Exhibit No.:

Issue: Regulatory Plan

Witness: Stephen L. Ferry

Sponsoring Party: St. Joseph Light & Power Company

and UtiliCorp United Inc.

Case No.: EM-2000-292

Date Prepared: June 26, 2000

## MISSOURI PUBLIC SERVICE COMMISSION Case No. EM-2000-292

Surrebuttal Testimony

of

Stephen L. Ferry

Jefferson City, Missouri

Date 7-11-70 Case No. 9th -21-20-192

Reporter 74

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI SURREBUTTAL TESTIMONY OF STEPHEN L. FERRY ON BEHALF OF ST. JOSEPH LIGHT & POWER COMPANY CASE NO. EM-2000-292

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1	Q.	Please state your name and business address.		
2	A.	My name is Stephen L. Ferry. My business address is 520 Francis Street, St. Joseph,		
3		Missouri.		
4	Q.	By whom are you employed and in what capacity?		
5	A.	I am employed by the St. Joseph Light & Power Company ("SJLP") in the position of		
6		Manager System Operations and Planning.		
7	Q.	Please briefly describe your education, work experience, and participation in professional		
8		associations.		
9	A.	In 1971 I received a Bachelor of Science degree in Electrical Engineering, and in 1979 a		
10		Master of Science degree in Electrical Engineering from the University of Nebraska -		
11		Lincoln.		
12		Upon graduation from Nebraska in 1971, I was employed by the Omaha Public Power		
13		District, Omaha, Nebraska ("OPPD"), as an Electrical Engineer performing distribution		
14		line design. In 1976 I accepted the position of Distribution Planning Supervisor with the		
15		Nebraska Public Power District ("NPPD") where I supervised other engineers in the		
16		preparation of distribution system operating studies and expansion plans. I left NPPD in		
17		1980 to become System Planning Engineer for the Public Utility District #2 of Grant		
18		County, Ephrata, Washington ("PUD"), advancing to the position of System Planning		
19		Manager in 1984, and Director of Power Production in 1986. While in the system		

i		planning positions I worked in the capacity of both an engineer and a manager on varied
2		engineering assignments such as distribution and transmission line engineering,
3		substation design, and relay engineering as well as transmission and distribution system
4		planning. As Director of Power Production, I managed and was responsible for the
5		PUD's power plants.
6		I joined SJLP in 1990 as Manager System Operations and Planning. I am responsible for
7		the economic scheduling of SJLP's generating units, bulk power purchases and sales, fuel
8		and interchange budgeting and planning, system protection, and electric system planning.
9		I am a registered Professional Engineer in the State of Missouri, a member of the
10		National and Missouri Society of Professional Engineers, and a member of the Institute
11		of Electrical and Electronic Engineers. I am active in the coordinated operation and
12		planning of the interconnected electric systems of the Mid Continent Area Power Pool
13		("MAPP"). I am a member of the MAPP Regional Transmission Committee, Power and
14		Energy Market Committee, and Reliability Committee.
15	Q.	Are you responsible for preparing the fuel and purchased power portion of SJLP's long-
16		range forecast?
17	A.	Yes. The fuel and purchased power portion of SJLP's long-range forecast is prepared
18		under my supervision.
19		Purpose of this Testimony
20	Q.	What is the purpose of your rebuttal testimony?
21	A.	To support the level of fuel and purchased power expense in SJLP's long-range forecast.
22		SJLP's long-range forecast is presented by SJLP witness Janet K. Pullen in her
23		surrebuttal testimony in this case. Pullen rebuts the testimony of Missouri Public Service

1 Commission Staff ("Staff") witnesses who have claimed that SJLP's cost of service is decreasing. 2 3 Are you sponsoring any schedules? Q. 4 A. Yes. I am sponsoring Schedules SLF-1, SLF-2 and SLF-3 which are attached to and a 5 part of this surrebuttal testimony. These Schedules were prepared under my supervision. SJLP's Cost of Fuel and Purchased Power is Increasing 6 7 When was SJLP's long-range forecast prepared? Q. I will be referring to the forecast, titled "St. Joseph Light & Power Company Forecasted 8 Α. 9 Income Statement 1999-2004", provided to the Staff on 4/14/00, in an update to SJLP's response to Staff Data Request SJLP-133 of this case. The long-range forecast contained 10 in the updated response was prepared in early 2000. 11 12 For what period of time does this long-range forecast cover? Q. 13 The forecast covers the five-year period of 2000 through 2004. A. 14 How is the fuel and purchased power portion of SJLP's long-range forecast prepared? Q. 15 A. Estimates are developed for the inputs to the forecast, namely; system requirements, system peak demand, generating unit maintenance and forced outages, the availability 16 and price of purchased power and energy, and the price paid for fuel. With these inputs, 17 18 the fuel and purchased power are dispatched by a reliable and accurate production cost 19 computer model to develop the appropriate generation and purchased power levels and 20 the resulting amount of fuel burned. SJLP uses the ENPRO III computer software as its 21 production cost model. How are the estimates for system requirements and system peak demand prepared? 22 Q. 23 A. The methods for preparing estimated system requirements and system peak demand are

- presented in the surrebuttal testimony in this case of SJLP witness Lois J. Liechti.
- 2 Q. How would you characterize the prices for purchased power?
- 3 A. As increasing. Please refer to Schedule SLF-1. This Schedule shows SJLP's average
- 4 cost of purchased power, 1995 1999. The data for this chart was submitted to the Staff
- in SJLP's monthly compliance filings associated with 4-CSR 240-20.080.
- 6 Q. How is purchased power priced?
- 7 A. Prior to wholesale competition, the price for purchased power was regulated by the
- 8 Federal Energy Regulatory Commission ("FERC") on a cost plus basis. Even during
- 9 periods of high demand and limited availability, the price would remain reasonably stable
- since it was tied to actual production cost. With the advent of wholesale competition, the
- price of purchased power is now market driven. The price will be whatever the market
- will bear, and during periods when demand approaches or exceeds supply, the price can
- be very volatile, rising very rapidly to levels much greater than the cost of generating the
- energy. For example, on July 29, 1999, the price paid by SJLP for purchased energy
- ranged from a low of \$8,77/MWH to a high of \$5,500.00/MWH.
- 16 Q. Have these high prices occurred before?
- 17 A. Yes. Another example of high prices occurred on June 25, 1998, when the price paid by
- SJLP for purchased energy ranged from a low of \$9.24/MWH to a high of
- 19 \$1,980.00/MWH.
- 20 Q. Was the data for these transactions given to the Staff?
- 21 A. Yes. The detailed hourly data for these transactions were submitted to the Staff in 1998
- and 1999 in SJLP's monthly compliance filings associated with 4-CSR 240-20.080.
- 23 Q. Will these high prices occur again?

1 A. Yes, because the price for purchased power is market-driven and is dependent on supply and demand; and demand is increasing at a greater rate than supply. 2 SJLP buys its purchased power from generating capacity in the MAPP and Southwest 3 4 Power Pool ("SPP") regions. With the exception of Kansas City Power & Light Company's ("KCPL") replacement unit at Hawthorn plant, no new coal-fired baseload 5 units have been built in the MAPP and SPP regions in the recent past, nor will be built in 6 the near future. At the same time, regional energy demand continues to increase. In other 7 8 words, the supply of low-cost coal-fired baseload energy from the markets in which SJLP buys purchased power has remained unchanged, and even decreased if the loss of the 9 KCPL Hawthorn plant is considered, whereas demand within these regions has continued 10 11 to increase. In the unregulated wholesale market that now exists, higher demand and 12 constant or decreasing supply means higher prices. The implementation of new operating rules governing how energy is purchased have also 13 14 impacted SJLP's average cost of economy energy. Prior to FERC Order 888, SJLP 15 needed only to arrange for an energy transaction that included transmission service as part of the bundled price for both energy and transmission service. The bundled transaction 16 17 was typically arranged via a phone call with the supplier and could be implemented in a few minutes time. As a result, SJLP was able to identify sources of low-cost baseload 18 generation for the next hour and rapidly secure them for use in its system. SJLP's small 19 20 size and load when compared to other systems enabled it to utilize small amounts (5 MW - 20 MW) of hourly excess baseload capacity on regional baseload units that were 21 22 overlooked by other larger systems. This was a niche market that SJLP was able to exploit for the benefit of its retail customers. 23

1 Since the implementation of FERC Order 888, energy purchasers and sellers must, in 2 addition to arranging for an energy transaction, also separately arrange for transmission service using an Open Access Same-time Information System ("OASIS"). Arranging for 3 transmission service on an OASIS takes at least 20 minutes, usually longer. As a result, 4 5 energy sellers are less willing to accept the burden of OASIS administration for small transactions. Accordingly, SJLP's previous niche market of access to low-cost economy 6 energy has virtually disappeared. 7 8 How would you characterize SJLP's cost for fuel and purchased power? Q. As increasing. Please refer to the attached Schedule SLF-2 which is a chart of SJLP's 9 A. 10 actual average net cost of fuel and purchased power for the years 1995 - 1999. The data 11 used in preparing Schedule SLF-2 was provided to the Staff in SJLP's response to Staff 12 Data Request SJLP-133 of this case. Also refer to Schedule SLF-3, which is a chart 13 showing SJLP's forecasted net expense for fuel and purchased power for the years 2000 -14 2004. The data used in preparing Schedule SLF-3 was provided to the Staff in the 15 response and updates to Staff Data Request SJLP-133. 16 As can be seen in Schedule SLF-2, SJLP's actual average cost of fuel and purchased power has increased from \$12.99/MWH in 1995 to \$14.95/MWH in 1999, an increase of 17 18 15.1%. As can be seen in Schedule SLF-3, the forecasted net expense for fuel and 19 purchased power is forecasted to increase from \$32.67 million in 2000 to \$36.04 million 20 in 2004, an increase of 10.3% from 2000 to 2004. Isn't it true that SJLP purchased base load capacity from NPPD for the period 2000 -21 Q. 22 2011?

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Yes. This purchase began June 1, 2000, at a level of 60 MW and increases by 10 MW

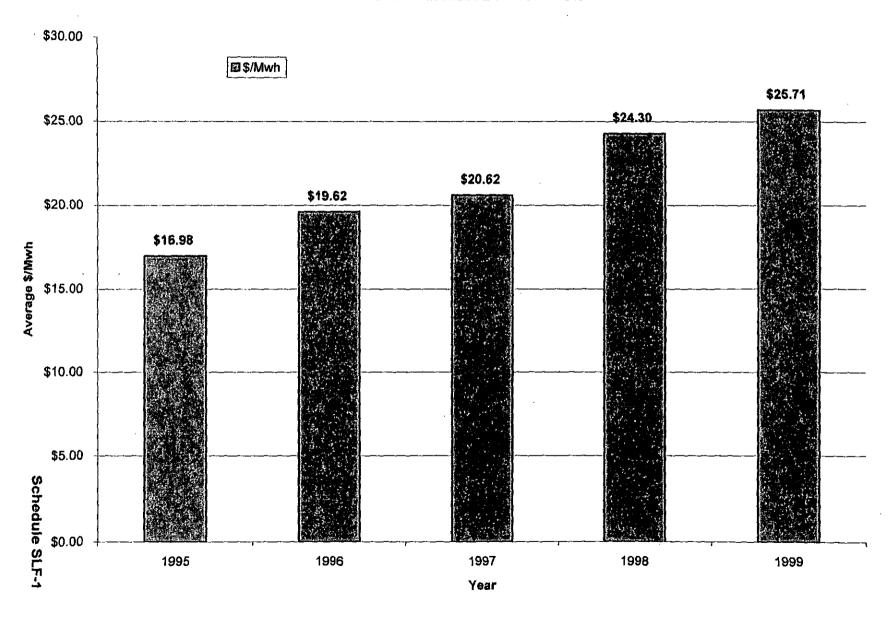
- 1 each year thereafter until reaching 100 MW; the purchase level then remains at 100 MW 2 until the completion of the contract. Because of this purchase, SJLP will on occasion have surplus energy it can sell off-system. 3 What will be the effect of the increase in off-system sales resulting from the NPPD Q. 4 5 purchase? 6 A. The effect of the increased off-system sales is to slow the rate at which the average cost 7 of fuel and purchased power increases, but it will still increase, not decrease. The effect 8 of off-system sales is included in the expense shown in Schedule SLF-3, and as can be
- 10 Q. Does this conclude your surrebuttal testimony?

seen the expense continues to increase.

11 A. Yes.

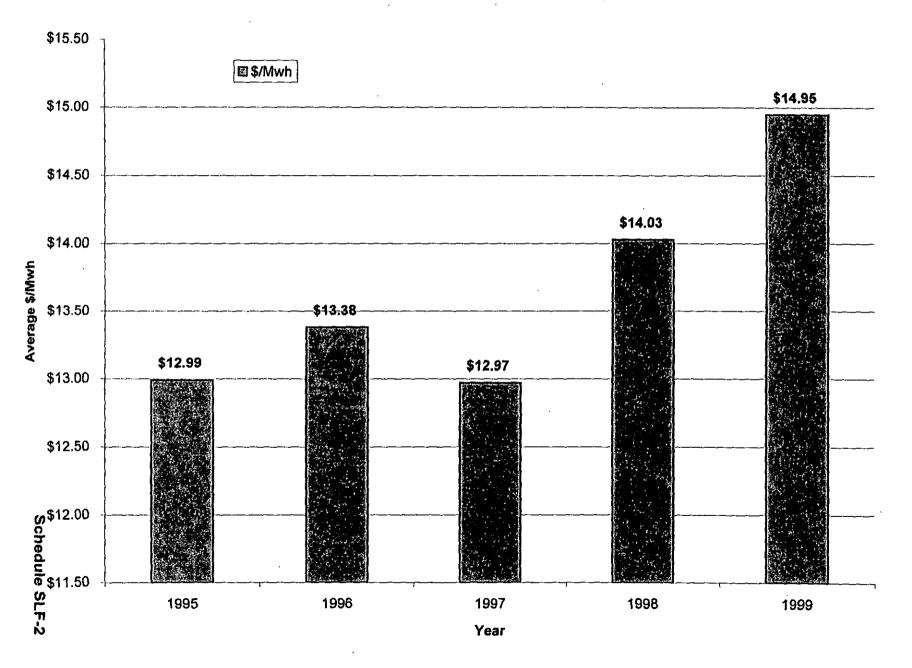
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## **SJLP Purchased Power Costs**



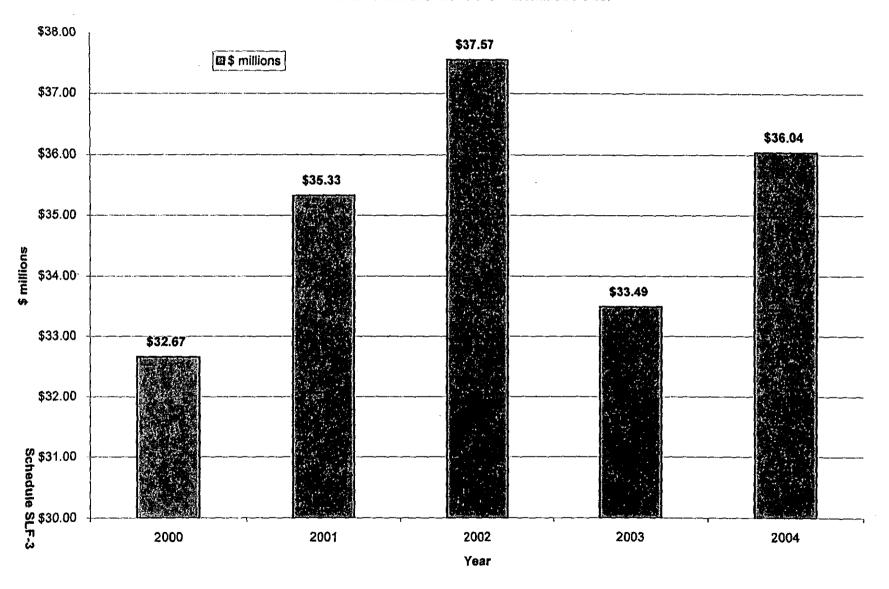
EM-2000-292

# SJLP Net Fuel & Purchased Power



EM-2000-292

## SJLP Forecast Net Fuel & Purchased Power



EM-2000-292

### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Joint Application of UtiliCorp United Inc. and St. Joseph Light & Power Company for Authority to Merger St. Joseph Light & Power Company with and into UtiliCorp United Inc., and, in Connection Therewith, Certain Other Related Transactions.	) ) Case No. ) )	se No. EM-2000-292
County of Buchanan )		
State of Missouri )		

#### AFFIDAVIT OF STEPHEN L. FERRY

Stephen L. Ferry, being first duly sworn, deposes and says that he/she is the witness who sponsors the accompanying testimony entitled "Regulatory Plan"; that said testimony was prepared by him/her and/or under his/her direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he/she would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his/her knowledge, information, and belief.

Subscribed and sworn before me this 20 day of June, 2000

My Commission expires

June 16, 2002

Notary Fullic