BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the matter of St. Joseph Light & Power Company's tariff sheets designed to increase rates for steam service provided to customers in the Missouri service area of the company.	)))))	CASE NO. HR-94-177

APPEARANCES:

James C. Swearengen, Attorney at Law, and
Gary W. Duffy, Attorney at Law, Brydon, Swearengen & England, P.C., P. O. Box 456, Jefferson City, MO 65102, for St. Joseph Light & Power Company.
Gary L. Myers, General Counsel and Secretary, 520 Francis Street, P. O. Box 998, St. Joseph, MO 64502-0998, for St. Joseph Light & Power Company.
William M. Barvick, Attorney at Law, 240 East High Street, Suite 202, Jefferson City, Missouri 65101, for AG Processing Inc.
Lewis R. Mills, Jr., Deputy Public Counsel, and
Randy Bakewell, Assistant Public Counsel, P. O. Box 7800, Jefferson City, Missouri 65102, for the Office of the Public Counsel and the Public.
Thomas R. Schwarz, Jr., Senior Counsel, and
William M. Shansey, Assistant General Counsel, P. O. Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

HEARING EXAMINER: **Mark A. Grothoff**

REPORT AND ORDER

On December 3, 1993, St. Joseph Light & Power Company (SJLP) filed tariff sheets reflecting increased rates for industrial steam service. On December 14, 1993, the Commission issued a Suspension Order And Notice Of Proceedings establishing a procedural schedule.

On January 26, 1994, the Commission granted intervention to AG Processing, Inc. (AGP) and participation without intervention to the City of St. Joseph, Missouri. Prepared testimony was filed by the parties pursuant to the established procedural schedule. Concurrent with its direct testimony, SJLP recommended the twelve-month period ending December 31, 1993 as the proper test year in this case. None of the other parties objected to SJLP's recommendation and the twelve-month period ending December 31, 1993 was utilized by the parties as the test year in this case.

On April 14, 1994, a local public hearing was held in St. Joseph, Missouri. On June 13, 1994, a prehearing conference was convened as scheduled and a hearing memorandum and a reconciliation of the issues were subsequently filed.

On August 1, 1994, a hearing was convened as scheduled. The hearing was adjourned on August 2, 1994 and briefs were subsequently filed by the parties.

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:

On December 3, 1993, SJLP filed revised steam rate schedules designed to increase its annual steam revenue by $800,000 or 12.2 percent. Although it has filed for an $800,000 increase in revenues, SJLP asserts that its actual revenue requirement is $979,974. The Staff of the Commission (Staff) has taken the position that SJLP is entitled to a revenue increase of $822,334 while AGP recommends a revenue decrease of $76,853.

SJLP provides electric, natural gas, and industrial steam service to customers in northwest Missouri, including the City of St. Joseph, Missouri. Revenues from its electric operations constitute approximately 85.3 percent of SJLP's total operating revenue and natural gas operations account for 6 percent of SJLP's operating revenue. SJLP has eight industrial steam customers, and steam revenues are 8.5 percent of SJLP's operating revenue.

Steam for sales to SJLP's industrial steam customers is produced in boilers numbered 1 through 5 at its Lake Road Plant. The boilers deliver steam at a pressure of 900 pounds per square inch (psi) to a common steam header. The common steam header then provides steam for direct sale to SJLP's industrial steam customers; for the generation of electricity for SJLP's electric customers; for auxiliary uses in a separate 1800 psi electric generating unit (1800 psi system) which is used solely for SJLP's electric service; and for auxiliary uses in the 900 psi system itself. It is the cost of providing that steam devoted to industrial steam sales which SJLP intends to recover through its proposed revenue increase.

This case involves six contested issues which pertain to the revenue required by SJLP to recover the cost of providing steam to its industrial steam customers: return on equity; Lake Road Plant fuel mix; the cost of No. 6 oil; sales revenue level; subsidization of the 1800 psi system; and rate case expense. Each issue shall be discussed in turn.

Return on Equity

A settlement was reached between the parties concerning the appropriate capital structure, embedded cost of long-term debt, and embedded cost of preferred stock. The parties have agreed on an assumed cost of preferred equity of 7.8 percent and an embedded cost of long-term debt of 8.43 percent utilizing the following hypothetical capital structure: 55.28 percent common equity; 2.75 percent preferred equity; and 41.97 percent long-term debt. The parties have not agreed on an appropriate return on equity.

Return on equity is that element of the cost of providing service which estimates a reasonable return that shareholders are entitled to earn for providing capital to the company. A settlement was reached between Staff and SJLP concerning the appropriate return on equity. SJLP and Staff agreed to settle the issue at 12.16 percent, the midpoint between their original positions. AGP proposes a return on equity of 9.7 percent.

All of the parties estimated the return on equity by means of a discounted cash flow (DCF) analysis and all of the parties agree on the algebraic equation which is the basis for DCF analysis. However, the approach taken by AGP in utilizing its DCF analysis differs from that of Staff and SJLP.

SJLP originally proposed a return on equity of 12.32 percent and Staff initially recommended a return of 12 percent. Both derived their cost of equity using a DCF analysis which was company-specific for SJLP. The analyses included adjustments for increased risk to investors based on the use of a hypothetical capital structure, the economic conditions existing in Buchanan County, Missouri, and the risk associated with the fact that SJLP has only eight steam customers.

AGP bases its recommendation of a 9.7 percent return on equity on the mid-point of the DCF cost of common equity estimates for a group of comparison companies with stock and bond ratings similar to SJLP's. AGP conducted DCF calculations on SJLP's stock and that of other electric companies and then performed a comparative analysis using: (1) companies with a <u>Value Line</u> safety rating of "2", (2) companies with a <u>Standard & Poor's</u> stock rating of "A-", and (3) companies with a <u>Standard & Poor's</u> bond rating of "A+" to get an average cost of equity for each of these groups. AGP's comparison group includes, among others, Commonwealth

Edison, Consolidated Edison, Union Electric, Long Island Lighting, and Duke Power.

The Commission finds that the range from Staff's initial proposal of 12 percent and SJLP's proposal of 12.32 percent is the most reasonable return on equity for SJLP. Upon consideration of the evidence which showed that SJLP is smaller than the companies used to establish the comparison groups and to develop the hypothetical capital structure, the Commission determines that it is reasonable to adjust the return on equity to recognize SJLP's smaller size and the components of the hypothetical structure, as well as other factors affecting SJLP's risk.

The Commission does not find it necessary to base DCF estimates strictly on a "comparable companies" basis as AGP recommends. The Commission may find this approach appropriate where there is not enough available information on a company; for example, if a company is not publicly traded. This is not the case in this proceeding and the Commission finds it is more reasonable to establish the return on equity on a company-specific basis.

Thus, the Commission determines that the range of 12 percent to 12.32 percent is the most appropriate for the return on equity in this case. In that context, the Commission also determines that 12.16 percent, the mid-point of the range, is the most just and reasonable return on equity for SJLP.

Fuel Mix

Another contested issue is the appropriate mix of fuels SJLP should burn to produce the steam it sells to its industrial customers. The boilers at SJLP's Lake Road Plant burn a mixture of either coal and natural gas or No. 6 fuel oil and natural gas. With the assumption that coal is cheaper than oil which in turn is cheaper than natural gas, the cost of meeting SJLP's fuel energy needs varies with the proportion of each fuel burned. Staff and SJLP use the fuel mixture as an input parameter to a computer cost simulation program while AGP uses historical fuel mix to directly estimate fuel cost.

SJLP proposes a fuel mix of 59.7 percent coal, 23.1 percent oil, and 17.2 natural gas. SJLP used a five-year, unadjusted average of fuel burned at the Lake Road Plant as an estimate of an appropriate mix of fuels.

AGP initially proposed a fuel mix of 76.9 percent coal and 23.1 percent oil, eliminating any provision for burning natural gas. AGP later amended its proposal to 76.9 percent coal, 22.544 percent oil, and .556 percent natural gas, basing its new estimate on a calculation of gas used for start-up purposes.

Staff proposes a fuel mix of 62.8 percent coal, 30.3 percent oil, and 6.9 percent natural gas. Staff conducted an analysis of actual test year fuel consumption to estimate the appropriate fuel mix. Also, Staff adjusted for a 56-day period of unusually high natural gas consumption on boilers 1 through 4 at the Lake Road Plant.

The Commission questions the accuracy of SJLP's estimates. SJLP fails to account for or explain the extreme variations in the fuel mix during the years analyzed. SJLP also fails to account for the known fuel supply problems caused by the flood conditions which occurred during the test year in this case (1993) and for the loss of a steam customer at the end of the test year.

Examination of the historical fuel mix of SJLP's 900 psi system indicates that natural gas consumption ranged from 4.6 percent of total fuel used in 1988 to 32.1 percent in 1990. While the high figure was explained by the inability to burn coal during 1990 due to damage to SJLP's only coal burning boiler, no explanation was given for the 15.9 percent natural gas consumption in 1991. Absent explanation that such consumption levels are expected to recur, the Commission finds their use for estimating future fuel consumption patterns is suspect.

The Commission also finds AGP's fuel mix estimate to be unreliable. AGP first eliminated any provision for burning natural gas, later admitting that boiler operating procedures might require burning some natural gas. AGP then based its amended estimate solely on a calculation of gas used for start-up purposes, .556 percent of the fuel needs of the Lake Road plant. However, the record indicates that natural gas is used for much more than just start-up purposes, including hot-banking, flame stability, quick restart, outages on coal or oil equipment, steam deficient situations, fuel inventory conservation, and fuel availability. The Commission finds AGP's estimate to be wholly inadequate in light of the other operating demands of plant operation in producing a reliable source of steam for industrial customers.

Staff provides the most reasonable approach to estimating an appropriate fuel mix for operation of the Lake Road Plant. Staff's use of actual test year consumption levels in its analysis lessens the effect on the yearly fuel mix of variable factors such as boiler availability and fuel prices. Staff's analysis also takes into account a period of extreme variation in natural gas consumption so that the estimate is not skewed by such an anomaly. Also, Staff's adjusted estimate is consistent with SJLP's overall plant natural gas burns in 1988 (4.6 percent), 1989 (5.5 percent), and 1992 (8.2 percent).

The Commission finds that Staff's recommendation is the most reliable and reasonable estimate of fuel mix provided in the record. Thus, the Commission determines that a fuel mix of 62.8 percent coal, 30.3 percent oil, and 6.9 percent natural gas, should be utilized.

Cost of No. 6 Oil

As stated previously, No. 6 fuel oil is used to provide steam production heat energy. The parties disagree as to the appropriate price level of such fuel for ratemaking purposes.

Staff proposes a cost for No. 6 oil of $10.86 per barrel or $1.682 per mmbtu. Staff calculated an average price for No. 6 oil purchased in 1993, weighted by Btu content, using the actual test year cost of oil as derived from invoices for the fuel.

AGP proposes a price of $1.6421 per mmbtu for No. 6 oil. AGP derived its proposed cost from a 1993 SJLP interchange report which had been provided to AGP in response to a data request in Case No. ER-94-163.

SJLP proposes a cost for No. 6 oil of $11.49 per barrel or $1.768 per mmbtu. SJLP adjusted actual test year purchases to eliminate what it characterizes as "below-market" purchases in the test year.

The Commission finds AGP's cost proposal unpersuasive. In calculating its proposed cost, AGP uses figures taken from an inventory which includes the averages of purchases from 1993 and prior years, rather than the actual purchases in 1993 as it claims.

The Commission also finds SJLP's cost recommendation to be unpersuasive. SJLP's rationale for its adjustment to the test year purchases is that its test year "below-market" purchases were limited phenomena which will not recur. However, the record indicates that SJLP eliminated purchases amounting to more than 25 percent of SJLP's total purchases and that substantial purchases were made at similar prices during the same period in the previous year. The Commission finds that the purchases characterized as "below-market" by SJLP are neither limited nor nonrecurring and that the adjustment made by SJLP was not justified.

Staff has proposed the most reasonable and accurate estimate of the appropriate cost of No. 6 oil. Staff calculated an average of the actual test year cost of oil as shown on invoices for the fuel and computed the Btu content of each gallon to arrive at the actual cost per mmbtu. Staff used actual test year prices obtained from invoices for actual test year purchases, with no adjustments, to calculate the actual test year average cost.

The Commission finds that Staff's recommendation is the most accurate and reasonable estimate of the cost of No. 6 oil provided in the record. Thus, the Commission determines that $10.86 per barrel or $1.682 per mmbtu is the appropriate cost of No. 6 fuel oil for use in this case.

Sales Revenue Level

The expected level of sales will adversely affect the amount per unit sales which must be collected to meet revenues. Staff and SJLP have concurred in a projected sales revenue level for purposes of this case which AGP argues is too low.

SJLP estimated its sales level by reviewing the actual sales which occurred during the test year and making two adjustments to that number. The first adjustment was made in order to reflect the loss of a large industrial steam customer, Monfort Park. The second adjustment was to increase sales to eliminate the effects of the 1993 flood. SJLP calculated its test year sales revenue after the adjustments to be $6,605,616. Staff has concurred with SJLP's approach and filed no testimony on this issue.

AGP proposes that actual sales revenues, as normalized for the effects of the 1993 flood, be used in this case. AGP opposes adjustments for the loss of revenue associated with the closing of the Monfort Park plant. AGP claims that SJLP's 1994 budgeted sales are higher than the actual 1993 sales before the loss of Monfort Park is taken into account. AGP also claims that a major plant expansion at its own facility will require the consumption of more steam and result in greater sales for SJLP.

The record, however, does not support AGP's claims. Through June 1994, actual industrial steam sales experienced by SJLP were below the budgeted amount by approximately 13.6 percent. In addition, through June 1994, actual steam sales were below the test year sales number and approximately 22 percent below actual sales for 1993.

Also, the Commission is skeptical of AGP's argument concerning the expansion of its own plant. The record indicates that AGP did communicate the assumed increase to SJLP, and SJLP included the anticipated increase in sales to AGP in its 1994 budget. Yet, at the time of the hearing in this case, sales to AGP had not increased as budgeted but rather had decreased by approximately 7 percent from 1993 levels.

The Commission finds that the adjustments made by SJLP in its calculation of the sales revenue level are appropriate and that the recommendation of SJLP and Staff is the most reasonable and accurate calculation of SJLP's sales revenue level provided in the record. Thus, the Commission determines that the recommendation of SJLP and Staff should be adopted as the appropriate sales revenue level for use in this case.

Subsidization Of Fuel For The 1800 psi System

As previously stated, the 900 psi steam system at the Lake Road Plant provides steam to an 1800 psi electric generating system. AGP claims that SJLP's estimate of such steam usage, with which Staff concurs, is too low, thereby charging industrial steam customers for service provided to electric customers. AGP alleges that SJLP did not credit any of the cost of steam provided by the 900 psi system to the 1800 psi system within the ENPRO cost model and, therefore, steam customers are bearing part of the cost of providing steam for the 1800 psi system. AGP proposes a $279,662 adjustment to the cost of fuel to recognize steam from the 900 psi system that is provided to the 1800 psi electric system.

Staff and SJLP state that no subsidization of the electric customers has occurred and that AGP has overlooked the portion of the process in which the crediting of the steam takes place in the daily fuel allocation procedure. SJLP and Staff state that the cost of fuel for the 900 psi system used for steam provided to the 1800 psi system is assigned to electric customers by an accounting process which is not part of the ENPRO cost model.

The record indicates that ENPRO is a computer program which simulates the economic dispatch of a given load. Staff and SJLP used ENPRO to determine the total 900 psi system boiler fuel burned for both the electric and industrial steam jurisdictions. ENPRO simulated the actual hourly operation of the Lake Road Plant 900 psi boilers to supply steam for electric generation and steam sales, thereby developing the data necessary to make the fuel allocation between steam and electric service in a manner approximating actual practice. The record shows that this data is then used to make the fuel allocation within a different computer program.

The record also shows that this fuel allocation process is reliable. In its testimony, SJLP compared its ENPRO approach with a more detailed actual fuel allocation procedure. SJLP's comparison shows that the results of the detailed procedure and those of the more simplified ENPRO approach have not differed by more than 0.34 percent in three years.

The Commission finds that AGP's allegations of subsidization are erroneous and that no subsidization of SJLP's electric customers by

SJLP's industrial steam customers is occurring. Thus, the Commission determines that the adjustment to SJLP's cost of fuel proposed by AGP is unwarranted.

Rate Case Expense

Rate case expense encompasses the amounts necessary for a regulated utility to participate in a rate case amortized over the expected period such rates might be in effect. SJLP initially sought recovery in this case of $52,000 in rate case expense over a two-year period. SJLP states this amount was based on the anticipated consolidation of this case and its electric rate case, Case No. ER-94-163. However, the cases were not consolidated and as this case progressed, SJLP determined that the rate case expense amount was $56,250. Staff concurs with SJLP's figure and, consequently, Staff and SJLP both recommend that the Commission allow the recovery of $56,250 over a two-year period or $28,125 per year. AGP, though, proposes a six-year amortization of $52,000 or $18,667 per year.

SJLP states that a two-year amortization is proper because it is probable that within two years SJLP will propose another rate case. SJLP also notes that the Commission authorized a two-year amortization of rate case expense in Case No. ER-93-41. AGP argues that a six-year amortization should be used because SJLP did not seek a steam rate increase from 1987 to 1993.

The Commission finds that $56,250 is a reasonable amount for SJLP to recover as rate case expense. The record contains no evidence that such expense was not prudently incurred and, as the Commission noted in Case No. ER-93-41, it does not want to put itself in the position of discouraging necessary rate cases by discouraging rate case expense. The Commission cannot be viewed as having a dampening effect upon a regulated company's statutory procedural rights to seek out a rate increase when it believes the facts so justify it. Disallowing prudently incurred rate case expense could be viewed as violating a company's procedural rights. Thus, the Commission determines that SJLP should be allowed to recover $56,250 in rate case expense.

In addition, the Commission finds it likely that SJLP will file another rate case within two years. The record indicates that SJLP did not seek a rate increase between 1987 and 1993 because it experienced cost savings which are not expected to recur. Also, the Commission is aware that the St. Joseph, Missouri area is experiencing uncertain economic times and the loss of even one steam customer would likely require SJLP to seek rate relief. Thus, the Commission determines that a two-year amortization of the rate case expense is appropriate.

Revenue Requirement

SJLP claims that the evidence establishes its revenue requirement as $979,974. Staff asserts that the record shows SJLP's revenue requirement to be $822,334. AGP argues that a revenue decrease is warranted by the evidence.

The reconciliation filed in this case (Appendix A to Exhibit 1) provides the dollar value of the issues decided in this proceeding. The chart below begins with the revenue requirement claimed by SJLP and that amount is adjusted based upon the Commission's decision on each issue.

ISSUE	REVENUE REQUIREMENT
SJLP Revenue Requirement	$ 979,974
Return on Equity	0
Fuel Mix	(99,168)
Cost of No. 6 Oil	(58,472)
Sales Revenue Level	0
Subsidization of 1800 psi System	0
Rate Case Expense	0
TOTAL	$ 822,334

Based upon the record as a whole and the Commission's findings on the contested issues in this case, the Commission finds that SJLP's appropriate revenue requirement is $822,334. Furthermore, inasmuch as SJLP's requested revenue increase of $800,000 falls below SJLP's actual revenue requirement, the Commission finds that the rates proposed by SJLP are just and reasonable. Thus, the Commission determines that the tariff sheets filed by SJLP reflecting increased rates for industrial steam service should be approved.

Conclusions of Law

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

The Commission has jurisdiction over this matter pursuant to Section 386, RSMo 1986, as amended. The Commission must consider all matters which come before it which have a bearing on the determination of the price to be charged for utility service.

The ultimate issue to be determined by the Commission is the establishment of just and reasonable rates. The Commission has the authority to set just and reasonable rates for utility service.

The Commission may approve rates if it finds such rates to be just and reasonable. The Commission has so found and thus concludes that the tariff sheets filed by SJLP reflecting increased rates for industrial steam service should be approved.

IT IS THEREFORE ORDERED:

1. That the tariff sheets filed by St. Joseph Light & Power Company on December 3, 1993, reflecting an increase in its industrial steam revenues of $800,000 are hereby approved, consistent with this Report and Order, for service on and after November 2, 1994.

2. That this Report and Order shall become effective on November 2, 1994.

BY THE COMMISSION

David L. Rauch

David L. Rauch
Executive Secretary

(S E A L)

Mueller, Chm., McClure, Perkins,
Kincheloe and Crumpton, CC., Concur
and certify compliance with the
provisions of Section 536.080, RSMo 1986.

Dated at Jefferson City, Missouri,
on this 12th day of October, 1994.