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Issue: Termination Issues
Witness/Type of Exhibit: Oligschlaeger,
Surrebuttal
Sponsoring Party: Missouri Public
Service Commission
Company: Kansas City Power
& Light Company
Case No.: HO-86-139

MISSOURI PUBLIC SERVICE COMMISSION
UTILITY DIVISION

SURREBUTTAL TESTIMONY
OF
MARK L. OLIGSCHLAEGER

Jefferson City, Missouri
April, 1987

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1 SURREBUTTAL TESTIMONY

2 OF

3 MARK L. OLIGSCHLAEGER

4 KANSAS POWER AND LIGHT COMPANY

5 CASE NO. HO-86-139

6 Q. Please state your name for the record.

7 A. Mark L. Oligschlaeger.

8 Q. Are you the same Mark L. Oligschlaeger who has previously
9 filed direct and rebuttal testimony in this proceeding?

10 A. Yes, I am.

11 Q. What is the purpose of this surrebuttal testimony?

12 A. The purpose of this testimony is to address certain
13 statements made in the rebuttal testimony of Kansas City Power and Light
14 Company (KCPL or Company) witnesses Bernard J. Beaudoin and Robert W.
15 Levesque.

16 Q. On page 4 of his rebuttal testimony, lines 15-20, Company
17 witness Beaudoin states:

18 KCPL has not pursued sale of its steam system because KCPL
19 believes that such a sale is not in the best interests of
20 its customers. Both Staff and KCPL analyses show that
21 regardless of who operates the system (be it KCPL or a
22 hypothetical operator), steam prices must increase
23 significantly above present levels. The customer base will
24 unavoidably decrease.

25 Does Staff agree with Mr. Beaudoin's comments?

26 A. No. KCPL cannot credibly state that sale of its steam
27 system is not in the best interest of its customers, as KCPL has never
28 bothered to investigate the sale option or its impact on current steam
customers. Apparently, KCPL believes selling electric heat to its current
steam customers is in the best interest of its customers, when electric
heat is the most expensive option for heating according to the analysis of

1 Staff consultant Derick O. Dahlen. Furthermore, the Company cannot
2 credibly state that "steam prices must increase significantly" or "the
3 customer base will unavoidably decrease" under a different owner. Neither
4 the Staff nor the Company know what an alternative owner would charge for
5 steam rates or what steps they would take to halt customer erosion because
6 KCPL never investigated the sale option to any extent. What Staff does
7 know is that other central district steam systems around the country have
8 stabilized their rates and their customer bases, as shown in the prefiled
9 direct testimony of Staff consultant Derick O. Dahlen and the rebuttal
10 testimony of Staff witness Cary G. Featherstone. KCPL's refusal to admit
11 to the possibility that negative trends in prices and customer numbers can
12 be halted or reversed flies in the face of the experience of other central
13 district heating systems.

14 Q. Why has the Company refused to investigate the possible sale
15 of its steam system?

16 A. After spending four months at KCPL to conduct the audit,
17 review of KCPL's prefiled direct and rebuttal testimony, a prehearing
18 conference, and reviewing KCPL's stated position on the sales option in
19 the hearing memorandum, Staff still does not know the answer to that
20 question. If KCPL believes strongly that the central district steam
21 service is not economically viable, as indicated in Mr. Beaudoin's
22 rebuttal testimony, taking bids for sale of the system is a way that KCPL
23 could prove itself correct. Possible buyers will base their bidding
24 decision on their perception of the potential future profitability of
25 steam service in downtown Kansas City. An important test of steam system
26 viability in Kansas City would be the positive or negative reaction of
27 interested parties to the offering of bids for sale of the system. But
28 that is a test KCPL is not willing to undergo, even with the knowledge

1 that interested parties have contacted them several times over the past
2 few years to inquire about availability for sale of KCPL's steam system,
3 and their awareness of sales of other steam systems throughout the
4 Company. In light of the evidence available to Staff of the viability and
5 saleability of other central district steam systems (including the recent
6 sale of the Harrisburg, Pennsylvania system described in the article
7 attached as Surebuttal Schedule 1), Staff is not willing to accept at face
8 value KCPL's negative assertions concerning the viability of its steam
9 systems. The taking of bids for sale of the system would be a "market"
10 test of the viability of steam service in downtown Kansas City, and would
11 insure that the heating options of steam customers in Kansas City are not
12 prematurely foreclosed simply because KCPL wishes to increase its electric
13 revenues.

14 Q. Turning to Company witness Levesque, on page 5 of his
15 rebuttal testimony, lines 12-21, he discusses the impact the loss of
16 National Starch as a steam customer after 1990 would have on Staff witness
17 Dahlen's projected steam prices. He further states that loss of National
18 Starch as a customer "is the most likely situation that Downtown steam
19 customers would face after 1990." Do you agree?

20 A. No. The assumption by the Company that National Starch will
21 not desire a supply of steam after 1990 does not seem well-founded,
22 especially in light of the fact that National Starch desired a longer-term
23 contract for steam supply than KCPL was willing to give. When KCPL and
24 National Starch began discussing a possible steam supply contract in 1984,
25 National Starch indicated an interest in a ten-year contract. This is
26 indicated in Surrebuttal Schedule 2, a June 15, 1984 letter from Lloyd
27 Lukenbach of National Starch to M. C. Mandacina of KCPL in which Mr.
28 Lukenbach wrote " . . . we would expect to enter into a longer-term

Surrebuttal Testimony of
Mark L. Oligschlaeger

1 contract (10 years or more), if the proposed contract revisions are
2 satisfactory." However, once KCPL made the decision to terminate central
3 system heating service in Kansas City, they would not agree to serve
4 National Starch beyond 1990. Mr. Mandacina, in a memorandum to J. R.
5 Miller dated September 28, 1984 (Surrebuttal Schedule 3) noted, "Mr.
6 Lukenbach . . . did say they regret not being able to have any firm
7 commitment from KCPL for steam past 1990." Regardless of National
8 Starch's present intentions for the period after 1990, it is likely that
9 one of the first steps a new owner of KCPL's steam system would take is to
10 attempt to retain National Starch as a steam customer beyond 1990.

11 Q. On page 9, lines 12-27 of his rebuttal testimony, Mr.
12 Levesque discusses projections of natural gas prices forecasting
13 significant increases in the cost of natural gas in coming years. Please
14 comment.

15 A. Staff consultant Dahlen will address the specifics of Mr.
16 Levesque's gas price forecasts in his surrebuttal testimony. However, Mr.
17 Levesque's statements concerning future natural gas prices are a
18 compelling argument in favor of retention of the central district steam
19 system in Kansas City. If natural gas costs do increase significantly in
20 the future, the preservation of the central station steam option becomes
21 even more crucial. If the steam system is maintained, downtown customers
22 will have another alternative to natural gas besides electric heat, the
23 most expensive heating option for KCPL's steam customers according to
24 Staff consultant Dahlen's analysis.

25 Q. Mr. Levesque on page 10 of his rebuttal testimony, lines
26 1-11, discusses the relative economics of gas and electric boiler
27 installations. He states, " . . . there are some gas installations that
28

1 are so uneconomic, if not impossible, that electric driven boilers are the
2 only answer" (original emphasis). How do you respond?

3 A. The fact that there are likely to be some present KCPL steam
4 customers who cannot choose the gas option and will become captive
5 customers of KCPL for electric heat if central district steam service is
6 eliminated is yet another strong argument for retention of the present
7 steam system. Preserving the element of choice and competition for
8 downtown Kansas City customers for whom practical economics foreclose the
9 possibility of the electric or natural gas heating option is a secondary
10 but important consideration in the decision whether to preserve central
11 district steam heat in Kansas City. This is particularly true when
12 experience in other cities shows central district steam to be a viable
13 competitor to both electric heat and natural gas.

14 Q. Does this conclude your surrebuttal testimony?

15 A. Yes, it does.
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Harrisburg Steam Works Buys PP&L Plant

■ By: Paul Gipe

An independent power producer recently bought Pennsylvania Power & Light's (PP&L) steam heating system and power plant in Pennsylvania's capitol city.

Harrisburg Steam Works Ltd. (HSW) bought the city's steam heating system and its steam heat plant from PP&L for an undisclosed sum. PP&L will continue to operate the oil-fired, steam heat system through November to give HSW time to familiarize itself with the maintenance and administration of the system.

PP&L decided in 1983 to sell the district heating system, (which they have owned since 1926), and chose HSW from among six developers who bid on the facilities. The state public utility commission approved the sale last summer.

In an effort to reduce operating costs, an HSW affiliate is installing two 6.3 MW diesel generators at the site of the steam plant. HSW plans to sell PP&L 98 million kWh yearly from

the cogeneration system in addition to producing steam. Waste heat from the diesel generators will provide 40% of HSW's thermal demand.

The 25-year contract with PP&L pegs the price at slightly above \$0.06/kWh for the first five years. This then becomes the floor price during the second five years. After the first ten years the price escalates with PP&L's fuel price.

William Goodwin, HSW vice president and financial officer, explains that they wouldn't have entered the venture without the opportunity for cogeneration.

PP&L didn't aggressively market steam sales, says Goodwin, who notes that only one-third to one-half of the plant's capacity is currently used. "But they've done an excellent job of maintaining the system; they spared no expense," he says. "We feel we bought a 1972 steam plant."

A limited partnership of HSW, Harrisburg Energy Co., is developing the \$13 million cogeneration plant. The partnership raised \$3 million in equity through Butcher Capital Markets, a subsidiary of Philadelphia's invest-

ment banking firm Butcher Singer. They raised the remaining \$10 million from bank loans.

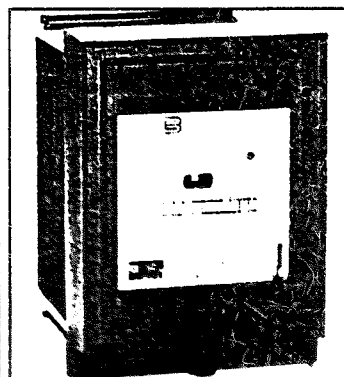
HSW sized the Cooper Industries' engines for the system's minimum steam demand, which occurs during the summer.

HSW fuels the diesels with contract carriage gas from Western Pennsylvania over UGI's (the gas utility serving central Pennsylvania) lines. When the thermal demand exceeds that produced by the diesel engines HSW will fire the steam plant with #6 fuel oil.

During the 1980's the city of Harrisburg built a steam line from the city's incinerator to PP&L's steam plant. The city then sold PP&L steam which the utility distributed through its district heating system. HSW will also buy steam from the city's incinerator. According to Goodwin, the city's steam is cheaper than that produced by HSW's steam plant.

Goodwin, who spent 16 years with New York's Consolidated Edison in steam production and planning, states that the steam plant, with its 36,000 foot distribution system, will employ 42 people. ■

Products & Services



Basler's new BE1-60 Voltage Relay is now available

Integrated Energy Systems

Dept. ASE

307 N. Columbia St.

Chapel Hill, NC

Integrated Energy Systems now has available a new software program, *Cogeneration Feasibility Analysis System (CFAS)*. According to Integrated Energy Systems, CFAS is a sophisticated model for simulating the performance of various types of cogeneration systems. It features evaluation of steam or

gas turbines or reciprocating engines, and evaluates fuel switch with and without cogeneration, calculating payback and life cycle cost. The program was developed by and for engineers and includes complete source listings with variable cross references. The program, written in Microsoft® BASIC, is available for TRS-80 III & IV, and IBM/PC & compatibles. One-year updates are included in the purchase price.

Basler Electric Company

Dept. ASE

Box 269, Route 143

Highland, IL 62249

Basler Electric Company has announced the availability of a new voltage balance relay. Designated the BE1-60, the relay monitors each of two inputs to verify that they are equal within the allowable tolerance for balance. A front panel switch allows the setting to be adjusted to suit the system application.

Typical applications for the BE1-60 Voltage Balance Relay would include supervision of the sensing and power inputs of a generator excitation sys-

tem; three-phase voltage checking for single-phase automatic synchronizers and sync-check relays; and supervision of the sensing voltage to distance, voltage controlled, or voltage restrained overcurrent functions. Styles are available for sensing single-phase systems as well as three-phase, three-wire and three-phase, four-wire systems.

ASEA Electric

1100 S. Prairie Ave.

Waukesha, WI 53186

ASEA Electric will "design, build, pre-assemble and pre-test your PDS" substation all under one roof, ship it complete, and warrant the entire substation with no divided responsibility." According to the company, there has never been a through-fault failure on any ASEA Electric transformer. The PDS transformers come standard with liquid level gauge, a sudden pressure relay, and winding temperature and liquid temperature gauges, all equipped with alarm and trip contacts that initiate a trip of the primary circuit breaker in the event of critical abnormal operation conditions.

NATIONAL STARCH AND CHEMICAL CORPORATION

FINDERNE AVENUE, BRIDGEWATER, NEW JERSEY 08807

LLOYD J. LUKENBACH

VICE PRESIDENT, MARKETING

FOOD PRODUCTS DIVISION

June 15, 1984

Mr. Michael C. Mandacina
Manager, Utility Steam Operations
Kansas City Power & Light Company
P.O. Box 679
Kansas City, Missouri 64141

Subject: Industrial Steam Contract

Dear Mike:

Thanks to you and Mr. Doyle for meeting with Mr. Trewartha and me on June 7. Mr. Doyle's description of the status of the steam program and of the background and plans was most helpful.

As I stated, the current interruptable steam contract with Corn Products would place a severe economic hardship on the North Kansas Plant, as National Starch and Chemical Corporation would plan to operate it. We expect to purchase reduced quantities of steam as compared to Corn Products' projection of 250,000 lb/hr.

In order to make this a satisfactory long term relationship for National Starch and for the Kansas City Power & Light, you have agreed to review this contract for possible revision, effective January of 1986. To do this, you require estimates of National's steam requirements. They are as follows:

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Summer Average Steam Load	- Approximately 104,000 lb/hr
Winter Average Steam Load	- Approximately 126,000 lb/hr
Peak Load	- Approximately 150,000 lb/hr
In 1989 these loads could increase by	- 27,000 lb/hr