "heating company" and require a Certificate of Public Convenience and Necessity from the Commission to conduct the Business. Further, the purchaser's conduct of the Business and its rules and rates for steam service shall be subject to Commission regulation and approval.

1. General Business Information and Background.

A. Regulation of Steam Business.

The Missouri Public Service Commission has extensive regulatory authority over the rates, rules and operations of "heating companies", as that term is defined in Section 386.020.10., RSMo 1986. Generally, any person, partnership or other business organization that owns, operates, manages or controls any property or plant for manufacturing, distributing and selling steam in any Missouri municipality is subject to the Commission's jurisdiction.

Heating companies are public utilities under Missouri law, and are required to obtain a Certificate of Public Convenience and Necessity from the Commission. Heating companies may be relieved of their service obligations under their certificate only upon the Commission's decision that the public convenience and necessity no longer require the operation of such service.

B. Business Configuration.

The territory for which KCPL holds a Certificate of Public Convenience and Necessity to provide public utility steam service in Kansas City, Missouri extends generally north and south from 3rd Street to 14th Street and east and west from Oak to Broadway, as shown on Exhibit 1. KCPL and its corporate predecessors have provided steam service in that area of downtown Kansas City since 1888.

Steam for the Business is currently provided by Grand Avenue Station (Grand Avenue), which was purchased by KCPL in 1927. Grand Avenue generated both steam and electricity until 1985, when the electrical generation facilities were retired in place. Some electrical transmission and distribution facilities are still maintained by KCPL in Grand Avenue. There is a significant amount of asbestos insulation in Grand Avenue.

Four boilers are currently available at Grand Avenue for steam supply to the Business. Boilers 6, 7 and 8 are capable of being fired on either coal or gas, and have an aggregate manufacturer's maximum continuous rating of 1125 mlbs per hour. These three boilers were installed prior to 1950. Boiler 1A is a package boiler installed in 1968 and has a manufacturer's maximum

continuous rating of 230 mlbs per hour. Boiler 1A can be fired either by fuel oil or gas. Gas is presently the fuel stock used at Grand Avenue, due to the low level of steam sales.

Steam at high pressure (185 psi) is piped from Grand Avenue to two pressure reducing stations located at the north and south ends of the Business. Heating Station No. 1, the northern pressure reducing station located at 604 Baltimore, feeds the low pressure (15 psi) steam distribution piping, while Heating Station No. 3, located in KCPL's garage at 1319 Wyandotte, feeds both the low pressure and intermediate pressure (105 psi) steam distribution piping.

Presently, KCPL has in service 22,834 feet of 185 psi pipe, serving 20 customers at that pressure, and 25,592 feet of 15 psi pipe, serving 98 customers. Additionally, there is 1,653 feet of 105 psi pipe; however, no customers are currently served at that pressure. Much of the low pressure piping was installed in 1905, and asbestos piping insulation was commonly used prior to 1980. The piping is generally buried under streets in Kansas City; KCPL's franchise to operate a steam heat business and use public streets and rights of way for its steam facilities expired without replacement in 1985.

C. Customer Sales and Revenue History.

Exhibit 2 shows the number of customers, mlbs of steam sales and sales revenues for the downtown portion of the Business for the period 1966-1986. The number of customers in this period peaked in 1970 at 283, and is currently at 118. Steam sales in the downtown Kansas City area peaked in 1970 at 1,220,016 mlbs;

sales for the twelve-month period ended November, 1987 were 781,492 mlbs (384,491 mlbs to downtown Kansas City steam customers and 397,001 mlbs to National Starch and Chemical Corporation).

The decline of customers is attributed to building demolition and urban renewal, as well as to the competitive costs of electrical and gas space heating alternatives in Kansas City. The price of steam downtown is currently about $11.50 per mlb; the electrical space heating rate is $0.03691 per kWh, and the commercial rate for natural gas is $3.70 per mcf.

KCPL's largest steam customer is National Starch and Chemical Corporation (National Starch), which is under contract to take steam until December 31, 1990, at which time the contract expires. Sales to National Starch in the twelve months ended November, 1987, accounted for about 51% of total steam sales. The contract is assignable by KCPL in the event of the sale of Grand Avenue. No other steam customers are under contract with KCPL.

D. RFP Is Pursuant to Regulatory Authorization of Business Abandonment.

In 1986, KCPL filed with the Commission a plan to phase-out its central station steam distribution service by 1991, along with a request for a $5.6 million (120%) rate increase. KCPL also proposed to offer electric boilers or alternative electric space heating equipment to its remaining steam customers at no initial cost. KCPL and commission staff subsequently stipulated that a steam revenue deficiency of $3.2 million (66% rate increase) existed.

The Commission authorized KCPL to terminate steam service as of December 31, 1990, but did not grant a rate increase or authorize KCPL to offer electric equipment to its steam customers. It further required KCPL to make a good faith effort to sell the Business:

> The Company should solicit its proposals for sale or transfer of the business 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.

A copy of the Report and Order of the Commission, issued October 7, 1987, is contained in Exhibit 3.

Should the Business be sold, KCPL will continue to offer and provide electrical service for all purposes, including space heating, in downtown Kansas City, Missouri.

2. **Property To Be Sold.**

Pursuant to the Commission's Report and Order, KCPL is requesting proposals for the purchase of its Business and the assumption of the public utility duties of a heating company (unless the purchaser is exempt under Missouri law from Commission regulation). The property used in the Business is generally comprised of (a) the Grand Avenue Station structure, steam generating equipment and auxiliaries and associated lands; (b) steam distribution piping; (c) Heating Station No. 1 and the

fixtures and equipment making up Heating Station No. 3 contained in KCPL's parking facility at 1319 Wyandotte; (d) the steam supply agreement between National Starch and Chemical Corporation and KCPL, and; (e) materials and supplies, including fuel oil, coal and replacement parts. A more particular description of the major items of property used in the Business follows.

A. Grand Avenue Station.

A detailed description of the real estate, fixtures and equipment at Grand Avenue subject to this RFP is contained in Exhibit 4. KCPL shall retain certain easements over the Grand Avenue lands for its existing electrical distribution facilities, and will also retain rights to access, construct, maintain, locate, store, operate and repair its electrical facilities within the Grand Avenue structure, all as described in Exhibit 4.

Because of the existence of electrical facilities in the Grand Avenue Station structure and associated lands, the sale of the structure and associated lands pursuant to this RFP shall be subject to KCPL's right (but not the obligation) to reacquire the structure and associated lands at their then-fair market value, as a steam production facility, should steam finally cease being generated at Grand Avenue within twenty years of the date of sale.

B. Steam Distribution Piping.

All steam distribution piping presently used for steam service, all piping retired in place, and associated property interests are subject to this RFP and detailed in Exhibit 5. If any relocation of the 185 psi steam lines extending to the east

from Heating Station No. 3 are required due to future construction activities engaged in by KCPL, such relocation shall be done at the Business purchaser's expense.

C. Pressure Reducing Stations.

All of the fixtures, equipment and property interests comprising Heating Station No. 1 are subject to this RFP. The location of this station is noted in Exhibit 5. This Station is located below ground, and KCPL possesses only a subsurface easement for this facility.

Only the fixtures and equipment comprising Heating Station No. 3 are subject to sale. KCPL shall grant rights to access, construct, maintain, operate and repair such fixtures and equipment, since they are within KCPL's parking facilities at 1319 Wyandotte.

D. National Starch Agreement.

A copy of the National Starch Agreement, which KCPL intends to assign to the purchaser of the Business, is contained in Exhibit 6. The Agreement is on file with the Commission as a part of KCPL's tariffs.

E. Materials and Supplies.

As of October 31, 1987, KCPL maintained $282,000 in coal and oil inventories at Grand Avenue, and $1,135,000 in spare parts, piping and other materials for the Business.

3. **Inspection of Business and Further Information.**

KCPL will hold two meetings with parties interested in further information or inspecting the properties. The meetings will be held on February 8 and February 12, 1988, at 10:00 a.m. on the fourth floor of the Power & Light Building, 1330 Baltimore, Kansas City, Missouri. Inspection of the properties will be conducted after each of these meetings.

4. **Method of Sale.**

A. Proposal Form.

KCPL shall consider only those proposals for the purchase of the Business which are submitted in accordance with the terms and conditions of this RFP. All Proposals for the purchase of the Business shall be submitted in quadruplicate using the Proposal form contained in Exhibit 7. All information requested on the form must be completely supplied for the Proposal to be considered by KCPL. All Proposals shall incorporate by reference the terms and conditions of this RFP unless specific exception, and the reason therefore, is noted on the form.

B. Submission of Proposals.

Sealed Proposals must be received by KCPL on or before 3 p.m. on March 25, 1988.

Proposals should be addressed to:

Kansas City Power & Light Company
8th Floor
1330 Baltimore Avenue
Kansas City, Missouri 64105

Attention:
Mark G. English--Steam Business Proposal

Earnest money (certified or cashier's check only) in the amount of $100,000.00 shall accompany each Proposal.

All Proposals shall be irrevocable for a period of thirty (30) days from March 25, 1988. KCPL, in its sole discretion, shall have the right to extend this period with respect to any or all of the Proposals an additional thirty (30) days.

C. Right to Reject Proposals.

KCPL reserves the right to reject any or all Proposals at any time before or after Proposal opening. KCPL further reserves the right after Proposal opening to negotiate with any party and vary or alter any term or condition as KCPL, in its sole discretion, may deem advantageous, and KCPL shall have no obligation to any other party as a result of any such negotiations. If KCPL rejects all Proposals, KCPL nevertheless reserves the right to attempt to negotiate a sale to any party submitting a Proposal or to others as it may deem appropriate.

Earnest money associated with any rejected Proposal shall be returned, without interest, within ten (10) days of the decision to reject.

D. Acceptance of Proposal Conditional.

This RFP shall not be considered an offer of sale binding upon acceptance. Should KCPL accept any Proposal in writing, such acceptance is conditioned upon (a) reaching acceptable sale documents respecting the sale of the Business with the successful purchaser (Purchaser), (b) the parties acquiring all necessary regulatory and other approvals and franchises, and (c) the satisfaction of all other terms and conditions of this RFP.

5. Other Terms and Conditions.

A. Business Covenants.

KCPL, as directed by the Commission, seeks a purchaser of its regulated public utility steam Business. At all times prior to and after any such sale, KCPL will continue to discharge its obligations as a regulated electric public utility throughout its certificated service territories, including the area of downtown Kansas City in which the Business is located. In order to ensure to the extent possible that its steam customers will continue to be afforded adequate and reliable steam heat service at reasonable rates, and to avoid subsidization of the Purchaser by, or other detriment to, KCPL's electric customers and/or shareholders, the Purchaser shall covenant with KCPL that for a period of ten years following the closing of the sale of the Business that it shall: use the properties of the Business for the sole purpose of providing steam heat energy to customers in Kansas City, Missouri; not enter as a supplier of electricity into competition with KCPL for any electric energy customer or within KCPL's Missouri and Kansas certificated service territories by the generation of electrical energy and power with, at or on any of the properties acquired in the purchase of the Business; and waive any rights or privileges it may now or hereafter have to require KCPL to purchase or wheel any electrical energy and power generated with, at or on any of the properties acquired in the purchase of the Business.

This covenant is agreed to be a covenant touching and running with the lands subject to this RFP, and shall be binding upon Purchaser's heirs, assigns and successors in interest. This covenant is not severable, and should this covenant, or any part thereof, be found to be void or otherwise unenforceable, KCPL retains the absolute right to rescind the sale of the Business and to reacquire the Business upon the repayment of the purchase price to the Purchaser.

B. Warranties and Title.

Except as expressly provided with respect to title to realty, KCPL gives no warranty, express or implied, as to the description, quality, merchantability, fitness for any particular purpose, productiveness, or any other matter, concerning the Business and any of the items comprising the Business. The Business is sold "as is" and "with all faults". KCPL neither by this RFP or otherwise makes any representations either express or implied with respect to the assignability or assumability of any franchise, easement, right of way, or any other right it may have with respect to its Business.

Fee title will be conveyed by corporate special warranty deed, but subject to all exceptions, reservations, conditions, terms, provisions and limitations contained in either the document conveying title to KCPL, or any other subsequent document affecting title, and further subject to: (i) zoning regulations, ordinances, restrictions and all other laws, ordinances, regulations or restrictions of the State and City; (ii) any state of facts an accurate survey would show, provided the same do not

render title unmarketable; (iii) any assessment or assessments for municipal improvements which hereafter become liens.

Any title search or title examination shall be the responsibility of the Purchaser at its own expense. Purchaser shall notify KCPL in writing as soon as practicable of any defects in title or objections to title. Any defect or objection not noted in writing received by KCPL prior to closing of the sale of the Business shall be waived. This waiver shall be effective regardless of any warranties of title contained in any deed or other document of conveyance or assignment, and shall survive the closing and shall not merge with the conveyance of title.

In the event of a timely noticed and substantial defect in or objection to title which materially affects the value of what is being purchased taken as a whole, KCPL shall have a reasonable time to correct or cause the same to be corrected. If the same cannot be corrected or if KCPL is unwilling to correct or cause the same to be corrected, the Purchaser may either accept said title as is or may withdraw from its obligation to purchase, in which case any earnest money paid to KCPL shall be refunded without interest and neither party shall have any further obligation to the other.

C. Regulatory Approvals.

Any sale of the Business is expressly conditioned upon (a) its approval without modification by the Missouri Public Service Commission, (b) Purchaser receiving a Certificate of Public Convenience and Necessity (unless exempted by Missouri law) and all other required Commission certificates and approvals for its acquisition and operation of the Business, and (c) the Commission

relieving KCPL of its public utility obligation to provide steam heat service as of the closing of such sale. Should such certificates and approvals not be obtained, any obligations of KCPL to sell and Purchaser to buy the Business shall thereupon cease without further liability.

D. Release of KCPL from National Starch Agreement.

Any sale of the Business is expressly conditioned upon KCPL's assignment of the National Starch Agreement to the Purchaser, and the obtaining of a release from liability for performance of its obligations thereunder by National Starch. Should such assignment and release not be obtained before closing, any obligations of KCPL to sell and Purchaser to buy the Business shall thereupon cease without further liability.

E. Environmental Liability Indemnification.

Asbestos is used for insulation purposes in Grand Avenue Station and the steam distribution piping. Additionally, one of the 13,200/2,400 volt transformers at Grand Avenue is a PCB Transformer, as defined under the Toxic Substances Control Act. The Purchaser shall warrant that it will at all times faithfully observe all Federal, State and local laws, statutes, ordinances and regulations regarding the possession, use, removal and disposal of such asbestos and PCB Transformer, and shall indemnify and hold harmless KCPL from any and all liability arising from (a) the Purchaser's possession, use, removal and disposal of such asbestos, PCB Transformer, and PCB-containing or PCB-contaminated materials, and (b) all other liability under Federal, State and

local environmental laws and regulations arising from Purchaser's possession, use, operation and disposition of the Business.

F. Environmental Permits.

Any sale of the Business is expressly conditioned upon the Purchaser acquiring before the closing all requisite environmental permits for the operation of Grand Avenue Station, KCPL will use its best efforts to have its present permits either transferred or reissued to the Purchaser. Should such permits not be transferred or reissued to Purchaser before closing, any obligations of KCPL to sell and Purchaser to buy the Business shall thereupon cease without further liability.

G. Releases from Indentures of Mortgages.

The Business is subject to the liens of two indentures of mortgage. KCPL shall use its best reasonable efforts to have the Business released from the liens in the event of sale; however, if the Business is not released from said lien as of closing, any obligation KCPL may have to sell, and the Purchaser to buy, the Business shall thereupon cease without further liability.

H. Repurchase Provision.

In recognition of the fact that it is economically impracticable for KCPL to remove its electrical facilities from the Grand Avenue structure and lands, the Purchaser shall agree that in the event steam finally ceases to be produced at Grand Avenue within twenty years of the sale of the Business, KCPL shall have the first right (but not the obligation) to repurchase the

Grand Avenue structure and associated lands, as detailed in Exhibit 4, at its then-fair market value as a steam production facility.

I. Risk of Loss.

Should any loss occur to the Business prior to closing, and the loss is so substantial and significant as to materially affect the value of the Business taken as a whole, the Purchaser may either accept in satisfaction of KCPL's obligations hereunder the Business as it then exists without diminution or abatement in the purchase price (or such diminution or abatement as KCPL in its sole discretion agrees to) or Purchaser may withdraw from its obligation to purchase, in which case any earnest money paid to KCPL will be refunded without interest, and neither party shall have any further obligation to the other.

J. Closing and Possession.

Closing shall occur at a mutually agreed upon time and place. At closing, Purchaser shall tender the remainder of the purchase price in same-day funds, and KCPL shall convey title to the Business by good and sufficient documents of transfer in accordance with the terms and conditions of the RFP. Possession shall be delivered as specified in the applicable sales documents.

K. Breach.

Purchaser's sole and exclusive remedy (at law or in equity) in the event KCPL fails to perform any of its obligations hereunder shall be limited to the right of the Purchaser to withdraw from its obligations to purchase and receive a refund of

any earnest money paid without interest. In the event of any failure on the part of Purchaser to perform its obligations hereunder, KCPL shall have the right to bring an action for specific performance, or for damages, or both. KCPL, at its election, may retain the earnest money paid by Purchaser as liquidated damages for the failure of performance or breach by Purchaser. It is agreed that the liquidated damages provision herein is fair and reasonable and that Purchaser has accepted same and made its Proposal recognizing the fairness and validity of same.

L. Insurance

Purchaser shall comply with the following insurance conditions and requirements for as long as Purchaser has the right to enter upon any KCPL property granted pursuant to the sale of the Business. KCPL retains the right to reasonably alter these insurance conditions and requirements, at which time Purchaser shall comply with the altered conditions and requirements:

a. Certificates of Insurance. Certificates from insurance carriers evidencing compliance by Purchaser with insurance coverage requirements as provided herein, shall be submitted to KCPL, and Purchaser shall not take possession until such certificates of insurance shall have been furnished. KCPL shall not be liable for delays occasioned due to, or in connection with, furnishing such certificates.

b. Notice of Cancellation or Change. Purchaser shall have an endorsement attached to the policy or policies of insurance which shall provide that at least ten (10) days prior to the termination of the policy or policies the insurance carrier shall notify KCPL of such termination and that at least ten (10) days prior to the effective date of any change in such policy or policies, if such change restricts or reduces the amount of insurance or insurance coverage provided therein or changes the name or names of the insured(s), the insurance carrier shall notify KCPL in writing of the nature of such change. The certificates of insurance required under a. above shall evidence this endorsement.

c. Workers' Compensation or Employer's Liability. Purchaser shall comply with all provisions of all Workers' Compensation laws and Employer's Liability Acts of the State of Missouri and shall carry full insurance coverage or be authorized to self-insure liability to its employees under such Laws or Acts.

d. Public Liability and Property Damage. Purchaser shall carry public liability and property damage insurance, including automobile coverage, in amounts not less than $1,000,000 public liability and $1,000,000 property damage per occurrence with responsible insurance companies having a Best's rating of B+ or better.

M. Binding Effect and No Assignment.

The Proposal and any sales documents arising out of this RFP shall be binding upon KCPL and Purchaser and their respective successors and assigns. However, the Proposal and any sales documents, and any rights or obligations thereunder, shall not be assigned by Purchaser without any required regulatory approvals and the express written consent of KCPL, which shall not be unreasonably refused.

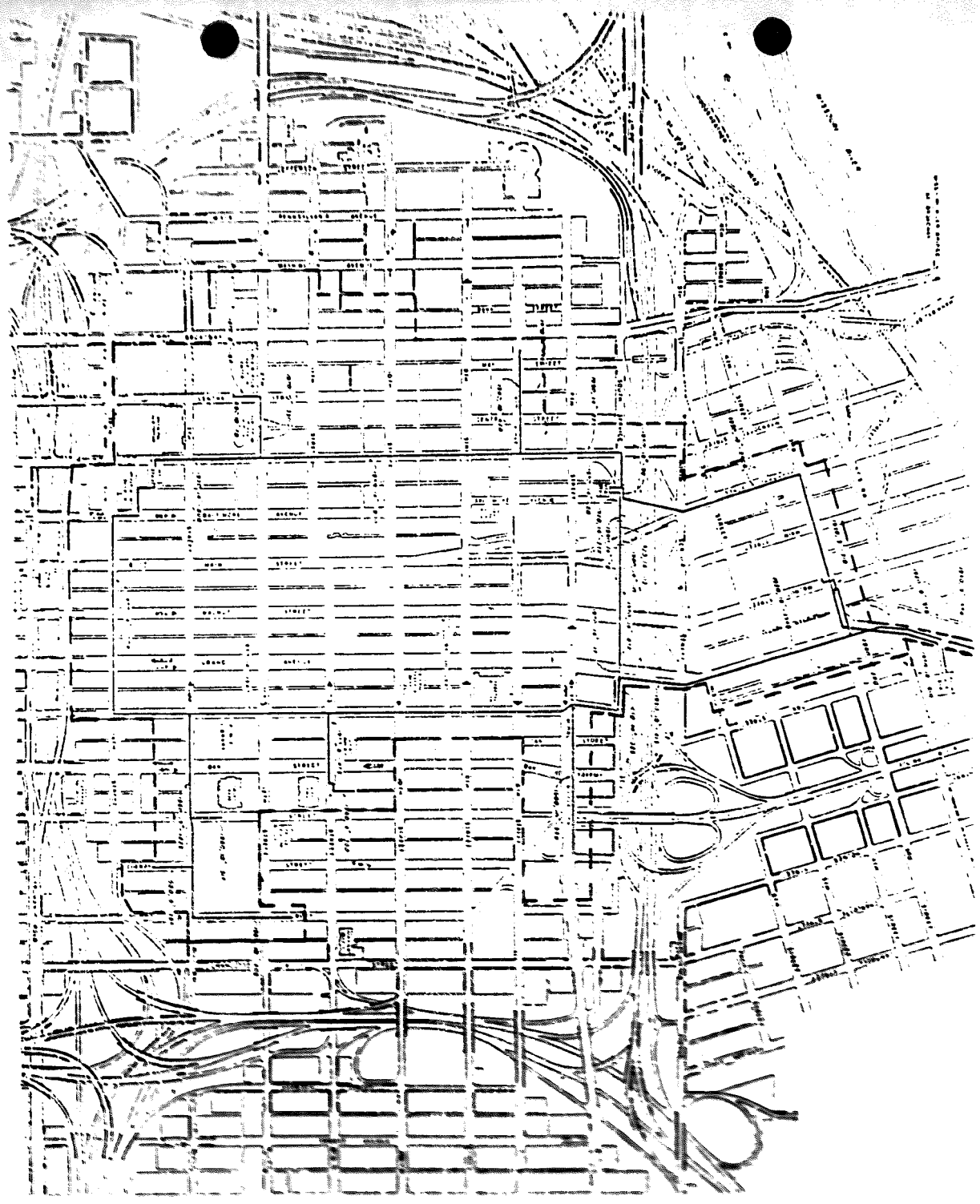
N. Choice of Law.

This RFP, and any Proposal and sales documents shall be interpreted in accordance with the laws of the State of Missouri.

KANSAS CITY POWER & LIGHT COMPANY
1330 Baltimore Avenue
Kansas City, Missouri 64105

January 25, 1988.

Exhibit 1



R.C.P.L. CO. PUBLIC
UTILITY STEAM SERVICE
TERRITORY BOUNDARY

Exhibit 2

Customer, Revenues and Sales

1966 - 1986

Year	No. of Customers	Revenue ($)	Sales * (mlbs)
1966	281	$ 1,292,850	966,176
1967	274	1,321,137	981,216
1968	281	1,568,595	1,176,756
1969	278	1,729,432	1,215,377
1970	283	1,797,983	1,220,016
1971	276	1,688,884	1,141,181
1972	275	1,818,863	1,168,903
1973	262	1,725,665	1,139,261
1974	251	1,786,694	882,003
1975	252	2,487,736	922,335
1976	250	2,849,167	867,772
1977	248	3,480,455	908,454
1978	222	3,887,258	863,919
1979	218	3,411,573	657,813
1980	210	3,620,443	633,682
1981	205	3,848,478	502,779
1982	199	6,301,127	621,141
1983	177	7,072,823	618,053
1984	165	5,805,332	507,324
1985	142	4,888,650	554,099
1986	126	4,544,385	427,964

* Excludes sales to CPC International and its successor National Starch and Chemical Corporation of 1,062,519 mlbs in 1984, 1,310,786 mlbs in 1985 and 547,164 mlbs in 1986.

Exhibit 3

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

CASE NO. EO-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.

Martin J. Bregman, Assistant General Counsel, 818 Kansas Avenue, Topeka, Kansas 66612, for The Kansas Power and Light Company.

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, Danson 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 1934 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 comparisons 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 would triple KCPL's annual steam load. The agreement was signed August 3, 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 alternatives 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 uncompensatory 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 [illegible] 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. <u>Sale of the System</u>

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. EM-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.

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.

Exhibit 4

EXHIBIT 4

GRAND AVENUE STATION

I. General Description of the Facilities

The Grand Avenue Station (Grand Avenue) is located on the Missouri River north of the main business district of Kansas City, Missouri. Grand Avenue was purchased by Kansas City Power & Light Company in 1927 and is now the oldest operating plant in the KCPL system. The station's facilities were originally designed primarily for electrical generation with steam for heating purposes being produced as a by-product.

The electrical production facilities were retired from service in 1985 and Grand Avenue now consists primarily of steam production facilities and electrical transmission and distribution facilities.

In addition to the existing steam production facilities, associated structures and lands offered for sale, the existing plant inventory of materials and supplies is also included in the sale.

Excluded from sale are the electrical transmission and distribution facilities, for which KCPL must retain both ownership, and related easements and rights necessary for access, operation and maintenance activities. Along with the electrical facilities Grand Avenue contains other items which are excluded from sale. These items include several turbine generators and their auxiliary equipment which have been retired from service and machine tool equipment located in the main structure.

The general locations of these facilities in relation to the Grand Avenue site are shown in Illustration 1. Please note that KCPL shall retain title to the various switchyards and the switchroom addition, which adjoins the Grand Avenue Station main structure. These retained items are shown in yellow on Illustration 1. The green lines on Illustration 1 indicate retained easements by KCPL for its electrical facilities.

II. Steam Production Facilities

The steam production facilities consist of three major components:

(1) The main building. This building houses the boilers, water treatment facility, storeroom/office area, and shower/locker room. Major pieces of equipment housed in this building are described in more detail in Table 1. Illustrations 2-5 are photographs of the structure.

(2) The intake structure. This building houses the circulating water supply pumps which were used to supply condenser water when electric generation was occurring. Currently the auxiliary water pump supplies cooling water for heat exchangers associated with boiler auxiliary equipment. Illustration 6 is a photograph of this component.

(3) Fuel receiving and storage area. This area, located west of the main building, has the capacity to store approximately 15,000 tons of coal, and also houses a fuel oil tank with the capacity of 643,000 gallons. The fuel storage area has located within its confines a structure which houses an office, lubrication supplies, and minor maintenance equipment. A portion of this area is shown in Illustration No. 7.

Main Building & Equipment

The main building contains four boilers capable of producing steam at 600 psi. The three larger boilers (6, 7 and 8) were manufactured by Combustion Engineering and were all installed prior to 1950. They can burn pulverized coal or natural gas. Boiler 1A, which was added in 1969, is a small package boiler fired by natural gas or No. 2 fuel oil.

The operation of these boilers involves a number of constraints which should be noted. Because these boilers were designed for the production of electricity, steam is produced at a higher temperature and pressure than is needed for heating purposes. Thus, it is necessary to cool (desuperheat) and reduce the steam pressure prior to send out to the steam distribution system. Condensate for desuperheating water can be supplied to the remote (out of plant) desuperheating stations by two desuperheating pumps. City water can also be used for this purpose. The configuration of the boilers and the downtown heat lines are shown on Drawing No. RC 41701 SH C115 (following Illustration 7). It should also be noted that the design of the large boilers limit the burning of coal to high load periods. With the retirement of electric generation in 1965 and the limited steam heat loads, natural gas is being used almost exclusively for the production of steam. The Grand Avenue Station is also a non-automated facility.

typical of the late 1940s, which makes operation of the large boilers very labor intensive.

The Combustion Engineering boilers are of the "wet bottom" design. When coal is burned, bottom ash leaves the boiler in a molten state and is cooled in slag tanks under the boiler. After the ash is cooled it is moved by conveyor belt to the "cinder pit" located in the east part of the building. Bottom ash can then be loaded into trucks by means of an overhead clamshell crane which is located above the pit. Fly ash is removed from the precipitators (described in more detail elsewhere in this document) by means of a hydrovac system and is collected in a silo on the north side of the main building. It is then made suitable for hauling by means of a dustless unloader which adds moisture to the dry ash to facilitate handling and is then loaded into trucks for offsite disposal.

Boilers 6, 7 and 8 also have coal pulverizers, air heaters and other auxiliary equipment necessary for their operation. The exit gases from these boilers can be directed through an electrostatic precipitator when burning coal or through an alternate stack when burning natural gas. The specifications for these items are listed in Table 1.

Boiler 1A is a small package unit capable of being fired with natural gas or No. 2 fuel oil only. Boiler 1A is not equipped with air heaters, an economizer or superheater, and has normally been used for backup purposes only. It produces steam at 600 psig and has its own pressure reducing valve prior to supplying the heating system. A detailed description of this boiler and its associated equipment is included in Table 1.

The main building also includes additional auxiliary equipment such as FD and ID fans, boiler feed pumps and 480V motors, all of which are described in more detail in Table 1.

The main building also contains significant piping, wiring and minor auxiliary equipment which has not been described. It should be noted that main structure contains substantial amounts of asbestos insulation which will become the responsibility of the purchaser upon sale.

Electric power for the main building is provided through a 2400 volt auxiliary bus system which supplies power to large motors, 2400 to 480 volt transformers and power centers. This system, including the 13,200 volt to 2400 volt transformers which supply the bus, will become the responsibility of the purchaser. KCPL will provide electric service at the high side of the transformer. If any changes to this service are desired by the purchaser, such will be done pursuant to KCPL's General Rules and Regulations. It should be noted that one of these transformers is PCB filled and will become the responsibility of the purchaser upon sale. It should also be recognized that these facilities, excluding the 13200 volt to 2,400 volt transformers are located in the switchroom addition. The

switchroom addition is located immediately south of and adjacent to the main building structure. As described in Section III of this exhibit, KCPL will retain ownership to the switchroom addition but will provide any necessary easements associated with operation and maintenance of the 2400 volt auxiliary bus system.

The main building contains several turbine generators which have been retired from service. These machines, along with their directly associated auxiliary equipment such as condensers, ejectors, condensate pumps and other auxiliary equipment directly connected with the operation of the turbine generators, will not be sold and for the present will remain in place in the building.

Intake

The intake structure contains 6 pumps the specifications of which are listed in Table 2. The intake facility is capable of providing large quantities of Missouri River water which would not be required in the absence of the need to condense large quantities of steam. When producing steam, the smallest of the 6 pumps is used to provide cooling water for the plant bearing cooling water system, and the hydroveyor. Details of equipment located in this structure are in Table 2. KCPL has electrical facilities along the piping extending between the intake structure and Grand Avenue and on the intake structure property. KCPL will retain easements for such facilities.

Fuel Receiving and Storage Area.

When coal was used as a primary fuel it was received by rail and unloaded with a Gantry crane equipped with a clamshell bucket. Coal can be dumped directly on the storage pile or placed on the yardbelt which conveys coal to the crusher house. After passing through the crusher, coal is conveyed to the main building by means of an inclined conveyer which crosses over Grand Avenue. Discharge from the inclined conveyer is to a tripper conveyer belt which provides for distribution of the coal in the bunkers located above the C.E. boilers. A drag conveyor is located beneath the railroad tracks for purposes of dumping the coal which is inaccessible by means of the clamshell and is collected in a concrete bunker. Approximately eleven cars can be located on the two tracks adjoining the coal storage pile. In addition to the fuel oil storage tank previously mentioned, a condensate storage tank is also located in the fuel storage area. Details of the fuel handling equipment are contained in Table 3.

General

A machine shop is also located in the main building; the machine tool equipment is not for sale.

All available prints, operating diagrams, instruction books, etc., will be turned over to the purchaser at the time of sale.

III. Electrical Transmission and Distribution Facilities

KCPL operates and maintains electrical transmission and distribution facilities both on the Grand Avenue lands and within the main building structure. KCPL will maintain ownership and access to these facilities.

Primarily, KCPL will maintain ownership and access to the two 161 kv switchyards at Grand Avenue. These include the Grand Avenue switchyard, located immediately west of the main building structure, and the Grand Avenue west switchyard, located west of the Grand Avenue roadway and south of the fuel storage area. The location of each of these switchyards is shown in yellow on Illustration 1. KCPL will provide an easement for pedestrian access to the main building structure across the Grand Avenue switchyard.

In addition, KCPL will retain easements and other rights to operate and maintain its underground and overhead transmission lines and distribution manhole conduit system located in the yard area and on the intake structure property. The locations of these easements are also identified in green on Illustration 1.

KCPL will retain easements and other necessary rights within the Grand Avenue structure to locate, maintain, operate, replace, repair and remove (a) the turbine generators and associated equipment, (b) the electrical facilities located on levels 50 and 63, and (c) all other existing electrical conductors and equipment reasonably required for said facilities and KCPL's electric distribution system.

In addition, KCPL will retain ownership and all necessary easements to the switchroom addition and facilities located immediately south of and adjacent to the main building structure. It should be noted that the 2400 volt auxiliary bus system which supplies electric power for the main building is located in the east one-third of the top floor of the switchroom addition. KCPL will provide the necessary easements and other rights to the purchaser for maintenance and operation of these facilities.

TABLE 1

BOILER UNIT DATA

	Boiler Unit Number			
	1A	6	7	8
Rating, M lbs/hr - Manufacturers maximum continuous	230	350	375	400
Rating, M lbs/hr - Normal operating maximum	200	350	375	250-350
Maximum pressure, psig	650	750	750	750
Temperature, °F	534	750	750	750-950
Method of firing	FO & G	PC & G	PC & G	PC & G
Date in service	6-18-68	10-18-44	2-15-50	8-29-48
Manufacturer	B&W	CE, Inc.	CE, Inc.	CE, Inc.

PRECIPITATOR

Cubic ft/minute	410,000
Number of fields	4
Size	42'x55'x41' overall
Number of lanes	51
Number of hoppers	12
Number & size of rectifiers	4, Westinghouse 53 Kv
Number & size of transformers	2, 35 kva and 2, 53 kva

PULVERIZERS

	Unit 6	Unit 7	Unit 8
Manufacturer	Raymond	Raymond	Raymond
Type	Bowl	Bowl	Bowl
Size	533	613	613
lb/hr.	24,700	34,100	34,100

FAN DATA

ID Fans

	Fan Number			
	1A	6	7	8
Manufacturer		Sirocco	Sirocco	Sirocco
Rating, cubic feet minute (gas)			206,000	206,000
Gas temperature, °F			364	364
Serial number		84950-C		

ID Fan Drives	Fan Number			
	1A	6	7	8
Manufacturer		Electric Machine & Mfg.	G.E.	G.E.
Horsepower		800	700	700
Voltage		2300	2300	2300
Rpm		900	720	710
Serial number		87508		
Type		Sync	AC	AC

FD Fans	Fan Number			
	1A	6	7	8
Manufacturer	West	Sirocco	American	American
Rating, cubic feet/min (air	307,000		112,000	112,000
Air temp. °F	115		110	110
Serial number				

FD Fan Drives	Fan Number			
	1A	6	7	8
Manufacturer	West.	G.E.	G.E.	G.E.
Horsepower	600	250	250	250
Voltage		2300	2300	2300
Rpm		885	1200	1180
Serial Number		5931055	6812115	6731192
Type		AC	AC	AC

PUMPS

Boiler Feed Pump Data	Pump Number				
	1	2	3	6	7
Manufacturer			DeLaval	Allis-C	Allis-C
Gallons per minute	500	500	600	1000	1000
Total head (feet)	2000	2000	1902	2020	2020
Size				6x4	6x4
Serial #		80962		49678	51267
Stages			6	5	

Boiler Feed Pump Drivers	Pump Number				
	1	2	3	6	7
Manufacturer			W.E.&M.	Allis-C	Allis-C
Horsepower	400	400	500	700	700
Voltage	2300	2300	2300	2300	2300
Rpm			3550	3600	3600
Serial #			4945555	150901	152426
Type			AC	Induct	Induct

440 VOLT MOTORS

Description		Horsepower	R.P.M.
Bunker Conveyor		10	1175
Incline Conveyor		30	1160
Crusher		75	705
Yard Conveyor		15	1160
Gantry Crane:			
	Hoist	50	870
	Open & Close	50	870
	Trolley	20	1160
	Travel	5	1160
Yard Loader		10	870
Air Compressors:			
	2 mtrs	2	1735
	1 mtr	25	870
	1 mtr	25	1760
	5 mtrs	40	1755
Air Preheater:			
	1 mtr	5	1150
	2 mtrs	7.75	1165
Ash Crane			
	Hoist	40	1200
	Open & Close	40	1200
	Bridge Travel	10	1175
	Trolley Travel	7.5	1175
Ash Conveyors:			
	3	5	860
Bearing Cooling Water Pumps:			
	2 mtrs	40	3500
Brine Pumps:			
	1 mtr	1.5	3450
	1 mtr	2	3450
	1 mtr	3	3495
Coal Feeders:			
	6 mtrs	1	1720
Condensate Transfer Pumps:			
	1 mtr	10	1730
	2 mtrs	40	1767
Desuperheater Pumps:			
	3 mtrs	50	3540
Drip Drain Pumps:			
	#1	7.5	1735
	#2	10	3480
Dust Collector #6 Boiler		40	875
Elevators:			
	BR	9	1050
	SR	9	1050
	TR	10	1060
Fuel Oil Pumps:			
	#1 & #2	15	1160
	#3	15	1175

Gas Dryer #9		1.5	1160
Grinders:			
	Bo. Rm	5	1730
	Weld Shop	2	1725
Heater Drain Pumps:			
	#2	25	1725
	9E & 9W	15	3490
	7N & 7S	10	1740
	#1 & 2A	25	1760
Hydraulic Coupling Oil Pumps:			
	7 Bo	2	1155
	7 Bo	1/4	1725
	8 Bo	2	1155
Pump House Hydraulic Oil Pump:			
	#1	10	1160
	#2	7.5	1150
Hydroveyor Pumps:	#1 & #2	150	1765
Hydroveyor Gland Seal:	#1 & @	1.5	1740
Main Seal Oil Pump #9 Gen		3	1160
Man Lift		5	1160
Mg Sets:			
	#1 Battery	15	1800
	#1 & #1 Stoker	50	1800
	6A & 6B Feeder	5	1720
Oil Separator Pumps:	#1 & #2	2	3510
Pure Water Pump:	#1 & #2	22.5	1745
Reservoir Pump		50	1750
Reservoir Supply Pump		25H	1760
Screen Drive P.H.:	#1 & #2	7.5	1740
	#3, #4 & #5	5	855
Screen Heater Blower		2	1800
Switch House Supply Fans:	N & S	25	1760
Sump Pumps:			
	Bo. Rm. 1-2-3-4	10	1160
	Turb. Rm 3-4	10	1160
	Turb. Rm #1	15	1160
	Turb. Rm #2	7.5	1160
	P. Hse	25	1150
Weld Shop Fume Collector		5	1160

<u>2300 VOLT MOTORS</u>

Boiler Feed Pumps:			
	#1 & #2	400	3556
	#3-#4-#7	700	3570
		850	3562
Circ. Water Pumps:			
	#1 & #2	700	508
	#3-#4-#5	700	592
City Water Booster		100	1770
Coal Mills:			
	#1A & #1B	250	1180
	#2A & #2B, #4A & #4B	300	885

Condensate Pumps:			
	#7 & 8, #8E & W	60	1160
	#9E & S	60	880
Forced Draft Fans:			
	#1A Boiler	600	1779
	#6 Boiler	250	885
	#7 & #8 Boilers	250	1180
Induced Draft Fans:			
	#6 Bo.	800	900
	#7 & #8 Bo.	700	710

TRANSFORMERS

	1&2 Pumphouse	Precip.	1&2 Fuel Yard	#1 Aux	#2 Aux
Manufacturer	Heviduty Electric	West.	West.	H.K.Porter	West.
Kva	300	300	1000	3750	3750
Voltage	2400/480	2400/480	2400/480	13.2/2400/1386	13200/2400

COMPRESSOR DATA

Control Air	Compressor Number 1	2	3 (Emerg.)
Manufacturer	Chicago Pneu	Chicago Pneu	Sullivan
Manufacturer Number	80520	8052	Model 25
Size	9x9TB0-2	9x9TB0-B2	(Class WL-80)
Max Rpm	360	360	1200
Min Rpm	85	85	
Max Pressure			12516

Service Air	Compressor Number 1	2
Manufacturer	Chicago Pneu	Chicago Pneu
Manufacturer Number	80517	80518
Size	9x9TB	9x9TB
Max Rpm	360	360
Min Rpm	85	85

TABLE 2

INTAKE

Circulating Water Pumps	#1	#2	#3	#4	#5	#6
Manufacturer	Worth	Worth.	F.W.	F.W.	F.W.	Peerless
Gallon/min.	45000	45000	45000	45000	45000	2500
Feet head	50	50	47	47	47	
Discharge dia.	42"	42"	36"	36"	36"	
Circulating Water Pump Drivers						
Manufacturer			G.E.	G.E.	G.E.	
Horsepower	700	700	700	700	700	50
Rev/min.	514	514	392	392	392	1200
Voltage	2300	2300	2300	2300	2300	230/440

Screen Wash Pumps	#1	#2
Manufacturer		
Model	2JC-14	2JC-14
Gal/min.	200	200
Screen Wash Pump Motors		
Manufacturer		
Rev/min.	1750	1750
Voltage	240/480v	240/480v

Screen house Sump Pump	
Manufacturer	Yeomans
Gal/Min	650
Feet head	60

Screen house Sump Pump Motor	
Manufacturer	G.E.
Type	Induction
Horsepower	25
Rev/min	1200

TABLE 3

Vertical Bucket Conveyor

Manufacturer	Beaumont Birch Co.

Drag Conveyor

Manufacturer	Beaumont Birch Co.
Tons per hour	40
Motor type	Squirrel cage
Motor HP	5

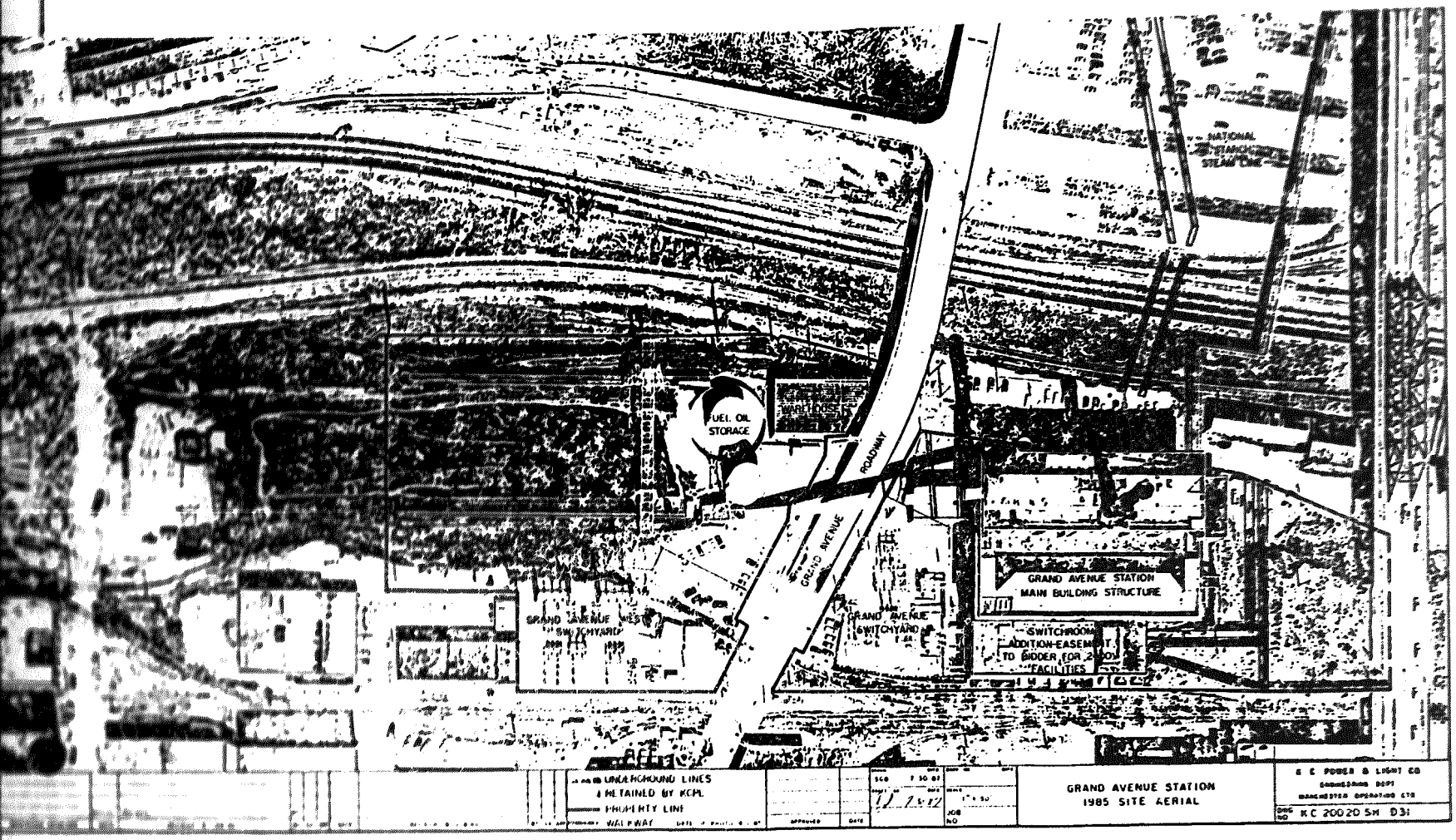
Belts	Yardbelt	Inclined Bridge	Tripper
Manufacturer	Stearns Convey.	Stearns Conv.	Link Belt Co.
Tons per hour	200	200	200
Feet per minute	300	300	300
Belt size	30"	30"	30"
No. of trough rollers	92	73	54
No. of return idlers	41	32	25
Gear reducer ratio	30:1	30:1	
Motor			
Type	AC		AC
Horsepower	15		10
Manufacturer	WE & M Co.		G.E.
Voltage	440	2200	440
Rev/minute	1160	1160	1200

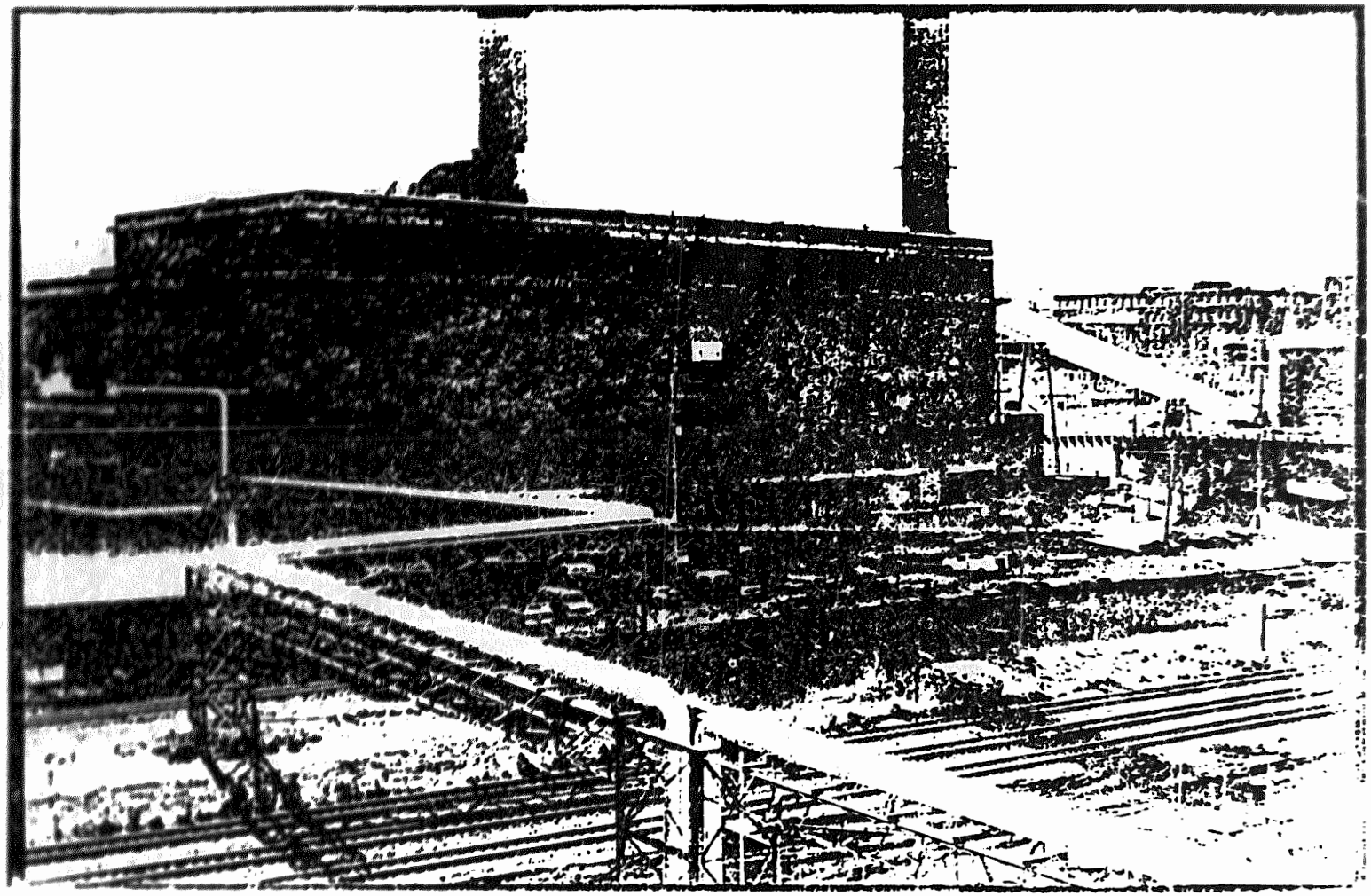
Crusher

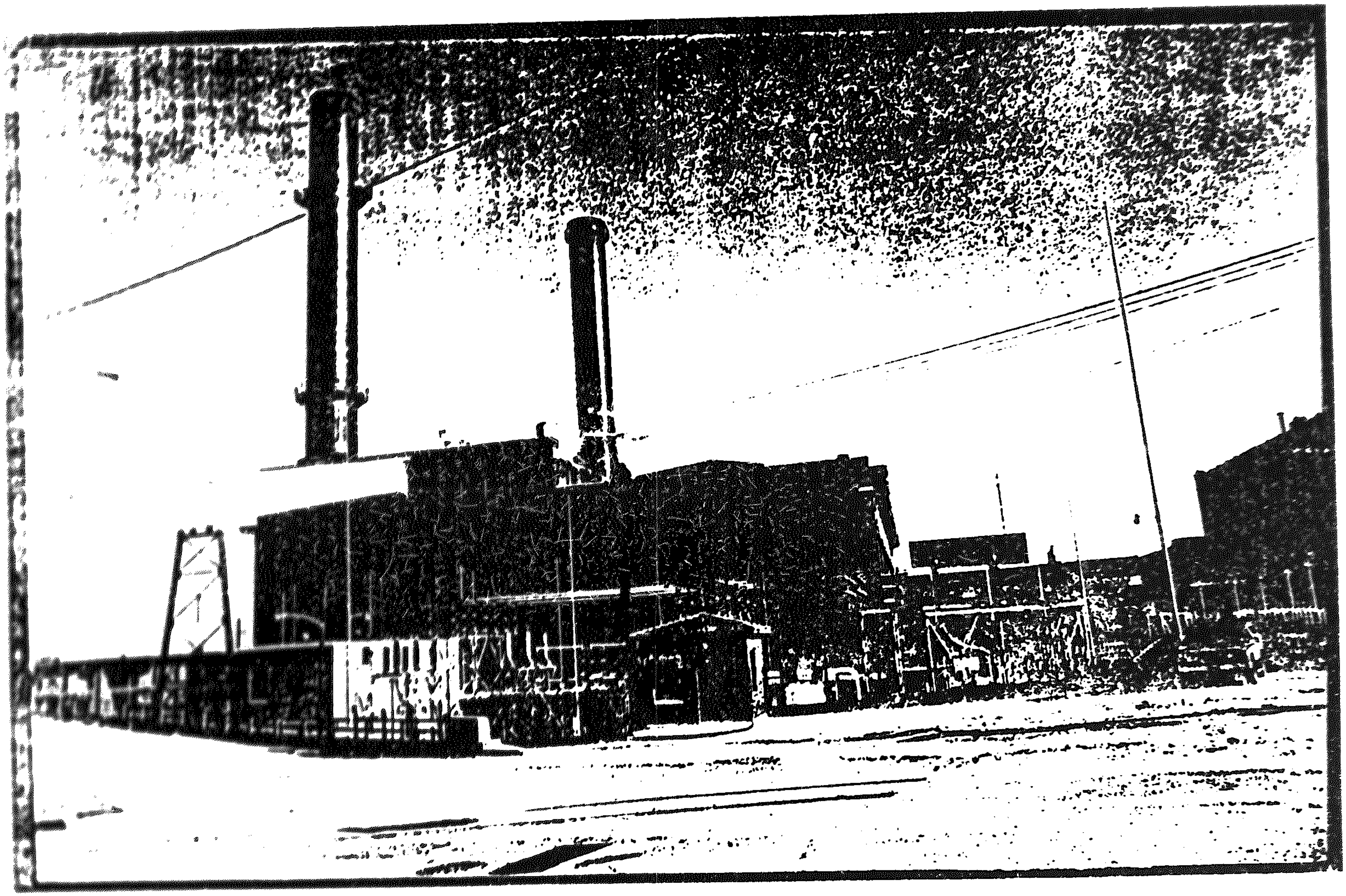
Manufacturer	American Pulverizer Co.
Type	Ring
Tons/hour	150

Crusher Motor

Manufacturer	W.E. & M. Co.
Horsepower	75
Voltage	2200
Rev/minute	690
Type	A C.


FUEL OIL STORAGE
ROADWAY
GRAND AVENUE
GRAND AVENUE SWITCHYARD
GRAND AVENUE STATION
MAIN BUILDING STRUCTURE
SWITCHROOM ADDITION-EASEMENT TO BIDDER FOR 230 KV FACILITIES
UNDERGROUND LINES RETAINED BY KCPL
PROPERTY LINE
RAILWAY
GRAND AVENUE STATION
1985 SITE AERIAL
KC 20020 SH D31





GRATIOT 4

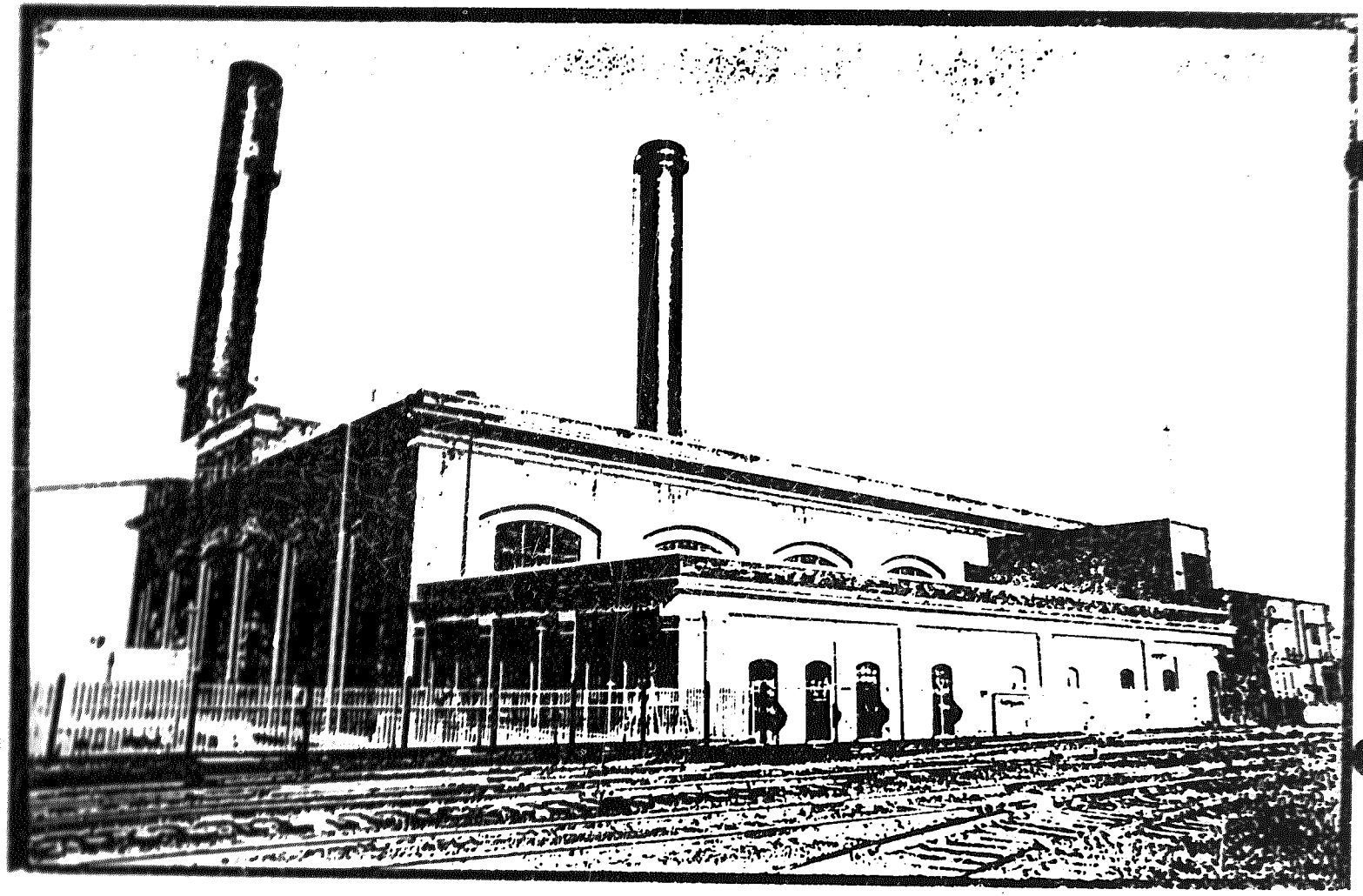
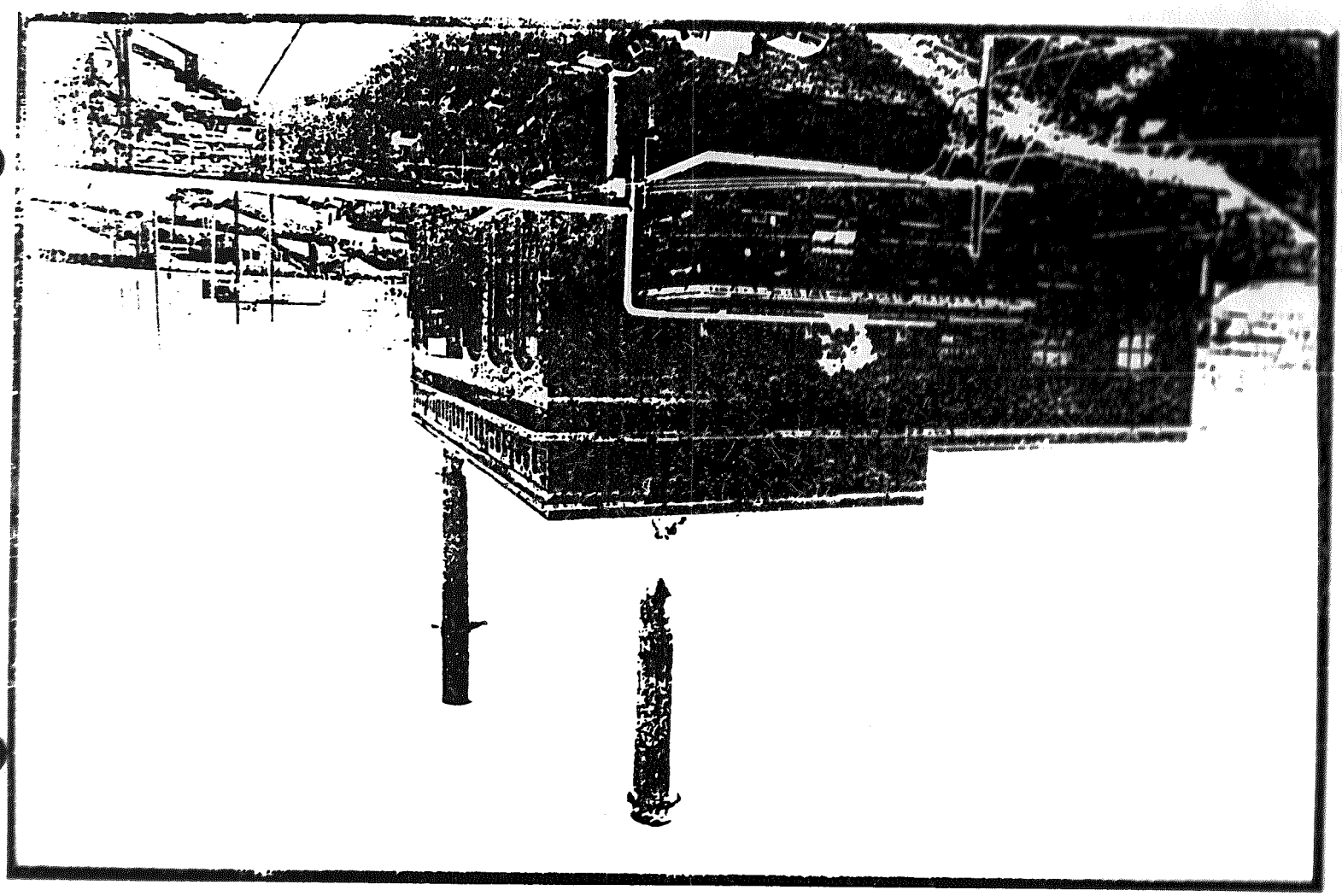
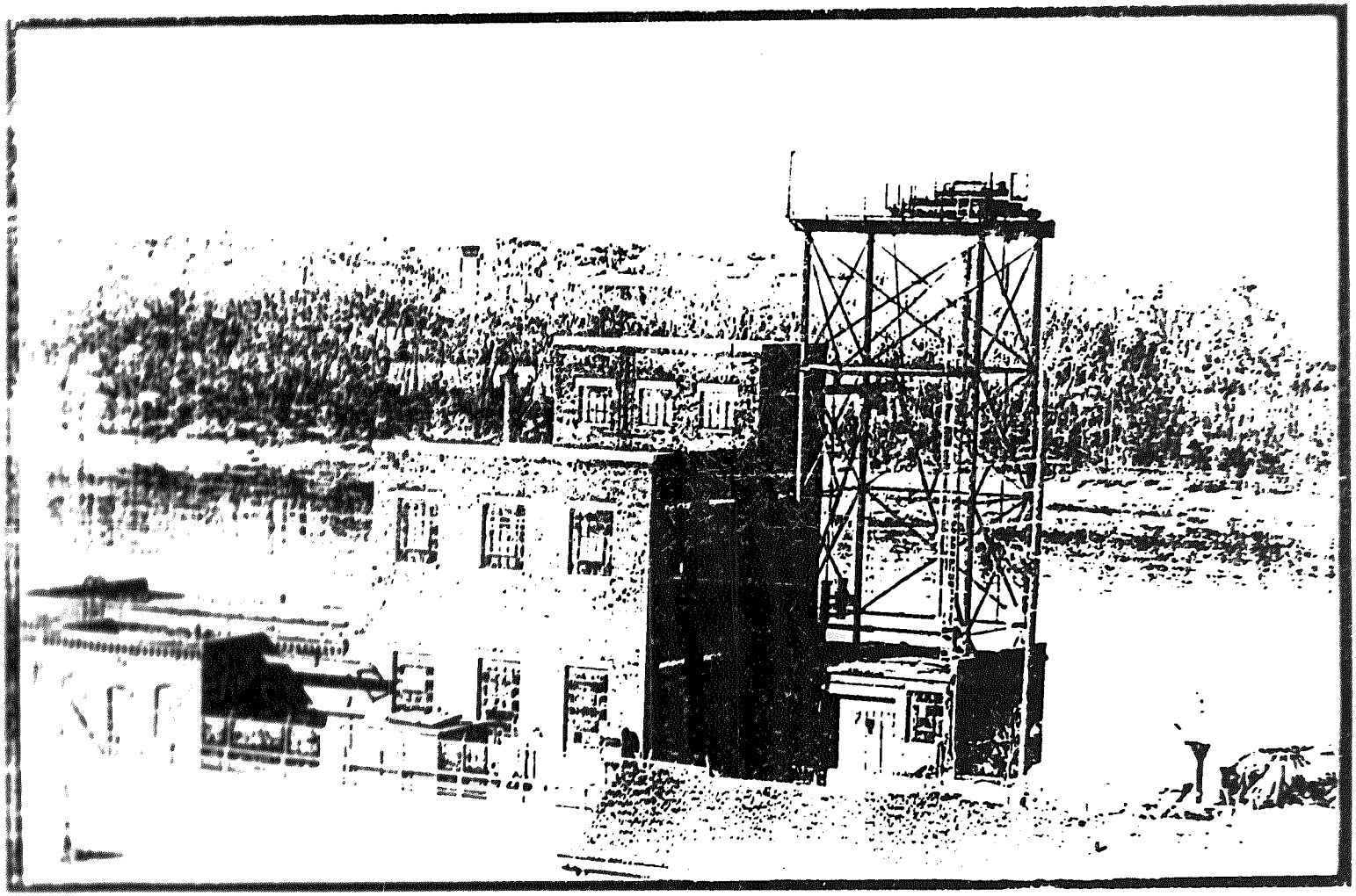
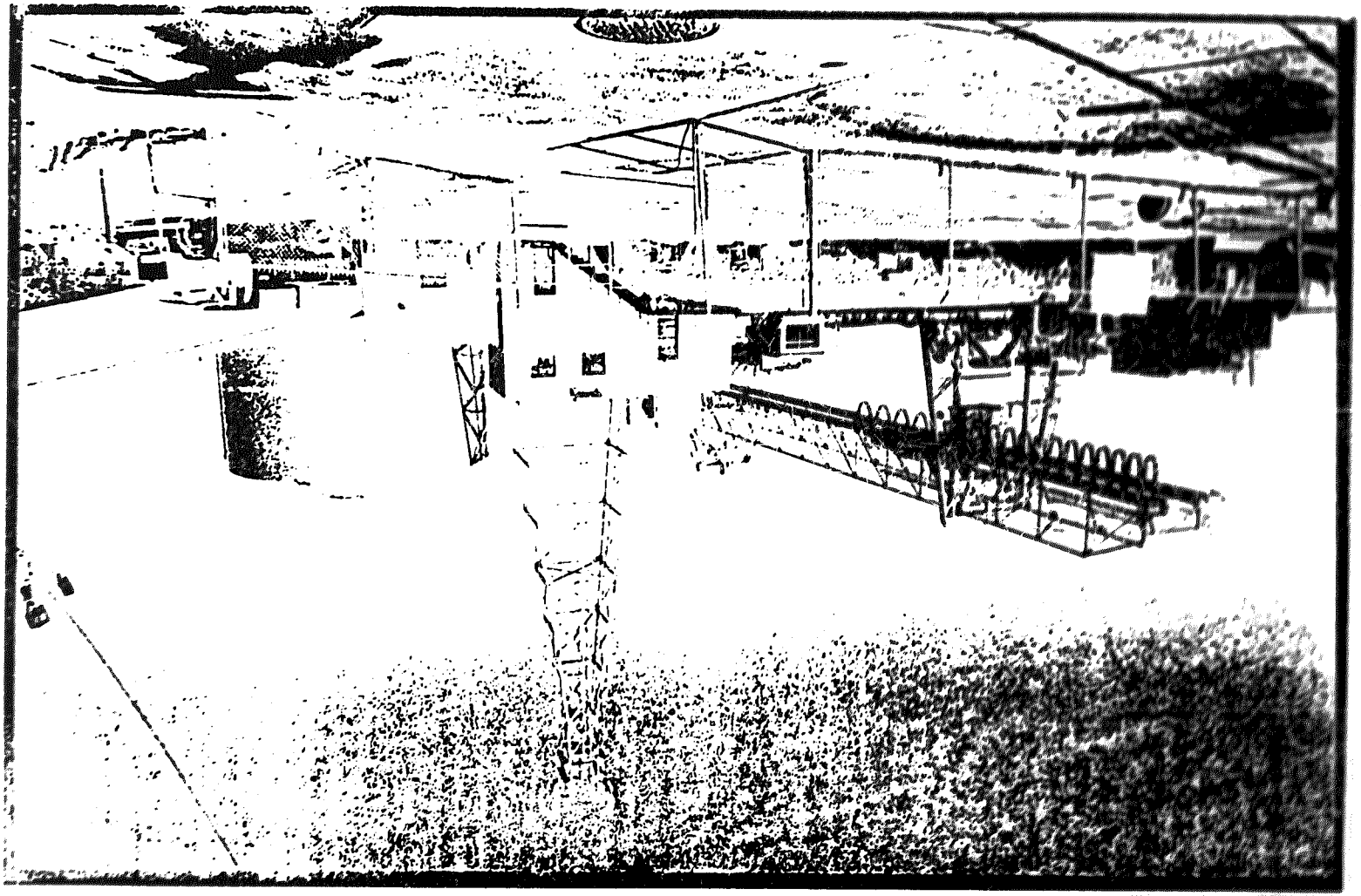


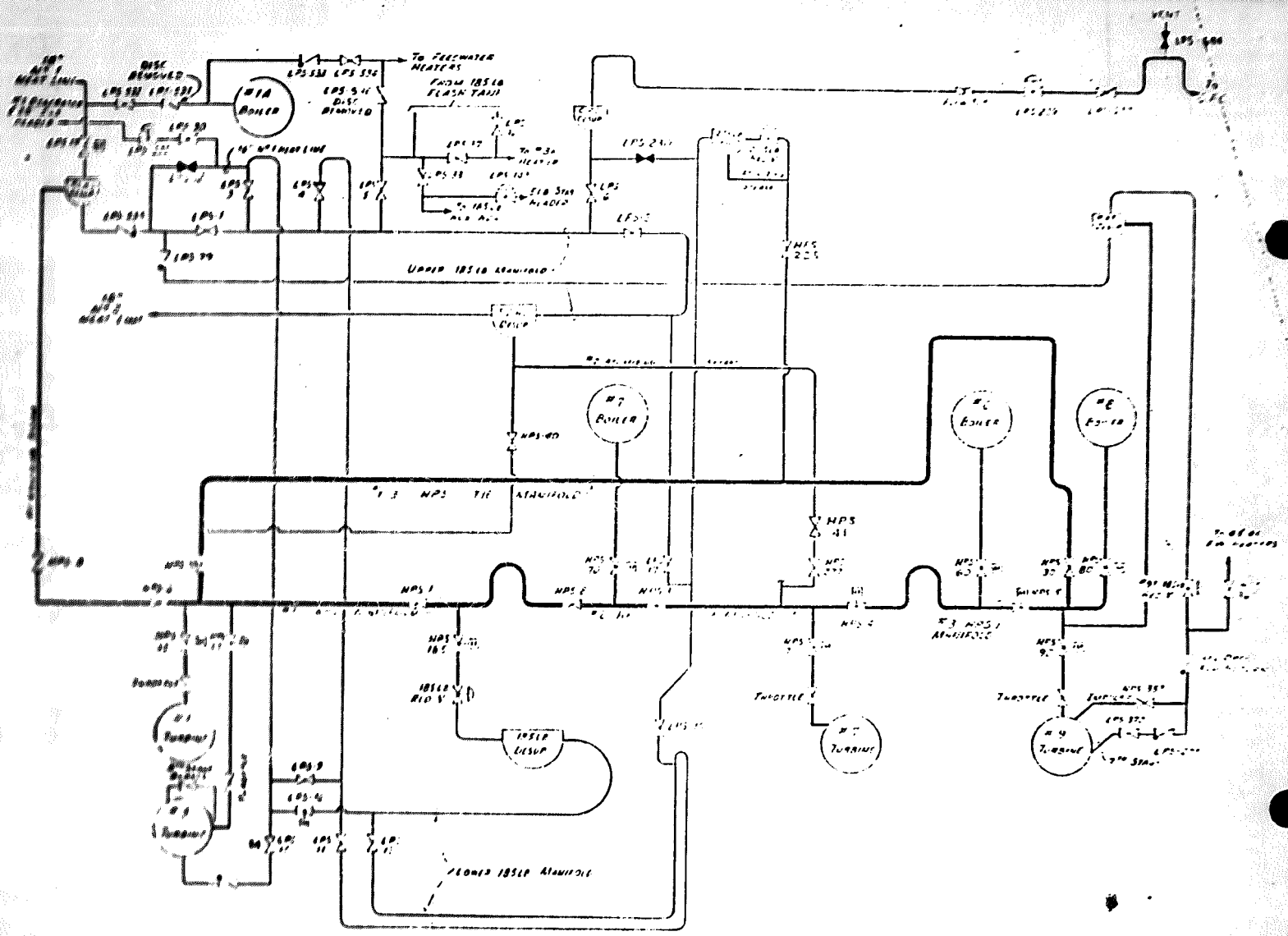
ILLUSTRATION 4





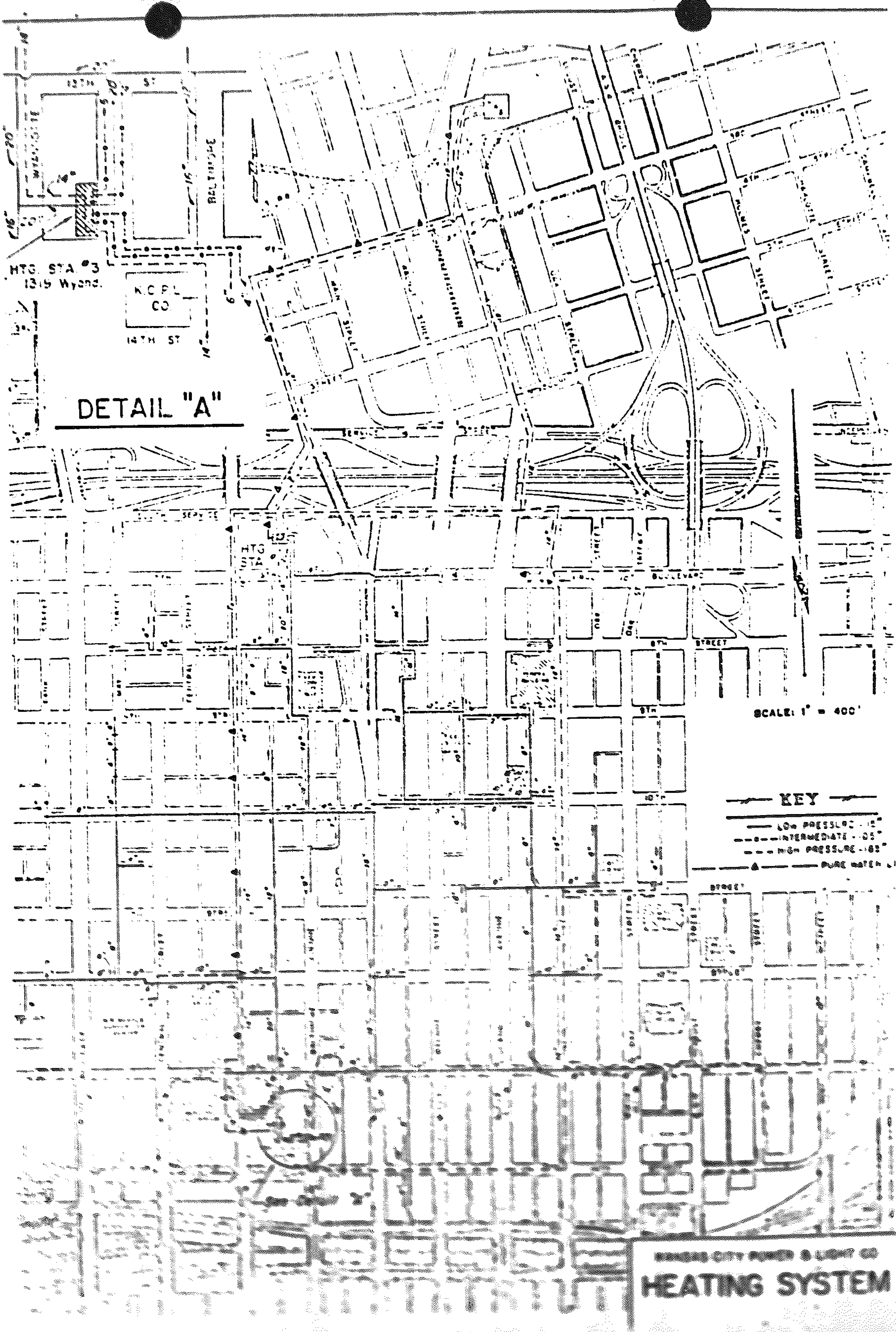
TRATION 6



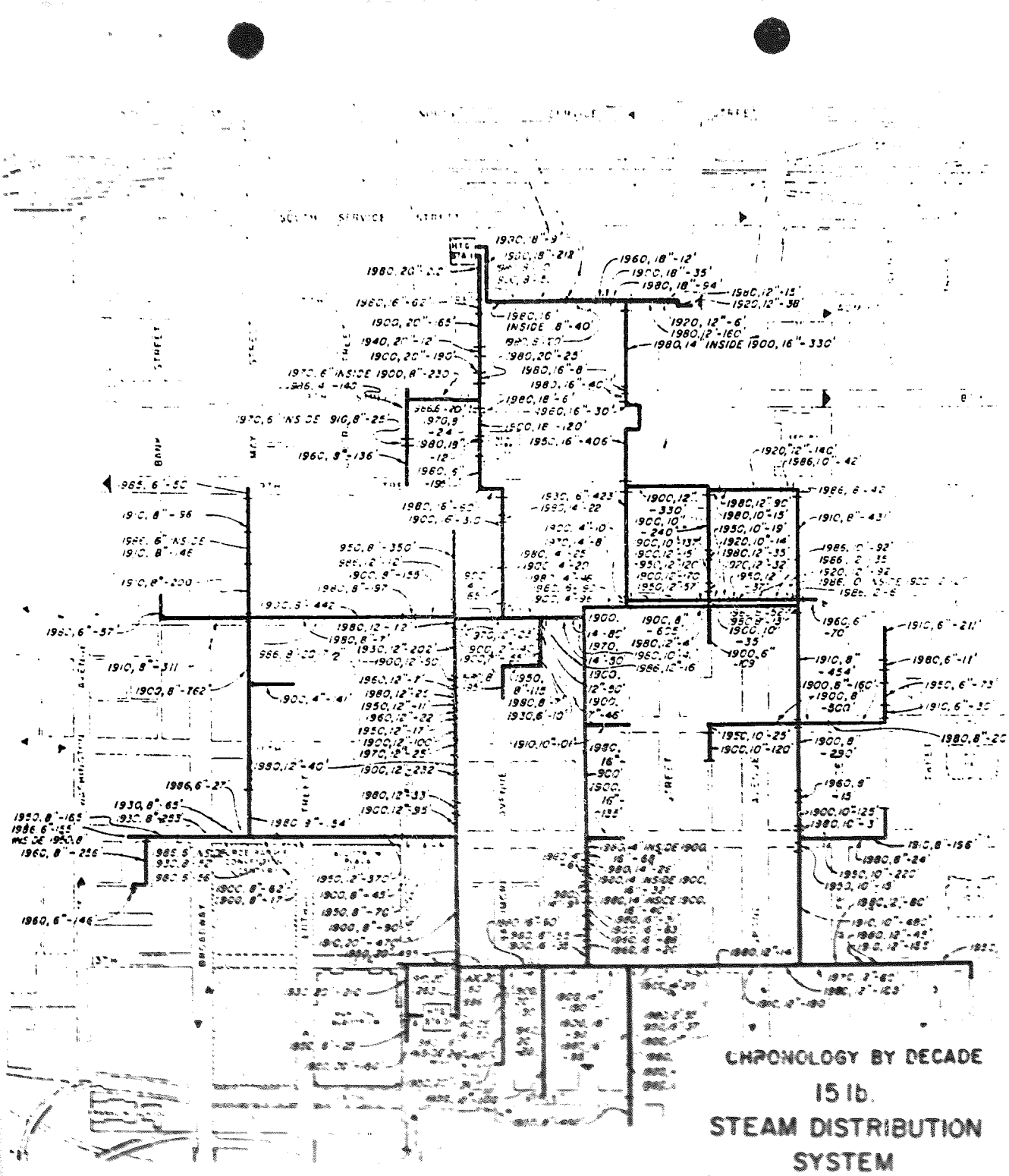


KC POWER & LIGHT CO
ENGINEERING DEPT
MANCHESTER OPERATING CTR

Exhibit 5



HTG. STA. #3
1319 Wyand.
K.C.P.L. CO.
14TH ST
DETAIL "A"
HTG. STA.
SCALE: 1" = 400'
KEY
LOW PRESSURE
INTERMEDIATE
HIGH PRESSURE
HEATING SYSTEM

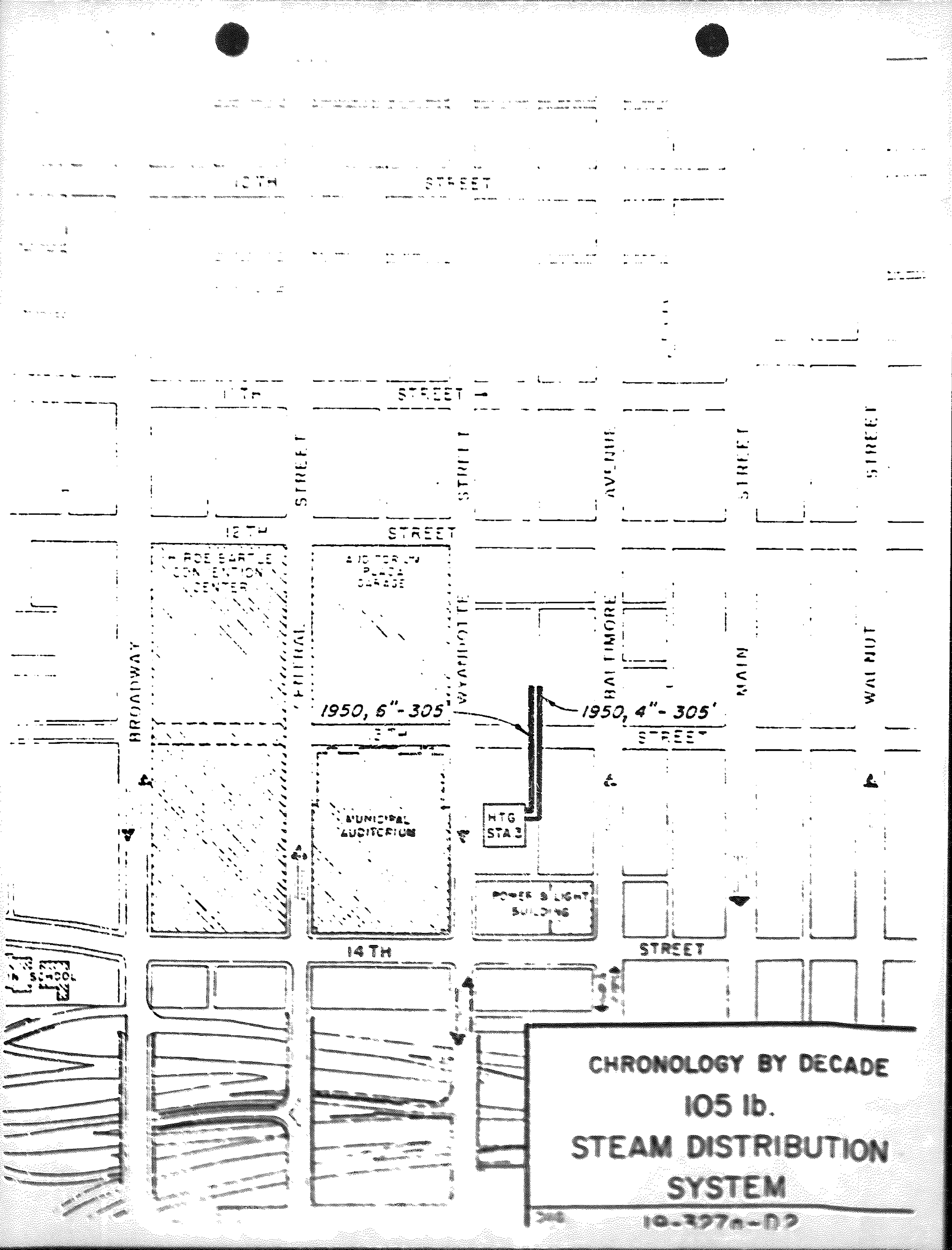


CHRONOLOGY BY DECADE

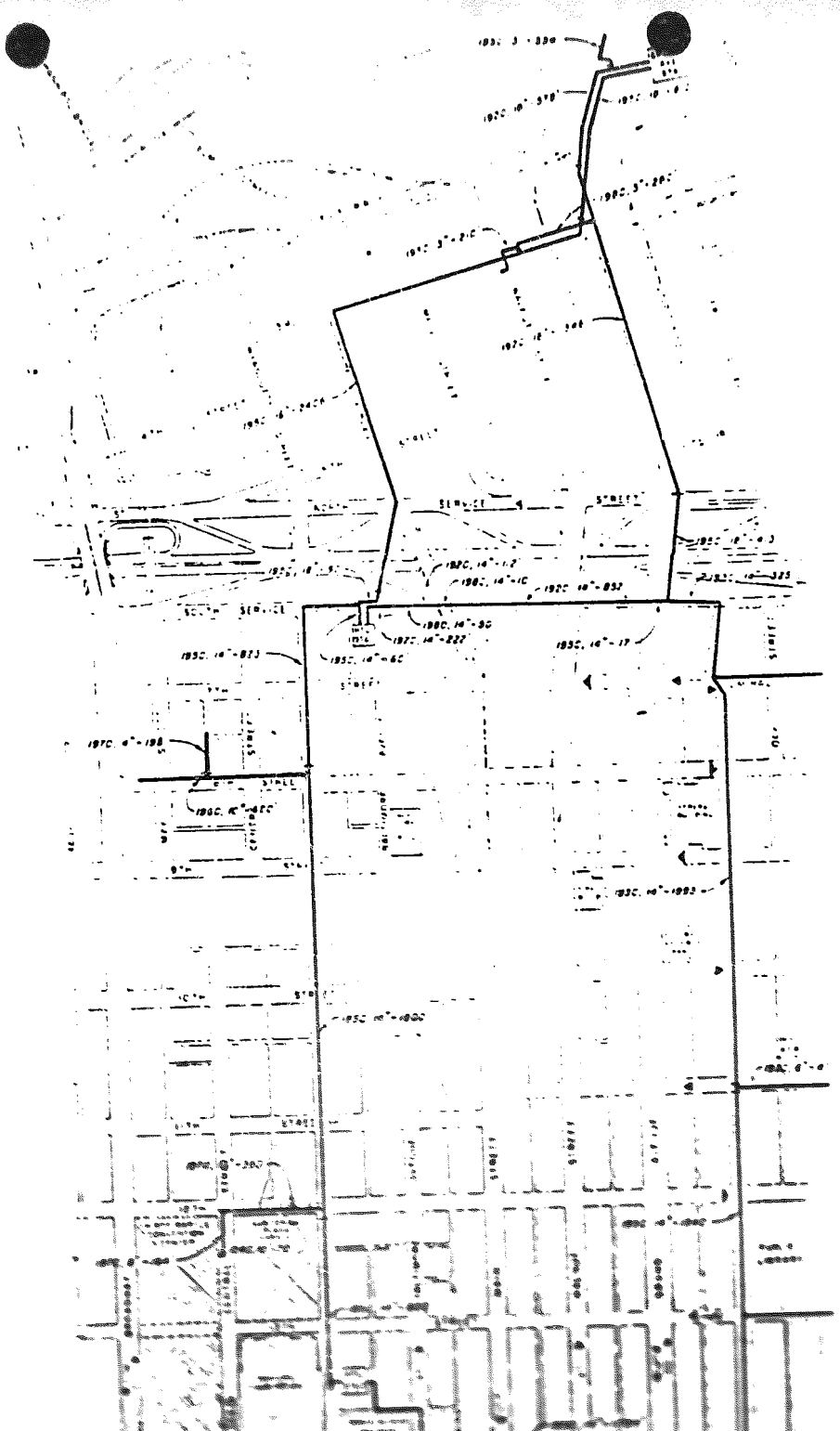
151b.

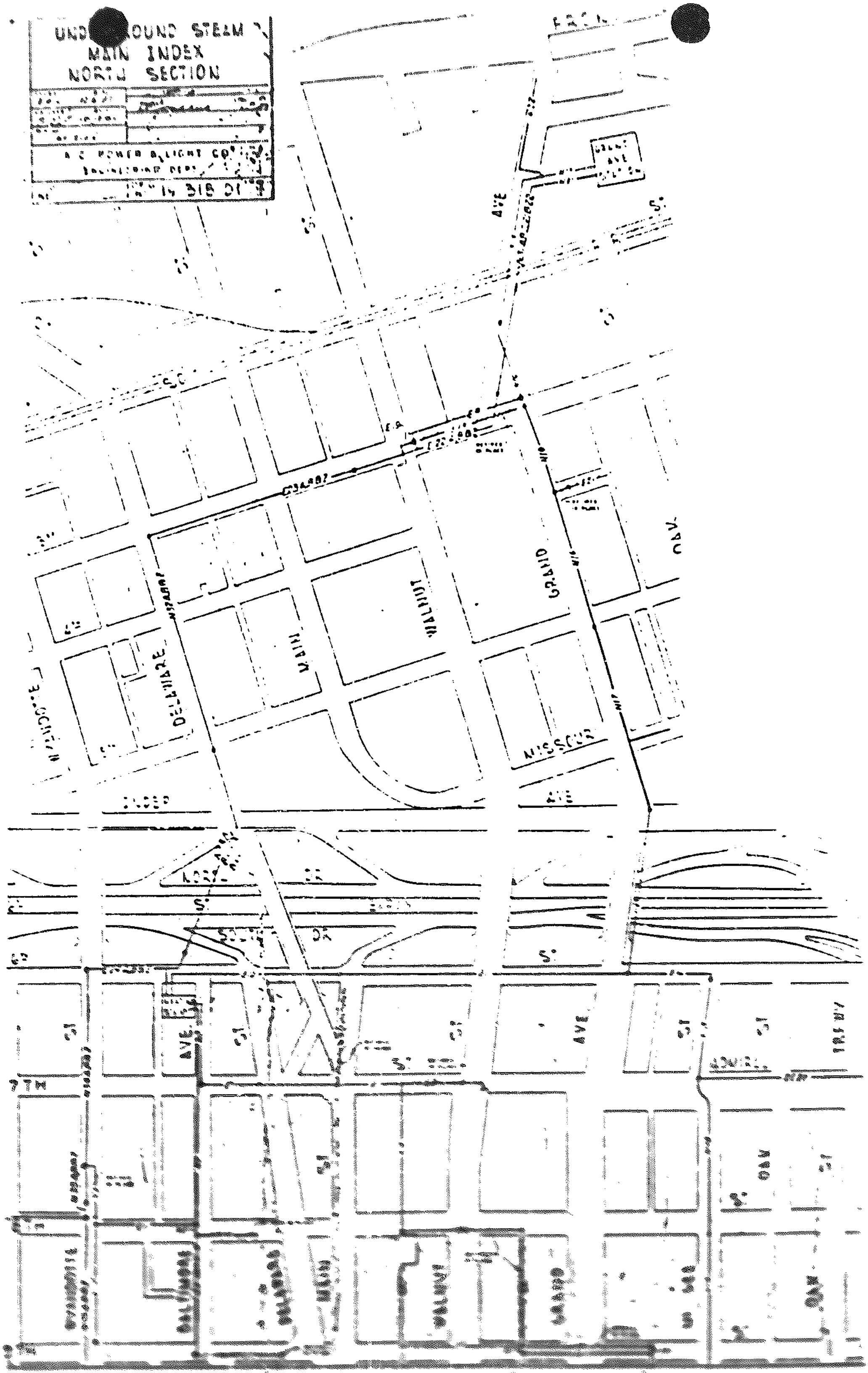
STEAM DISTRIBUTION SYSTEM

19-327a-DI



11TH STREET
12TH STREET
STREET
STREET
AVENUE
STREET
STREET
BROADWAY
CENTRAL
WYANDOTTE
BALTIMORE
MAIN
WALNUT
H. ROE BARTLE CONVENTION CENTER
AUDITORIUM PLAZA GARAGE
1950, 6"-305'
1950, 4"-305'
STREET
MUNICIPAL AUDITORIUM
HTG STA 3
POWER & LIGHT BUILDING
14TH
STREET
SCHOOL
CHRONOLOGY BY DECADE
105 lb.
STEAM DISTRIBUTION
SYSTEM


STEAM DISTRIBUTION
SYSTEM


MAIN INDEX
NORTH SECTION
DELAWARE
MAIN
WALNUT
GRAND
AVE

UNDERGROUND STEAM
MAIN INDEX
SOUTH SECTION
HOLMES
CHERRY
OAK

Exhibit 6

STEAM SERVICE AGREEMENT

THIS STEAM SERVICE AGREEMENT made and entered into this 16th day of October, 1985, by and between KANSAS CITY POWER & LIGHT COMPANY (the "Company") and NATIONAL STARCH AND CHEMICAL CORPORATION (the "Customer").

WITNESSETH:

WHEREAS, the Company, a regulated public utility, is engaged, inter alia, in the production, distribution and sale of steam in a certain limited portion of downtown Kansas City, Jackson County, Missouri; and

WHEREAS, the Customer desires to commence taking and receiving steam produced at the Company's Grand Avenue Station, at a delivery point to be located at the north property line of said Grand Avenue Station, for transmission and utilization by the Customer exclusively at its premises at 1001 Bedford Avenue, North Kansas City, Missouri; and

WHEREAS, the Company is willing to furnish steam to the Customer, at such delivery point, for such purpose upon the terms and conditions herein contained;

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties hereto agree as follows:

Section 1. Delivery Point. The Delivery Point of steam service provided hereunder by the Company shall be located at the north property line of the Company's Grand Avenue Station, near the northeast corner thereof on Lot 329, Old Town, Kansas City, Missouri.

Section 2. Company Facilities. The Company will provide, operate and maintain, at its own cost and expense, all steam production and delivery facilities required for service hereunder on its side of the Delivery Point.

including additional steam regulation, desuperheating, water treatment and metering equipment, piping to require all condensate for desuperheating to be delivered from the condensate reservoir, and a steam supply line from the point of steam production to the Delivery Point, all of which facilities shall be located within the boundaries of Grand Avenue Station.

Section 3. Customer Facilities.

(a) The Customer shall provide, operate and maintain, at its own cost and expense, all steam transmission and utilization facilities required on its side of the Delivery Point, including a steam transmission pipeline for the receipt and delivery of steam supplied hereunder from the Delivery Point to the Customer's premises located at 1001 Bedford Avenue, North Kansas City, Missouri, for use by the Customer exclusively at such premises as herein provided. The Customer shall be responsible for securing and obtaining, at its own cost and expense, all rights-of-way, easements, licenses, permits and other authority and approvals, of whatsoever kind, required for the operation and maintenance of its facilities.

(b) The Customer shall, at its own cost and expense, provide a block valve and an appropriate by-pass valve in Grand Avenue Station at a mutually agreed location in the Company's steam supply line between the Company's metering facilities and the Delivery Point, which block and by-pass valves will be maintained and operated exclusively by employees of the Customer and the Customer shall lock such valves and post signs at such valve locations to such effect.

Section 4. Steam Supply.

(a) The Company will produce, deliver and sell steam to the Customer, and the Customer will receive and purchase such steam, at the Delivery Point,

as measured by Company-supplied metering equipment installed in Grand Avenue Station. Steam will normally be delivered by the Company in a range of 378 to 410°F., as measured at the metering point, and during steady state operations at a minimum pressure of 185 pounds per square inch gauge, as measured at the metering point, it being recognized by the parties that such minimum pressure may not be available during steam load or supply changes, upset conditions or scheduled maintenance. The Company will notify the Customer at least 30 days in advance when possible of any scheduled maintenance which would adversely affect such minimum pressure and the parties will cooperate to minimize pressure variations during such scheduled maintenance.

(b) Subject to the provisions of Section 5 herein, the Company will supply the Customer's total steam requirements, up to a normal demand of 60,000 pounds per hour, provided that, at any time within such hour the Customer's demand shall not exceed, and the Company shall have no obligation to supply steam at quantities above, a maximum rate of 90,000 pounds per hour, and provided further, that steam delivered and sold by the Company, and received and purchased by the Customer hereunder, shall neither be used for the generation of electricity other than for use of the Customer in its 50 kw turbine generator when the Company's electric service to the Customer's premises at 1001 Bedford Avenue, North Kansas City, Missouri, is disrupted, nor be resold or redelivered to any other person or entity. The Customer will provide interlocks such that when electric service is ready to be restored the electricity provided by the Customer's generator is disconnected.

(c) The Company will use its best efforts at Grand Avenue Station to operate existing facilities at optimum efficiency for its steam operations and minimize fuel costs therefor, all in accordance with prudent utility operating practices to provide that level of reliability and continuity of service as

herein provided. The Customer will use its best efforts to receive and utilize steam supplied by the Company hereunder in such manner as to minimize any adverse effect on the Company's facilities and operations, all in accordance with prudent manufacturing practices.

(c) In producing steam at Grand Avenue Station, the Company uses (i) potable water supplied to it as "City water" by the Kansas City, Missouri, municipal system and (ii) desuperheating water which, will be supplied only from the Company's condensate reservoir at Grand Avenue Station. The Company will give at least 30 days' prior written notice to the Customer of any change by the Company in such water sources. The Company uses chemicals for water treatment and boiler additives into the water/steam cycle as listed on Attachment A hereto, that have been approved by the United States Food and Drug Administration, and will provide at least 30 days' prior written notice to the Customer of any change in chemicals used for such purposes. The Customer acknowledges that it has thoroughly familiarized itself with the chemical properties of the steam to be supplied under this Agreement, and is satisfied with said chemical properties. Should the Customer desire any changes in said chemical properties, it shall request such changes in writing. The Company, in its sole judgment, shall determine whether such changes may have a detrimental effect on the equipment or operating practices at Grand Avenue Station, or on steam service to the Company's downtown Kansas City, Missouri, utility steam customers. If the Company agrees to such changes, all increases in costs associated with such changes shall be paid by the Customer pursuant to charges established by the Company at the time of the change.

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE COMPANY COMPLETELY DISCLAIMS, EXCLUDES AND NEGATES ALL WARRANTIES BY THE COMPANY, WHETHER EXPRESS OR IMPLIED, RELATING TO THE STEAM SERVICE TO BE FURNISHED UNDER THIS AGREEMENT WITH RESPECT TO MERCHANTABILITY, FITNESS FOR USE, SAFETY, CONDITION, QUALITY, QUANTITY, TEMPERATURE, PRESSURE, PURITY, CHEMICAL COMPOSITION, OR

ANY OTHER CHARACTERISTIC, WHETHER ARISING PURSUANT TO THE UNIFORM COMMERCIAL CODE OR ANY OTHER PRESENT OR FUTURE LAW, OR OTHERWISE.

Section 5. Steam Supply Limitations and Curtailment.

The Company shall have the right to interrupt or curtail steam service to the Customer under the following circumstances: (i) to avoid curtailment or interruption of steam supply to the Company's downtown Kansas City, Missouri, utility steam customers; or (ii) when gas is then being purchased by the Company and burned for its steam operations, pursuant to Section 4(c) but the supply of all or any part of its supply of gas for such purpose is curtailed, and one or more higher cost alternative fuels would have to be burned in the Company's steam operations in lieu thereof (an "Economy Curtailment"). Notwithstanding the foregoing, during the period of an Economy Curtailment, the Company shall continue to supply steam of 10,000 pounds per hour, and more, as the Customer may request, pursuant to Section 6(b), up to the maximum hourly rate specified in Section 4(b). The Customer shall pay the Company for the cost of such alternative fuel or fuels as may be required to produce all steam supplied to the Customer during the period of an Economy Curtailment, provided however, the Company will fire the most cost effective fuel or fuels then available.

Section 6. Notice of Curtailment.

(a) When the Company has knowledge of the need to curtail steam service to the Customer pursuant to Section 5, the Company shall notify the Customer of the amount of steam service curtailment, the reason therefor, the expected commencement time thereof and, if practicable, its estimated duration. The Company will use its best efforts to so notify the Customer in advance thereof, which in any event, shall be provided by the Company as promptly as practicable under then-existing operating conditions.

(b) In the event of an Economy Curtailment, the Company shall inform the Customer at the time it gives the notice required in subsection (a) above of the estimated timing and extent to which steam supply generated by burning alternate fuel or fuels may be available, and the estimated increased cost thereof. In the event the Customer elects to receive steam supply in excess of 10,000 pounds per hour pursuant to Section 5, it shall notify the Company of the rate of steam delivery desired to be generated by use of such alternative fuel or fuels. The Company will maintain accurate records of the quantity of steam supplied to the Customer from such alternative fuel or fuels, and of the additional fuel cost to be paid by the Customer in dollars per thousand pounds for all steam delivered.

(c) The Company will cancel a scheduled steam service curtailment prior to or after the commencement of such curtailment, effective when conditions giving rise to such curtailment no longer exist.

(d) When steam service to the Customer has been interrupted or curtailed to the extent that steam pressure has been at or below 30 psig for more than an hour pursuant to the provisions herein contained, the Company shall notify the Customer in advance by telephone of the expected time and extent of restoration of steam service, and a representative of the Customer will be entitled to be present at Grand Avenue Station to observe the restoration process and, after notifying the Company, operate the Customer's block and by-pass valves located in Grand Avenue Station, as provided for in Section 3(b) hereof.

Section 7. Rates and Charges.

(a) The Customer shall pay the Company for the steam service provided hereunder in accordance with the rates and charges set forth in Schedule A, attached hereto and incorporated herein by reference, together with any

increased alternative fuel costs resulting from the supply of steam to the Customer during the period of an Economy Curtailment, as provided in Section 5. Said rates and charges shall be subject to adjustment as provided in said Schedule A, and all such rates and charges shall be subject to change from time to time in accordance with the provisions of Chapters 386 and 393, RSMo, as the same may be amended.

(b) Bills for service hereunder shall be rendered, by mail or delivery at the option of the Company, at intervals of approximately 30 days, and shall be due and payable on rendition. Any bill for service remaining unpaid on and after the fifteenth (15th) day following rendition will be considered delinquent, and increased by the sum of two percent (2%) of the amount billed.

(c) All steam delivered hereunder shall be metered for billing purposes by a flow meter measuring pounds of steam compensated for temperature and pressure to be located in Grand Avenue Station. Said flow meter shall be tested at intervals of approximately six months, or more frequently upon the Customer's reasonable request therefor, and the Customer shall be notified of the test date and time, and shall be entitled to witness all meter tests. The cost of meter tests made at the request of the Customer shall be paid for by the Customer. In the event said meter is found to be inaccurate in its registration, it shall be restored to a condition of accuracy, and, if any such inaccuracy as detected measures 2% or more of actual steam flow, corrections shall be made in the bills rendered from the date the meter became inaccurate, if determinable, and if indeterminable, then from the beginning of the month preceding the time of the test.

Section 8. Uncontrollable Force.

(a) The Company shall not be deemed to be in default hereunder and shall not otherwise be liable on account of any failure by the Company to perform

any obligation to the Customer if prevented from fulfilling such obligation by reason of delivery delays, breakdowns of, or damage to facilities, Acts of God, acts of public enemy, strikes or other labor disturbances involving the Company or the Customer, intervention of military or other governmental authorities, or any cause reasonably beyond the control of the Company. Labor disturbances affecting the Company or involving employees of the Company may be resolved by the Company at its sole discretion. Where interruptions or curtailments are caused by an Uncontrollable Force, the Company may interrupt or curtail steam supply to the Customer prior to interruption and curtailment of steam required for electric generation and steam service to the Company's downtown Kansas City, Missouri utility steam customers as provided for herein. The Company will use its best reasonable efforts to attempt to maintain a minimum steam supply of 10,000 pounds per hour to the Customer, prior to complete curtailment due to an Uncontrollable Force.

(b) If any Uncontrollable Force renders the Company unable to provide steam service to the Customer hereunder and the Company anticipates that such inability will continue for a period of more than ninety (90) days, the Company shall promptly so notify the Customer in writing and the Customer may, within five (5) days thereafter, elect, by written notice delivered to the Company, either (i) to terminate this Agreement, in which event the Customer shall have no further obligation hereunder with respect to any rates or charges applicable to the period after the effective date of termination, or (ii) to suspend the operativeness of this Agreement effective as of the date of suspension of service and continuing through that day of the month preceding the date the Customer resumes steam consumption. During such suspension of service, the Customer will have no obligation hereunder with respect to any rates or charges.

(c) If any Uncontrollable Force renders the Customer unable to receive steam service from the Company hereunder and the Customer anticipates that such inability will continue for a period of time more than ninety days, the Customer shall promptly so notify the Company in writing either (i) that the Customer is terminating the Agreement, or (ii) the date at which the Customer expects to resume steam service.

Section 9. Limitation of Liability. The Company shall have no liability to the Customer or to or for any other person, firm or corporation for any loss, cost, damage, injury or expense (including but not limited to product loss and loss of profits) by reason of any interruption, reduction, cessation, curtailment or restoration of steam service to the Customer as contemplated in this Agreement, and the Customer shall defend, indemnify and hold harmless the Company for any liability, loss, cost, damage, injury, fees or expenses on account thereof; provided, however, the Customer shall not be responsible and shall neither defend nor indemnify the Company for any personal injury or property damage to any other person, firm or corporation where the proximate cause of such loss, damage, injury or expense is due to the negligence of the Company.

Section 10. Term of Agreement.

This Agreement shall become effective thirty (30) days following the date the Missouri Public Service Commission (the "Commission") accepts this Agreement as an effective contract rate schedule of the Company, provided that if any modification of this Agreement is required by the Commission as a condition of such acceptance and such modification is unacceptable to either the Company or the Customer, such party shall so notify the other party in writing within such 30-day period and this Agreement shall thereupon become null and void and have no further force or effect. In the absence of any such notice,

this Agreement shall become effective on the 30th day following such acceptance by the Commission and shall become operative on the date elected by the Customer (the "Operative Date"), which date shall not be prior to the date of cancellation of the Steam Service Agreement dated November 3, 1982, between CPC International Inc. and the Company, nor later than ninety (90) days after the effective date. Except as otherwise provided herein, this Agreement shall remain in force and effect for an initial term of five (5) years from and after the actual Operative Date, and thereafter from year to year subject to termination at the end of the initial term or any date thereafter by either party upon one year's prior written notice to the other party.

The Company with six months prior written notice to the Customer, except as provided for in Section 8, may terminate this Agreement in the event (i) the Company must incur major system replacement capital expenditures above and beyond that required to serve the Company's downtown Kansas City, Missouri, utility steam customers in order to provide the reliability of service required by the Customer. The Customer, with at least six months prior written notice to the Company, may terminate this Agreement if the Customer and the Company cannot resolve a dispute over rate increases pursuant to Section 13(d).

Section 11. Company Books and Records. During the term of this Agreement, the Customer shall have the right to inspect and audit, during the Company's regular business hours and at the Customer's own cost and expense, the books and records of the Company as related to its operation of Grand Avenue Station, which inspection and audit may be conducted either by the Customer's own internal auditors or by independent certified accountants.

Section 12. Successors and Assigns. Each party hereto shall have the right to assign this Agreement to a successor to all or any portion of its

properties which include either Grand Avenue Station or the premises at 1001 Bedford Avenue, North Kansas City, Missouri, provided that no such assignment or succession by a party shall release such party from liability for performance of its obligations hereunder unless such assignment or succession is consented to and released in writing by the other party, provided further that such consent and release shall not be withheld unreasonably.

Section 13. Regulatory Approval.

(a) This Agreement and all rights and obligations contained herein are conditioned upon acceptance of this Agreement by the Commission as an effective contract rate schedule of the Company. Except as otherwise provided by the foregoing specific provisions of this Agreement, all of the Company's General Rules and Regulations in effect and on file from time to time with the Missouri Public Service Commission shall apply to the service supplied under this Agreement.

(b) This Agreement is in all respects made subject to the terms and provisions of the Public Service Commission Laws of the State of Missouri, and all acts amendatory thereto, and subject to the jurisdiction and authority of the Missouri Public Service Commission. Notwithstanding any other provisions in the Agreement, nothing herein contained shall be construed as divesting or attempting to divest said Commission or other regulatory agency or body or any party hereto of any of its rights, jurisdiction, power or authority vested in it by law or provided in any governmental regulatory act or law.

(c) The Customer shall have the right to intervene in any proceeding before the Commission which might affect its interests under this Agreement and nothing contained herein shall be construed or deemed to restrict or prevent the Customer from exercising such right of intervention.

(c) Prior to filing with the Commission any change proposed by the Company in the then effective special contract rate schedule embodied in this Agreement, the Company will discuss its proposed change with the Customer and each party will in good faith endeavor to resolve promptly any dispute or differences related to such proposed change unless such proposed change is based upon an order or findings by the Commission; provided, however, that nothing contained herein shall be construed or deemed as affecting in any way the right of the Company to make application, file or put into effect unilaterally any change herein under and pursuant to the provisions of Chapters 386 and 393, RSMo 1978, and the Commission's Rules and Regulations promulgated thereunder.

Section 14. Notices.

Any notice provided for in this Agreement to be given by either party shall be directed, whether in writing or by telephone, as follows:

To Customer: As to Operational Matters:

Plant Mechanical Superintendent
National Starch and Chemical Corporation
1001 Bedford Avenue
North Kansas City, Missouri 64116
Telephone: (816)

As to Contractual Matters:

General Counsel
National Starch and Chemical Corporation
Finderne Avenue
Bridgewater, New Jersey 08807
(201) 685-5000

To Company: As to Operational Matters:

Shift Foreman-Grand Avenue Station
Kansas City Power & Light Company
315 Grand Avenue
Kansas City, Missouri 64106
Telephone: (816) 556-2532

As to Contractual Matters:

President
Kansas City Power & Light Company
Post Office Box 679
Kansas City, Missouri 64141
Telephone: (816) 556-2200

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective corporate officers thereunto duly authorized as of the day and year first above written.

ATTEST:

KANSAS CITY POWER & LIGHT COMPANY

By

ATTEST:

NATIONAL STARCH AND CHEMICAL CORPORATION

By

SCHEDULE A

STEAM SERVICE AGREEMENT
RATES AND CHARGES

I. Rates and Charges. The Customer shall pay for service delivered under the terms of this Agreement in accordance with the following rates:

A. Basic Charges:

Steam Charge:	$6.00 per 1000 pounds per month.
Minimum Charge:	$50,000* per month for the first three months following the Operative Date; $108,000 per month thereafter. *Plus applicable adjustments

B. Adjustment Charges:

The monthly steam charges to the Customer shall be subject to the following adjustment provisions:

1. Fuel Adjustment:

The foregoing Steam Charge is based on a fuel cost to the Company of 221¢ per million Btu, and for any month in which fuel cost per million Btu (excluding the cost and heat content of alternative fuels) to the Company in the latest preceding month for which such cost data is available shall have been more or less than 221¢ per million Btu, such Steam Charge for steam service shall be increased or decreased by 1.707¢ per thousand pounds of steam for each one cent (or proportionately for fractional parts thereof) of such increase or decrease from 221 cents.

In any month in which the Customer elects to receive service under Section 5 of the Agreement the fuel adjustment per thousand pounds determined above shall be increased by A cents per thousand pounds calculated pursuant to the following formula:

$$A = (B/C - D)(1.707)(E/F)$$

Where,

A = the Fuel Adjustment increment due to alternative fuels (cents per thousand pounds).

B = the aggregate cost of alternative fuels used during the month to supply service to the Customer pursuant to Section 5 of the Agreement, expressed in cents.

C = The aggregate heat content of alternative fuels used during the month to supply service to the Customer pursuant to Section 5 of the Agreement, expressed in millions of Btu.

SCHEDULE A

STEAM SERVICE AGREEMENT
RATES AND CHARGES

I. Rates and Charges. The Customer shall pay for service delivered under the terms of this Agreement in accordance with the following rates:

A. Basic Charges:

Steam Charge:	$6.00 per 1000 pounds per month.
Minimum Charge:	$50,000* per month for the first three months following the Operative Date; $108,000 per month thereafter. *Plus applicable adjustments

B. Adjustment Charges:

The monthly steam charges to the Customer shall be subject to the following adjustment provisions:

1. Fuel Adjustment:

The foregoing Steam Charge is based on a fuel cost to the Company of 221¢ per million Btu, and for any month in which fuel cost per million Btu (excluding the cost and heat content of alternative fuels) to the Company in the latest preceding month for which such cost data is available shall have been more or less than 221¢ per million Btu, such Steam Charge for steam service shall be increased or decreased by 1.707¢ per thousand pounds of steam for each one cent (or proportionately for fractional parts thereof) of such increase or decrease from 221 cents.

In any month in which the Customer elects to receive service under Section 5 of the Agreement the fuel adjustment per thousand pounds determined above shall be increased by A cents per thousand pounds calculated pursuant to the following formula:

$$A = (B/C - D)(1.707)(E/F)$$

Where,

A = the Fuel Adjustment increment due to alternative fuels (cents per thousand pounds).

B = the aggregate cost of alternative fuels used during the month to supply service to the Customer pursuant to Section 5 of the Agreement, expressed in cents.

C = The aggregate heat content of alternative fuels used during the month to supply service to the Customer pursuant to Section 5 of the Agreement, expressed in millions of Btu.

D = the fuel cost per million Btu to supply service to the Customer pursuant to Section 5 of the Agreement (excluding the cost and heat content of alternative fuels), in the latest preceding month for which such cost data is available, expressed in cents per million Btu,

E = the thousands of pounds of steam using alternative fuels pursuant to Section 5 of the Agreement, and

F = the total steam, expressed in thousands of pounds, delivered to the Customer during the month.

The "fuel cost" as used herein is as fired in the Grand Avenue Station in Kansas City, Missouri, and shall mean the cost to the Company of coal, gas, oil or any other fuel used in the production of steam and shall include the fixed charges, operation, maintenance and other operating expenses incurred by the Company for transportation equipment used to transport any such fuel from the point of acquisition to the unloading point, the cost to the Company of such transportation equipment in the case of lease or rental, the cost of products added prior to or in the burning cycle, and the cost of other materials used to control emission of products of combustion.

Any additional fuel cost incurred by the Company by reason of using alternate fuel at the request of the Customer to avoid all or any portion of an Economy Curtailment (as defined in Section 5 of this Agreement) shall be billed by the Company and paid for by the Customer in accordance with the provisions of the above Fuel Adjustment.

2. Purchased Water Cost Adjustment.

The monthly Steam Charge shall be increased or decreased $0.0018 per thousand pounds for each one percent (or proportionately for fractional parts thereof) increase or decrease in the annualized water cost per 100 cubic feet of water delivered to Grand Avenue Station from a base of $0.8111 per 100 cubic feet. This adjustment shall be updated whenever the Kansas City, Missouri municipal water rates to the Company change. Each adjustment shall reflect the change from the base level.

3. Water Treatment Adjustment:

The monthly Steam Charge shall be increased or decreased $0.0004 per thousand pounds for each one percent (or proportionately for fractional parts thereof) increase or decrease in the U. S. Department of Labor, Bureau of Labor Statistics Commodity Price Index 06-5, Agricultural Chemicals and Products, from a base of 285.5 (July 1984). The first adjustment shall reflect the 12 month change in the July 1985 Index from the base level, and shall be first billed as of June 1, 1986. On June 1, 1987, and

annually thereafter, the adjustment shall be updated to reflect the Index 06-5 as published for the preceding July by multiplying the foregoing unit price factor by a fraction, the numerator of which is the difference between such Index published for such preceding July and the Base Index, and the denominator of which is the Base Index.

4. Materials Adjustment:

The monthly Steam Charge shall be increased or decreased $0.0025 per thousand pounds for each one percent (or proportionately for fractional parts thereof) increase or decrease in the U. S. Department of Labor, Bureau of Labor Statistics Commodity Price Index 11, Machinery and Equipment, from a base of 293.7 (July 1984). The first adjustment shall reflect the 12 month change in the July 1985 Index from the base level, and shall be first billed as of June 1, 1986. On June 1, 1987, and annually thereafter, the adjustment shall be updated to reflect Index 11, as published for the preceding July, by multiplying the foregoing unit price factor by a fraction, the numerator of which is the difference between such Index published for such preceding July and the Base Index, and the denominator of which is the Base Index.

5. Wage Adjustment:

The monthly Steam Charge shall be increased or decreased $0.0062 per thousand pounds for each one percent (or proportionately for fractional parts thereof) increase or decrease in the weighted average hourly straight time rate for Local 412 bargaining unit employees from a base of $13.0113 per hour (July 1984). The first adjustment shall reflect wage rates expected to become effective July 1, 1985, and shall be first billed as of June 1, 1986. On June 1, 1987, and annually thereafter, the adjustment shall be updated to reflect the average hourly straight time rate for Local 412 bargaining unit employees for the preceding July by multiplying the foregoing unit price factor by a fraction, the numerator of which is the difference between such Index published for such preceding July and the Base Index, and the denominator of which is the Base Index.

6. Other Steam Charge Adjustment:

The monthly Steam Charge shall be increased or decreased $0.0075 per thousand pounds for each one percent (or proportionately for fractional parts thereof) increase or decrease in the U. S. Department of Commerce Gross National Product Implicit Price Deflator from a base of 222.33 (July 1984). The first adjustment shall reflect the 12 month change in the July 1985 Index from the base level, and shall be first billed as of June 1, 1986. On

June 1, 1987, and annually thereafter, the adjustment shall be updated to reflect the Gross National Product Implicit Price deflator published for the preceding July, by multiplying the foregoing unit price factor by a fraction, the numerator of which is the difference between such Index published for the preceding July and the Base Index, and the denominator of which is the Base Index.

7. Tax Adjustment:

There shall be added to the monthly bill of the Customer, as separate items, a surcharge equal to the proportionate part of any license, occupation, or other similar fee, tax or governmental imposition applicable to steam service by the Company to the Customer, which fee, tax, or governmental imposition is imposed upon the Company by taxing authorities on the basis of the gross receipts, net receipts, or revenues from steam sales by the Company.

II. Effective Term:

This Schedule shall remain and continue in effect until superseded by a substitute Schedule filed by the Company and made effective by governmental regulatory agencies having jurisdiction, and in accordance with the provisions of Section 10. Nothing contained herein shall be construed as affecting in any way the right of the party furnishing service under this rate schedule to unilaterally make application to, or filings with, the Missouri Public Service Commission for a change in rates, charges, classification, or service, or any rule, regulation, or contract relating thereto, under Chapters 386 and 393, RSMo 1978, and pursuant to said Commission's Rules and Regulations promulgated thereunder. The Company will notify the Customer in writing of any substitute Schedule filed by the Company as soon as practicable following such filing.

ATTACHMENT A

The following chemicals are used for boiler water treatment at Grand Avenue Station, and no boiler additives are used at this time.

A. Salt (Sodium Chloride)--Purchased from Cargill for regeneration of sodium (Zeolite) softeners. City water is passed through a cold Zeolite softener process prior to entering the feedwater system. F.D.A. approved (no safety data sheet required).

B. Santosite (Sodium Sulfite)--Purchased from either Tri-State Chemical Co., McKesson Chemical Co., or Nalco Chemical Co. Used as an oxygen scavenger in boiler feedwater. F.D.A. approved.

C. Nalco 762 (Nalco NTA proprietary formulation)--Purchased from Nalco Chemical Co. F.D.A. approved.

Exhibit 7

PROPOSAL

FOR THE PURCHASE OF KCPL'S DOWNTOWN KANSAS CITY, MISSOURI CENTRAL STATION STEAM DISTRIBUTION BUSINESS

To be submitted in quadruplicate

Name of Purchaser: _____

Address: _____

_____

_____

Date of Bid: _____

I/we hereby submit the following Proposal for the purchase of KCPL's downtown Kansas City, Missouri, central station steam distribution business in accordance with the terms and conditions of the Request for Proposals dated January 25, 1988:

1. Purchase price:

_____
(in figures)

_____
(in words)

2. Qualifications of Purchaser to operate the Business (attach to Proposal form). Purchaser should include sufficient information regarding its financial and operational qualifications to allow evaluation of the likelihood of Purchaser's successful operation of the Business.

3. Purchaser's approach to providing steam service in downtown Kansas City, Missouri (attach to Proposal form).

4. Steam rates and the conditions of steam service to be provided by Purchaser (attach to Proposal form).

5. Disposition of Grand Avenue Station (attach to Proposal form).

6. I/we hereby incorporate by reference all of the terms and conditions of the RFP into this Proposal, except for the following specific items to which exception is taken and the reasons therefore given. Also listed are any additional terms, and the reasons therefore, upon which this Proposal is conditioned. _____

_____

_____

_____

_____.

I/we understand and agree that this Proposal shall be irrevocable for a period of thirty (30) days from March 25, 1988, and that KCPL has the option of extending this irrevocable period an additional thirty (30) days. It is also agreed and understood that KCPL has no obligation to sell the Business unless (a) satisfactory sale documents are entered into, (b) all necessary regulatory consents are obtained, and (c) all conditions precedent

are satisfied. A cashier or certified check in the amount of $100,000.00 as earnest money is enclosed.

I/we further understand that this Proposal is subject to disclosure to the Missouri Public Service Commission and its Staff, and in any Commission proceedings concerning the sale of the Business in accordance with the practice and rules of the Commission.

Purchaser: _____

By: _____

Attest:

_____

_____ Secretary

LMSL, Inc.
Regulatory-Management-Litigation Consultants

March 25, 1988

Mr. Mark G. English
Kansas City Power & Light Company
1330 Baltimore Avenue, 8th Floor
Kansas City, Missouri 64105

Re: KCPL Steam Business

Dear Mr. English:

On behalf of Kansas City Energy Corporation, we would like to extend an expression of interest to Kansas City Power & Light Company ("KCPL") in further discussing an alternative approach to providing steam service from the Grand Avenue Station to National Starch and Chemical Corporation and the downtown Kansas City, Missouri central district heating customers. Due to the nature of our business concept for providing such service, we believe that it is more appropriately considered outside the proposal process outlined in KCPL's Request for Proposals, dated January 25, 1988 (the "RFP"), for the purchase of the Downtown Kansas City, Missouri, Central Station Steam Distribution System (the "System").

The business concept for Kansas City Energy Corporation was jointly developed by LMSL, Inc., an Overland Park, Kansas utility regulatory consulting firm, together with the law firm of Craft Fridkin Shaffer & Rhyne of Kansas City, Missouri, and Stone & Webster Development Corporation of Boston, Massachusetts, an affiliate of Stone & Webster Engineering Corporation. We have had preliminary discussions with major steam users and other potential participants, including National Starch, Jackson County, and the City of Kansas City, Missouri, and they have all indicated their support for the objectives fostered by this business concept.

[redacted]

The objectives of the business concept developed for Kansas City Energy Corporation are:

- To create an ownership structure that would consist of local utilities and local business interests.
- To provide benefits to all participants.
- To preserve the integrity and reliability of the steam system.
- To provide low cost steam service to customers.
- To promote economic development in downtown Kansas City, Missouri.

Since the structure of KCPL's Request for Proposals dated January 25, 1988 does not provide a framework which is fully consistent with the above stated objectives of Kansas City Energy Corporation, we would like to present our business concept to KCPL independent of the proposal process contained in the RFP. We believe that this business concept will nevertheless satisfy the objectives of KCPL, as stated in section 4(c) of the RFP, to consider proposals regarding the future operation of the System which do not strictly comply with the terms of the RFP. Section 4(c) of the RFP states:

> *"KCPL reserves the right to reject any or all Proposals at any time before or after Proposal opening. KCPL further reserves the right after Proposal opening to negotiate with any party and vary or alter any term or condition as KCPL, in its sole discretion, may deem advantageous, and KCPL shall have no obligation to any other party as a result of any such negotiations. If KCPL rejects all Proposals, KCPL nevertheless reserves the right to attempt to negotiate a sale to any party submitting a Proposal or to others as it may deem appropriate."*

We, along with representatives of Craft Fridkin Shaffer & Rhyne and Stone & Webster Development Corporation, and other interested parties, would like to pursue further discussions with KCPL regarding our business concept for providing steam service from the Grand Avenue Station, in the following manner:

- By making a presentation to the appropriate KCPL management personnel within the next two weeks.
- Based on KCPL's input and the input of other parties, by submitting an unsolicited proposal to KCPL within one week after receiving KCPL's input, but not later than April 29, 1988.

We believe that KCPL will find our approach to providing steam service superior to other alternatives, and that it will uniquely satisfy the objectives of KCPL, the Missouri Public Service Commission, the steam customers of the System, and all potential participants. Our approach is designed to:

- Ensure that adequate and reliable steam service is provided to existing and future steam customers at the lowest possible cost by maintaining or reducing steam rates.
- Provide benefits to all participants.
- Satisfy all required regulatory approvals.
- Provide KCPL with certain continuing control over the operation and/or ownership of the Grand Avenue Station.
- Allow KCPL to maintain its competitive position, enhance its value of service to customers, and promote the social and economic well-being of the community.

We look forward to further discussing our business concept with KCPL as soon as practical.

Thank you.

Best Regards,

LMSL, Inc.

Howard E. Lubow
President

HEL/tt

cc: John C. Craft, Craft Fridkin Shaffer & Rhyne
Raymond F. Rugg, Stone & Webster Development Corporation
Mary Ann Young, General Counsel, Missouri Public Service Commission
Douglas M. Brooks, Office of Public Counsel, State of Missouri

S&C Holding Company, Inc.
3314 Highway 162
Granite City, Illinois 62040

March 24, 1988

Kansas City Power & Light Company
8th Floor 1330 Baltimore Avenue
Kansas City, Missouri 64105

ATTENTION: Mr. Mark G. English

REFERENCE: Steam Business Proposal

Gentlemen:

Pursuant to the Request for Proposals, dated January 25, 1988, provided by Kansas City Power & Light Company ("KCPL") to prospective purchasers of the Downtown Kansas City, Missouri Central Station Steam Distribution Business (the "Business"), we are pleased to present this offer for the purchase of all of the assets of the Business.

Our offer is based on our review of the Request for Proposals, prepared by KCPL, and the Exhibits thereto, and the Statement of Selected Balance Sheet Accounts as of December 31, 1987, as adjusted in accordance with KCPL's letter dated March 1, 1988. Attached hereto is a completed Proposal and a copy of the form of Request for Proposals prepared by KCPL, with our comments thereto. Our offer is premised on satisfactory responses to our comments to the Request for Proposals, the fulfillment of the conditions set forth in the Proposal and the acceptance of the conditions set forth below.

1.) The Purchaser - The purchaser of the Business, pursuant to our offer, will be S&C Holding Company, Inc. ("S&C"), or its designee. S&C is a Missouri corporation headquartered in Granite City, Illinois, and is engaged, through its subsidiaries, in the repair, retrofit, maintenance and management of facilities utilized in the heating, chemical and oil industries. S&C is acting as a principal and not as an agent of another. S&C reserves the right, however, following the acquisition of the Business, to conduct the Business through one or more subsidiaries, affiliates and/or other industrial partners.

2.) Request For Proposals - We are prepared to discuss with you on an expedited basis, our proposed changes to the Request for Proposals in order to arrive at a mutually satisfactory agreement. Since we have not had the opportunity to verify all of the information furnished by KCPL and have not been able to meet with the principals of KCPL, we reserve our right to conduct due diligence with respect to the Business and to make changes in an

Agreement of Purchase and Sale to reflect the results of our due diligence. We also reserve the right to make changes based on an audit to be conducted by our accountants. Obviously, our offer is subject to and will become binding upon each of us only upon completion of the negotiation and signing of a definitive Agreement for the Purchase and Sale of the Business, and related agreements, satisfactory in form and substance to each of us, our counsel and respective boards of directors.

3.) Purchase Price - The computation of a purchase price for the Business will require a more detailed disclosure of operating results of the Business, on a stand-alone basis, as our price will reflect projected earnings. We suggest that we manage the business for a period of one year under a management contract in order to enable us to analyze the operating results of the Business. Thereafter, we will be in a position to compute the purchase price.

Our offer assumes there have been no undisclosed liabilities with respect to the operations of the Business and that KCPL has not knowingly withheld from S&C material facts relating to the assets, business, operations, financial condition and prospects of the Business.

Our offer also contemplates that a portion of the purchase price will be deposited into an escrow account at the closing pending confirmation of the financial results and net profit before taxes of the Business. The amount to be deposited in the escrow account is subject to negotiation.

We are pleased to make this offer to KCPL and to inform you that our offer will remain firm through 5:00 P.M. (Central Standard Time) on April 25, 1988. Should you accept our offer, we are ready to commence immediately our due diligence review and examination of the information to be disclosed to us by KCPL and to negotiate promptly a definitive Agreement of Purchase and sale, and related documentation, in order to complete the sale of the Business at the earliest practicable date.

In the meantime, if you have any questions with respect to this offer, or if you seek further clarification of any aspect of the offer, please contact Christian Joly or Roland Otte at (618) 452-3000.

Very truly yours,

STRANGE AND COLEMAN HOLDING COMPANY, INC.

ROLAND OTTE
Assistant to the Chairman

CHRISTIAN JOLY
Executive Vice President

Enclosures

REQUEST FOR PROPOSALS

FOR THE PURCHASE OF KANSAS CITY POWER & LIGHT COMPANY'S DOWNTOWN KANSAS CITY, MISSOURI CENTRAL STATION STEAM DISTRIBUTION BUSINESS

Pursuant to an order of the Missouri Public Service Commission (Commission), KCPL has issued this Request for Proposals (RFP) for the sale of its public utility steam heating business (Business) as an ongoing concern. Under Missouri law, any purchaser (except governmental entities) of the Business shall thereby become a public utility "heating company" and require a Certificate of Public Convenience and Necessity from the Commission to conduct the Business. Further, the purchaser's conduct of the Business and its rules and rates for steam service shall be subject to Commission regulation and approval.

1. General Business Information and Background.

A. Regulation of Steam Business.

The Missouri Public Service Commission has extensive regulatory authority over the rates, rules and operations of "heating companies", as that term is defined in Section 386.020.10., RSMo 1986. Generally, any person, partnership or other business organization that owns, operates, manages or controls any property or plant for manufacturing, distributing and selling steam in any Missouri municipality is subject to the Commission's jurisdiction.

Heating companies are public utilities under Missouri law, and are required to obtain a Certificate of Public Convenience and Necessity from the Commission. Heating companies may be relieved of their service obligations under their certificate only upon the Commission's decision that the public convenience and necessity no longer require the operation of such service.

B. Business Configuration.

The territory for which KCPL holds a Certificate of Public Convenience and Necessity to provide public utility steam service in Kansas City, Missouri extends generally north and south from 3rd Street to 14th Street and east and west from Oak to Broadway, as shown on Exhibit 1. KCPL and its corporate predecessors have provided steam service in that area of downtown Kansas City since 1888.

Steam for the Business is currently provided by Grand Avenue Station (Grand Avenue), which was purchased by KCPL in 1927. Grand Avenue generated both steam and electricity until 1985, when the electrical generation facilities were retired in place. Some electrical transmission and distribution facilities are still maintained by KCPL in Grand Avenue. There is a significant amount of asbestos insulation in Grand Avenue.

Four boilers are currently available at Grand Avenue for steam supply to the Business. Boilers 6, 7 and 8 are capable of being fired on either coal or gas, and have an aggregate manufacturer's maximum continuous rating of 1125 mlbs per hour. These three boilers were installed prior to 1950. Boiler 1A is a package boiler installed in 1969 and has a manufacturer's maximum

continuous rating of 230 mlbs per hour. Boiler 1A can be fired either by fuel oil or gas. Gas is presently the fuel stock used at Grand Avenue, due to the low level of steam sales.

Steam at high pressure (185 psi) is piped from Grand Avenue to two pressure reducing stations located at the north and south ends of the Business. Heating Station No. 1, the northern pressure reducing station located at 604 Baltimore, feeds the low pressure (15 psi) steam distribution piping, while Heating Station No. 3, located in KCPL's garage at 1319 Wyandotte, feeds both the low pressure and intermediate pressure (105 psi) steam distribution piping.

Presently, KCPL has in service 22,834 feet of 185 psi pipe, serving 20 customers at that pressure, and 25,592 feet of 15 psi pipe, serving 98 customers. Additionally, there is 1,653 feet of 105 psi pipe; however, no customers are currently served at that pressure. Much of the low pressure piping was installed in 1905, and asbestos piping insulation was commonly used prior to 1980. The piping is generally buried under streets in Kansas City; KCPL's franchise to operate a steam heat business and use public streets and rights of way for its steam facilities expired without replacement in 1985.

C. Customer Sales and Revenue History.

Exhibit 2 shows the number of customers, mlbs of steam sales and sales revenues for the downtown portion of the Business for the period 1966-1986. The number of customers in this period peaked in 1970 at 283, and is currently at 118. Steam sales in the downtown Kansas City area peaked in 1970 at 1,220,016 mlbs;

sales for the twelve-month period ended November, 1987 were 781,492 mlbs (384,491 mlbs to downtown Kansas City steam customers and 397,001 mlbs to National Starch and Chemical Corporation).

The decline of customers is attributed to building demolition and urban renewal, as well as to the competitive costs of electrical and gas space heating alternatives in Kansas City. The price of steam downtown is currently about $11.50 per mlb; the electrical space heating rate is $0.03691 per kWh, and the commercial rate for natural gas is $3.70 per mcf.

KCPL's largest steam customer is National Starch and Chemical Corporation (National Starch), which is under contract to take steam until December 31, 1990, at which time the contract expires. Sales to National Starch in the twelve months ended November, 1987, accounted for about 51% of total steam sales. The contract is assignable by KCPL in the event of the sale of Grand Avenue. No other steam customers are under contract with KCPL.

D. RFP Is Pursuant to Regulatory Authorization of Business Abandonment.

In 1986, KCPL filed with the Commission a plan to phase-out its central station steam distribution service by 1991, along with a request for a $5.6 million (120%) rate increase. KCPL also proposed to offer electric boilers or alternative electric space heating equipment to its remaining steam customers at no initial cost. KCPL and commission staff subsequently stipulated that a steam revenue deficiency of $3.2 million (66% rate increase) existed.

The Commission authorized KCPL to terminate steam service as of December 31, 1990, but did not grant a rate increase or authorize KCPL to offer electric equipment to its steam customers. It further required KCPL to make a good faith effort to sell the Business:

> The Company should solicit its proposals for sale or transfer of the business 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.

A copy of the Report and Order of the Commission, issued October 7, 1987, is contained in Exhibit 3.

Should the Business be sold, KCPL will continue to offer and provide electrical service for all purposes, including space heating, in downtown Kansas City, Missouri.

2. Property To Be Sold.

Pursuant to the Commission's Report and Order, KCPL is requesting proposals for the purchase of its Business and the assumption of the public utility duties of a heating company (unless the purchaser is exempt under Missouri law from Commission regulation). The property used in the Business is generally comprised of (a) the Grand Avenue Station structure, steam generating equipment and auxiliaries and associated lands; (b) steam distribution piping; (c) Heating Station No. 1 and the

fixtures and equipment making up Heating Station No. 3 contained in KCPL's parking facility at 1319 Wyandotte; (d) the steam supply agreement between National Starch and Chemical Corporation and KCPL, and; (e) materials and supplies, including fuel oil, coal and replacement parts. A more particular description of the major items of property used in the Business follows.

A. Grand Avenue Station.

A detailed description of the real estate, fixtures and equipment at Grand Avenue subject to this RFP is contained in Exhibit 4. KCPL shall retain certain easements over the Grand Avenue lands for its existing electrical distribution facilities, and will also retain rights to access, construct, maintain, locate, store, operate and repair its electrical facilities within the Grand Avenue structure, all as described in Exhibit 4, provided such easements do not interfere with the conduct of the Business.

Because of the existence of electrical facilities in the Grand Avenue Station structure and associated lands, the sale of the structure and associated lands pursuant to this RFP shall be subject to KCPL's right (but not the obligation) to reacquire the structure and associated lands at their then-fair market value, as a steam production facility, should steam finally cease being generated at Grand Avenue ~~within~~ after twenty years ~~of~~ from the date of sale.

B. Steam Distribution Piping.

All steam distribution piping presently used for steam service, all piping retired in place, and associated property interests are subject to this RFP and detailed in Exhibit 5. If any relocation of the 185 psi steam lines extending to the east

from Heating Station No. 3 are required due to future construction activities engaged in by KCPL, such relocation shall be done at the KCPL expense.

C. Pressure Reducing Stations.

All of the fixtures, equipment and property interests comprising Heating Station No. 1 are subject to this RFP. The location of this station is noted in Exhibit 5. This Station is located below ground, and KCPL possesses only a subsurface easement for this facility. (Clarify)

Only the fixtures and equipment comprising Heating Station No. 3 are subject to sale. KCPL shall grant rights to access, construct, maintain, operate and repair such fixtures and equipment, since they are within KCPL's parking facilities at 1319 Wyandotte.

D. National Starch Agreement.

A copy of the National Starch Agreement, which KCPL intends to assign to the purchaser of the Business, is contained in Exhibit 6. The Agreement is on file with the Commission as a part of KCPL's tariffs.

E. Materials and Supplies.

As of October 31, 1987, KCPL maintained $282,000 in coal and oil inventories at Grand Avenue, and $1,135,000 in spare parts, piping and other materials for the Business.

3. Inspection of Business and Further Information.

KCPL will hold two meetings with parties interested in further information or inspecting the properties. The meetings will be held on February 8 and February 12, 1988, at 10:00 a.m. on the fourth floor of the Power & Light Building, 1330 Baltimore, Kansas City, Missouri. Inspection of the properties will be conducted after each of these meetings.

4. Method of Sale.

A. Proposal Form.

KCPL shall consider only those proposals for the purchase of the Business which are submitted in accordance with the terms and conditions of this RFP. All Proposals for the purchase of the Business shall be submitted in quadruplicate using the Proposal form contained in Exhibit 7. All information requested on the form must be completely supplied for the Proposal to be considered by KCPL. All Proposals shall incorporate by reference the terms and conditions of this RFP unless specific exception, and the reason therefore, is noted on the form.

B. Submission of Proposals.

Sealed Proposals must be received by KCPL on or before 3 p.m. on March 25, 1988.

Proposals should be addressed to:

Kansas City Power & Light Company
8th Floor
1330 Baltimore Avenue
Kansas City, Missouri 64105

Attention:
Mark G. English--Steam Business Proposal

Earnest money (~~certified or cashier's check only~~ by letter of credit or bid bond) in the amount of $100,000.00 shall ~~accompany each~~ be required if this Proposal is accepted by KCPL.

All Proposals shall be irrevocable for a period of thirty (30) days from March 25, 1988. KCPL, in its sole discretion, shall have the right to extend this period with respect to any or all of the Proposals an additional thirty (30) days.

C. Right to Reject Proposals.

KCPL reserves the right to reject any or all Proposals at any time before or after Proposal opening. KCPL further reserves the right after Proposal opening to negotiate with any party and vary or alter any term or condition as KCPL, in its sole discretion, may deem advantageous, and KCPL shall have no obligation to any other party as a result of any such negotiations. If KCPL rejects all Proposals, KCPL nevertheless reserves the right to attempt to negotiate a sale to any party submitting a Proposal or to others as it may deem appropriate.

Earnest money associated with any rejected Proposal shall be returned, ~~without~~ interest, within ten (10) days of the decision to reject.

D. Acceptance of Proposal Conditional.

This RFP shall not be considered an offer of sale binding upon acceptance. Should KCPL accept any Proposal in writing, such acceptance is conditioned upon (a) reaching acceptable sale documents respecting the sale of the Business with the successful purchaser (Purchaser), (b) the parties acquiring all necessary regulatory and other approvals and franchises, and (c) the satisfaction of all other terms and conditions of this RFP and the conditions set forth in an Agreement for the Purchase and sale of the Business.

5. Other Terms and Conditions.

A. Business Covenants.

KCPL, as directed by the Commission, seeks a purchaser of its regulated public utility steam Business. At all times prior to and after any such sale, KCPL will continue to discharge its obligations as a regulated electric public utility throughout its certificated service territories, including the area of downtown Kansas City in which the Business is located. In order to ensure to the extent possible that its steam customers will continue to be afforded adequate and reliable steam heat service at reasonable rates, and to avoid subsidization of the Purchaser by, or other detriment to, KCPL's electric customers and/or shareholders, the Purchaser shall covenant with KCPL that for a period of ten years following the closing of the sale of the Business that it shall: use the properties of the Business for the sole purpose of providing steam heat energy to customers in Kansas City, Missouri; not enter as a supplier of electricity into competition with KCPL for any electric energy customer or within KCPL's Missouri and Kansas certificated service territories by the generation of electrical energy and power with, at or on any of the properties acquired in the purchase of the Business; and waive any rights or privileges it may now or hereafter have to require KCPL to purchase or wheel any electrical energy and power generated with, at or on any of the properties acquired in the purchase of the Business.

~~This covenant is agreed to be a covenant touching and running with the lands subject to this RFP, and shall be binding upon Purchaser's heirs, assigns and successors in interest. This covenant is not severable, and should this covenant, or any part thereof, be found to be void or otherwise unenforceable, KCPL retains the absolute right to rescind the sale of the Business and to repurchase the Business upon the repayment of the purchase price to the Purchaser.~~

B. Warranties and Title.

Except as expressly provided with respect to title to realty, KCPL agrees to such warranties, ~~gives no warranty~~, express or implied, as to the description, quality, merchantability, fitness for any particular purpose, productiveness, or any other matter, concerning the Business and any of the items comprising the Business as contained in the Agreement for the Pruchase and Sale of the Business. ~~The Business is sold "as is" and "with all faults". KCPL neither by this RFP or otherwise makes any representations either express or implied with respect to the assignability or assumability of any franchise, document, right of way, or any other right it may have with respect to the Business.~~

Fee title will be conveyed by ~~corporate special~~ warranty deed, ~~but~~ subject only to ~~the~~ exceptions, satisfactory to Purchaser. ~~reservations, conditions, terms, provisions and limitations contained in either the document conveying title to KCPL, or any other subsequent document affecting title, and further subject to (i) zoning regulations, ordinances, restrictions and all other laws, ordinances, regulations or restrictions of the State and City, (ii) any state of facts an accurate survey would show, provided the same do not~~

render title unmarketable; (iii) any assessment or assessments for municipal improvements which hereafter become liens.

The title search or title examination shall be conducted by Purchaser at the expense of KCPL. ~~the responsibility of the Purchaser at its own expense. Purchaser shall notify KCPL in writing as soon as practicable of any defects in title or objections to title. Any defect or objection not noted in writing received by KCPL prior to closing of the sale of the Business shall be waived. This waiver shall be effective regardless of any warranties of title contained in any deed or other document of conveyance or assignment, and shall survive the closing and shall not merge with the conveyance of title.~~

~~In the event of a timely noticed and substantial defect in or objection to title which materially affects the value of what is being purchased taken as a whole, KCPL shall have a reasonable time to correct or cause the same to be corrected. If the same cannot be corrected or if KCPL is unwilling to correct or cause the same to be corrected, the Purchaser may either accept said title as is or may withdraw from its obligation to purchase in which case any earnest money paid to KCPL shall be refunded without interest and neither party shall have any further obligation to the other.~~

C. Regulatory Approvals.

Any sale of the Business is expressly conditioned upon (a) its approval without substantial modification by the Missouri Public Service Commission, (b) Purchaser receiving a Certificate of Public Convenience and Necessity (unless exempted by Missouri law) and all other required Commission certificates and approvals for its acquisition and operation of the Business, and (c) the Commission

relieving KCPL of its public utility obligation to provide steam heat service as of the closing of such sale. Should such certificates and approvals not be obtained, any obligations of KCPL to sell and Purchaser to buy the Business shall thereupon cease without further liability to either party, and KCPL shall return any earnest money together with interest.

D. Release of KCPL from National Starch Agreement.

Any sale of the Business is expressly conditioned upon KCPL's assignment of the National Starch Agreement to the Purchaser, and the obtaining of a release from liability for performance of its future obligations thereunder by National Starch. Should such assignment and release not be obtained before closing, any obligations of KCPL to sell and Purchaser to buy the Business shall thereupon cease without further liability to either party, and KCPL shall return any earnest money together with interest.

E. Environmental Liability Indemnification.

Asbestos is used for insulation purposes in Grand Avenue Station and the steam distribution piping. Additionally, one of the 13,200/2,400 volt transformers at Grand Avenue is a PCB Transformer, as defined under the Toxic Substances Control Act. ~~The Purchaser shall warrant that it will at all times faithfully observe all Federal, State and local laws, statutes, ordinances and regulations regarding the possession, use, removal and disposal of such asbestos and PCB transformer, and~~ KCPL shall indemnify and hold harmless ~~KCPL~~ the Purchaser from any and all liability arising from (a) the ~~Purchaser's~~ KCPL's possession, use, removal and disposal of such asbestos, PCB Transformer, and PCB-containing or PCB-contaminated materials prior to the closing date and (b) all other liability under Federal, State and

local environmental laws and regulations arising from ~~Purchaser's~~ KCPL's and possession, use and operation ~~and disposition~~ of the Business prior to the closing date.

F. Environmental Permits.

Any sale of the Business is expressly conditioned upon the Purchaser acquiring before the closing all requisite environmental permits for the operation of Grand Avenue Station, KCPL will use its best efforts to have its present permits either transferred or reissued to the Purchaser. Should such permits not be transferred or reissued to Purchaser before closing, any obligations of KCPL to sell and Purchaser to buy the Business shall thereupon cease without further liability to either party, and KCPL shall return any earnest money together with interest.

G. Releases from Indentures of Mortgages.

The Business is subject to the liens of two indentures of mortgage. KCPL shall use its best reasonable efforts to have the Business released from the liens in the event of sale; however, if the Business is not released from said lien as of closing, any obligation KCPL may have to sell, and the Purchaser to buy, the Business shall thereupon cease without further liability to either party, and KCPL shall return any earnest money together with interest.

H. Repurchase Provision.

In recognition of the fact that it is economically impracticable for KCPL to remove its electrical facilities from the Grand Avenue structure and lands, the Purchaser shall agree that in the event steam finally ceases to be produced at Grand Avenue ~~within~~ after twenty years ~~of~~ from the sale of the Business, KCPL shall have the first right (but not the obligation) to repurchase the

Grand Avenue structure and associated lands, as detailed in Exhibit 4, at the price set by S&C. ~~its then fair market value as a steam production facility~~.

I. Risk of Loss.

Should any loss occur to the Business prior to closing, and the loss is ~~so substantial and~~ in the opinion of Purchaser significant ~~as~~ to materially affect the value of the Business ~~taken as a whole,~~ the Purchaser may ~~either accept in satisfaction of KCPL's obligations hereunder the Business as it then exists without diminution or abatement in the purchase price (or such diminution or abatement as KCPL in its sole discretion agrees to) or Purchaser~~ reduce the pruchase price to reflect such loss or may withdraw from its obligation to purchase, in which case any earnest money paid to KCPL will be refunded ~~with~~ interest, and neither party shall have any further obligation to the other.

J. Closing and Possession.

Closing shall occur at a mutually agreed upon time and place. At closing, Purchaser shall tender the remainder of the purchase price in same-day funds less amounts deposited in escrow and KCPL shall convey title to the Business by good and sufficient documents of transfer in accordance with the terms and conditions of the ~~RSP~~ Agreement for the Purchase and Sale of the Business. ~~Possession shall be delivered as specified in the applicable sales documents~~.

K. ~~Breach~~.

~~Purchaser's sole and exclusive remedy (at law or in equity) in the event KCPL fails to perform any of its obligations hereunder shall be limited to the right of the Purchaser to withdraw from its obligations to purchase and receive a refund of~~

any earnest money paid without interest. In the event of any failure on the part of Purchaser to perform its obligations hereunder, KCPL shall have the right to bring an action for specific performance, or for damages, or both. KCPL, at its election, may retain the earnest money paid by Purchaser as liquidated damages for the failure of performance or breach by Purchaser. It is agreed that the liquidated damages provision herein is fair and reasonable and that Purchaser has accepted same and made its Proposal recognizing the fairness and validity of same.

L. Insurance

Purchaser shall comply with the following insurance conditions and requirements for as long as Purchaser has the right to enter upon any KCPL property granted pursuant to the sale of the Business. KCPL retains the right to reasonably alter these insurance conditions and requirements, at which time Purchaser shall comply with the altered conditions and requirements:

a. Certificates of Insurance. Certificates from insurance carriers evidencing compliance by Purchaser with insurance coverage requirements as provided herein, shall be submitted to KCPL, and Purchaser shall not take possession until such certificates of insurance shall have been furnished. KCPL shall not be liable for delays occasioned due to, or in connection with furnishing such certificates.

b. Notice of Cancellation or Change. Purchaser shall have an endorsement attached to the policy or policies of insurance which shall provide that at least ten (10) days prior to the termination of the policy or policies the insurance carrier shall notify KCPL of such termination and that at least ten (10) days prior to the effective date of any change in such policy or policies, if such change restricts or reduces the amount of insurance or insurance coverage provided therein or changes the name or names of the insured(s), the insurance carrier shall notify KCPL in writing of the nature of such change. The certificates of insurance required under a. above shall evidence this endorsement.

c. Workers' Compensation or Employer's Liability. Purchaser shall comply with all provisions of all Workers' Compensation laws and Employer's Liability Acts of the State of Missouri and shall carry full insurance coverage or be authorized to self-insure liability to its employees under such Laws or Acts.

d. Public Liability and Property Damage. Purchaser shall carry public liability and property damage insurance, including automobile coverage, in amounts not less than $1,000,000 public liability and $1,000,000 property damage per occurrence with responsible insurance companies having a Best's rating of B+ or better.

~~M. Binding Effect and No Assignment.~~

~~This Proposal and any sales documents arising out of this RFP shall be binding upon KCPL and Purchaser and their respective successors and assigns. However, the Proposal and any sales documents, and any rights or obligations thereunder, shall not be assigned by Purchaser without any required regulatory approvals and the express written consent of KCPL, which shall not be unreasonably refused.~~

~~N. Choice of Law.~~

~~This RFP, and any Proposal and sales documents shall be interpreted in accordance with the laws of the State of Missouri.~~

KANSAS CITY POWER & LIGHT COMPANY
1330 Baltimore Avenue
Kansas City, Missouri 64105

January 25, 1988.

ADDITIONAL PROVISIONS TO BE ADDED:

1.) Representations and Warranties as to the assets, business, operations, financial condition and prospects of the Business.

2.) Indemnitication of the Purchaser by KCPL for breaches of the Representations and Warranties.

3.) Conditions to closing.

4.) Adjustments of Purchase Price.

Proposal

for the purchase of

KCP&L's

Downtown Kansas City, Missouri
Central Station Steam
Distribution Business

March 24, 1988

PROPOSAL

FOR THE PURCHASE OF KCP&L'S DOWNTOWN KANSAS CITY, MISSOURI CENTRAL STATION STEAM DISTRIBUTION BUSINESS

To be submitted in quadruplicate

Name of Purchaser: Kinetic Energy Development Corporation

Address: 712 North Second Street

Suite 210

St. Louis, Missouri 63102

Date of Bid: March 25, 1988

I/we hereby submit the following Proposal for the purchase of KCP&L's downtown Kansas City, Missouri, central station steam distribution business in accordance with the terms and conditions of the Request for Proposals dated January 25, 1988:

1. Purchase price:

Option 1: Purchase Grand Avenue Station and Distribution System

$6,000,000.00
(in figures)

Six Million Dollars
(in words)

Option 2: Purchase Distribution System Only

$4,000,000.00
(in figures)

Four Million Dollars
(in words)

2. Qualifications of Purchaser to operate the Business (attach to proposal form). Purchaser should include sufficient information regarding its financial and operational qualifications to allow evaluation of the likelihood of Purchaser's successful operation of the Business.

3. Purchaser's approach to providing steam service in downtown Kansas City, Missouri (attach to Proposal form).

4. Steam rates and the conditions of steam service to be provided by Purchaser (attach to Proposal form).

5. Disposition of Grand Avenue Station (attach to Proposal form).

6. I/we hereby incorporate by reference all of the terms and conditions of the RFP into this Proposal, except for the following specific items to which exception is taken and the reasons therefore given. Also listed are any additional terms and the reasons therefore, upon which this Proposal is conditioned. Exception - Schedule for submission of earnest money, (RFP Para 4B). Kinetic Energy Development will submit a cashier's check for a minimum of $100,000.00 in earnest money as provided in most conventional transactions; at the time an agreement for Sale/Purchase is executed. A corporate guarantee for $100,000.00 and corporate financial documentation is attached as interim assurance until a sale agreement is reached or KCP&L has rejected Kinetic's proposal.

Kinetic Energy Development Corporation accepts all other terms and conditions provided in the Request for Proposals dated January 25, 1988, as well as all corrections and addenda provided by KCP&L. Kinetic further accepts all terms and conditions as approved by the Missouri Public Service Commission.

I/we understand and agree that this Proposal shall be irrevocable for a period of thirty (30) days from March 25, 1988, and that KCP&L has the option of extending this irrevocable period an additional thirty (30) days. It is also agreed and understood that KCP&L has no obligation to sell the Business

unless (a) satisfactory sale documents are entered into, (b) all necessary regulatory consents are obtained, and (c) all conditions precedent are satisfied. A Corporate Surety in the amount of $100,000.00 is enclosed.

I/we further understand that this Proposal is subject to disclosure to the Missouri Public Service Commission and its Staff, and in any Commission proceedings concerning the sale of the Business in accordance with the practice and rules of the Commission.

Purchaser: Kinetic Energy Development Corporation

By: W. T. Schmidt, President

W. T. Schmidt, President

Attest:

Jerry K. Corbier, Secretary

Jerry K. Corbier, Secretary

2. Qualifications of Purchaser to Operate the Business

Kinetic Energy Development Corporation has formed the following project team to insure the future viability of the downtown Kansas City Steam System:

Kinetic Energy Development Corporation 712 North Second Street Suite 210 St. Louis, MO 63102	- owners of steam system.
Affiliated Resource Corporation (Owner/Operator of Hartford, Connecticut Steam System)	- support for operations and maintenance of steam system through contact with Kinetic.
Jeremiah Finnegan, Attorney 4049 Pennsylvania Suite 300 Kansas City, MO 64111	- Legal counsel for steam system.
B.C. Christopher Securities Company 4800 Main Street Kansas City, MO 64112	- Financing counsel for acquisition and future expansion.
John Goulias, Engineer Consultant Goulias Associates 1925 North Circle Drive Jefferson City, MO 65701	- Environmental and Engineering Consultant

Kinetic will use local labor for operations and maintenance and will include qualified local contractors for any construction bidding which may be necessary.

Summary of Qualifications

Kinetic's project team is made up of Missouri based corporations. We understand the Midwest market and how a successful district steam system can

be implemented. And, being based in Missouri, we are here to stand behind the project and insure its future long-term success.

The principals of Kinetic Energy Development Corporation have first-hand experience in the development, acquisition, start-up and profitable operation of the St. Louis District Steam System. We also have direct experience with state regulatory, environmental permitting and legislative agencies in Missouri and have an excellent track record in each of these areas.

Kinetic's principals have considerable expertise in the restructuring and business plan implementation for the successful revitalization of district steam systems, with particular focus on conditions specific and unique for Missouri and the Midwest.

The team also brings strong operational support and experience to the downtown Kansas City Steam System through Affiliated Resource Corporation, the owners and operators of the Hartford Connecticut Steam System.

And, the team boasts strong local Kansas City representation for legal, political, economic and financial conditions affecting the future viability of the District Steam System.

As for the project team's financial capabilities, we have the following resources.

Kinetic is an "energy and environmental" development company and is developing energy projects across the country. To date, our projects

represent over $64,000,000 in capital investment when they are completed. Kinetic is presently made up of three companies with total assets of $8,500,000.

To further strengthen our financial capability, we are represented by B. C. Christopher Securities Company, an investment banking firm in Kansas City, Missouri. B.C. Christopher has assets totaling more than $1.6 billion and has executed financings for steam and electric utilities totaling over $360 million in the last five years.

QUALIFICATIONS

KINETIC ENERGY DEVELOPMENT CORPORATION
BACKGROUND

Kinetic Energy Development Corporation, with assets of over $8.5 million, brings a highly professional, seasoned, expert approach to providing cost-effective energy solutions to meet today's growing institutional, industrial and municipal needs.

Kinetic's focus is the identification and development of alternative energy projects and is market driven, rather than technology or equipment driven. Kinetic's business plan has a successful track record as its principals have applied innovative concepts to projects and businesses.

The principals of Kinetic comprised the corporate development group of the second largest producer of resale district steam in the USA, and INC magazine's No. 1 fastest growing public company in 1986. Their major focus was the development of alternative-energy projects, including the acquisition and growth of major District Heating and Cooling systems, Waste-To-Energy plants, Cogeneration facilities and hydroelectric projects.

Kinetic Energy Development Corporation applies its program for proven success to tailor various technologies to a project's specific needs. Technologies from which Kinetic draws may include any of the following alternatives, either singly or in an optimal combination:

- District Heating and Cooling
- Waste-To-Energy
- Total Energy (Cogeneration)
- Biomass
- Coal

Kinetic provides coordination of all necessary resources, working with local governmental entities, licensing bodies, community leaders, and other parties to ensure that a viable project meets every regulatory criteria. Kinetic handles all aspects of a project through a step-by-step process that provides for modification at every stage of development. This process moves from a concept and feasibility program, through the refinement and reassessment processes of engineering and design, to the implementation stages of construction, start-up and ongoing operation and maintenance. Ownership and financing alternatives are included in this process.

Kinetic has a streamlined development group, comprised of, experienced professionals, which identifies, coordinates, locates and developes energy markets, combining the most effective and efficient processes to meet the project's requirements. In addition, Kinetic has the capability to serve as owner/operator for these energy projects.

District Steam System Experience

Kinetic's principals have a very successful track record in the acquisition and operation of district steam systems. They are also well versed on steam generation through the use of fossil fuels, waste-to-energy applications, and sewage sludge incineration. Because of this expertise, Kinetic has been commissioned by the State of Missouri to develop an implementation plan for the construction of a Municipal Waste and Sewage Sludge Codisposal Facility in the St. Louis area.

Kinetic's outstanding reputation is a direct result of the strong credentials its officers bring to the energy industry.

Tab Schmidt, President of Kinetic, was instrumental in the purchase of the downtown St. Louis District Steam System from Union Electric Company in 1984. He then became General Manager of the system, Thermal Resources of St. Louis, and transformed it from a liability for Union Electric into an income producing asset in just over a year.

His plan for success included a reduction in operation costs while increasing the customer base to boost sagging revenues. This action put a halt to a steady 10 year decline in steam sales for the St. Louis system.

Under Tab's direction, the steam system has added over 20 new customers since early 1985 and continues to grow and prosper today.

Now head of Kinetic, Tab has built a well respected reputation in the District Heating and Cooling industry throughout the Country. He is responsible for bringing many innovative ideas to this field and has written several papers on district steam system operations.

Tab has also traveled to Europe to exchange ideas on steam system operation and efficient utilization of both fossil fueled and waste fueled steam generation equipment. Because of his extensive knowledge and experience, he has been appointed as chairman of the Production, Cogeneration and Refuse Energy Committees for the International District Heating and Cooling Association in Washington D.C.

Jerry Corbier, Vice President of Kinetic, rounds out a strong team in the managing, operating and marketing of district steam systems. Jerry has a strong background in both technical and business arenas and holds a degree in Civil and Mechanical Engineering and a minor in Marketing.

Jerry gained an in-depth knowledge of the steam business when he was Project Manager for Catalyst Thermal Energy Corporation, owners/operators of five district steam systems throughout the U.S. He played a key role in the expansion of these systems and became heavily involved in new and unique steam applications for these systems as well.

Jerry's experience includes the design of a steam-driven refrigeration plant for St. Louis' steam system as well as conceptualized and

documented the application of a district cooling system in Baltimore. Further technical credentials include authoring a book on the design of industrial bulb thermostats to provide ambient temperature compensation and the subsequent design of such a thermostat which is now being manufactured and marketed by Barber-Colman Inc. in Rockford, Illinois.

Jerry also has a successful background in marketing and sales. He was National Accounts Manager at Harris Corporation in Atlanta and handled such clients as Southern Company Services, Georgia Power Company, Alabama Power Company, Lockheed Corporation, Fuqua Industries. Alexander & Alexander, Inc., C&S National Bank and Georgia Pacific Corporation.

Kinetic's principals have a very good knowledge of the marketplace and the type of environment in which to sell steam services to prospective clients within the steam loop. This team also has the ability to implement an outstanding customer relations program to look after the needs and wants of present customers on an existing District Steam System.

Kinetic Subsidiary Companies

Kinetic Environmental Laboratories, Inc.

Kinetic Environmental Laboratories, Inc. (KELI) is a company engaged in the safe and efficient disposal of residential, commercial and industrial waste. Located in Centralia, Illinois, approximately 60 miles east of St. Louis, KELI is the largest waste management company in a six county area and specializes in industrial special waste transport and disposal.

KELI owns a refuse incinerator located in Centralia which is presently being refurbished and once in service, will offer an economical and environmentally-sound disposal alternative to landfills. This incinerator process will also produce steam which will be consumed by surrounding industry as a low-cost energy source for their heating, processing and cooling needs.

KELI also offers consulting services for industries and municipalities who wish to develop and implement both short-term and long-term waste management programs. Our services insure that waste disposal is handled responsibly in order to preserve our environment now and in the future.

Centralia Environmental Services, Inc.

Another subsidiary, Centralia Environmental Services, Inc. (CESI). owns and operates (3) 40 acre landfills, (2) in Marion County, Illinois and (1) in Jackson County, Illinois.

This business was acquired to help control our waste disposal costs as well as provide a waste stream which could be used in future waste-to-energy projects. Several such projects are being developed by Kinetic Energy Development Corporation throughout Central Illinois. Once these facilities come on line, the waste normally received by our landfills will be diverted to these facilities where it will be used as fuel to produce economical energy.

Selected Specific Project Experience

Kinetic Energy Development Corporation currently has over 25 projects in various stages of development. These projects cover a wide spectrum from the brokering of fuels to the acquisition of district steam systems to the development of new district steam systems with waste-to-energy and the codisposal of sewage sludge.

The following provides an overview of the general category of projects currently underway:

Type of Project	No. of Project
Acquisition of Existing District Steam Systems	3
Waste-to-Energy and Codisposal	2
Development of New District Steam Systems	6
Fuel Brokering	2
Hazardous Waste Services and Disposal	3
Central Facilities to Serve Industrial and Commercial Customers	7
Residential Waste Transfer Stations	4
Total	27

The principals of Kinetic Energy Development Corporation have a wide range of experience throughout the energy industry. Selected past experience of the principals at Kinetic include the following:

1. State of Missouri: **Codisposal Facility Utilizing Solid Waste and Sewage Sludge.** Kinetic was selected by the State of Missouri in conjunction with the local government development agency and a technology vendor to develop an implementation plan for the above facility. The scope of this project is to include a program for the design, construction, financing, ownership and operation of a waste to energy facility utilizing solid waste and sewage sludge. The service area for this project will contain one or more facilities utilizing sewage sludge from the Metropolitan Sewer District and solid waste from the St. Louis metropolitan area. Further, a model is to be developed from this project and to be utilized in assessing codisposal potential in out of state areas such as St. Charles County.

2. Washington D.C.: **IDHCA, Brookhaven National Laboratory and U.S. Department of Energy.** Technical Assistance with the International District Heating and Cooling Association Research and Development Committee for contract services to the Brookhaven National Laboratory for the U.S. Department of Energy. This scope provided technical assistance including analyses, consultations, and research relating to establishing a database to the U.S. Department of Energy for district

heating and cooling systems. More specifically, this scope involved an analysis of existing systems across the U.S.; a critique of the existing DOE Technology Research program; and recommendations for future DOE district heating and cooling programs.

3. St. Louis, Missouri: **Downtown District Steam System.** This project included the negotiation and acquisition of 22 miles of steam distribution system, and a 1,500,000 lb per hour, 70 MW power station. The project began in 1983, and included restructuring of the rate tariffs, the negotiation of long term service contracts with major steam customers, and a permanent change from Public Service Commission regulation to contract regulation between the customers and the central steam system. Upon closing of the transaction, the scope of this project transitioned into the start-up of operations; the hiring, training, day to day direction of all operations, accounting, marketing, and engineering personnel; and the implementation of a business plan for the rebirth of the downtown steam system.

In following that business plan, the district steam system has stabilized the loss of customers, and attracted new developments and previous customers to account for a 40% increase in sales. Historically, the steam system documented annual losses in excess of $500,000 per year. Following the acquisition and transition of operations, the downtown steam system produced profits in excess of $500,000 the first year of operation.

4. St. Louis, Missouri: **600 TPD Waste-to-Energy Facility.** In conjunction with the acquisition of the downtown steam system, this project involved the development, design, financing and construction of a 600 TPD Waste to Energy Facility to utilize residential waste from the City of St. Louis. The award of this project resulted from a competitive selection process among 26 prequalified bidders. Development of the project began in 1983, and the scope of this project included environmental permitting, engineering and design, equipment selection, and firm estimates for construction. Additional tasks included waste supply and energy contract negotiation. Environmental permitting was accomplished in six months, and the project was located in a non-attainment area of the pollution control district.

5. St. Louis, Missouri: **Solid Fuel conversion of Downtown District Steam System.** The scope of this project included the development and conversion of the power station to solid fuels, (coal and biomass), to provide a long term, stable, environmentally sound source of energy for the district system. This project was in conjunction with the 600 TPD Waste to Energy facility to provide peaking and back-up service to the central steam system. The 5-300,000 lb per hour boilers at the central plant were originally designed for pulverized coal, and were converted to burn No. 6 oil in 1972. Various technologies such as micronization and traveling grate spreader stoker, were assessed for the optimum application in consideration of capital cost, operating experience, and environmental suitability. Environmental permitting was accomplished in six months and the project was located in a non-attainment area of the pollution control district.

6. St. Louis, Missouri: **Satellite Power Station for the Downtown District Steam System.** This project involved the acquisition of a boiler plant which previously served a hospital complex adjacent to the downtown steam system. The scope of this project included the competitive bidding and negotiated purchase of four gas fired boilers, and three turbine generators to interconnect for the long term expansion of the district steam system. This facility was originally designed as a coal fired facility and has a total capacity of 60,000 lb per hour. This project was developed to be converted back to solid fuels and supplement the existing central system power station from the opposite end of the district steam system.

7. St. Louis, Missouri: **Major Steam Line Expansion of the downtown Steam System.** This project involved the assessment of potential for major expansion of the downtown steam system. Specific customers were identified and commitments for a 30% increase in steam sales for the steam system were obtained. The project specifically included five facilities owned and operated by the St. Louis Housing Authority. The scope of the project included distribution piping, heat exchangers for conversion from steam to hot water, and the associated valving and controls for interconnection. Additionally, the development of a new tariff and negotiation of a 20 year service agreement with the customer were part of this project.

8. Bristol, Virginia: **Municipal Solid Waste Energy Recovery Facility With Cogeneration.** A Phase I feasibility study was completed for an approximate 300 ton per day mass-burn system to generate steam for industrial customers and cogenerate electricity for sale to the utility grid. Specific tasks in the scope of that study included: a comparative computer analysis of in-plant steam generation versus central plant generation, development of steam sales rate schedules, and development of draft contract for steam sales. The projected cost of this facility was $31 million.

9. Bristol, Virginia: **Procurement Planning: 300 TPD Waste to Energy Facility.** The scope of this project involved the preliminary design and engineering of a 300 TPD WTE facility. Specific tasks included: specification and procurement documents for major equipment, capital cost estimates, and coordination of technical, legal and financial input to determine a specific business plan for implementation.

10. Millington, Tennessee: **Navy Cogeneration Project.** This project involved an initial evaluation of 10 alternatives for 20,000 KW; 300,000 lb/hr cogeneration facility at Naval Air Station Memphis. The various alternatives included 600 TPD of municipal solid waste, coal, or oil as fuels. This evaluation included: economic and energy use ranking, ownership alternatives, life cycle cost analyses, life cycle energy analyses, comparison of operating costs, and a sensitivity analysis of various parameters.

11. Marion, Virginia: **Smyth County, Virginia, Municipal Solid Waste Energy Recovery Facility-150 TPD.** A Preliminary Engineering and Economic Study was completed. The proposed facility would incinerate municipal solid waste for generating steam for industrial/institutional customers' process and building heat. Additional developmental work and

feasibility assessment included. A landfill weighing study and area wood waste survey were completed. A comparative computer analysis of in-plant steam generation versus central plant generation was performed. A steam service contract was drafted and preliminary steam customer negotiations were conducted. Investment costs, operating costs, and revenue potential were reassessed for the projected $15,000,000 central plant and steam distribution system. A proposal was prepared on behalf of Smyth County to obtain Federal Price Support loans for the DOE.

12. Asheville, North Carolina: **Solid Waste Study for a six (6) County Area.** The scope of this project involved a landfill study of nine (9) landfills in a six (6) county area of western North Carolina for the Land-of-Sky Regional Council. This study included annual quantities received and annual operating costs. The study included a weighing study of six (6) landfills.

13. Asheville, North Carolina: **Steam Customer Search, Evaluation, and Feasibility Analysis of a Solid Waste Energy Recovery Facility.** The scope of this study involved the location and evaluation of steam customers in a six county area of western North Carolina and match potential customers to the waste stream as defined in project #17 above. Two projects were defined as to be located in Henderson County and Buncombe County respectively. Phase I feasibility was evaluated for each county.

14. Marshall County, Alabama: **Incinerator-Boiler Project - 140 TPD.** The scope of this project involved an economic and technical feasibility study for the construction of a solid waste to energy facility to supply steam to Continental Grain, Goldkist Feed Mill, and the Goldkist Processing Plant. Because of the large steam demands of the potential customers, an alternative to supplement the steam generated by the solid waste with a 40,000 lb/hr coal fired boiler and a standby 40,000 lb/hr gas fired boiler was also analyzed in this study.

15. **Additional projects related to the experience of the principals in Kinetic Energy Development Corporation include:**

- **Feasibility Analysis - Solid Waste To Energy Facility; Phillips County, Arkansas**
- **Feasibility Analysis - Solid Waste To Energy Facility; Henderson County, North Carolina**
- **Feasibility Analysis - Solid Waste To Energy Facility; Buncombe County, North Carolina**
- **Addition to Waste Disposal Heat Recovery Plant; Blytheville, Arkansas**
- **Evaluation and Permitting of Emission Sources, Plough, Inc., Memphis, Tennessee**
- **Incinerator-Boiler Evaluation and Upgrade, Plough, Inc., Memphis, Tennessee**

GENERAL BACKGROUND

The Hartford Steam Company, a subsidiary of Connecticut Natural Gas Corporation, operates a modern heating and cooling plant to service the central business district of Hartford, Connecticut. The concept of central heating and cooling was incorporated into the overall Hartford Redevelopment Plan in the early 60's when the city planners went forward with the Constitution Plaza Redevelopment Program. The plant and its associated distribution system has expanded during the past 25 years to encompass other major development projects, including the Hartford Civic Center, comprised of a 15,000 seat coliseum, and the million square foot Civic Center retail shopping mall.

The Company presently services 35 buildings with steam and 37 buildings with chilled water. Its customers include the Travelers Insurance Company buildings, the Senior Citizens Building, all the buildings on Constitution Plaza, the Federal Building, the Bushnell Plaza buildings, the Southern New England Telephone company buildings, Phoenix Insurance Company, Wadsworth Athenaeum, Connecticut National Bank, the Metropolitan District Headquarters, the Summit Hotel, the Sheraton Hotel, Hartford Club, Hartford Steam Boiler Insurance Company, and the new Connecticut Natural Gas Operating and Administrative Center. Significant growth came in the early 1980's with the renewed growth of the central business district. During this period, Connecticut's largest building (Aetna Reality's City Place Complex) joined the system along with the One State Street building and Connecticut River Plaza. These buildings represented 2,500,000 square feet of new office space. Annual steam sales are approximately 370,000 M lbs., and annual chilled water sales are 1,200,000 daily tons. Although new customers have been added since 1973, both steam and chilled water sales are now beginning to approach and exceed the peak sales of 485,000 M lbs. of steam, and 954,000 tons of chilled water which occurred during the early 1970's. Significant declines in sales were directly attributed to major conservation efforts that the customers have employed as a direct result of the increased cost of energy as well as in response to the national goal to conserve energy.

The Company burns both natural gas and No. 6 fuel oil in its boilers to produce steam. Natural gas is available from Connecticut Natural Gas on a manual interruptible basis and is generally supplied between early and late fall. During the winter period, No. 6 fuel oil is the primary fuel. The Company also exercises economic dispatch in the use of fuel and, whenever possible, the cheaper fuel is employed. Currently, natural gas is being supplied at approximately $2.60 per million BTUs, and No. 6 fuel oil is available at approximately $2.75 per million BTUs. The steam that is produced in the boilers is either distributed directly to

customers for heating or is used for power within the plant to produce chilled water. The present plant has an installed boiler capacity of 385,000 pounds per hour and a chiller capacity of 20,000 tons. The plant has experienced a steam production peak hour of 305,000 pounds and a chiller production peak of 19,500 tons.

The plant produces chilled water by directing the 250 psi saturated steam produced by the boilers to steam turbine driven centrifugal refrigeration machines. The six refrigeration chillers range in size from 1500 tons to 5000 tons. Return water from the downtown system enters the chillers at approximately 55 F.; the water is cooled to about 40 F. in the chillers and then is returned to the downtown system. Six steam powered centrifugal water pumps provide the pumping power to the chilled water distribution system. The direct buried distribution system includes over 19,000 feet of pipe ranging from 12 to 36 inches in diameter. Condenser water for the chillers and condenser water for the turbine exhaust is provided by a pipeline which delivers Connecticut River water directly to the plant. Nine electric motor drive pumps provide a total flow of up to 60,000 GPM to the refrigeration equipment.

NEW CONCEPTS, NEW CUSTOMERS

In 1977, the Company installed and began operation of a 1000 ton river water/chilled water heat exchanger designed to provide direct cooling of the chilled water loop during the winter months when river water temperature is less than chilled water return temperature. Two 30 foot long shell and tube heat exchangers were designed and specially manufactured for this application. During its first winter season, the heat exchanger operated for 116 days, producing a total of 69,651 daily tons. The energy saved by the operation of the heat exchanger was equivalent to 33,500 MM BTU, a savings currently valued at more than $165,000 annually. Considering that the cost of the heat exchanger, including its installation, was less than $100,000, the efficiency and economic payback of this concept is extraordinary.

The Company has now upgraded the original exchanger with higher efficiency flat plate equipment. This allows the extension of operating conditions and increases the cost savings by using the natural cooling of the river water for a longer season.

During recent years, Hartford Steam has been able to maximize the availability and load factor on the base plant by incorporating chilled water thermal storage. The basis for this operation was the conversion of 1,200,000 gallon oil

storage tank to chilled water storage. This allows chilled water to be generated off peak and meet additional load requirements during the daytime. This project is unique in the industry for many reasons but clearly demonstrates the Company's dedication to its customer base.

The Company has been aggressive in the pursuit of additional thermal energy development projects. This is evidenced by the development of the Capitol District Energy System beginning in 1985. This project has been one of the most closely coordinated and timely energy developments in many years. It has been a project which demonstrates the ability to develop a chilled and hot water thermal system during a time of significant question as to the viability of district energy systems. This project was developed entirely with private funds and did not require the significant government financial support present in other developing systems during the 1980's.

Hartford Steam Company through its affiliates has been involved in energy development in other locations. Noteworthy is the selection of the Company to operate the new thermal energy system being developed currently in Springfield, Massachusetts. This opportunity has resulted from that City conducting a procurement process which selected the Company as the developer/operator. This project now involves others, but the Company will operate the new system.

During the last decade the Hartford Steam Company has been a key role model for many thermal energy systems across the country. The Company has been a leader in the operation and maintenance of large systems. The management of the Company has been able to continue the growth and competitiveness of thermal energy products. This experience is unmatched in the industry and now is a tool which allows the Company to share the experience in the development and operation of other thermal energy systems. The Company will continue to posture itself as a key player in thermal energy development across the country.

B. C. Christopher Securities Co.

4800 MAIN STREET/SUITE 100/KANSAS CITY, MISSOURI 64112-2578
(816) 932-7000

EXPERIENCE AND QUALIFICATIONS

INVESTMENT BANKING GROUP

B. C. Christopher Securities Co., through its Public Finance and Corporate Finance Departments, provides the capital financing component of the Kinetic team. B. C. Christopher has been working along side Kinetic Energy Development Company since Kinetic's inception, assisting the firm in structuring and completing transactions for a variety of types of projects. Outlined below are the major qualifications of B. C. Christopher in handling the financing of Kinetic's acquisition of the Downtown Kansas City, Missouri Central Station, Steam Distribution System.

DESCRIPTION OF B. C. CHRISTOPHER SECURITIES CO.

General Background

Founded in 1878, B. C. Christopher has evolved from a grain trading company started on the banks of the Missouri River to become a full service investment firm. Headquartered in Kansas City, Missouri, Christopher has 10 branch offices and over 150 account executives offering a full range of investment services. The firm is a member of the New York Stock Exchange, as well as all other principal Stock and Futures Exchanges.

In 1985, Central Life Assurance Company of Des Moines, Iowa, purchased controlling interest in B. C. Christopher. Central Life, which was incorporated on February 8, 1896, is the 29th largest mutual insurance company in the United States as measured by assets. Central Life reports assets in excess of $1.6 billion and capital of more than $130 million. Best's insurance rating service has given Central Life its highest rating, A+ (excellent) based on past performance and financial strength.

When Central Life acquired B. C. Christopher Securities Co. it made a commitment to add its formidable capital position to that of B. C. Christopher. This strength has enabled B. C. Christopher to provide investment banking services for some of the largest issuers in the country--a unique capability for a regional firm. For example, in the summer of 1986, B. C. Christopher underwrote, as the senior managers, an issue of $97,890,000 for the Kansas Turnpike Authority. Central Life added its capital to that of B. C. Christopher to complete the transaction.

	For the Year Ended		
	1984	1985	1986
Total Capital (Contingency Reserves & Surplus)	$150,396,000	$212,336,000	$209,831,000
Excess Capital (Surplus only)	$103,000,000	$105,000,000	$108,000,000
Total Assets	$1,158,038,000	$1,482,620,000	$1,669,429,000

INVESTMENT BANKING SERVICES

B. C. Christopher offers numerous investment banking services including: Corporate Finance, Merger and Acquisition, Corporate Syndicate, Over-the-Counter Trading and Market Making, Corporate Evaluation, Financial Advisory, Underwriting, Public Finance, Portfolio Evaluation and Government trading. These departments, based in Kansas City, allow our clients to take full advantage of the interaction among various markets inherent in today's more complex capital markets. Trends and concepts identified in one market can be applied by the firm's professionals to projects in other markets.

PUBLIC FINANCE DEPARTMENT

General Description

The primary objective of the Public Finance Department is to deliver state-of-the-art financing alternatives accompanied by a quality of service unattainable by the financial service conglomerates. The firm's professionals provide a hands-on approach to the delivery of public finance services--the same professionals that have the initial contact with the issuer work with the issuer through the closing of the transaction. In contrast to the wire house approach, Christopher professionals work on a broad range of financings both in terms of size and complexity, and thus afford our clients the benefit of this more wide ranging experience.

Specifically in the utility finance area, the principals of the Public Finance Department have structured and executed financings for steam and electric utilities totaling over $360 million in the last five years. These financings have included projects for new plant capacity, operational needs and equipment replacement.

The Public Finance Department has maintained a position as a major player in capital finance in the Midwest and across the nation. In 1986 the firm ranked 5th out of over 50 firms in the 6-state region. In 1987 the firm ranked 25th nationwide in total negotiated general obligation bond issues and 16th nationwide in total taxable issues underwritten.

The Department is experienced in the use of Credit Enhancements including: Bond Insurance, Bank Letters of Credit, and Third Party Guarantees. As the Credit Enhancement segment of the municipal market has grown, the professionals of B. C. Christopher have been at the forefront in developing new strategies to broaden the market for our clients' debt. The firm's professionals developed the first "Insured Trigger Reserve" and have used this concept for a number of utility system clients since its initial application in 1984.

The Department offers a complete Research and Rating Application capability. The research function assures our clients the availability of latest information on the capital markets including the status of comparable financings that may be entering the market at the same time as the client. Identifying structuring trends and interest rate windows are key functions of the Research group. The Bond Rating process is a critical step in any financing program and demands an approach based on thorough credit analysis and preparation of a complete presentation to the various agencies.

Christopher offers to its clients an in-house proprietary computer capability that allows for the maximum in design flexibility in the structuring of public financings. Custom designed computer programs assist in the development of financing alternatives that include; fixed rate financings, floating rate financings, zero coupon bonds, accelerated amortization as well as other alternatives. This computer capability is available on a 24-hour basis, thus assuring our clients flexibility in accessing the markets.

CORPORATE FINANCE DEPARTMENT

General Description

The services provided by B. C. Christopher's Corporate Finance Department cover all aspects of corporate investment banking. These services are outlined below.

Project Financings:
- Assist in structuring and arranging debt and equity placements for specific project completion.

Private Placements of Debt and Equity Securities:
- Assist in placing debt or equity for expansion capital, refinancing of existing debt or general working capital.

Public Offerings of Debt or Equity.

General Financial Consultation Services:
- Assist in long range financial planning.
- Analysis of acquisitions and divestitures and/or the redeployment of corporate assets.
- Assist in positioning the client corporation and determining optimal timing for entry into capital markets.

Mergers, Acquisitions and Divestitures:
- Provide acquisition search services.
- Provide assistance in pricing the entity.
- Assist in determining the most favorable financial structure with special consideration given to relevant tax and accounting treatments.
- Access buyers and assist in financing the spinoffs of divisions or subsidiaries of corporations.

Leveraged Buyouts:
- Pricing.
- Structuring and arranging financing.
- Prefer to represent the interests of management.

Evaluations:
- Freezes.
- Incentive Stock Option Plans.
- ESOPs.
- Fairness Opinions.

REFERENCES

PARTIAL LISTING
OF
REFERENCES

1.	MISSOURI PUBLIC SERVICE COMMISSION	314-751-7442
2.	UNION ELECTRIC	
	RICH BAUDENTISTEL	314-554-2051
	DON CRAWFORD	314-554-2487
3.	CITY OF ST. LOUIS	
	MAYOR VINCENT SCHOEMEHL	
	BILL KUEHLING	314-622-3201
4.	BI-STATE DEVELOPMENT AGENCY	
	PAUL MYDLER	314-982-1548
5.	J.S. ALBERICI CONSTRUCTION COMPANY	
	GABE ALBERICI	314-261-2611
	GUY JESTER	
6.	INTERNATIONAL DISTRICT HEATING AND COOLING ASSOCIATION	
	DAVID HOBSON	202-429-5111
7.	CONFERENCE OF MAYORS	
	RON MUSSLEWHITE	202-293-7330

UNION ELECTRIC

1901 Gratiot Street, St Louis

August 20, 1987

Re: Letter of Reference

This is a letter of reference for Tab Schmidt, President of Kinetic Energy Development Corporation.

I first met Tab in 1983 when the company he worked for was selected by the Bi-State Development Agency to implement a plan whereby the St. Louis District Steam System and the Ashley Plant, both owned by Union Electric Company (UE), would be purchased and integrated with a proposed waste-to-energy facility utilizing waste generated by the City of St. Louis. Tab was their key and sole representative in St. Louis being responsible for the coordination of technical, business, legal and financial aspects of their operations in St. Louis. My position was to represent UE's interests in negotiating the arrangements and, later, in coordinating the implementation and operation of the contract terms.

After the business and facilities were purchased from UE, Tab coordinated the transition and start-up of operations, as well as the transition program for the customers of the district steam system. Although the steam system transition plan required a lengthy Public Service Commission review and approval, to the best of my knowledge Tab's activities have produced a smooth transition of service for the customers and project participants.

Concurrently over the past four years, he has coordinated the development of the waste-to-energy facility contemplated in the original plan. Although the facility has not yet been built, Tab's activities required him to oversee all the details involved in the design, engineering, permitting, and procurement of the project.

During the period of time that I have known and worked with Tab, he has conducted himself in a professional manner, with high integrity for his actions, and with technical competence.

If you have any specific questions concerning Tab's background, feel free to call me at (314) 554-2051.

Sincerely,

Richard H. Bandmeistel

Richard H. Bandmeistel
Senior Engineer
Union Electric Company

RHB:mmh

UNION ELECTRIC

1901 Gratiot Street, St. Louis

August 20, 1987

To Whom it may Concern

Re: Letter of Reference

This is a letter of reference for Tab Schmidt, President of Kinetic Energy Development Corporation.

I first met Tab while he worked for a company that was selected to purchase the St. Louis District Steam System and implement a waste to energy facility utilizing waste generated by the City of St. Louis. At the onset of their project, Tab was their key and sole representative in St. Louis being responsible for the coordination of technical, business, legal and financial aspects of their operations in St. Louis.

He has coordinated the transition and start-up of operations, as well as the transition program for the customers of the district steam system. Although, the steam system transition required a lengthy Public Service Commission review and approval; to the best of my knowledge, Tab's activities have produced a smooth transition of service for the customers and project participants.

During the period of time that I have known Tab, he has conducted himself in a professional manner, with high integrity for his actions.

If you have any specific questions concerning Tab's background, please call.

Sincerely,

Don W. Crawford

Don W. Crawford
Manager
Ashley Power Plant

City Hall
Tucker & Market Streets
St. Louis, Missouri 63103
(314) 622-4201

Office of the Mayor

Vincent C. Schoemehl, Jr.
Mayor

Re: Letter of Reference

This is a letter of reference for Tab Schmidt, President of Kinetic Energy Development Corporation.

I first met Tab while he worked for a company that was selected to purchase the St. Louis District Steam System and implement a waste to energy facility utilizing waste generated by the City of Saint Louis. At the onset of their project, Tab was their key and sole representative in St. Louis being responsible for the coordination of technical, business, legal and financial aspects of their operation in Saint Louis.

He has coordinated the transition and start-up of operations, as well as the transition program for the customers of the district steam system. Although, the steam system transition required a lengthy Public Service Commission review and approval; to the best of my knowledge, Tab's activities have produced a smooth transition of service for the customers and project participants.

Concurrently over the past four years, he has coordinated the development of a trash to energy facility which included many detailed activities in the design, engineering, permitting, and procurement of the project.

During the period of time that I have known Tab, he has conducted himself in a professional manner, with high integrity for his actions.

If you have any specific questions concerning Tab's background, please call.

Sincerely,

William J. Kuehling

WILLIAM J. KUEHLING
Director of Special Projects

THE BI-STATE DEVELOPMENT AGENCY
707 North First Street/Laclede's Landing
St. Louis, Missouri 63102-2595
(314) 982-1400

August 20, 1987

To Whom It May Concern:

This is a letter of reference for Tab Schmidt, President of Kinetic Energy Development Corporation.

I first met Tab in 1983, when the company he worked for was selected to purchase the St. Louis District Steam System and to implement a waste to energy facility utilizing waste generated by the City of St. Louis. Tab was their key and sole representative in St. Louis being responsible for the coordination of technical, business, legal and financial aspects of their operations in St. Louis.

He has coordinated the transition and start-up of operations, as well as the transition program for the customers of the district steam system. Although, the steam system transition required a lengthy Public Service Commission review and approval, Tab's assistance has produced a smooth transition of service for the customers and project participants.

Concurrently over the past four years, he has coordinated the development of a trash to energy facility which included many detailed activities in the design, engineering, permitting, and procurement of the project.

During the period of time that I have known Tab, he has conducted himself in a professional manner, with high integrity for his actions.

If you have any specific questions concerning Tab's background, please call.

Sincerely,

Paul T. Mydler
Director of Special Projects

ama

THE BI-STATE DEVELOPMENT AGENCY
707 North First Street/Laclede's Landing
St. Louis, Missouri 63102-2595
(314) 982-1400

August 20, 1987

To Whom It May Concern:

This is a letter of reference for Tab Schmidt, President of Kinetic Energy Development Corporation.

I first met Tab in 1983, when the company he worked for was selected to purchase the St. Louis District Steam System and to implement a waste to energy facility utilizing waste generated by the City of St. Louis. Tab was their key and sole representative in St. Louis being responsible for the coordination of technical, business, legal and financial aspects of their operations in St. Louis.

He has coordinated the transition and start-up of operations, as well as the transition program for the customers of the district steam system. Although, the steam system transition required a lengthy Public Service Commission review and approval, Tab's assistance has produced a smooth transition of service for the customers and project participants.

Concurrently over the past four years, he has coordinated the development of a trash to energy facility which included many detailed activities in the design, engineering, permitting, and procurement of the project.

During the period of time that I have known Tab, he has conducted himself in a professional manner, with high integrity for his actions.

If you have any specific questions concerning Tab's background, please call.

Sincerely,

Paul T. Mydler
Director of Special Projects

ama

J.S. ALBERICI
CONSTRUCTION CO., INC.

August 20, 1987

TO WHOM IT MAY CONCERN:

Re: Letter of Reference for Mr. Tab Schmidt, President,
Kinetic Energy Development Corporation

I first met Mr. Schmidt in 1983 when the company he worked for was selected to purchase the St. Louis District Steam System and to implement a waste to energy facility utilizing waste generated by the City of St. Louis. He was their key representative responsible for the coordination of technical, business, legal and financial aspects of their operations in St. Louis.

Tab has coordinated the transition and start-up of operations, as well as the transition program for the customers of the district steam system. Although the steam system transition required a lengthy Public Service Commission review and approval; to the best of my knowledge, Tab's activities have produced a smooth service transition for the customers and project participants.

In addition, over the past four years Tab has coordinated the development of a Trash to Energy Facility. His activities included directing design, engineering, permitting, and procurement for the project.

During the period of time that I have known Tab, he has conducted himself in a professional manner. His actions have exhibited a high degree of integrity.

If you have any specific questions concerning Tab's background, please do not hesitate to call.

Sincerely,

J. S. ALBERICI CONSTRUCTION CO., INC.

Guy E. Jester, Ph.D.
Vice President

GEJ:jl

2100 KIENLEN AVENUE
ST. LOUIS, MISSOURI 63121
UNITED STATES OF AMERICA

TELEPHONE (314) 351-8811
TELECOPIER (314) 351-4225
TELEX 44-2436

RESUMES
OF
PRINCIPALS

Tab Schmidt
President
Kinetic Energy Development Corporation

Tab Schmidt is a developer and President of Kinetic Energy Development Corporation. He is a certified Professional Engineer, and a graduate of the University of Missouri at Rolla, with a B.S. in Mechanical Engineering. Mr. Schmidt has over 10 years of experience in evaluation, design, development, and operation of energy-producing facilities; with major emphasis in municipal waste-to-energy facilities.

Prior to forming Kinetic, Mr. Schmidt was Vice President of Development for Catalyst Thermal Energy Corporation (CTEC), a parent holding company for five district steam systems across the United States. Among Mr. Schmidt's responsibilities included the design, financing and construction of a 600 Ton per day, mass burn Trash-To-Energy facility for the City of St. Louis. Also, responsibilities included the conversion of a 300,000 lb/hr existing boiler facility to coal firing to provide emergency backup and peaking capability to the Trash-To-Energy facility. Additionally, a waste transfer station network was also designed to supplement the waste supply for the project. Other responsibilities included marketing, evaluation, and development of new projects and steam systems, and continued development of St. Louis operations. The full scope of these activities included coordination of legal, financial, engineering, construction, and governmental facets.

Mr. Schmidt also served as Vice President of Operations and Engineering for Thermal Resources of St. Louis, an operating subsidiary of CTEC. He was responsible for directing day-to-day operations of the Ashley Power Station, steam distribution system, and design and engineering tasks related to the steam system. Mr. Schmidt was the General Manager and Chief Operating Officer for the district steam system, to oversee its transition when it was bought from the local utility, Union Electric, in 1984. Responsibilities as General Manager included the start-up of operations; the hiring, training, and day-to-day direction of all operations, accounting, marketing, and engineering personnel; and the implementation of a business plan for the rebirth of the downtown district steam system.

In following that business plan, the district steam system has stopped the mass exodus of steam customers, attracted previous customers and new developments to connect to the district steam system, and obtained commitments for major expansion to the system for over a 30% increase in steam sales.

Mr. Schmidt also has experience as a consulting engineer from his association with Ellers, Oakley, Chester, and Rike, Inc.; a consulting engineering company with five offices across the mid-south. His experience with this firm as a Project Manager/Engineer included the

design and coordination of various disciplines for solid waste, wood waste, and coal-fired projects. Among Mr. Schmidt's responsibilities, specific tasks included:

- Marketing of engineering services;
- Evaluation and statistical analysis of waste streams;
- Market analysis of potential energy customers;
- Marketing and negotiation of steam sales agreements;
- Selection, evaluation and application of major equipment technology;
- Facility planning and preliminary design;
- Financial analysis of capital, revenue, operating expenses, and debt services for central steam facilities; and
- Review and coordination of legislative and permitting requirements relating to central waste-fueled facilities.

Tab Schmidt has also had hands-on field work experience as an engineer for Factory Mutual Engineering. Responsibilities included field inspection, evaluation, and report writing for a wide spectrum of industrial and commercial locations such as new construction site surveys, specification for hazardous processes and operations, security systems, loss investigation and evaluation and specification of combustion safeguards and interlocks for various furnace, dryer, and boiler applications. Classroom instruction, field training of new employees, top management contact, plan review, and report review were supplemented responsibilities.

Mr. Schmidt has served as the Chairman for the Refuse Energy Committee, Chairman of the Production and Cogeneration Committees, and a committee member of the Metering, and Research and Development Committees of the International District Heating and Cooling Association; and as a member of the District Heating and Cooling Committee of ASHRAE, American Society of Heating, Refrigeration, and Air Conditioning Engineers.

Jerry Corbier
Vice President
Kinetic Energy Development Corporation

Jerry K. Corbier is Vice President for Kinetic Energy Development Corporation where he specializes in Marketing and Development of alternative-energy projects.

Jerry began his career as an engineer with McDonnell Douglas Aircraft Corporation in St. Louis where he developed weight reduction strategies for the F/A-18 Hornet, a fighter jet used by the U.S. Navy.

From there, he became a Sales Engineer for a porcelain enamel and steel fabrication manufacturing firm. There he gained extensive experience in manufacturing and cost-estimating techniques.

Jerry broadened his knowledge and expertise when he later joined Harris Corporation, a Fortune 200 computer and electronics manufacturer, as their National Accounts Manager in Atlanta. He directed a group of Sales and Technical Support Representatives who marketed computer and telecommunications equipment to Fortune 500 corporations. Jerry was one of the youngest National Account Managers in the company's history and received many sales and sales training awards while with Harris.

Jerry was then recruited by Contel Corporation, a multi-billion dollar telecommunications firm, to fill the role of Senior Marketing Editor, where he headed up a team of engineers and Account Executives that designed and marketed multi-million dollar telecommunications networks for municipal, university, utility and industrial clients. Mr. Corbier was largely involved in managing the technical proposal development to bid requests.

Jerry then joined Catalyst Thermal Energy Corporation in St. Louis as their Project Manager for Business Development. He worked extensively on major expansion projects for their district steam systems throughout the country. Jerry's experience also covered technical and financial analyses for projects such as major steam system expansions, Waste-to-Energy facilities, upgrades and conversions of their existing generating stations, and special applications of steam powered refrigeration equipment.

Mr. Corbier's responsibilities included the acquisition of satellite steam generating facilities as well as the development of a Regional Waste-To-Energy program for the St. Louis Metropolitan area. Jerry's additional expertise covered a broad range and included: determination of chilled water potential for various district steam systems;

identification of major steam loads; customer and vendor contract negotiations; major proposal development; and development and implementation of target marketing campaigns.

Jerry holds a B.S. in Civil/Mechanical Engineering and a minor in Marketing from the University of Illinois at Champaign/Urbana. His formal education and comprehensive background in marketing and engineering has provided him with a solid foundation on which to successfully fulfill his role as Vice President for Kinetic.

R E S U M E

ANTHONY C. MIRABELLA: VICE PRESIDENT - AFFILIATED RESOURCES CORPORATION

CURRENT STATUS: Mr. Mirabella is responsible for operations of Affiliated Resources Corporation and its subsidiary companies.

EDUCATION: Graduate of Stevens Institute of Technology - 1962 with a B.S. in Mechanical Engineering.
Advanced Aeronautical Engineering courses from Brooklyn Polytechnic Institute - 1963
Graduate of Western New England College - 1969 with a Masters in Business Administration.

EXPERIENCE: 1978-Present - Vice President of CNG, Affiliated Resources Corp. and its subsidiary companies including the Hartford Steam Co. and Energy Networks Inc.

1971-1978 - Mr. Mirabella was employed by Connecticut Natural Gas in the construction and management of its LNG plant and gas storage facilities.

1962-1971 - Mr. Mirabella was employed by Grumman Aerospace, and later by Hamilton Standard in several projects including Apollo and the Manned Orbiting Laboratory. Mr. Mirabella was a Project Engineer responsible for liason between the contractor and the customer agency.

AFFILIATIONS: Mr. Mirabella is a past President of the International District Heating and Cooling Association and has prepared and presented several papers on DHC topics. Mr. Mirabella is a member and past Director of the New England LP Gas Association, a member of American Gas Association, National LP Gas Association, and the American Institute of Plant Engineers. He is currently a Director of North American District Heating and Cooling Institute.

R E S U M E

PAUL A RIDGEWAY: DIRECTOR, COGENERATION AND DISTRICT ENERGY SYSTEMS - AFFILIATED RESOURCES CORPORATION

CURRENT STATUS: Mr. Ridgeway has a background in HVAC Design and Engineering. Present responsibilities include development of cogeneration projects as well ad district system themal energy designs.

EDUCATION:
BME - Western New England College 1971
MBA - Western New England College 1974
JD - Western New England College 1981
PROFESSIONAL ENGINEER - State of Connecticut 1977

EXPERIENCE:
1980-Present - Connecticut Natural Gas and Subsidiaries, Hartford, CT. Energy economics and analysis for cogeneration and HVAC systems.

1978-1980 - Minges Associates, Avon, CT. As Senior HVAC Engineer - design and specify economics of operations.

1971-1978 - Tuttle and Bailey, New Britain, CT. Manager, Air Distribution Engineer and Contact Sales. Responsible for field engineering group responding to 80 sales representatives. Design new products, marketing and literature programs.

AFFILIATIONS: Asrae, Association of Energy Engineers, North American District Heating and Cooling Association, Connecticut Cogeneration Society, - Board Member, Cogeneration Coalition of America - Board Member.

R E S U M E

JEFFREY T. LINDBERG: MANAGER OF OPERATIONS AND PRODUCTION FOR DISTRICT HEATING PLANTS - AFFILIATED RESOURCES CORPORATION

CURRENT STATUS: Mr. Lindberg is responsible for operations and production for all district heating and cooling plants. Major responsibilities include maintenance, metering, training, staffing and many other activities required to operate modern commercial heating and cooling district energy system.

EDUCATION: Advanced Power Transmission courses from the University of Central Connecticut State College - 1982.

Graduate of Tunxis Community College - 1981 with an A.S. in Industrial Technology, Major - Building Construction.

First Class Engineers Licene - 1978
Connecticut License Number E53 NAPE. Unlimited horse power (AC/boilers, etc.)

U.S. Navy Main Propulsion Systems School - 1974.

U.S. Navy Main Mechanical and Preventive Maintenance Systems Schools.

EXPERIENCE: PRESENT - Manager of Operations and Production for Heating and Cooling District Energy Systems.

1980-1982 - Mr. Lindberg was employed by Coordinated Systems, Inc. as Director of Power Systems. This division addressed all phases of power engineering with special emphasis on mechanical systems (i.e. chillers, boilers, turbines, pumps, heat exchangers, cogeneration projects, etc).

1976-1980 - Mr. Lindberg was Chief of Operations for a 200 bed hospital. Responsibilities included project managemednt and central plant operations with maintenance staff (including a JC80 energy management system, heat recovery incineration system, etc).

1974-1976 - Mr. Lindberg was utilities foreman for 1 million square feet of corporate office space. Responsibilities included central plant operations and maintenance support staff.

AFFILIATIONS: Mr. Lindberg is an active member of the following organizations: National Association of Power Engineers, North American District Heating and Cooling Association.

RESUME

JAMES A. TULLER: MANAGER, ENGINEERING AND CONSTRUCTION - AFFILIATED RESOURCES CORPORATION, ENERGY NETWORKS INCORPORATED

CURRENT STATUS: Mr. Tuller joined Energy Networks Incorporated this year to take charge of the development of new district heating and ooling systems and to respond to the needs of cities and utilities with older and less effecient steam systems.

EDUCATION: B.A. from Brown University 1968
Departmental Management Courses - U.S. Navy

EXPERIENCE: 1979-1985 - Project Engineer, The Dextor Corporation. Responsible for the execution of major capital improvement projects including the current feasibility analysis of a 20 MW cogeneration plant. Overall responsibility to the boiler plant and for HVAC systems throughout the process plant and office spaces.

1977-1979 - Power Plant Manager - Energy Unlimited, Inc. Managed two cogeneration power plants serving a major shopping mall and a hotel complex. Managed a major steam district heating system in the Bronx, Ne York. Responsible for preparation and implementation of preventative maintenance programs.

1969-1977 - Surface Line Officer - U.S. Navy. Line management of departments dealing with ships operations, electronics, power engineering and facilities management.

AFFILIATIONS: Association of Energy Engineers.

R E S U M E

DOUGLAS K. WALWORTH: PLANT SUPERINTENDENT - THE HARTFORD STEAM COMPANY

CURRENT STATUS: Mr Walworth is responsible for overseeing the operations of The Hartford Steam Company, Steam and Chilled Water Distribution Systems, Associated Facilities and Manages Operating Personnel.

EDUCATION:

U.S. Navy:
Propulsion and Engineering
Engineman/Machinist - A School
Nuclear Power School
Nuclear Power Training Unit
Air Conditioning & Refrigeration
Instructor Traininy
Leadership and Management

Business Management courses at University of Texas at El Paso Eastern Connecticut State University

High School - Burges High School - El Paso, Texas

EXPERIENCE:

PRESENT - Plant Superintendent for The Hartford Steam Company.

1970-1985 - U.S. Navy:
Engineering Department Leading Chief Petty Officer
Machinery Division Leading Chief Petty Officer
Instructor Submarine School
Maintenance, Material and Management Coordinator (3M)

AFFILIATIONS: Mr. Walworth is an active member of the Hartford Industrial Managers Club (YMCA).

R E S U M E

ROBERT P. THORNTON: MARKETING CONSULTANT - AFFILIATED RESOURCES CORPORATION

CURRENT STATUS: Mr. Thornton brings eight years of diverse experience in the energy field to his current position as Marketing Consultant for Hartford Steam Company and Energy Networks Incorporated. Major responsibilities are the development and expansion of the Downtown Hartford and the Capitol Energy Center District Heating and Cooling Systems. Sales, marketing and communications are his primary functions.

EDUCATION: 1981 graduate of Tufts University with a Bachelor of Arts in Psychology and English. Extensive coursework in Energy and Environment.

Additional courses in alternative energy design, sales and marketing skills and motivation.

EXPERIENCE: 1987-Present - Marketing Consultant, Affiliated Resources Corporation (see above status)

1985-1987 - Vice President, Light Flight, Inc. Entreprenurial soft goods venture with multiple responsibilities including sales, product development and operations.

1984-1985 - Sales Manager, Geo-Service Division, Megated Corporation. Responsible for sales and marketing of earth-coupled heat pump system to institutional, commercial and residential clients. Extensive proposal writing and lobbying experience.

1982-1984 - Sales Representative, Reynolds Aluminum Solar Energy Division. Direct sales of solar energy clients. Promoted to Commercial Systems Sales Manager for Boston area.

EXPERIENCE:

1978 - 1981	Consumer Affairs Assistant. Region One Department of Energy
1980 - 1981	Energy Consultant. Tufts University/City of Somerville
1979 - 1980	Appropriate Technologies Assistant. Region One Department of Energy
1978 - 1979	Research Assistant. Energy Policy Information Institute

R E S U M E

HAROLD B. LINDER: ENGINEERING SUPERVISOR - AFFILIATED RESOURCES CORPORATION

CURRENT STATUS: Mr. Linder is the supervisor of the Capitol District Energy Center Heating and Cooling Operations.

EDUCATION: Degree Candidate 1988 Columbia Pacific University BSEE

Military - Motor Controls, Sound and Vibration analysis, Electrical and Electronics

EXPERIENCE: Six years experience in operation, maintenance, and repair electrical equipment in nuclear power plants, training and supervising personnel to work on the same.

CIVILIAN

1986-Present - Engineering Supervisor Affiliate Resources Corporation.

1984-1986 - Industronics, South Windsor, CT - Field Service Engineer Supervisor. Installation and Operation of Waste to Energy Incinerators.

1983-1984 - Hartford Insurance Group, Simsbury, CT - Electronical Operator for Data Center Power Plant.

MILITARY

1977-1983 - U.S. Navy - Electrician and Electrical Operator on Ship Board systems including Nuclear Power Systems.

R E S U M E

ROBERT K. CALVER: PLANT SUPERVISOR - THE HARTFORD STEAM COMPANY, G. FOX PLANT

CURRENT STATUS: Mr. Calver is responsible for supervising and overseeing a group of engineers in safety and preventative maintenance of a large power plant which supplies heating, cooling and electricity to a 960,000 SF complex. Also, to do complete budgeting and purchasing as well as training of plant personnel.

EDUCATION:

1986-Present - Plant Supervisor for G. Fox Power Plant

1974-1986 - Plant Engineer (G. Fox)

1969-1974 - Assistant Plant Engineer (G. Fox)

1959-1969 - Watch Engineer (G.Fox)

1955-1959 - U.S. Navy. Honorable Discharge, 2 class Firemen

AFFILIATIONS: Mr. Calver is an active member of The State of Connecticut Advisory Committee on regulations applicable to boilers and pressure vessels since 1979.

Outside Interest--Licenced Antique Dealer

R E S U M E

CHARLES SIMMONS: MAINTENANCE SUPERVISOR - THE HARTFORD STEAM COMPANY

CURRENT STATUS: Mr. Simmons is responsible for overseeing maintenance of The Hartford Steam Company steam and chilled water systems. Manages maintenance personnel and provides operational support.

EDUCATION: Rutgers University in New Jersey - 1954

Engineering Courses at Hartford State Technical College

University of Hartford - 1952

High School - 1942

EXPERIENCE: 1983-Present - Maintenance Supervisor for The Hartford Steam Company

1980-1983 - Shift Foreman

1979-1980 - plant Operator

1978-1979 - Gas Dispatcher

AFFILIATIONS: Mr. Simmons is an active member of the Hartford Industrial Managers Club

B. C. CHRISTOPHER SECURITIES, CO.

Profiles of Public Finance Principals

John M. Holland
Executive Vice President, Manager

Mr. Holland, age 38, entered the investment banking business in 1976 after receiving his B.A. and J.D. from the University of Missouri. Mr. Holland is a member of the Missouri Bar, Kansas City Bar Association, and has been active in the Section of Local Government Law of the American Bar Association. Mr. Holland's experience includes a broad range of public finance activities with a special emphasis in the development and implementation of non-traditional financing methods. Mr. Holland has been involved in more than $2.5 billion in public financings for issuers throughout the Midwest and Southwest. Mr. Holland handled the financing for the City of Independence, Missouri, of its Blue Valley Power Plant in eastern Jackson County. He was responsible for all aspects of the financing, from financial feasibility to structuring and marketing. Mr. Holland has also managed the structuring and completion of many lease-purchase financings through not-for-profit issuers in the State of Missouri. His experience in this area has included refinancing of several lease-purchase transactions, including one for St. Joseph's Hospital in Kansas City, Missouri.

Rick Worner
Executive Vice President

Mr. Worner, age 33, entered the investment banking field in 1981 after having served as Governmental Affairs Director of the Greater Kansas City Chamber of Commerce. Mr. Worner, a graduate of Kansas University, has continued his involvement in local chamber affairs and served as Chairman of the State Affairs Committee of the Chamber of Commerce. Mr. Worner has

been active in structuring municipal financings that employ third party guarantees, as well as numerous traditional financings for states, counties, and municipalities throughout the region. Working with a regional utility system issuer and a national bond insurer, Mr. Horner developed the Country's first "insured trigger reserve" financing. This financing became the model for many similar financings throughout the Country. He recently completed a $32,910,000 financing for the Kansas City, Kansas Board of Public Utilities.

Bradford J. Max
Senior Vice President

Mr. Max, age 33, is a graduate of Kansas University and UMKC Law School. Mr. Max had previously been associated with the cities of Bonner Springs, Kansas, and Kansas City, Missouri. His writings in the field of Tax-Exempt Finance have been extensively published and he has addressed numerous trade groups on various aspects of Public Finance. He is a member of the Missouri Bar and American Bar Association and is active in civic affairs. Among his utility clients is the Electric Utility System of Chillicothe, Missouri, for which he completed a $13,245,000 financing in 1985. Mr. Max has also been active in structuring a variety of tax-exempt bond issues, including refinancings of local debt and bond issues by "on-behalf of" not-for-profit corporations for specialized facilities and equipment. In addition, Mr. Max is responsible for computer operations and programming related to municipal finance.

B. C. CHRISTOPHER SECURITIES, CO.

Profiles of Corporate Finance

Principals

Lee W. Peakes
Executive Vice President

Mr. Peakes joined B. C. Christopher in December of 1987. Mr. Peakes is responsible for marketing Corporate Finance services and coordinating negotiations between corporate clients and potential lenders. He is the coordinator of institutional privately placed products. Prior to joining B. C. Christopher, he spent nine years with George K. Baum & Company, a Kansas City based investment banking firm. He holds B.S. and M.B.A. degrees from the University of Kansas and serves on the board of directors of Citizens State Bank, L.I.C.O., Inc., Emmons Farms Corporation and Grand American Hotel Corporation.

Terry C. Matlack
Senior Vice President, Manager

Mr. Matlack joined B. C. Christopher in December of 1987. Prior to joining B. C. Christopher, he spent five and one-half years with George K. Baum & Company, a Kansas City based investment banking firm. Mr. Matlack has experience in virtually all phases of investment banking, including management leveraged buyouts, private placements, public offerings and general corporate consultation. He is a Chartered Financial Analyst and holds a B.S. degree from Kansas State University and M.B.A. and J.D. degrees from the University of Kansas. He is a member of the Kansas City Society of Financial Analysts, the Kansas and American Bar Associations and is licensed to practice law in the state of Kansas.

Michael D. Bruhn
Senior Vice President

Mr Bruhn joined B. C. Christopher in December of 1987. Prior to joining B. C. Christopher, he spent three years with George K. Baum & Company, a Kansas City based investment banking firm. Mr. Bruhn has underwriting responsibilities in corporate finance, in which capacity he works closely with corporate clients in determining their capital needs and structuring the optimal financing. He also is primarily responsible for B. C. Christopher's merger, acquisition and divestiture consultation services. Mr. Bruhn holds B.J. and M.B.A. degrees from the University of Missouri.

PRESS RELEASES

For More Information Contact:
Tab Schmidt
Kinetic Energy Development Corporation
(314)621-5656

PRESS RELEASE

FOR IMMEDIATE RELEASE:

KINETIC SELECTED AS TECHNICAL ADVISOR FOR ST. CLAIR COUNTY, ILLINOIS

Kinetic Energy Development Corporation, a St. Louis-based independent power producer was selected to provide review, planning and recommendations in a long-term management plan for waste disposal in conjunction with the application received by Waste Management, Inc. for expansion of the Milam landfill. St. Clair County is adjacent to downtown St. Louis and comprises a part of the regional wasteshed for Metropolitan St. Louis.

The County selected Kinetic for its expertise in environmental engineering, project development and its background, database and experience in the energy and waste disposal industries.

The work is being performed through a recently formed subsidiary, Kinetic Environmental Laboratories, Inc., noted Kinetic President Tab Schmidt. Schmidt adds that the focus for Kinetic Environmental Labs will be to bridge the gap between existing disposal systems and state-of-the-art Trash-To-Energy Systems. "Long-term environmental planning will create a solid basis for both landfill and Trash-To-Energy Systems," said Schmidt.

Kinetic is also providing assistance to a project initiated in August by the Missouri Department of Natural Resources and administered by Bi-State Development Agency of St. Louis. Kinetic's efforts will include a full technical implementation plan, costs, financing, a business plan, as well as site selection for a Municipal Solid Waste and Sewage sludge co-disposal operation in the St. Louis Metropolitan area.

Kinetic Energy Development Corporation owns and operates generation facilities that produce energy from waste and alternative fuels for sale to institutional, industrial, commercial and residential users. Headquartered in St. Louis, Kinetic develops energy projects throughout the United States.

Kinetic Energy Development Corp. - INDEPENDENT POWER PRODUCERS

PRESS RELEASE

For more information contact:
KINETIC ENERGY DEVELOPMENT CORPORATION
TAB SCHMIDT
314/621-5656

FOR IMMEDIATE RELEASE:

TRASH TO ENERGY DEVELOPER PURCHASE'S INDUSTRIAL SERVICES OF CENTRALIA

Tab Schmidt, President of St. Louis based Kinetic Energy Development Corporation, today announced that Kinetic purchased Industrial Services of Centralia, Illinois.

Industrial Services is an environmental, waste management concern, serving industrial, commercial and residential customers in a multi-county area of central Illinois.

Schmidt said, "our core business is developing and owning alternative energy projects, and the purchase of Industrial Services provides for development of waste to energy projects in their service area. This process provides two benefits, a safe and environmentally sound alternative to landfilling waste, and a stable, low cost supply of energy for the future"

"As energy costs start to rise again, waste to energy plants will become common place, and this acquisition complements our long term plan." Schmidt said.

(more)

Industrial Services will begin operations through Kinetic Environmental Laboratories, Inc., and Centralia Environmental Services, Inc., both Kinetic subsidiaries.

Schmidt adds that the focus for Kinetic Environmental Labs will be to bridge the gap between existing disposal systems and state-of-the-art Trash-To-Energy Systems. "Long-term environmental planning will create a solid basis for both landfill and Trash-To-Energy Systems," said Schmidt.

Kinetic is also providing assistance to a project initiated in August by the Missouri Department of Natural Resources and administered by Bi-State Development Agency of St. Louis. Kinetic's efforts will include a full technical implementation plan, costs, financing, a business plan, as well as site selection for a Municipal Solid Waste and Sewage sludge co-disposal operation in the St. Louis Metropolitan area.

Kinetic Energy Development Corporation owns and operates generation facilities that produce energy from waste and alternative fuels for sale to institutional, industrial, commercial and residential users. Headquartered in St. Louis, Kinetic develops energy projects throughout the United States.

###

BH/dc:02/01/88

TECHNICAL PAPERS

REVITALIZATION OF ST. LOUIS AND BALTIMORE DISTRICT HEATING SYSTEMS

W.T. Schmidt, P.E. B. Mitchell

ABSTRACT

The history behind the St. Louis District Steam System stretches as far back as 1904 when the power plant was constructed to provide electricity for the St. Louis World's Fair. Later in the early 1900s, a local utility began marketing a new product in St. Louis called electricity. In order to gain acceptance by their customers to use electricity for lighting, they developed a network of steam pipes in the downtown area to serve the heating needs of their potential customers. In 1923 the 22-mile grid system was interconnected to a power plant and the District Steam System was formed as we know it today.

The original franchise for the Baltimore District Steam System was issued in 1901. The start of this district steam system was heavily focused to provide an ammonia refrigeration loop for downtown Baltimore. Ongoing in its development the franchise was transferred to a local utility in 1929. The system as we know it was again transferred in 1975. In February of 1985, an energy development company was selected by the local government, the state public service commission, and the local gas and electric company to purchase, operate and manage the existing district steam system serving the central business area of downtown Baltimore.

Historically, the operations in St. Louis and Baltimore were outside of each utility's main business activity of providing reliable production and distribution of low-cost electricity. This has led to a declining trend of their viability. The basic goal of the revitalization business plan for each city has been to provide reliable and quality service at stable steam prices over the long term. This is being accomplished through a detailed business plan that includes three fundamental actions:

1. Switching to solid fuel for steam production.

2. Capital investment which improves overall operating efficiency.

3. The addition of new customers that will provide for a sharing of fixed costs over a larger customer base.

INTRODUCTION

The experience gained by the two cities of Baltimore and St. Louis and the revitalization of their district heating systems is contained in this analysis. Both systems have been successful in their revitalization programs to date.

The addition of the waste-fired steam supply contract with a solid waste authority's facility in Baltimore and the newly executed waste supply contract with the City of St. Louis for the supply of waste to a proposed-trash-to-energy facility appear to offer the same advantages of low cost energy to each district steam system. The increase of the franchise area in Baltimore to four times the original area offers a significant growth potential for that system. The presently installed capacity in St. Louis is capable of serving three times the existing steam load. Within the existing boundaries of the district steam system in St. Louis there is a potential of a 300% increase in the volume of sales. In addition to this is the potential of entering new markets such as steam for air conditioning. These new markets can have a levelizing effect on the load duration curve for this type of system. The arrangement of each district steam system is characterized in the drawings found in the appendix.

HISTORY

Both cities' systems were built in the early 1900s. The power plant in St. Louis was built in 1904 for the St. Louis World's Fair. A local utility owned and operated this facility until the sale in December of 1984 to a local governmental development agency and a private energy development corporation. The government development agency owns the distribution network with the private energy development corporation holding a long-term lease to the distribution system. The private energy development corporation manages, operates, and maintains the entire plant and distribution system. During this power station's life, several updates have been made to its original 57-boiler steam facility in the early 1900s resulting in the five large steam boilers that were added in the 1940s. These boilers were originally designed to burn pulverized coal; two were installed in 1940 and the other three installed in 1947. In the early 1970s these boilers were converted to burn #6 fuel oil due to environmental laws passed in the late 1960s which would have required costly air pollution control equipment to be installed. Each of these boilers are presently capable of supplying 300,000 pounds per hour at 250 psi and 525 F; (2.38 E9 kg/s at 1.72 E3 kPa (gage) and 274 C); (Conference of Mayors, 1986; HDR, 1983).

During the late 1960s, the number of customers peaked at about 500. During the mid to late 1970s the inflation of oil prices caused the price of steam to increase drastically resulting in reduced steam sales and loss of customers. The historical trends for both steam sales and steam prices on the district system are illustrated on the graphs in the Appendix. The system became less and less profitable, reaching a low of 250 customers. The utility operated this system at losses four of the five years between 1978 to 1983, thus resulting in an offer in 1983 to sell the system. In September 1982 the U.S. Department of Housing and Urban Development sponsored a technical assistance team to assist St. Louis in assessing ownership options for the District Steam System. Based on the findings of this team, the City of St. Louis hired a consulting engineering firm to evaluate the steam plant and downtown district steam system as an integral part of a resource recovery development. This report concluded, "The plant was physically capable and economically feasible of supplying supplemental steam to meet the peak loads of the downtown district steam system when used in conjunction with a new resource recovery facility capable of burning an average 600 tons per day."

Since 1901, quality steam service has been provided to the central business district of downtown Baltimore. The most recent owner made a decision to divest themselves from district heating and concentrate on their gas and electric business as only 1% of their total corporate sales was generated by their steam system. Although the steam system was

profitable during the last six years that those owners operated it, this allowed them to concentrate their time and efforts on the electric and gas business. During the time those owners attempted to divest itself of the steam system, a steam moratorium was put in place and smaller customers that could convert to an alternate fuel were encouraged to do so.

A steam utility company was formed in February of 1985 as a subsidiary of an energy development company. After the close on the sale of the steam system, a one-year transition was completed with the assistance and support of the Mayor's office, the gas and electric utility, the regional solid waste authority and the turnkey contractor of the newly constructed trash-to-energy facility in Baltimore.

The Baltimore District Steam System is a thermal energy network that distributes steam through insulated pipes to over 500 commercial, institutional, and government facilities in Baltimore. The system has been served from two oil-and gas-fired production plants. With the availability and integration of waste-fired steam from a solid waste authority's resource recovery plant, the district steam system now purchases over 70% of the required steam from this new and modern trash-to-energy facility. A 20 year contract for the purchase of steam from this trash-to-energy facility was signed on September 7, 1984. The interconnection between the district steam system and the trash-to-energy facility was completed in January of 1986, nine months after the sale of the district steam system in Baltimore.

The historical trend in sales volume and steam prices for the Baltimore & St. Louis systems are illustrated on the graphs found in the Appendix.

REVITALIZATION BUSINESS PLAN

The basic business plan goal is to provide reliable and quality service at stable steam prices over the long term. District steam provides both short-and long-term benefits. Elimination of installed heating equipment results in substantial first cost savings. This technology provides fuel switching to allow economic dispatch and the integration of alternate fuels such as waste-fired steam. Operational expenditures by the building owner for man power, space, insurance, property taxes, debt service, and maintenance are reduced. Architects and engineers normally oversize a facility's heating requirements to insure the tenants' future needs. This results in the unnecessary expenditures of energy. District steam systems provide only the thermal energy that is required. Energy conservation is immediate and the pay back in energy cost savings are evident, especially when the unit cost of the thermal energy is lower at the outset.

The business plan for revitalization of both district steam systems includes three fundamental ingredients:

1. Switching to solid fuel for steam production.
2. Capital investment which improves overall operating efficiency.
3. The addition of new customers that will provide for a sharing of fixed cost over a larger customer base.

A case study of both programs has identified common ingredients. Both systems are incorporating trash-to-energy as the solid fuel to produce long term stable steam prices to the energy market. In Baltimore this included the building of an interconnection between the solid waste authority's trash-to-energy facility and the district steam system. This 12-inch (305 mm), steam line is capable of handling 350,000 pounds per hour of steam at 430 psig and 500 F (2.78 E9 kg/s at 3.10 E3 kPa(gage) and 260 C). The total capital cost for this interconnection was approximately $1.2 million. The purchase of low-cost steam from the waste-to-energy facility has

resulted in reduced energy costs to its customers. The fuel rate adjustment part of a customers bill, which is a direct fuel cost pass through, has been reduced 26%. This reduction translates into an annual cost saving of over $2,600,000 to the users of the district steam system.

The St. Louis business plan includes implementation of its own trash-to-energy facility by its new owner. The City of St. Louis has approved a 20-year agreement to supply an average of 600 tons per day (544 tonnes per day) to the facility which can generate steam at approximately 140,000 pounds per hour at 250 psig and 525 F (1.11 E9 kg/s at 1.72 E3 kPa (gage) and 274 C). Over $4 million has been invested towards engineering design and development of this facility as well as the acquisition of the site. The total cost for the project, including financing, is approximately $70 million. Construction is currently scheduled to break ground in 1987. The design for this trash-to-energy facility provides for a total of 1200 tons per day to be processed at this facility with future expansion.

Additionally, the St. Louis business plan intends to incorporate coal firing at the existing power plant to provide back-up and peaking requirements in addition to the trash-to-energy facility. The conversion of one boiler at the power station facility could provide 240,000 lbs per hour (1.90 E9 kg/s at 1.72 E3 kPa (gage) and 274 C) of steam capacity at 250 psig and 500 F (1.11 E9 Kg/s at 1.72 E3kPa (gage) and 274 C). The capital required to convert one of these boilers at Ashley is approximately $4 million.

Both systems have specific investments designed to increase the overall operating efficiency and the quality of service to customers. The Baltimore and St. Louis systems have both made substantial investments to recondition expansion joints and steam traps found on the distribution systems. Specifically, Baltimore is currently investing approximately $400,000 to upgrade a six-block area of its district steam system to accommodate high-pressure steam. The St. Louis steam system has made minor changes in the water treatment program to provide a better quality of steam to its customers.

Both systems have implemented an aggressive, comprehensive marketing program to add new customers that will provide for a sharing of fixed costs over a larger customer base. This program includes marketing brochures and public relations programs to educate the community on the benefits of energy from a central steam system. Customer service programs for the existing customer base include energy manager audits for the customers as well as maintenance services available for customer-owned equipment. Competitive and innovative tariff's for the customers are a very important ingredient to the revitalization program. Tariff's designed to focus on a specific market such as air conditioning and refrigeration will create a whole new profile of operation for a district steam system to change from a seasonal operation to a year round energy supplier. Additionally, both programs focus on a role of the district steam system to be an energy manager for the community, and provide turn key utility services which can range from providing heat exchangers for hot water needs of a customer to providing the entire centralized HVAC system for the customer.

The Baltimore system has connected a new high-rise office building of approximately 355,000 square feet and a newly renovated hotel for downtown Baltimore. The Baltimore system also has commitments for two projects currently under design which would add a new shock trauma center in an office, and a shopping mall to the system. In addition to these projects, over 1,000,000 Mlbs (4.54 E8 kg) of steam has been targeted for potential customers to the Baltimore district steam system. In part, expansion of the district steam system has targeted a state office complex, a 2600-unit

public housing facility, and two local hospitals as potential customers to the system.

Since December 1984, the St. Louis system has already connected a brand new 900 room convention hotel; a multi-use retail office complex; a 665,000 sq. ft.(61,799 sq m), 34 story office building; a 165,000 sq. ft. (15,329 sq m), office building; a 600,000 sq. ft. (55,740 sq m), 13 story residential complex; and a 1,250,000 sq. ft (116,125 sq m),, 42 story office complex for the local phone utility. An additional group of potential customers has also been identified. The majority of these customers were previously on the district steam system and are currently serving their needs with gas fired boilers. In researching the outlying area of the district steam system in St. Louis, two major expansions have been identified. A feasibility analysis by a consulting engineering firm has identified an approximate 250,000 Mlb (1.14 E8 kg) increase to the district steam system by interconnecting the housing authority facilities at the periphery of the district steam system. The cost of extending lines for the housing authority facilities is approximately $5,300,000. This expansion would interconnect five independent facilities of the housing authority. In order to obtain a foothold on a hospital complex adjacent to the district steam system in St. Louis, the central boiler plant for this hospital complex was acquired in July of 1986 by the energy development corporation. As part of the plans for interconnection of the housing authority, a steam line extension would be directed to include the hospital complex at a later date.

An in-house feasibility analysis by the energy development corporation in St. Louis has identified in excess of 800,000 Mlbs of steam potential along an industrial corridor to the north side of the district steam system. This extension would require approximately three-miles of pipeline with interconnection branches for those industrial customers. The estimated capital cost is approximately $5 million for this north industrial corridor. Potential for additional expansion to the east, west, and south exist, but have not yet been fully quantified.

The air-conditioning market in St. Louis is estimated to offer a 300% increase in the current level of sales in St. Louis. This market would be served with the use of absorption chillers by new potential customers and district chilled water distribution systems where applicable.

LESSONS LEARNED

Defined communication and educational programs are necessary ingredients for the development of the revitalization program due to the diverse backgrounds of the project participants. The diverse perspectives of the technical engineering community, financial community, utility industry, energy customers, and government involve an intense effort of communication and education for each group to understand the benefits of central steam to the community.

The revitalization of a district steam system is a very complicated and multifaceted redevelopment. Keeping the program as simple a possible and approaching the development in a step-by-step manner can assist in a more straightforward implementation of the project. For instance, changing the form of regulation in St. Louis from Public Service Commission regulation to contract regulation, as well as the implementation of a trash-to-energy project, and the acquisition/transition of the central steam system all at once provided a very complicated program. Tackling these programs one at a time increased the probability for success.

KEYS FOR SUCCESS

There are five areas of significance to the revitalization of a district steam system:

1. Physical condition of the power plant and district steam system.
2. A critical level of sales to support fixed costs of the district steam system.
3. The form of regulation to allow flexibility in obtaining tariffs to meet the customers needs.
4. A local commitment to the revitalization of the district steam system.
5. Capital investment.

CONCLUSIONS

The following conclusions can be drawn from reviewing the data obtained in the case study of the Baltimore and St. Louis district steam systems.

1. Central steam systems have inherent qualities to provide long-term stability for energy users.
2. Solid fuels--trash and coal--are readily compatible to central steam systems and are typically not available to the potential customers of a downtown district steam system.
3. Central steam systems can grow to serve a large customer base when the ability to provide service at stable prices is part of the revitalization program.
4. A community revitalization program and a central steam system revitalization program follow hand and hand. Each program can help the other.

REFERENCES

Conference of Mayors. 1986. "A case study of district heating and resource recovery" St. Louis.

Henningson, Durham, & Richardson, Inc. 1983; "St. Louis resource recovery project. Evaluation of the Ashley steam plant and downtown district heating system."

ACKNOWLEDGMENTS

Stu Temple, Baltimore Steam Company; Mike Larkin, Baltimore Steam Company; Jackie Hughes, Thermal Resources of St. Louis; Lisa Lindemann, Thermal Resources of St. Louis; Beth Lammi, HDR Techserve.

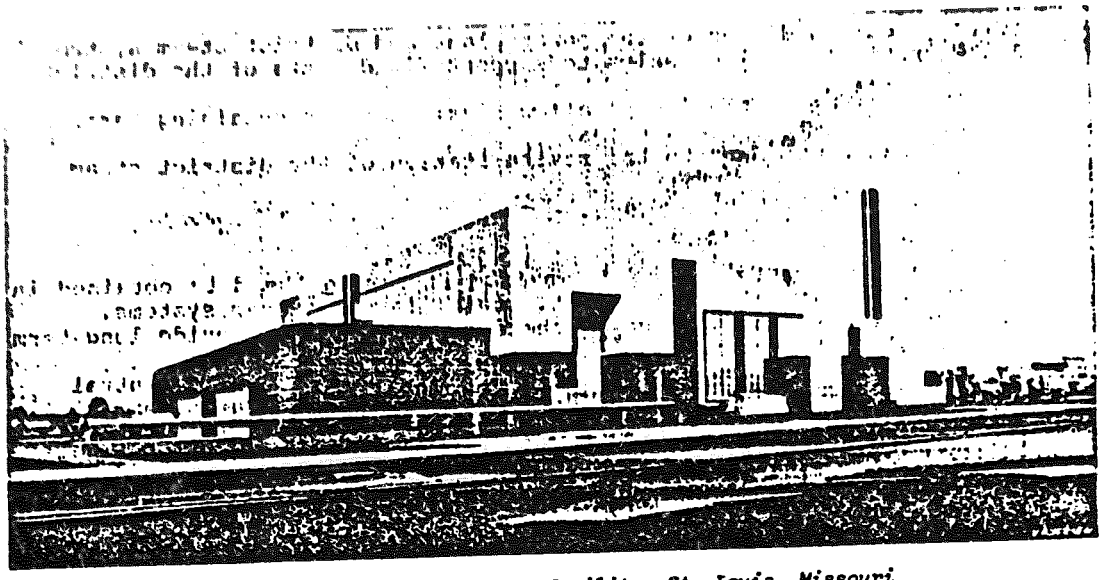


Figure 1. Trash to energy facility--St. Louis, Missouri

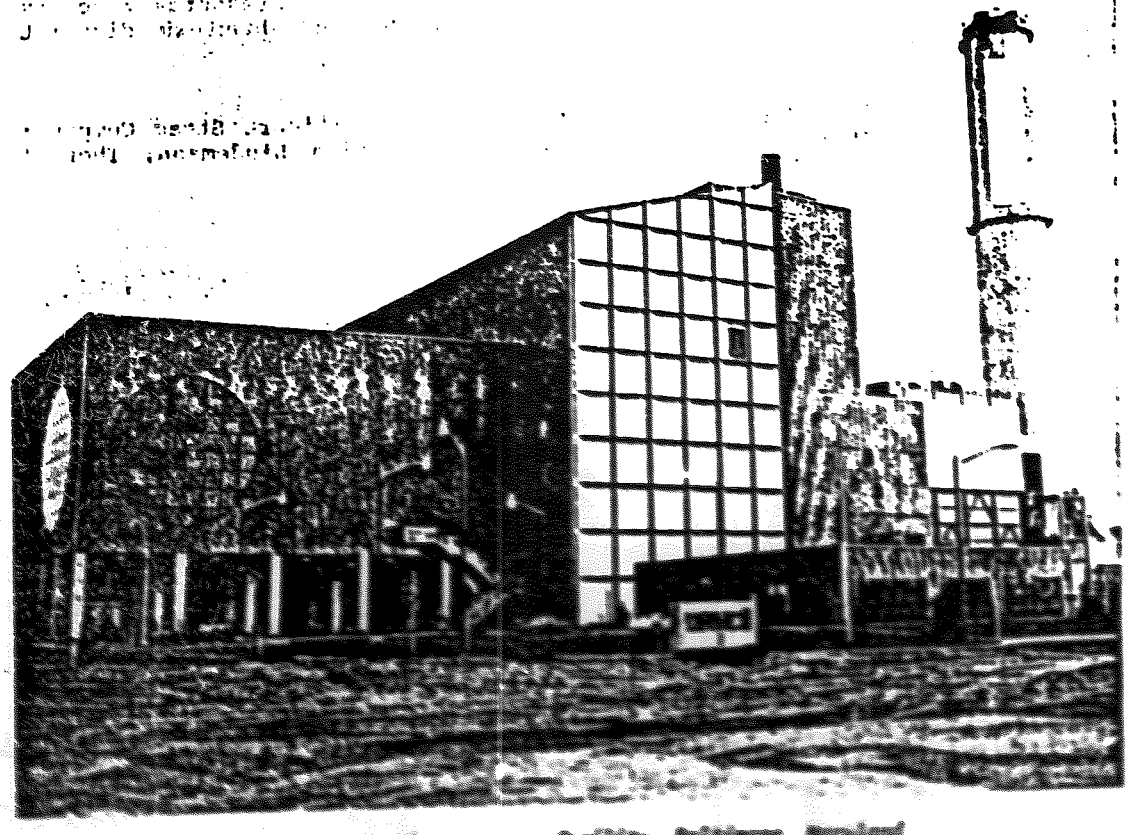


Figure 2. Trash to energy facility--Baltimore, Maryland

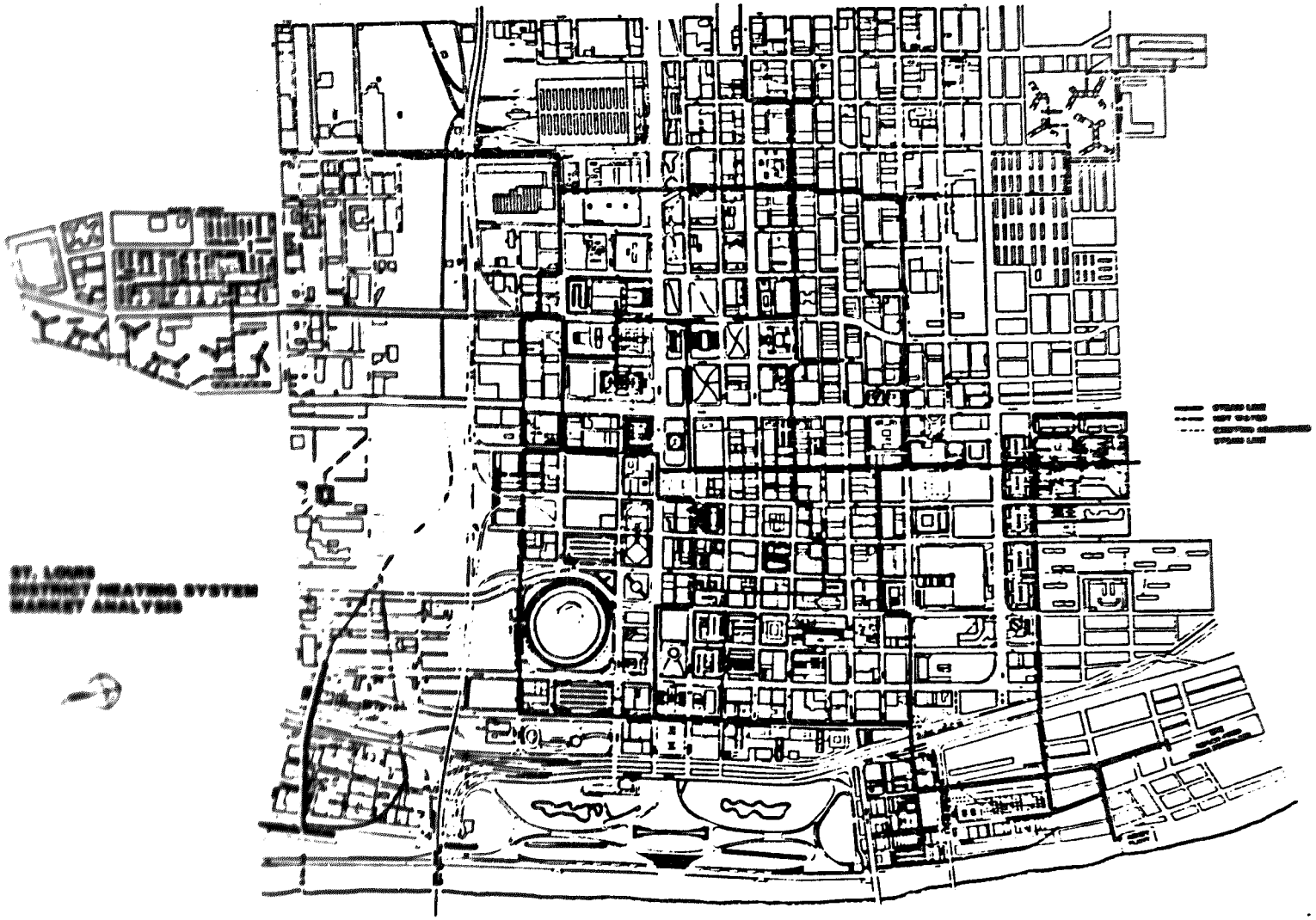


Figure 3. Steam distribution system--St. Louis, Missouri

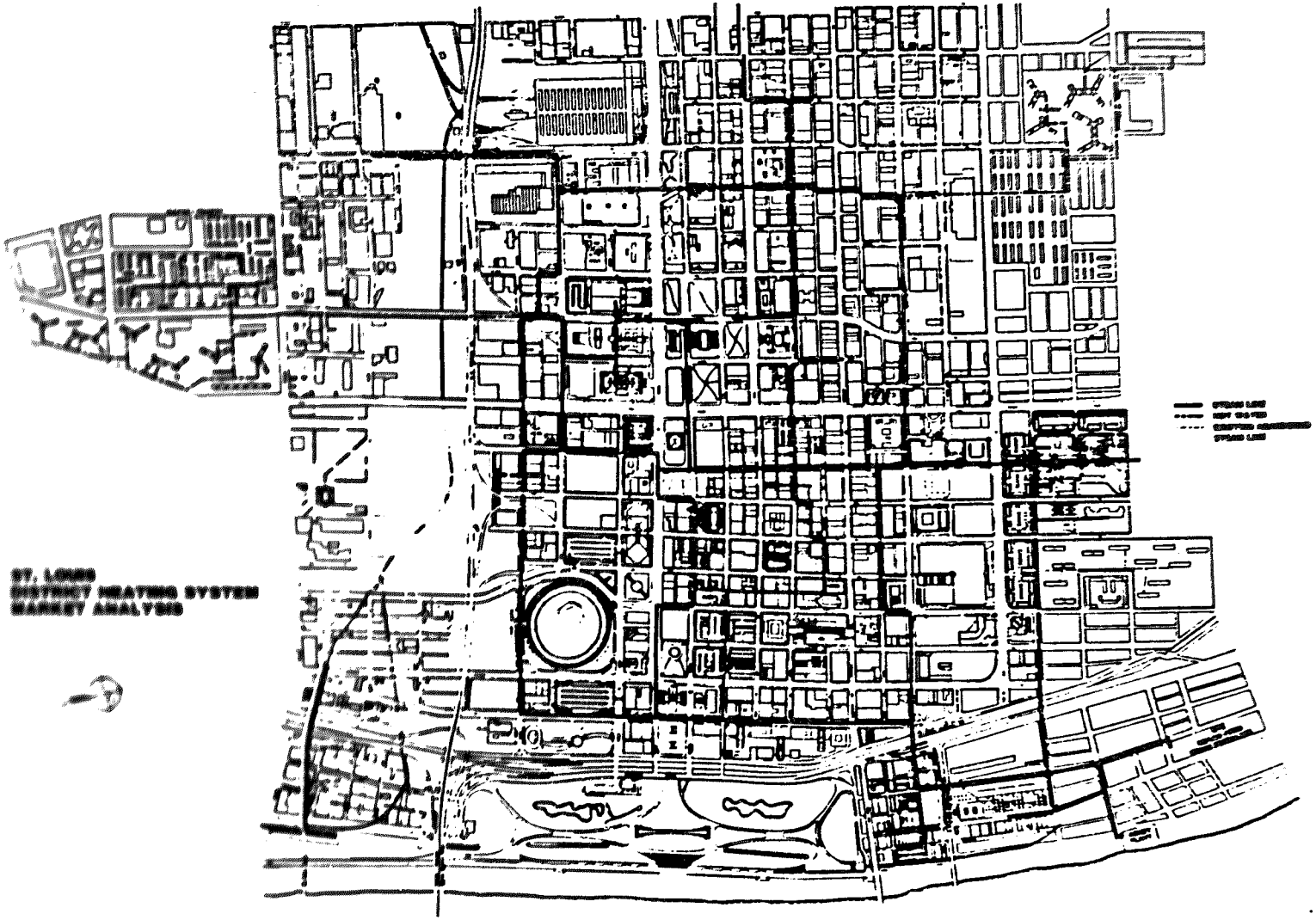


Figure 3. Steam distribution system--St. Louis, Missouri

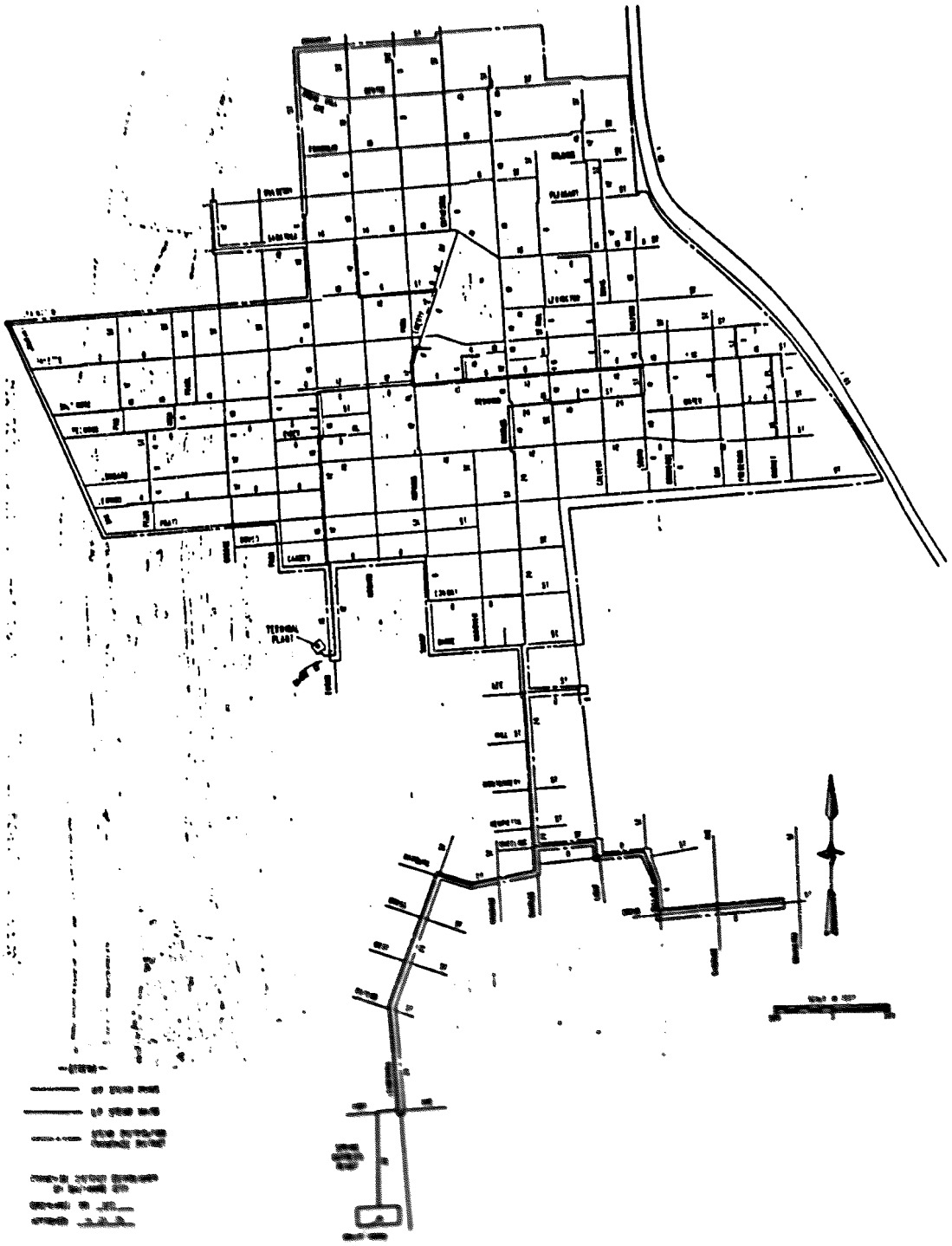


Figure 4. Steam distribution system--Baltimore, Maryland

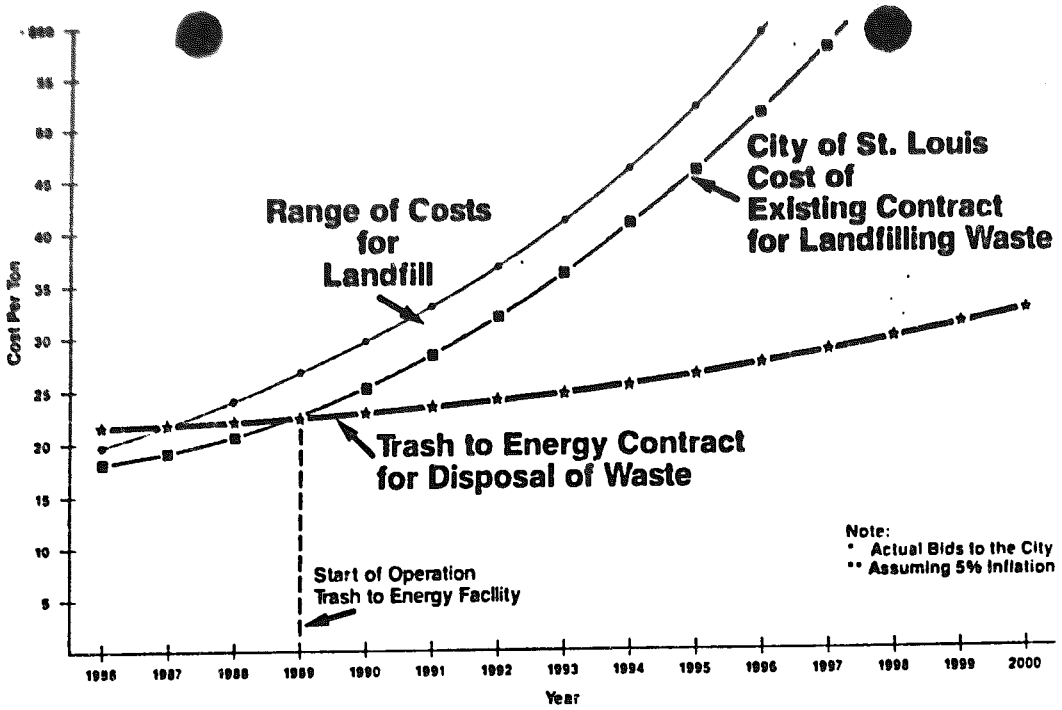


Figure 5. Waste disposal fee--St. Louis, Missouri

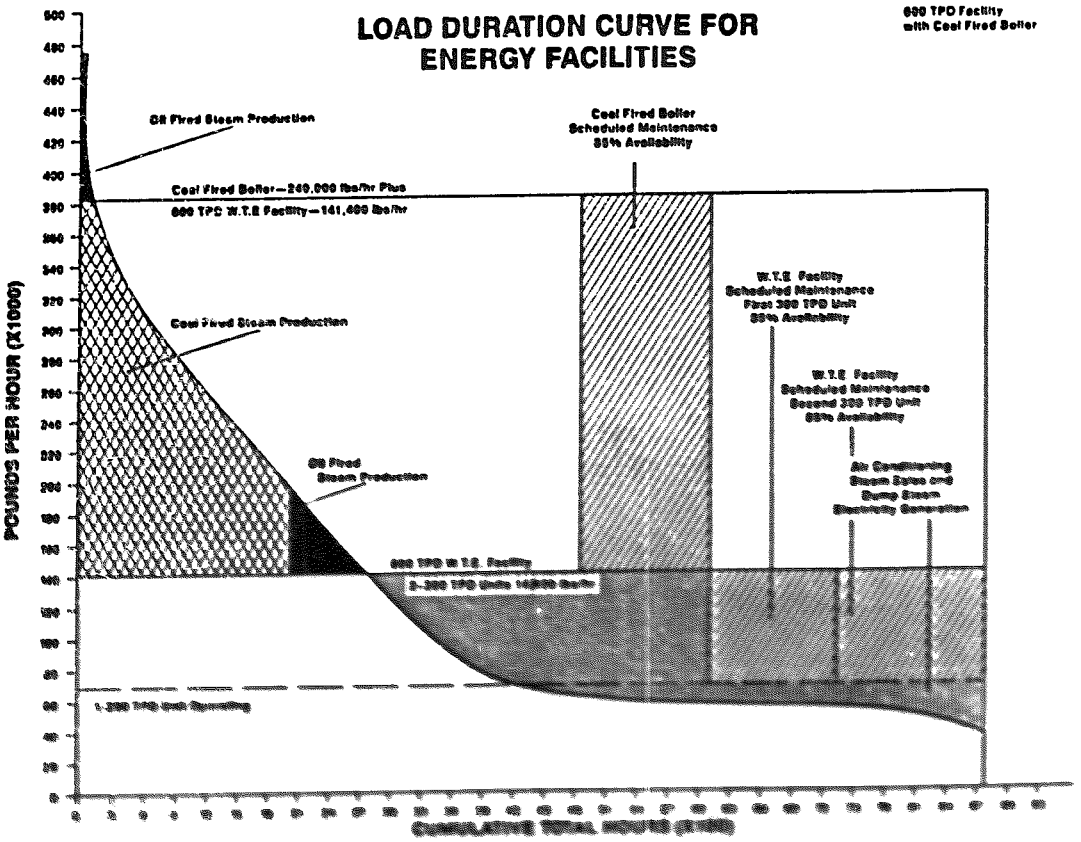


Figure 6. Load duration curve--St. Louis, Missouri

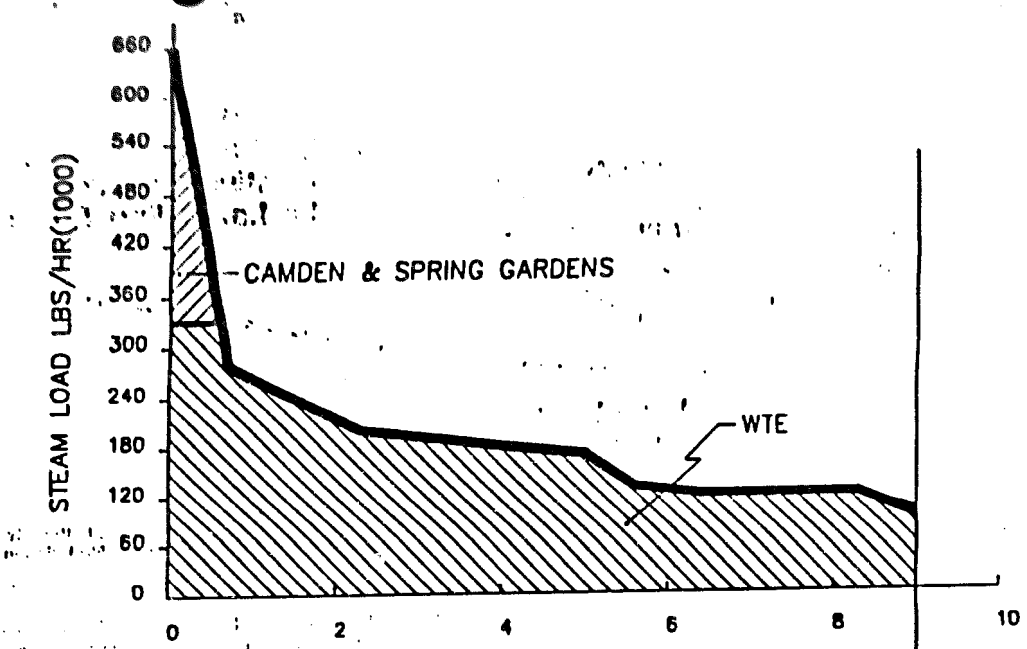


Figure 7. Load duration curve--Baltimore, Maryland

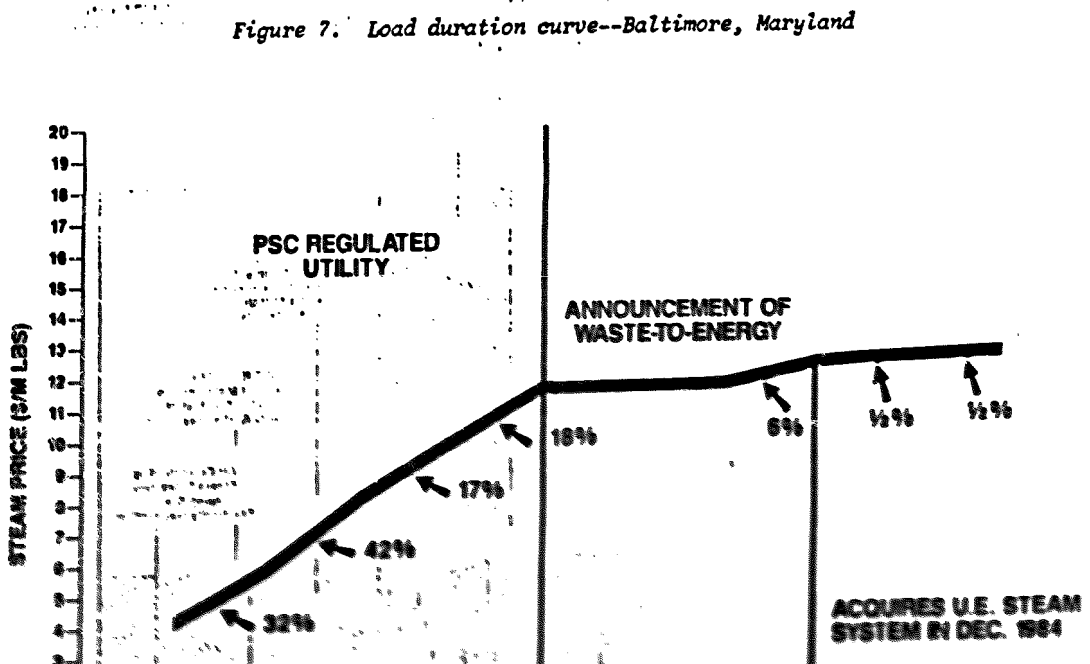


Figure 8. Steam price history--St. Louis, Missouri

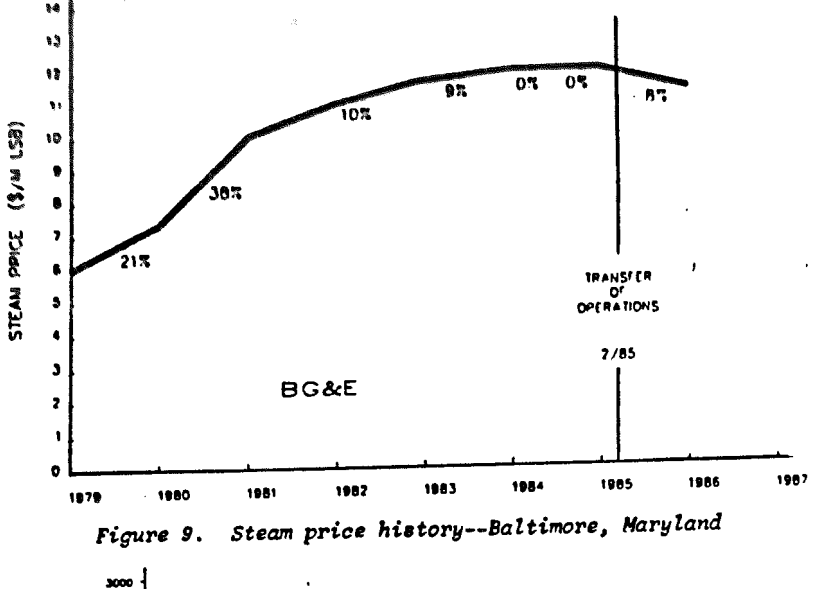


Figure 9. Steam price history--Baltimore, Maryland

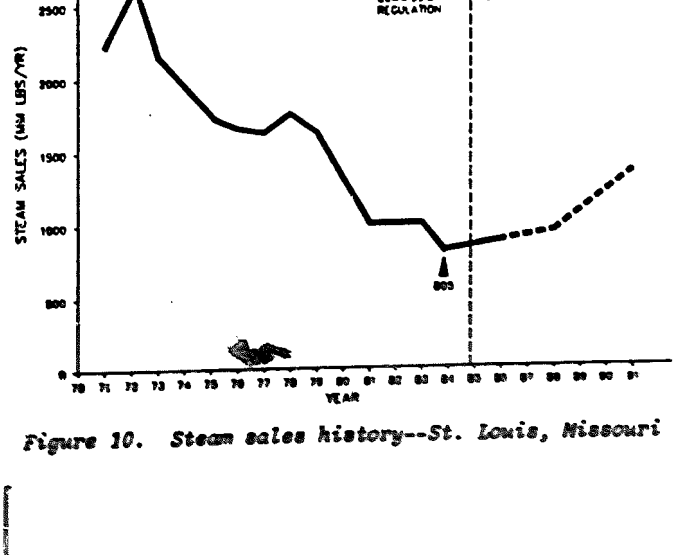


Figure 10. Steam sales history--St. Louis, Missouri

Figure 11. Steam sales history--Baltimore, Maryland

3. Purchaser's approach to providing steam service in downtown Kansas City, Missouri.

Kinetic's aim is to provide reliable steam service at a competitive price. We feel that the system is a viable entity which can be operated for the long-term good of the present customers of the steam system.

We do not see great expansion potential for steam in the Kansas City area due to the large capital costs associated with running new steam lines and the fact that there are other forms of economical energy which we will be competing with. Our focus is reliable, long-term steam service to customers in downtown Kansas City.

Our goal is to operate the steam system at its present sales level. We hope to reduce costs to increase operational and boiler efficiencies and hold prices for existing customers at a stable rate for future years. Additionally, we will pursue the use of multiple supplies of solid and fossil fuels to provide choice and flexibility for changing economic conditions. We want to make sure that the option of steam heat is preserved for downtown Kansas City businesses since many customers do not have the capital or room to install boilers in there own building.

Kinetic will approach the revitalization of this system in an identical manner as the principals of Kinetic implemented the revitalization of the St. Louis system. We will organize and establish management, accounting, marketing, and customer service departments prior to closing. We anticipate a one year time period will be necessary to train and transition operations

and maintenance personnel. This business plan will focus particular efforts toward customer services and energy management.

4. **Steam rates and the conditions of steam service to be provided by purchaser.**

Kinetic plans to serve the existing customers by holding rates steady in year 1 at $11.50 per mlb. In years 2 and beyond, the rates will fluctuate with our production costs in much the same manner that your rates now fluctuate. We intend to implement a stable rate program for service to downtown customers similar to the program the principals of Kinetic implemented in St. Louis, Missouri. This program was accepted by the Missouri Public Service Commission and has received support from the City and other governmental agencies, as well as the downtown steam customers. Further, this program has a successful track record for revitalization of the downtown steam system. Through a reduction in overhead costs and a concerted effort to increase operational and boiler efficiencies, it is Kinetic's intent to implement a slight rate reduction in the first few years with a formula for future escalation based upon indices related to our cost of service. We foresee the following rate structure:

	1988	1989	1990	1991	1992	1993
$/MLB	$11.50	$11.25	$11.00	(Formula for future increases based upon government published indices.)		

Our intent is to offer the lowest rates possible while still insuring the solvency of the business. Market conditions for competitive fuels will set the structure for future escalations.

5. Disposition of Grand Avenue Station

Kinetic is proposing two options to KCP&L. Under option 1, Kinetic will purchase the Grand Avenue facility outright. It will then be retrofitted to install steam generating capacity which is better suited for the downtown system's needs. This will increase the seasonal boiler efficiency and result in somewhat lower steam rates.

Under option 2, Kinetic will purchase just the steam distribution system from KCP&L. Kinetic will then begin construction of a new steam generating facility which will be sized to meet the system's steam demands as well as insure adequate backup. Kinetic will then lease the Grand Avenue Station from KCP&L for the purpose of producing steam for the downtown system. This lease will be effective until the new facility is operational and will not be more than three years from the date of the system purchase. At the end of the lease, KCP&L will retain ownership of the Grand Avenue Station and will be able to utilize it as a electrical generating facility, donate it to the Friends of the Aquarium or use it in any other way KCP&L sees fit. KCP&L shall warrant not to compete with Kinetic by utilization of the Grand Avenue Plant for steam service to the downtown distribution system.

KCP&L has the right to chose which ever option it feels is most beneficial to itself as well as the citizens of Kansas City.

Kinetic has made provisions for the site location, preliminary design and engineering, construction costs, and environmental permitting of a new steam

production facility to be implemented under option 2. The information, documentation, drawings and illustrations related to this facility are proprietary. However, the information will be provided subsequent to an executed Sale/Purchase Agreement between KCP&L and KEDC and this information will be made part of conditions precedent to closing.

Kinetic Energy Development Corp.

CORPORATE GUARANTEE

Sum: $100,000.00 THE SUM 100000 DOLS 00 CTS

One Hundred Thousand Dollars

Effective Date: March 25, 1988

Kinetic Energy Development Corporation, a Missouri Corporation, 712 N. Second, Suite 210, St. Louis, Missouri does hereby unconditionally guarantee the performance as a bidder of all terms, conditions, corrections, and addenda provided in the Request for Proposal, dated January 25, 1988; and the Proposal submitted by the Corporation dated March 25, 1988, hereinafter called "Bid Documents". Kinetic Energy Development Corporation promises to pay the penal sum to Kansas City Power and Light unless the Corporation performs all terms and conditions in accordance with the Bid Documents.

This surety expires at the earlier of: the execution of a Sale/Purchase Agreement, the rejection of Kinetic's proposal, or December 31, 1988.

In Witness whereof, the Corporation has executed this surety and has affixed their seal on the date set forth above.

The persons who signatures appear below certify that they are authorized to execute this surety on behalf of the Corporation.

Corporate Seal

KINETIC ENERGY DEVELOPMENT CORPORATION
712 N. Second Street, Suite 210
St. Louis, Missouri 63102

Signature: W. T. Schmidt President

Typed Name: W. T. Schmidt

Title: President

Attest: Jerry K. Corbier Secretary

Typed Name: Jerry K. Corbier

Title: Secretary

Kinetic Energy Development Corporation
Consolidated Position

Abbreviated Financial Statement
of Net Worth
as of
February 29, 1988

Assets		Liabilities	
Current Assets	$ 578,447	Current Liabilities	$ 103,488
Fixed Assets	7,954,803	Long Term Debt	3,651,012
Total Assets	$8,533,250	Total Liabilities	$3,754,500
		Net Worth	$4,778,750

PROPOSAL
FOR THE PURCHASE OF KCPL'S DOWNTOWN KANSAS CITY, MISSOURI CENTRAL STATION STEAM DISTRIBUTION BUSINESS

PROPOSAL

FOR THE PURCHASE OF KCPL'S DOWNTOWN KANSAS CITY, MISSOURI CENTRAL STATION STEAM DISTRIBUTION BUSINESS

Name of Purchaser:	Catalyst Thermal Energy Corporation
Address:	29 East Front Street Youngstown, Ohio 44503-1404
Date of Bid:	Friday, March 25, 1988

We hereby submit the following Proposal for the purchase of KCPL's downtown Kansas City, Missouri, central station steam distribution business in accordance with the terms and conditions of the Request for Proposals dated January 25, 1988:

1. **Purchase price:**

$2,782,000.00

(in figures)

TWO MILLION SEVEN HUNDRED EIGHTY TWO THOUSAND DOLLARS

(in words)

2. Qualifications of Purchaser to operate the Business:

CATALYST THERMAL ENERGY CORPORATION

Catalyst Thermal Energy Corporation is highly qualified to own and operate the district energy system in Kansas City by virtue of the long standing dedication of its founders and all of its employees to this industry and its proven success record of the past eight years.

Catalyst Thermal Energy Corporation (CTEC), a subsidiary of Catalyst Energy Corporation (CEC), entered the district energy industry by establishing Thermal Resources of America Inc. in 1980. CTEC is dedicated to the revitalization of the district heating industry in America. Founded by management with over 45 years of combined experience in the district thermal energy business, CTEC has been recognized nationally as the leader in owning and operating district energy facilities. Over the past seven years, CTEC has taken orphaned district energy systems of large gas and electric utilities and has made them economically viable. While doing so, Thermal has also reduced or stabilized the cost of thermal energy to its end users.

Since district energy is Catalyst Thermal's only business, it is fully committed to sound energy management and the implementation of the latest technology and the concepts that continue the development of this nation's most efficient and economically viable energy source for central business

districts. CTEC has assembled strategic teams composed of engineers, operations managers, financial consultants, accountants, and legal counsel from across the country. These teams have worked closely together in the past, forming specialized groups to assure the smooth transfer and integration of the systems CTEC has acquired.

Catalyst Thermal Energy Corporation is recognized as the leader in district energy development in the U.S. It has acquired and revitalized the steam systems in Youngstown, St. Louis, Baltimore, Cleveland, Philadelphia and Boston. In each of these systems Catalyst has been able to stabilize or reduce steam costs to its customers. It is able to accomplish this through:

* Fuel Diversification - CTEC owned systems use oil, gas, coal, and refuse-derived fuel, but the primary goal is the use of solid fuel whenever possible.

* Improve System Efficiency - CTEC has implemented the latest technologies in the production and distribution of steam.

* Increase the Customer Base - A strong marketing effort increases unit volume, thereby distributing the fixed costs over a wider base, thus reducing the overall cost that the individual customer pays.

- Provide Customers with Energy Management Tools - Through energy audits and the provision of conservation information, CTEC aids its customers in further controlling their costs, enabling them to achieve the greatest value from their energy dollar.

In addition to our technical and managerial capability, public/private cooperation and community involvement have been in the forefront of all of CTEC's acquisitions. Time after time, CTEC has proven its diplomatic skills and solid public relations efforts with local government, regulatory commissions, customers, the media, and the community-at-large. In St. Louis, CTEC is working with the Bi-State Development Agency in developing a waste-to-energy plant that will provide steam to the system operated in that city. In Baltimore, CTEC was awarded a State and Federal DOE Award for Energy Innovation for its project to connect to the Waste-to-Energy plant in that city. That project resulted in improved revenue for the waste-to-energy plant and lower energy costs to the system's customers. CTEC representatives have regularly participated on the Mayor's Energy Council for Baltimore.

CATALYST ENERGY CORPORATION

Catalyst Energy Corporation (CEC), the majority stockholder of CTEC, is a leading participant in the alternative energy industry, and is a publicly-owned company with a national reputation. Headquartered in New York City, CEC was founded in 1982 to develop, own, and operate alternative energy projects throughout the United States. CEC currently has twenty operating facilities in fourteen states coast-to-coast.

3. Purchaser's approach to providing steam service in downtown Kansas City, Missouri:

Catalyst will follow the basic business plan that was outlined in the Qualification section in its integration and development of the Kansas City district energy system. This is the same plan that has been implemented on six previous successful occasions. The Kansas City district energy system will be established as a local company and will be managed and operated by people who will be residents of the Kansas City region. While the company will be a subsidiary of Catalyst Thermal Energy Corporation and will be guided by CTEC in all aspects of its operation, it will be very much a Kansas City company. Some employees will be transferred in from other of our locations to ensure continuity and aid in

the transfer of the successful CTEC "culture" and methods, but it is recognized that to be successful it must be a home-town company.

Business Plan Discussion:

a) Fuel Diversification - This subject is discussed fully in the section regarding the Grand ~~Street~~ Avenue Station. The system has the basic capability to burn coal at the present time, but because of the lack of an aggressive marketing program in recent years the system volume has fallen to a level below the economic capacity of the coal-fired equipment. This situation can be corrected. A full discussion of the corrective action required follows in later sections of this proposal.

b) Improve System Efficiency - a multi-stage program will be required to improve system efficiency. Increasing year round volume through an imaginative marketing program (discussed in 3 (c)) will provide significant gains in efficiency both in plant operation and in the efficient use of the distribution system. System losses, for example, are usually essentially constant per mile of distribution main. More steam volume, obviously, would reduce the loss as a percent of the total.

Other system efficiency improvements will be achieved as a part of a comprehensive system improvement program.

c) Increase the Customer Base - It is in the best interest of all customers to increase the overall system volume because a primary portion of the cost of service is the need to pay for the fixed costs of the system. The Kansas City district energy company will follow the marketing philosophies and practices that are proving so successful in other Catalyst Thermal Energy Company markets.

The program is based on the basic tenet of selling - Provide value to your customer by providing a quality product that meets his specific needs.

The company will approach the market on a positive basis. Since a district energy system is the most efficient method of producing and distributing thermal energy, it holds that there are many in the service territory who could benefit from the service if fully informed. To that end, KCTEC will hold information meetings, will mount an aggressive system visitation program and will inform the local public of the

existence and value of the Kansas City district energy system through an advertising program in appropriate local media vehicles.

d) Provide Customer with Energy Management Tools - Customer deserves full value from a product or service, and our approach is to continually inform and educate users about the benefits and efficient use of energy. Our founders' interest in and dedication to this industry began in a period of scarce, high cost energy. Knowing that those conditions will return, we provide written material and technical help to customers to ensure their increasing satisfaction.

4. **Steam rates and the conditions of steam service to be provided by Purchaser:**

As noted earlier, the subject of rates is complex, and is also an integral part of CTEC's marketing program. It is our intent to provide energy to the customers at prices that are competitive with alternative forms of energy. Current economic models anticipate no increase in cost to the customers. In fact, CTEC's primary goal in taking over a new system has always been the stabilization of customer costs in the short range and the reduction of customer overall energy costs in the long range.

5. Disposition of Grand Avenue Station:

The Grand Avenue station is an integral asset of the system and is required to accomplish CTEC's business plan. As outlined earlier, a primary strategy is the stabilization and reduction of energy costs to the customer by the use of solid fuel. Catalyst Thermal plans to invest up to $350,000 in rehabilitating and updating the equipment associated with coal burning. In addition, because of the design of characteristics of this plant, the full and efficient utilization of the heat cycle requires the use of excess steam energy (pressure and temperature) that is generated. Therefore, as outlined in the exceptions in Section 6, Catalyst desires to enter into a mutually beneficial agreement with KCPL that would benefit the customers of the district energy system and KCPL's electrical customers by allowing the use of this excess energy by generating electricity that would be sold exclusively to KCPL. Assuming such an agreement, Catalyst plans to invest an additional $2,550,000 in the equipment necessary to accomplish the desired end result.

SUMMARY OF ADDITIONAL INVESTMENT

In addition to the purchase price, Catalyst Thermal expects to invest $3,495,000 in the facilities and equipment to achieve the business plan and benefits to the customers outlined here.

6. We hereby incorporate by reference all of the terms and conditions of the RFP into this Proposal, except for the following specific items to which exception is taken and the reasons therefore given. Also listed are any additional terms, and the reasons therefore, upon which this Proposal is conditioned:

A. 1) (Reference paragraph 5A. Business Covenants)
In order to gain full utilization of the heat cycle that exists in the Grand Avenue plant and thereby reduce energy costs to both the steam customer and KCPL's electric customers, Catalyst proposes to enter into an agreement that would allow KCTEC to invest in equipment and generate electricity which would be sold exclusively to KCPL.

2) With regard to "...the absolute right to rescind the sale...upon repayment of the purchase price..."

Catalyst: 1) suggests that with an exclusive agreement to buy and sell electrical power this clause is unnecessary.

2) requires a revision to compensate

CTEC for reasonable expenses and costs incurred prior to the finding of invalidity or unenforceability.

B. The following items, included in the Request for proposal, are repeated here for emphasis:

1) The receipt of all federal, state and local regulatory approvals necessary to operate the business as outlined in this proposal.

2) The issuance of a franchise for the laying and maintaining the steam pipes in the City of Kansas City.

3) The assignment from KCPL to CTEC of the National Starch steam service agreement.

4) Procurement of all environmental permits required to operate the system as described herein.

5) The extinguishment of all liens on the System.

6) The execution of mutually satisfactory purchase documentation, which shall contain all the agreements between CTEC and KCPL.

7) CTEC's completion of its financial, legal and technical due diligence to its satisfaction.

8) Approval of the CTEC Board of Directors.

We understand and agree that this Proposal shall be irrevocable for a period of thirty (30) days from March 25, 1988, and that KCPL has the option of extending this irrevocable period an additional thirty (30) days. It is also agreed and understood that KCPL has no obligation to sell the Business unless (a) satisfactory sale documents are entered into, (b) all necessary regulatory consents are obtained, and (c) all conditions precedent are satisfied. A cashier or certified check in the amount of $100,000.00 as earnest money is enclosed.

We further understand that this Proposal is subject to disclosure to the Missouri Public Service Commission and its Staff, and in any Commission proceedings concerning the sale of the Business in accordance with the practice and rules of the Commission.

Purchaser: Catalyst Thermal Energy Co.

By: Carl E. Quist Chairman

Attest:

Secretary