Exhibit No.: Issue(s): "Acquisition Adjustment Electric Allocations Agreement Regulatory Plan-Power Supply Costs Market Fower Witness: Michael S. Proctor Type of Exhibit: Rebutta Sponsoring Party: MoPSC Staff Case No.: EM-2000-292

ON BEHALF OF THE

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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

MICHAEL S. PROCTOR

UTILICORP UNITED INC. AND ST. JOSEPH LIGHT & POWER COMPANY

CASE NO. EM-2000-292

Exhibit No. 714 Date 7-11-00 Case No. Em-2000-292 Reporter N

Jefferson City, Missouri

May, 2000

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1	REBUTTAL TESTIMONY
2	OF
3	MICHAEL S. PROCTOR
4	UTILICORP UNITED INC., AND
5	ST. JOSEPH LIGHT & POWER COMPANY
6	EM-2000-292
7	
8	Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?
9	A. My name is Michael S. Proctor. My business address is 301 West High St.,
10	P.O. Box 360, Jefferson City, Mo. 65102-0360.
11	Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
12	A. I am employed by the Missouri Public Service Commission (Commission) as
13	Chief Regulatory Economist in the Electric Department.
14	Q. WHAT IS YOUR EDUCATION BACKGROUND AND WORK
15	EXPERICENCE?
16	A. I have Bachelors and Masters of Arts degrees in Economics from the
17	University of Missouri at Columbia, and a Ph.D. degree in Economics from Texas A&M
18	University. My previous work experience has been as an Assistant Professor of
19	Economics at Purdue University and at the University of Missouri at Columbia. Since
20	June 1, 1977, I have been on the Staff of the Commission and have presented testimony
21	on various issues related to weather-normalized energy usage and rate design for both
22	electric and natural gas utilities. With respect to electric issues, I have worked in the
23	areas of load forecasting, resource planning and transmission pricing. I recently served

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as the Staff Vice Chair of the Market Structure and Market Power working group of the
 Commission's Task Force on Retail Competition.

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Q. WHAT ARE YOUR CURRENT DUTIES IN THE ELECTRIC

4 DEPARTMENT AS CHIEF ECONOMIST?

A. In addition to advising the Staff of the Electric Department on various issues related to weather normalization of sales and rate design, my primary focus has been on the development and structure of Regional Transmission Organizations (RTOs) for the purpose of increasing efficiency and reliability in the supply of electricity. Because of the restructuring of the electric industry toward the increased competitive supply of electricity, I have also focused my attention on the issue of market power within the electric industry.

12 Q. IN THIS INSTANT CASE, WHAT IS THE PURPOSE OF YOUR 13 TESTIMONY?

14 A. My rebuttal testimony in this instant case will first address the issue of the 15 correct treatment of the acquisition premium (also called acquisition adjustment or 16 merger premium) with respect to the proposed merger between UtiliCorp United Inc. 17 (UCU) and Saint Joseph Light & Power Company (SJLP), collectively referred to as the 18 Merger Applicants, Specifically, I disagree with Merger Applicants' witnesses Robert K. 19 Green and John W. McKinney, who argue for recovery of a portion of the acquisition 20 premium as a part of what they call the "regulatory plan." As a policy matter, the Staff 21 has always opposed the inclusion of an acquisition adjustment in revenue requirements. 22 The second part of my rebuttal testimony will address the Electric Allocations 23 Agreement proposed by Merger Applicants' witness Robert W. Holzworth. This

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1	agreement addresses the allocation of production supply costs from the joint dispatch of
2	power supply resources between Missouri Public Service (MPS, a division of UCU) and
3	SJLP, as well as the treatment of merger savings related to power supply costs in the
4	regulatory plan proposed by Merger Applicants' witness John W. McKinney. The final
5	part of my rebuttal testimony will address the issue of the potential for an increase in
6	horizontal and vertical market power from the proposed merger.
7	Q. WHAT ARE YOUR CONCLUSIONS AND RECOMMENDATIONS
8	WITH RESPECT TO THE ACQUISITION PREMIUM?
9	A. My rebuttal testimony on the acquisition premium is divided into four
10	subsections. In the first two subsections, an explanation of the components of the
11	acquisition premium is given. In the second two subsections, the policy implications of
12	treating the acquisition premium as a merger cost and allowing rate recovery are
13	discussed.
14	My conclusion is that a new Commission policy of treating the acquisition
15	premium as a merger cost and allowing a recovery of that premium would remove
16	incentives for utilities to minimize the amount of acquisition premiums. Of equal
17	importance is that such a policy would not mirror what occurs for non-regulated
18	businesses. My recommendation is that, if the Commission decides to implement a
19	policy of giving incentives for mergers, then such incentives should focus on sharing
20	plans that are implemented over a short period (e.g., three to five years) after the
21	completion of the merger and are independent of the amount of the acquisition premium.
22	Q. WHAT ARE YOUR CONCLUSIONS AND RECOMMENDATIONS
23	WITH RESPECT TO THE ELECTRIC ALLOCATIONS AGREEMENT?

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1	A. My conclusion with respect to the Electric Allocations Agreement proposed
2	by the Merger Applicants is that the language used is unclear in several major sections.
3	However, it appears that the Merger Applicants' intention is for the Electric Allocations
4	Agreement to incorporate its proposed regulatory treatment of savings in power supply
5	costs. My recommendation is that the Electric Allocations Agreement not directly
6	incorporate the regulatory plan, but that it follow an allocation principle of reflecting the
7	opportunity costs for each stand-alone power supply system for determining the
8	appropriate power supply costs for each division.
9	Q. WHAT ARE YOUR CONCLUSIONS AND RECOMMENDATIONS
10	WITH RESPECT TO THE REGULATORY PLAN TREATMENT OF SAVINGS
11	RELATED TO POWER SUPPLY COSTS?
12	A. My conclusions with respect to the regulatory plan treatment of savings
13	related to power supply costs proposed by the Merger Applicants are:
14 15	 What the Merger Applicants call energy cost savings represent, in large part, energy cost-related opportunities rather than merger-related savings;
16 17 18 19	 The proposed regulatory plan is designed to recover the acquisition premium from retention of all of the savings and energy cost-related opportunities except for approximately \$1.6 million per year over the second five years after the merger is completed;
21 22	 The regulatory plan does not allow MPS customers any sharing of the energy cost-related opportunities over a full ten-year period; and
23 24 25	4) The regulatory plan allocates energy cost-related opportunities from the UCU- SJLP merger to Empire District Electric (EDE) when modifications are made for the UCU-SJLP-EDE merger.
26	My recommendation is that only \$6.8 million of the Merger Applicants' estimate
27	of energy cost-related savings be included as merger-related and the Commission deny
28	the Merger Applicants' proposed regulatory plan.

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1 **Q. WHAT ARE YOUR CONCLUSIONS AND RECOMMENDATIONS** 2 WITH RESPECT TO MARKET POWER FROM THE MERGER? 3 A. With respect to increases in horizontal market power from the merger, my 4 conclusion is that the proposed merger does not pose a threat with respect to high levels 5 of concentration within the northern region of the Southwest Power Pool (SPP). Because 6 specific studies with respect to market power within load pockets have not been 7 performed, my *recommendation* is that at the time of retail competition, the merged entity 8 be required to submit a market power study that addresses this issue. 9 With respect to potential vertical market power from the merger, my *conclusion* is 10 that absent a regional transmission authority that is independent of an integrated utility, 11 the integrated utility has significant opportunities to impede the transactions of 12 competitors in generation markets. My recommendation is that the merged entity be 13 required to place the determination of availability of transmission service and the pricing 14 of its transmission under an independent regional transmission authority such as the 15 Southwest Power Pool (SPP). I. MERGER-RELATED ACQUISITION PREMIUM 16 **Q. WHAT IS MEANT BY THE TERM "ACQUISITION PREMIUM?"** 17 18 A. An acquisition premium is defined as the amount paid to shareholders of the 19 company being acquired that is in excess of the net book value of that company's assets. 20 In Mr. Green's direct testimony, he calculates the premium to be the difference between 21 the \$23/share offered by UCU and accepted by SJLP's shareholders compared to 22 \$11.76/share for the book value of SJLP's assets. With approximately 8.2 million

Rebuttal Testimony of Michael S. Proctor weighted average common shares outstanding, Mr. Green calculates the total amount of 1 2 the acquisition premium to be $[($23/share)*(8.2 \times 10^6 \text{ shares})]-[($11.76/share)*(8.2 \times 10^6 \text{ shares})]$ 3 4 [\$188.6 x 10⁶]-[\$96.4 x 10⁶] 5 6 $\$92.2 \times 10^{6}$ 7 8 Q. CAN THIS ACQUISITION PREMIUM BE DIVIDED INTO DISTINCT 9 **COMPONENTS?** 10 A. Yes. The acquisition premium can be divided into two distinct components. 11 The first component is the difference between the market price per share and the price per 12 share representing the book value of SJLP's assets. The second component is the 13 difference between what will be paid by UCU to acquire SJLP and the market price per 14 share. At the time SJLP shareholders accepted the UCU offer, the market price of their 15 common stock was \$17.125/share. Using this price to quantify the two components 16 gives: 17 Component 1: Market Value - Book Value $($17.125/\text{share}-$11.76/\text{share})*(8.2 \times 10^6 \text{ shares}) = 44.0×10^6 18 19 Component 2: Acquisition Payment – Market Value $($23.00/\text{share}-$17.125/\text{share})*(8.2 \times 10^6 \text{ shares}) = 48.2×10^6 20 21 Q. IN HIS DIRECT TESTIMONY, DOES MR. GREEN PROVIDES AN 22 **EXPLANATION FOR THE ACQUISITION PREMIUM?** 23 A. Yes, at page 11 of his direct testimony Mr. Green provides a brief explanation 24 of the reason that a corporation would be willing to pay above market price to acquire 25 another corporation. However, Mr. Green's testimony gives an incomplete explanation

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1 of the difference between acquisition payment and market value and gives no explanation 2 for the difference between market value and book value. 3 A. DIFFERENCE BETWEEN MARKET AND BOOK VALUE 4 Q. WHAT IS MEANT BY THE "MARKET VALUE" OF A STOCK? 5 A. Market price of a stock on a given day is the price at which the stock has 6 traded on that day. Market price is determined by transactions that occur at the margin 7 between those holding the stock and willing to sell the stock at a price that is at or below 8 the market price (sellers) and those who are willing to buy the stock at a price that is at or 9 above the market price (buyers). If there are a large number of transactions taking place 10 on any given day, then an individual holder of the stock should be able to sell shares at 11 the market price, and therefore can value the stock at its market price. In this context, the 12 market value of a stock is represented by its market price. 13 Q. WHAT THEN IS AN EXPLANATION FOR THE DIFFERENCE **BETWEEN THE MARKET VALUE AND THE BOOK VALUE OF THE STOCK?** 14 15 A. For any shareholder, the value of a stock is determined by three fundamental 16 factors: 17 1) The income the stock is expected to produce; 18 2) The opportunity cost of alternative investments; and 19 3) The individual's preference for or aversion to risk. 20 Stock can produce income either in the form of dividend payments or in the form 21 of capital gains (losses). Opportunity cost from alternative investments represents what 22 the shareholder believes can be earned in income by selling the stock in question and 23 investing in another alternative. Risk is the probability distribution around expected

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1 earnings, for both the stock in question as well as for alternative investments. When the 2 Commission sets just and reasonable rates, it makes a determination of the Return. On 3 Equity (ROE) as the earnings which shareholders require as a return on the book value of 4 the stock. The allowed ROE is in part determined by what has occurred with market 5 prices of the stock and stocks of similar risk over a recent period of time. In this sense, 6 recent opportunity costs and evaluation of risk are taken into account. Yet a 7 determination of the market valuation of ROE using even recent historical data on market 8 prices gives only a snapshot of a dynamic process that is constantly changing. If, for 9 example, the allowed ROE determined in this manner is actually above what the market 10 requires, then the expected earnings for the utility would be greater than anticipated in the ROE calculation, and the price which shareholders would require in order to offer shares 11 12 on the market would increase. Economists would call this an upward shift in the supply 13 curve (e.g., a decrease in supply) for the stock. This upward shift in the supply curve will 14 cause the market price for the stock to increase.

The allowed ROE determined from historical data at a given point in time can also be greater than what the market requires at a later time because of a subsequent downward shift in opportunity cost (i.e., earnings potential from alternative investments are falling). In addition, expected earnings for the utility can increase because of cost savings coming from either declining rate base or decreases in annual expenses.

Regulatory lag is the time between these changes occurring and the time the
regulatory process implements the results of these changes through new rates. In a world
of "perfect regulation," rates would be adjusted each day to reflect changes in ROE from
changing market expectations, and there would be no difference between the market

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value and the book value of the stock. But we do not live in a world of "perfect
 regulation," and the market adjusts to these imperfections through the daily changes in
 market prices.

Q. WHEN THE ASSETS OF A UTILITY ARE SOLD, SHOULD THE DIFFERENCE BETWEEN MARKET VALUE AND BOOK VALUE OF THE STOCK BE INCLUDED AS A RECOVERABLE COST OF THE MERGER?

7 A. The difference between market value and book value of the stock of the 8 acquired utility should not be considered as a recoverable cost of the merger. The reason 9 is quite simple. If the merger is not detrimental to the public interest, then the earnings 10 potential of the utility being purchased should not get worse due to the merger. Because 11 the market value of the stock represents the market's evaluation of the earnings potential 12 of the utility and since that potential has not become worse, the merger results in the 13 same, if not better, earnings potential for the entity purchasing the utility in question. 14 To state this differently, if the Commission does not allow rate base to be 15 increased by the amount of the difference between market and book value, then there 16 would be no change in the rate base of the acquired utility. Holding everything else 17 constant, the earnings potential of the acquired utility would not have changed from what 18 existed prior to the merger. If new shareholders could have acquired the stock of the 19 utility at its market price, they would have paid the market's evaluation of the earnings 20 potential of that stock that is either the same or better than what it was prior to the 21 merger. In essence, there is no loss of value to the new shareholders that needs to be 22 recovered through some mechanism designed to increase earnings, such as putting the

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difference between market and book value in rate base in the form of an acquisition
 adjustment.

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Q. WHILE THE MERGER HAS NOT WORSENED THE EARNINGS
POTENTIAL, DON'T EXISTING SHAREHOLDERS HAVE THIS SAME
EARNINGS POTENTIAL BUT AT AN INVESTMENT COST EQUAL TO BOOK
VALUE THAT IS LOWER THAN THE MARKET PRICE PAID BY THE
ACQUIRING ENTITY AND ITS SHAREHOLDERS?

8 A. No. It is incorrect to assume that existing shareholders paid book value for 9 their shares. In fact, there is no way from publicly available information to measure what 10 existing shareholders paid for their shares, and certainly there is no reason to believe that 11 current shareholders paid book value for their shares. Beyond the guestion of not 12 knowing what existing shareholders paid for their shares, what they have historically paid 13 for shares is a sunk cost to the investor. Sunk costs are not relevant either to current 14 investment decisions (to sell or not sell shares in the daily market), or with respect to 15 what is required as an offer price to sell their shares to the acquiring entity.

B. DIFFERENCE BETWEEN ACQUISITION PAYMENT AND MARKET VALUE

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Q. WHY WOULD THE ACQUISITION PAYMENT BE DIFFERENT

19 FROM MARKET VALUE?

A. Market price is determined based on the supply and demand for the stock on a
given day, with quantities being exchanged representing only a small fraction of the total
stock outstanding. In order for this merger to take place, at least two-thirds of current
shareholders of SJLP stock must agree to the sales price being offered by UCU.
Acquisition price represents the offer price that is expected to induce at least two-thirds

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1	of current SJLP shareholders to sell based on their overall evaluation of expected
2	earnings, opportunity costs and required risk premiums. While market price represents a
3	price at which a small fraction of shareholders are willing to sell their shares, to increase
4	the willingness to sell from that small fraction to two-thirds of outstanding shares will
5	demand a higher offer price.
6	Q. IN YOUR OPINION, WHEN THE ASSETS OF A UTILITY ARE
7	SOLD, SHOULD THE DIFFERENCE BETWEEN ACQUISITION PAYMENT
8	AND MARKET VALUE OF THE STOCK BE INCLUDED AS A
9	RECOVERABLE COST OF THE MERGER?
10	A. The difference between acquisition payment and market value of the stock of
11	the acquired utility should not be considered to be a recoverable cost of the merger. The
12	reason is the same as for the difference between market value and book value. In
13	essence, while the market value represents the value placed on future earnings at the
14	margin, the acquisition payment represents the value placed on future earnings by at least
15	two thirds of the existing shareholders. In essence, each individual shareholder makes an
16	evaluation of the price at which he or she would sell their stock based on expectations of
17	future earnings, opportunity cost of other investments and risk preference. If ranked from
18	lowest to highest asking price, the lowest asking price would be slightly above the current
19	market price and the acquisition price would be at or above the asking prices for two-
20	thirds of current shareholders.
21	There are additional similarities between the determination of the market price
22	and the acquisition price on the demand side of the offer. In the case of market price, the
23	investors are looking at alternative investment opportunities and making offers based on

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1	their evaluation of those opportunities relative to earnings for the specific company in
2	question. Likewise, companies that are considering mergers or acquisitions are looking
3	at alternative investment opportunities and set their bid price based on what they see as
4	their opportunity costs in the market compared to their earning potential from the utility
5	on which the offer is made. The reason that a company seeking to merge is willing to
6	make an offer that is higher than what the rest of the investment market is willing to offer
7	is that it sees higher earnings potential, has a lower opportunity cost or has a different risk
8	preference.
9 10	C. POLICY IMPLICATIONS FROM ALLOWING THE RECOVERY OF THE MERGER ACQUISITION PREMIUM
11	Q. IN NON-REGULATED BUSINESSES, DOES THIS FUTURE
12	EARNINGS POTENTIAL INCLUDE SOME RECOVERY OF THE
13	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET
13 14	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK?
13 14 15	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they
13 14 15 16	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that
13 14 15 16 17	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that to other opportunities in making a decision as to how much to offer to acquire the
13 14 15 16 17 18	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that to other opportunities in making a decision as to how much to offer to acquire the business in question. If that offer were accepted, then the merger would take place
13 14 15 16 17 18 19	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that to other opportunities in making a decision as to how much to offer to acquire the business in question. If that offer were accepted, then the merger would take place subject to the approval of the Securities and Exchange Commission (SEC). However, it
13 14 15 16 17 18 19 20	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that to other opportunities in making a decision as to how much to offer to acquire the business in question. If that offer were accepted, then the merger would take place subject to the approval of the Securities and Exchange Commission (SEC). However, it is important to realize that if there are synergies from the merger that will increase the
 13 14 15 16 17 18 19 20 21 	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that to other opportunities in making a decision as to how much to offer to acquire the business in question. If that offer were accepted, then the merger would take place subject to the approval of the Securities and Exchange Commission (SEC). However, it is important to realize that if there are synergies from the merger that will increase the earnings potential of the merged company when compared to the separate companies,
13 14 15 16 17 18 19 20 21 22	DIFFERENCE BETWEEN ACQUISITION PAYMENT AND EITHER MARKET VALUE OR BOOK VALUE OF THE STOCK? A. No, non-regulated businesses do not operate in this fashion. Instead, they would simply look at the earnings potential from acquiring the business and compare that to other opportunities in making a decision as to how much to offer to acquire the business in question. If that offer were accepted, then the merger would take place subject to the approval of the Securities and Exchange Commission (SEC). However, it is important to realize that if there are synergies from the merger that will increase the earnings potential of the merged company when compared to the separate companies, that increase in earnings potential can play a role in the price that the acquiring company

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- 1 Q. IN WHAT WAYS DOES THIS COMPARE TO WHAT HAPPENS 2 WITH REGULATED COMPANIES? 3 A. There should be no difference. The company seeking to acquire a regulated 4 company must perform an evaluation of the expected earnings it anticipates from that 5 company including some expectation of increased earnings from the synergies anticipated 6 from the merger. Based on this evaluation, the company determines the price per share 7 that it is willing to offer the regulated company's shareholders. If that price were 8 accepted, then the merger would take place subject to regulatory approval. The difficult 9 part of this comparison is what expectations should the acquiring utility have concerning 10 increased earnings from the synergies anticipated from the merger.
- It is important to note that this order of causality problem needs to be divided into the correct causal sequence. The incorrect causal chain is the one presented by UCU in its testimony: the acquisition premium causes a certain level of recovery of the synergies from the merger. The correct causal chain is that: a certain level of recovery of the synergies from the merger causes a cap on the offer price for the acquisition.
- Q. WHAT THEN IS THE IMPACT OF A POLICY THAT WOULD BASE
 THE LEVEL OF RECOVERY OF SYNERGIES FROM THE MERGER ON THE
 LEVEL OF THE ACQUISITION PREMIUM?

A. The effect of such a policy would be an increase in the price that companies
would be willing to offer to merge with other companies. Suppose, as was the case for
SJLP, there were several companies bidding to acquire the regulated company. With a
"known" regulatory policy of allowing recovery of an acquisition premium, all of the
companies would be willing to bid higher because of the higher expected earnings that

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1	would result from there being a regulatory policy of allowing the recovery of the
2	acquisition premium. The expected synergies from the merger should place a cap on
3	what any company would be willing to offer, but if recovery of the acquisition premium
4	is included in those potential earnings, what should be the true cap on bids is no longer
5	relevant. In non-regulated mergers, the bidding would stop when the company expecting
6	the next to highest synergies from the merger was no longer willing to bid. But when
7	recovery of the acquisition premium is "guaranteed" as a regulatory policy, it is
8	impossible to determine where the bidding will stop.
9	Q. WOULD HIGHER ACQUISITION PRICES RESULT IN MERGERS
10	TAKING PLACE THAT MIGHT NOT OTHERWISE TAKE PLACE?
11	A. Yes. It is very likely that a regulatory policy that allows recovery of the
12	acquisition premium and fosters offering higher acquisition prices would result in more
13	mergers being proposed. However, this is not a good thing. As a general economic
14	principle, whether or not a merger should take place should be based on the potential
15	economic gain in the market from the merger, and not on a regulatory policy of adding
16	earning incentives to the market through allowing recovery of an acquisition premium.
17	In effect, regulatory policy should be based on a parallel to what would happen in
18	competitive markets, and as indicated above, mergers in non-regulated businesses offer
19	no recovery of an acquisition premium.
20	Q. WOULD A POLICY OF NOT ALLOWING THE RECOVERY OF AN
21	ACQUISITION PREMIUM RESULT IN MERGERS NOT TAKING PLACE
22	THAT OTHERWISE WOULD HAVE RESULTED IN SAVINGS TO
23	RATEPAYERS?

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1	A. A merger where the offered acquisition premium is based on the assumption
2	of recovery of the acquisition premium may not be consummated if there is regulatory
3	denial of the acquisition premium. However, such a situation is not relevant for Missouri
4	because this Commission has not previously allowed recovery of an acquisition premium
5	and therefore it would be presumptuous to make an offer based on the assumption of
6	recovery.
7 8	D. POLICY IMPLICATIONS AND VARIOUS METHODS FOR SHARING MERGER SAVINGS
9	Q. DO YOU THEN CONCLUDE THAT THERE SHOULD BE A POLICY
10	OF NOT ALLOWING UTILITIES ANY RETENTION OF THE SYNERGIES
11	FROM THE MERGER?
12	A. No, that is not my conclusion. The Commission may allow some sharing of
13	the savings from the merger between shareholders and ratepayers. But any policy of
14	sharing merger savings should not be based on the amount of the acquisition premium
15	agreed to prior to obtaining regulatory approval of the merger. There are other options
16	available for sharing the savings. For example, regulatory lag allows the merged utility
17	the opportunity to recover some of the merger savings. Likewise, a rate freeze
18	(moratoriums on rate increase/earnings complaint cases) over a three- to five-year period
19	after the merger is completed allows companies (in declining cost circumstances) the
20	opportunity to pay off the merger costs and retain a portion of the immediate savings
21	resulting from the merger. After the rate freeze period, the Staff would file a complaint
22	case to lower rates to match the lower cost levels, including capturing actual merger
23	savings that are in place at that time. This rate freeze period also allows the marged

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1 entity the time it needs to implement its merger plan and begin to accrue some of the 2 merger savings.

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Q. IS A THREE- TO FIVE-YEAR RATE FREEZE A POSSIBLITY FOR MERGERS INVOLVING MISSOURI PUBLIC SERVICE?

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5 A. With the addition of significant levels of new purchased power and new leases 6 on generation capacity that are replacing older, lower-cost contracts, it appears that MPS 7 is not in a declining cost situation over the next three to five years. This means that even 8 with the opportunity for merger savings, MPS is likely to file for a rate increase sometime 9 within the next three years. Thus, a rate freeze over a three- to five-year period after the 10 consummation of the merger does not appear to be a viable alternative for MPS. 11 However, it appears that SJLP is in a declining cost situation, so that a rate freeze at SJLP 12 is a possible way for allowing the merged entity to retain and "share" a portion of the 13 synergies from the merger.

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Q. WHEN A RATE FREEZE IS NOT FEASIBLE, WHAT OTHER 15 ALTERNATIVE REGULATORY PLANS CAN BE IMPLEMENTED FOR 16 SHARING MERGER SAVINGS BETWEEN SHAREHOLDERS AND

17 **RATEPAYERS?**

18 A. Sharing plans require a determination of three elements. The first element is 19 whether or not the merger savings that are shared are based on estimates made prior to 20 the merger (ex ante), or will depend on after-the-fact measurements (ex post). The 21 second element is the percentage sharing between shareholders and ratepayers that will be applied. The third element is the length of time over which the sharing of the savings 22 23 would apply.

Q. CAN YOU ILLUSTRATE HOW THESE VARIOUS DETERMINANTS WOULD ACTUALLY APPLY?

A. Yes. For the first illustration assume that it is determined that an *ex ante* 3 4 estimate of merger savings will be used, that there will be a 50% sharing between 5 shareholders and ratepayers and that this sharing will apply for a five-year period. Putting this in the context of MPS with increasing costs, after the merger is completed 6 7 and before the five-year sharing period is up, any MPS filing for a rate increase would 8 add to actual costs an amount equal to 50% of the estimated annualized merger savings. 9 After the five-year sharing period, this adder would not be included in MPS's cost of 10 service. Changing either the percentage or the period of time has an obvious impact. The 11 higher the percentage going to shareholders and/or the longer the period of time, the 12 greater will be the amount of overall merger savings going to shareholders and resulting 13 in higher rates.

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Q. IF THIS *EX ANTE* PROCEDURE IS FOLLOWED, IS THERE ANY GUARANTEE OF ACTUAL SAVINGS FROM THE MERGER?

A. With the *ex ante* approach, there is no guarantee of actual savings from the 16 17 merger. If actual costs go up from the merger and the benefits expected in terms of 18 savings do not occur, then the utility's costs are higher than what was projected for the 19 merger. To make matters worse, on top of these higher costs are added the 50% of so-20 called shareholder "savings." In essence, ex ante procedures put the ratepayer at risk by adding certain costs that are to be offset by uncertain savings and providing no 21 incentives for utilities to achieve those savings. I would characterize such a plan as being 22 23 detrimental to ratepayers' interest.

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Q. HOW DOES THE EX POST PROCEDURE WORK?

A. For the second illustration, instead of using an ex ante estimate of annualized 2 merger savings, the merger savings would be estimated ex post for the test year of the 3 4 rate case. The word "estimated" ex post savings is used rather than "measured" ex post savings on purpose. Because merger savings are the difference between what would have 5 6 happened without the merger and what actually happened, and since what would have 7 happened without the merger is not measurable, it is impossible to measure merger 8 savings on an *ex post* basis. Unless very explicit formulas for estimating merger savings 9 ex post are set out ahead of time, any future rate case that includes merger savings will 10 involve additional testimony regarding each party's estimate of the merger savings. 11 Thus, one of the major drawbacks of the *ex post* approach is the difficulty in the 12 regulatory process to make a determination of merger savings.

13 To illustrate where *ex post* estimates of merger savings might be used, an example is in the energy cost savings that come from joint dispatch of generation. In this 14 15 application, methods for estimating the energy costs savings from joint dispatch are set 16 out as part of the regulatory plan. This would involve assumptions regarding the estimation of what energy costs would have been without the joint dispatch and 17 comparing them to what these costs are with the joint dispatch. Estimating what energy 18 19 costs would have been without the joint dispatch depends on applying certain 20 assumptions about what the test year would have been absent the merger. As I will discuss later in my testimony, there is no way to determine whether or not such 21 22 assumptions are valid.

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Q. SHOULD EX POST ESTIMATES BE COMPARED TO EXPECTED MERGER SAVINGS?

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3 A. Generally, it is a good idea to combine the *ex ante* and *ex post* estimation of 4 merger savings. This approach is what could be termed *benchmarking*. Benchmarking 5 simply means that ex post estimates of historical test year costs are compared to the ex 6 ante estimate of what these costs were expected to be. In addition to an ex ante estimate 7 of merger savings, benchmarking also requires an ex ante estimate of what the cost will 8 be without the merger (forecasts of future budgets without a merger). The sum of these 9 two ex ante estimates provides a benchmark against which actual test year costs are 10 measured. For example, suppose overhead costs for two utilities are estimated to be \$15 11 million prior to the merger and with the merger a claim is made for an expected \$3 12 million in savings. Thus, the ex ante estimate of overhead costs is \$12 million. After the 13 merger is completed, MPS files a rate case and the overhead costs are \$13 million rather 14 than the estimated \$12 million. Instead of sharing 50% of the \$3 million in expected 15 merger savings by adding \$1.5 million to its test year cost of service, MPS is required to 16 subtract 50% of the difference between estimated and actual test year overhead costs 17 from what is added for purposes of merger savings sharing. Specifically, instead of 18 adding \$1.5 million to its test year costs, it can only add \$1.5 million minus 50% of the 19 difference between \$13 million actual and \$12 million estimated (0.5*(13-12) = \$0.5)20 million). In this example, instead of adding \$1.5 million to the \$13 million in overhead 21 expense (\$1.5+\$13.0 = \$14.5), MPS can only add \$1 million to the \$13 million in 22 overhead expense, putting \$14 million into test year revenue requirements rather than \$14.5 million. Notice that this is equivalent to measuring the savings as being the 23

difference between projected costs of \$15 million and test year costs of \$13 million, and
 allowing 50-50 sharing on the difference of \$2 million.

3 On the other side of benchmarking, if the utility does better than the benchmark, it 4 is allowed to increase the adder by 50% of the difference. For example, if test year 5 expenses are \$11 million dollars, \$1 million below the benchmark of \$12 million, then 6 MPS is allowed to add 50% of this \$1 million to the \$1.5 million of shareholders' share 7 of expected savings. Thus, the test year revenue requirements for overhead expense 8 would be the test year expense of \$11 million plus the \$1.5 million of shareholders' share 9 of expected savings plus the \$0.5 million for being below the benchmark. The total 10 included in revenue requirements would be \$13 million. Again, notice the same results 11 are reached by measuring the savings as being the difference between projected costs of 12 \$15 million and test year costs of \$11 million, and allowing 50-50 sharing on the 13 difference of \$4 million.

14 The policy concept behind benchmarking is that it gives the utility an additional 15 incentive to maximize merger savings. This type of policy is most appropriate with 16 respect to costs that can be fairly closely controlled by the utility, such as the number of 17 employees working in the overhead functions.

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Q. IS THE BENCHMARKING PROCEDURE PREFERABLE TO

19 EITHER EX ANTE OR EX POST PROCEDURES?

A. In my opinion, benchmarking is preferable because it holds the utility to the
estimates of savings used to justify the merger. The difficulty with benchmarking is in
making a determination that the forecasted budget levels for costs absent the merger are
reasonable.

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2 **PROBLEMS OF ESTIMATING SAVINGS FROM THE MERGER?** 3 A. Yes, there are. However, these approaches involve what are called either 4 "alternative regulation" plans, "incentive ratemaking" plans or "performance-based 5 ratemaking" plans. An example of this approach is the settlement approved by the 6 Commission for the Union Electric Company merger with Central Illinois Public Service 7 to form Ameren. In this regulatory sharing plan, after a one-time rate decrease, electric 8 rates were frozen and there was a grid by which profits above certain levels were shared 9 between shareholders and ratepayers. The problems of inability to measure merger 10 savings were circumvented by not attempting to measure such savings. Instead, the focus 11 of this type of regulatory sharing plan is on measurement of overall earnings. In essence, 12 an alternative form of regulation was used to allow Union Electric to recover some 13 portion of the estimated savings from the merger. An initial three-year sharing plan was 14 in effect at the time of the merger, and this sharing plan was extended an additional three 15 years after agreement for a rate decrease reflecting the average level of savings over the 16 first three years.

Q. ARE THERE OTHER ALTERNATIVES THAT AVOID THE

The type of regulatory sharing plan implemented for Union Electric Company is
not directly related to the merger or to merger savings. In essence, these types of sharing
plans can just as easily be used for any utility as alternatives to traditional rate of return
regulation. The advantage of alternative regulation plans is that they do not isolate and
attempt to track specific elements of cost.

Q. ARE YOU RECOMMENDING THAT THE COMMISSION ADOPT
 SOME FORM OF REGULATORY SHARING PLAN FOR THE PURPOSE OF
 THIS MERGER?

A. No. The purpose of my rebuttal testimony is to explain attributes associated
with various types of regulatory sharing plans. Staff witness Mr. Mark L. Oligschlaeger
of the Accounting Department will testify on the Staff's recommendation regarding
regulatory sharing plans.

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II. MERGER SAVINGS IN POWER SUPPLY COSTS Q. WHAT FORMS OF SAVINGS IN POWER SUPPLY COSTS DO THE MERGER APPLICANTS ESTIMATE WILL RESULT FROM THE MERGER OF UCU AND SJLP?

A. There are several components to the proposed merger savings for power supply costs. First, with respect to the joint dispatch of the generation of MPS and SJLP, there are potential short-run savings with respect to the cost of fuel and purchased power net of sales. These savings can be divided into three basic subcategories: a) savings in fuel and variable operating costs; b) savings in interchange (off-system) purchased power costs; and c) greater profitability in interchange (off-system) sales.

Second, with respect to the joint capacity planning for the merged utilities there
are potential savings from combining the loads for purposes of determining peak load
capacity requirements. These savings are specifically related to the diversity of load (the
assumption that the MPS and SJLP loads do not reach their peaks at the same time).

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1	Third, it is important to point out that potential savings from joint dispatch will
2	not be possible without additional expenditures on transmission required to connect the
3	MPS and SJLP system.
4	My rebuttal testimony on proposed savings on power supply costs focuses on how
5	to estimate and allocate the various common costs related to power supply. This
6	testimony is divided into three parts:
7	A. Electric Allocations Agreement;
8	B. Regulatory Plan; and
9	C. Effects of the proposed merger with Empire District Electric Company (EDE).
10	A. ELECTRIC ALLOCATIONS AGREEMENT
11	Q. WHAT IS A JOINT DISPATCH AGREEMENT AND WHY 15 IT
12	IMPORTANT TO THE ISSUE OF CALCULATING SAVINGS IN SHORT-RUN
13	GENERATION COSTS?
14	A. A joint dispatch agreement specifies how the generation and long-term power
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15	contracts of the separate companies or divisions will be used to meet the overall native
15 16	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission
15 16 17	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission tariffs and wholesale loads that are either under contract or are served on a Federal
15 16 17 18	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission tariffs and wholesale loads that are either under contract or are served on a Federal Energy Regulatory Commission (FERC) tariff. This is the load that the utilities are
15 16 17 18 19	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission tariffs and wholesale loads that are either under contract or are served on a Federal Energy Regulatory Commission (FERC) tariff. This is the load that the utilities are obligated to serve with their power supply resources.
15 16 17 18 19 20	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission tariffs and wholesale loads that are either under contract or are served on a Federal Energy Regulatory Commission (FERC) tariff. This is the load that the utilities are obligated to serve with their power supply resources. In addition to specifying how power supply resources will be used, the joint
 15 16 17 18 19 20 21 	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission tariffs and wholesale loads that are either under contract or are served on a Federal Energy Regulatory Commission (FERC) tariff. This is the load that the utilities are obligated to serve with their power supply resources. In addition to specifying how power supply resources will be used, the joint dispatch agreement specifies how the costs resulting from the use of these resources will
 15 16 17 18 19 20 21 22 	contracts of the separate companies or divisions will be used to meet the overall native load requirements. Native load includes both retail loads served under State Commission tariffs and wholesale loads that are either under contract or are served on a Federal Energy Regulatory Commission (FERC) tariff. This is the load that the utilities are obligated to serve with their power supply resources. In addition to specifying how power supply resources will be used, the joint dispatch agreement specifies how the costs resulting from the use of these resources will be allocated among the various divisions; <i>e.g.</i> , MPS and SJLP. This is important if the

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1	supply as a common cost through jointly dispatching the separate power supply
2	resources. It should be noted that there are other divisions of UCU, such as West Plains,
3	that are not included in the joint dispatch agreement.
4	When the merging companies attempt to retain a pre-merger company identity
5	under a holding company, as with AmerenUE and AmerenCIPS, which are subsidiaries
6	under Ameren, the joint dispatch agreement is an agreement to dispatch each subsidiary's
7	power supply resources as if there were only one company. In the proposed merger
8	between UCU and SJLP, the result will be only one company with two divisions and the
9	joint dispatch agreement is called an Electric Allocations Agreement.
10	Q. IN THIS CASE, WHAT IS THE PROPOSED ELECTRIC
11	ALLOCATIONS AGREEMENT?
12	A. The Merger Applicants have included a proposed Electric Allocations
13	Agreement in Schedule RWH-10, attached to the direct testimony of Robert W.
14	Holzwarth. At page 18 of his direct testimony, Mr. Holzwarth brings out three main
15	elements:
16 17 18	1. <u>Allocation of Existing Capacity Costs</u> . "Existing generation capacity costs and purchased power capacity costs will remain with the entity which owned or had contracted for such capacity prior to the closing of the merger."
19 20 21 22	2. <u>Allocation of New Capacity Costs</u> . "New generation and/or purchased capacity and associated cost will be assigned to each entity on the basis of the capacity needs of each entity. The assignment will be on an equal cost per kilowatt basis."
23 24 25 26	3. <u>Allocation of Energy Costs</u> . "The power supply portfolio of the combined entity will be dispatched in a manner to minimize the overall power supply cost of the combined system. Energy savings achieved will be allocated to SJLP since none of the savings would be possible absent the merger."
27	In addition, energy savings will be determined for two separate components as follows:

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1 1. On-System Energy Savings. A computer production-costing model will be 2 calibrated to duplicate the actual joint dispatch of power supply resources. 3 That model will then be rerun on a stand-alone basis. The results of the joint 4 dispatch will be subtracted from the sum of the stand-alone dispatches to 5 determine the on-system energy savings. 6 2. Margins from Off-System Sales. Records will assign each off-system sale to 7 a specific power supply resource for purposes of calculating the profit margin. 8 Additional profit margins from off-system sales will be assigned to SJLP. 9 **O. DO YOU AGREE WITH THE DETERMINATION AND THE** 10 ALLOCATIONS OF CAPACITY COST SAVINGS PROPOSED BY THE 11 **MERGER APPLICANTS?** 12 A. Yes, I do. It is reasonable for a period of time after the merger to keep 13 divisional costs based on the historical capacity costs of the existing generation facilities. 14 It is also reasonable on a going-forward basis, to combine and allocate the capacity costs 15 of new generation facilities being brought on line to meet the joint peak load and reserve 16 requirements of the merged utilities. 17 Q. DO YOU AGREE WITH THE DETERMINATION AND THE 18 ALLOCATIONS OF ENERGY COST SAVINGS PROPOSED BY THE MERGER 19 **APPLICANTS?** 20 A. No, I do not. The primary source of the Staff's disagreement with the 21 allocations of energy costs savings proposed in the Electric Allocations Agreement is 22 because the proposal has not explicitly treated the concept of opportunity cost. I will illustrate this deficiency using three examples of a joint dispatch involving two utilities. 23 24 In all three illustrations, the incremental and decremental costs for energy from internal 25 (on-system) power supply resources for each utility to meet native load do not change.

What changes in each of the three illustrations is the market price for off-system
 (wholesale) purchases or sales of energy.

Q. WHAT DO YOU MEAN BY DECREMENTAL COSTS FROM SERVING NATIVE LOAD?

5 A. Blocks of hourly energy from available on-system power supply resources are 6 stacked in order of lowest to highest variable energy cost to serve native load. The first 7 block of decremental cost is then defined as the cost savings that would occur when the 8 highest energy cost block from on-system power supply resources required to serve 9 native load is removed from the stack. Further blocks of decremental costs are calculated 10 as the cost savings due to removing additional blocks of on-system power supply 11 resources from the stack. The decremental costs per unit of each additional block of 12 power are typically lower and should not be any higher than the decremental cost of 13 previous block. An off-system purchase is made as substitute for on-system power supply 14 resources when the price of off-system power is cheaper than the decremental cost of 15 serving the load with on-system power supply resources.

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Q. WHAT ARE THE INCREMENTAL COSTS TO SERVING NATIVE LOAD?

A. Blocks of hourly energy from available on-system power supply resources are stacked in order of lowest to highest variable energy cost to serve native load. The first block of incremental cost is then defined as the additional cost that would occur when the next higher energy cost block from on-system power supply resources is added to the stack required to serve native load. Further blocks of incremental costs are calculated as the additional cost due to adding additional blocks of on-system power supply resources

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1	to the stack. The per unit incremental costs of each additional block of power are
2	typically higher and should not be any lower than the incremental cost of previous block.
3	In addition, the lowest per unit incremental cost is typically higher and should not be any
4	lower than the highest per unit decremental cost. An off-system sale is made from
5	internal power supply resources when the price of off-system power is above the
6	incremental cost of power supply resources not being used to serve native load.
7	Q. WHAT DO YOU MEAN BY THE MARKET PRICE FOR OFF-
8	SYSTEM ENERGY?
9	A. The market for off-system energy is also called the wholesale spot market for
10	electricity. It is the market, in which traders buy and sell electricity. In the illustrations
11	that follow, it is assumed that there is a single market with a price established at which
12	both utilities can buy or sell whatever quantities they wish. Market clearing price means
13	the price at which demand and supply are equal. If the price is above market price, then
14	suppliers will want to sell more than buyers wish to purchase, thereby causing the price to
15	fall. If the price is below market price, then buyers will want to purchase more than
16	suppliers wish to sell, thereby causing the price to increase.
17	Q. WHAT IS YOUR FIRST ILLUSTRATION OF JOINT DISPATCH?
18	A. The first illustration is set out as Case 1 in Schedule 1, where the price of off-
19	system power is below the decremental costs of one of the utilities and below the
20	incremental costs for both utilities. The market price for off-system power is \$13/MWh,
21	while Utility B's decremental costs are \$25/MWh for the first 100 MWhs and \$20/MWh

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22 for the next 100 MWhs. Beyond the first 200 MWh, Utility B's decremental costs are

1 assumed to be at or below \$18/MWh. Utility A's decremental costs are at or below 2 \$18/MWh, and both utilities' incremental costs are above \$18/MWh. 3 In this case, the stand-alone and joint dispatch for the two utilities are the same. 4 Utility A neither purchases nor sells off-system, and Utility B replaces the 200 MWh of 5 more expensive power with off-system purchases from the wholesale market. Notice in 6 this case, there are savings from purchasing off-system, but these savings would have 7 occurred absent the merger. Therefore, there are no merger-related energy savings, and 8 since there are no off-system sales, there are no profits to be determined or allocated. In 9 this simple case, the proposed Electric Allocations Agreement would properly dispatch 10 and allocate costs, but almost any reasonably written allocations agreement would handle 11 this simple case the same. 12 **Q. WHAT IS YOUR SECOND ILLUSTRATION OF JOINT DISPATCH?** 13 A. The second illustration of joint dispatch is Case 2 found on Schedules 2.1 and 14 2.2 attached to my rebuttal testimony. This illustrates a case in which the marke: price is 15 between decremental and incremental costs. The market price for off-system power is 16 \$23/MWh, which is above the incremental cost of \$20/MWh for Utility A, and below the 17 decremental cost of \$25/MWh for Utility B. 18 On a stand-alone basis, Utility A would sell 100 MWh to the market making a 19 profit on the difference between the market price and its incremental energy cost of 20 23/MWh - 20/MWh = 3/MWh, for a total profit of $3/MWh \times 100 MWh = 300$. 21 Utility B would purchase 100 MWh from the market resulting in a savings on the 22 difference between its decremental energy cost and the market price of \$25/MV/h -23 23/MWh = 2/MWh, for a total savings of $2/MWh \ge 200$.

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On a joint dispatch basis, the incremental generation from Utility A will be
substituted for the decremental generation from Utility B, resulting in an internal energy
cost savings of $25/MWh - 20/MWh = 5/MWh$, for a total savings of $5/MWh$ x 100
MWh = \$500. After this joint dispatch, Utility A's revised incremental cost is the cost of
the next block not being dispatched to meet either its own native load or the native load
of Utility B. This incremental cost is \$25/MWh. After the joint dispatch, Utility B's
revised incremental cost is the decremental cost of the block of power taken out of the
dispatch to make room for the cheaper block of power from Utility A. Thus, Utility B's
incremental cost is \$25/MWh. Both incremental costs are above the market price for
electricity, and no sales will be made to the market from the joint dispatch.
Q. HOW WOULD THE PROPOSED ELECTRIC ALLOCATIONS
AGREEMENT CALCULATE INTERNAL ENERGY COST SAVINGS?
A. It appears that the proposed Electric Allocations Agreement would calculate
internal energy cost savings to be \$500, and would allocate all of that savings to
whichever of the two utilities is SJLP.
Q. HOW WOULD THE PROPOSED ELECTRIC ALLOCATIONS
AGREEMENT CALCULATE PROFIT MARGIN FROM SALES?
A. Here is where the proposed Electric Allocations Agreement is not clear. At
page 19 of Mr. Holzwarth's direct testimony, he interprets the language of the Electric
Allocations Agreement to say, "The margins from off system sales to be assigned to
SJLP since none of the additional margins would have occurred absent the merger." I
don't know what this statement means. There are two possible ways to interpret the
language in the proposed Electric Allocations Agreement:

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1. The profits from sales are calculated and allocated separately from the energy 1 2 cost savings when comparing the joint and stand-alone dispatches. 3 2. The profits from sales are included in the calculation of the energy cost 4 savings when comparing the joint and stand-alone dispatches. 5 My rebuttal testimony is that the former approach is incorrect and the latter approach is 6 correct. 7 Q. WHY DO YOU DISAGREE WITH THE CONCEPT OF SEPARATING 8 THE CALCULATION AND ALLOCATION OF INTERNAL ENERGY COST 9 SAVINGS FROM THE CALCULATION AND ALLOCATION OF PROFIT MARGINS? 10 11 A. A calculation of energy cost savings that does not include profit margins from 12 sales as an offset to energy costs fails to take into account the opportunity cost for the 13 utility that foregoes a sale in order to provide generation to another utility. In Case 2, 14 when Utility A substitutes 100 MWh of its \$20/MWh generation for the \$25/MWh 15 generation of Utility B, it foregoes the opportunity of selling that 100 MWh's to the off-16 system energy market at \$23/MWh and making a profit of \$300. Subtracting the \$300 in 17 opportunity cost from the \$500 of total internal energy savings leaves \$200 in savings to 18 Utility B. Notice that this is the same savings that Utility B would have realized by 19 buying the substitute block of power in the off-system energy market. Thus, there are 20 zero additional savings generated by the joint dispatch of the two systems. 21 If on the other hand, the net energy cost savings is calculated by subtracting the 22 profits from sales from the costs incurred by the utilities, it becomes clear that there are 23 zero savings from the joint dispatch. This is shown in the second table on Schedule 2.1. For the stand-alone dispatch, the net savings is \$300 in profit for Utility A and \$200 in 24

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1	internal energy cost savings for Utility B, giving an overall savings from the market of
2	\$500. For the joint dispatch case, Utility A's internal generation costs go up by \$2,000
3	and Utility B's internal generation costs go down by \$2,500, giving an overall savings
4	from the joint dispatch of the same \$500. Subtracting the stand-alone costs from the joint
5	dispatch costs will therefore yield a net savings of zero.
6	Q. IN THIS ILLUSTRATION, GIVEN THE PROPER CALCULATION
7	OF ENERGY COSTS FOR BOTH THE JOINT DISPATCH AND STAND-ALONE
8	CASES TO INCLUDE PROFITS FROM SALES, WHAT THEN IS THE PROPER
9	ALLOCATION OF COST FROM THE JOINT DISPATCH?
10	A. For Case 2, Schedule 2.2 shows a summary of the stand-alone and joint
11	dispatch results, sets out the proper joint dispatch allocation rule and shows the results of
12	applying that rule. The joint allocation rule represented on this Schedule requires the
13	utility receiving the generation from another utility to pay that utility both its incremental
14	generation costs and its loss of profits. Because there are no savings compared to the
15	stand-alone case, the joint dispatch allocation rule results in both utilities paying their
16	stand-alone costs.
17	Q. DOES THIS SAME RESULT HOLD WHEN THE MARKET PRICE IS
18	ABOVE THE INCREMENTAL COSTS FOR BOTH UTILITIES?
19	A. Yes, it does. This is illustrated in Case 3 on Schedules 3.1 and 3.2. The
20	market price for off-system energy is \$30/MWh, which is above Utility A's incremental
21	cost of \$20/MWh for the first 100 MWh, \$25/MWh for the next 100 MWh block and
22	\$28/MWh for the third 100 MWh block. The \$30/MWh market price is also above
23	Utility B's incremental costs of \$25/MWh for the first 100 MWh.

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1	In the stand-alone case, both utilities will sell into the off-system energy market at
2	a price of \$30. Utility A will make a different per unit profit on each 100 MWh block
3	(i.e., $10/MWh = 30/MWh - 20/MWh$ for the first 100 MWh, $5/MWh = 30/MWh - $
4	25/MWh for the next 100 MWh, and $2/MWh = 30/MWh - 28/MWh$ for the third
5	100 MWh block). The overall profit for Utility A is $1,000 + 500 + 200 = 1,700$.
6	Utility B will make a per unit profit of \$30/MWh - \$25/MWh = \$5/MWh, giving a total
7	profit of \$500 on its 100 MWh sale. Thus, savings from the market in the stand-alone
8	dispatch case is \$1,700 + \$500 = \$2,200.
9	In the joint dispatch case, the \$20/MWh of incremental cost from Utility A is
10	substituted for the \$25/MWh decremental cost from Utility B. Then Utility A sells 200
11	MWh to the market at an incremental cost of \$25/MWh for the first 100 MWh and
12	\$28/MWh for the second 100 MWh. At a sale price of \$30/MWh, Utility A's profits
13	from this sale are $500 + 200 = 700$. Also, Utility B can sell 200 MWh to the market
14	at an incremental cost of \$25/MWh for the first 100 (what was initially decremented for
15	Utility A's cheaper energy) and \$28/MWh for the second 100 MWh. At a sale price of
16	30/MWh, Utility B's profits from this sale are also $500 + 200 = 700$.
17	On Schedule 3.2, comparing the stand-alone to the joint dispatch case shows that
18	the overall incremental generation is the same as well as the incremental generation costs.
19	Also, notice that the overall sales to the market of 400 MWh are the same, giving the
20	same revenues. Thus, the total cost net of profits will be the same for the joint dispatch
21	and the stand-alone dispatch, and the savings from joint dispatch are zero.

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Q. IS IT YOUR REBUTTAL TESTIMONY THAT WHEN PROFITS
FROM SALES ARE SUBTRACTED FROM THE COSTS FOR BOTH THE

STAND-ALONE AND JOINT DISPATCHES, THE ANSWER WILL ALWAYS BE ZERO SAVINGS?

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3 A. Yes. When the Electric Allocations Agreement specifies that: "Generating unit 4 and interchange parameters, as developed in the joint dispatch model (step b. above) will 5 be used as input data for the stand alone production cost simulations to be done for each 6 Company," the calculated answer will always be zero savings. However, I should note 7 that in the sentence following the above quote, the proposed Electric Allocations 8 Agreement also states: "In addition, own load re-dispatch will reflect pre-merger 9 operating practices and conditions." Thus, it appears that some modifications to the 10 stand-alone dispatches are anticipated, but apparently not to generating unit or 11 interchange parameters. 12 Q. WHEN THE MERGER APPLICANTS CALCULATED EXPECTED 13 MERGER SAVINGS FROM THE JOINT DISPATCH, DID THEY ALSO 14 SUBTRACT PROFITS FROM THEIR CALCULATION OF BOTH JOINT 15 **DISPATCH AND STAND-ALONE COSTS TO ESTIMATE ENERGY COST** 16 SAVINGS? 17 A. Yes, they did. This is the proper way to include opportunity cost in the

A. Yes, they did. This is the proper way to include opportunity cost in the
calculation of possible merger savings. Based on calculations made by Staff witness Mr.
Tom Lin, the estimated difference in energy cost between the stand-alone and joint
dispatch is \$100 million for the ten-year period 2001 through 2010 compared to the
Merger Applicants' estimate of \$104 million.

Q. HOW DID THE MERGER APPLICANTS THEN CALCULATE 1 2 FAIRLY HIGH LEVELS OF ENERGY COST SAVINGS FROM THE JOINT 3 **DISPATCH?** 4 A. A significant portion of the merger-related energy cost savings calculated in 5 the Merger Applicants' estimate reflects an assumption of a greater availability and level 6 for sales in the off-system energy market for the joint dispatch case compared to the stand-alone case. From 2001 to 2010, profits from off-system energy sales totaled \$216 7 8 million in the joint dispatch model. Q. WHAT IS YOUR UNDERSTANDING OF THE LIMITATIONS THAT 9 10 THE MERGER APPLICANTS PLACED ON SALES OPPORTUNITIES FOR THE STAND-ALONE DISPATCHES? 11 12 A. The Merger Applicants limited the availability of sales opportunities through the use of an outage rate for MPS and SJLP and a limit on the amount of sales for SJLP. 13 14 Mr. Lin will discuss the details of these limits. My understanding is that these limits were set to reflect current sales levels in the off-system energy markets for MPS and 15 16 SJLP. 17 Q. DO YOU AGREE THAT CURRENT SALES LEVELS ARE A **REASONABLE MEASURE TO USE FOR SALES OPPORTUNITIES FOR MPS** 18 19 AND SJLP ON A STAND-ALONE BASIS FOR THE NEXT TEN YEARS? 20 A. No, I do not. In particular, SJLP is adding and will continue to add base-load 21 capacity through its current capacity purchase agreement with the Nebraska Public Power 22 District. As this capacity is added, additional low-cost energy will be available to SJLP,

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and I would expect SJLP to be more aggressive in its activities in the off-system energy
 markets on a stand-alone basis.

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Q. HOW MUCH OF THE SYNERGIES CLAIMED BY THE MERGER APPLICANTS ARE ATTRIBUTABLE TO EXPANDED SALES OPPORTUNITIES IN THE OFF-SYSTEM ENERGY MARKET?

A. When comparing profits from the joint dispatch to the profits from the standalone dispatches where sales opportunities are limited to current levels, I found that over
the ten year period, of \$216 million in profits from sales, the stand-alone case with
limited sales opportunities attributes \$164 million to pre-merger limited sales
opportunities, leaving \$52 million to post-merger expanded sales opportunities.

Since this \$52 million in additional profits from sales in off-system energy markets does not account for the total energy cost savings of \$100 million, I asked Mr. Lin to make additional stand-alone and joint dispatch runs that totally excluded the possibility of sales in the off-system energy market. The difference between these two runs was \$48 million. A summary of each of the components of generation synergies claimed by the Merger Applicants is included in the following table:

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Table 1: Power Supply Cost Differences by Source

Source	5 Year Level	10 Year Level
Joint Dispatch-No Sales	\$21,982,210	\$47,908,428
Expanded Sales	\$19,840,816	\$51,634,550
Total	\$41,823,026	\$99,542,978

Q. IN WHAT SENSE ARE THE \$48 MILLION IN SYNERGIES FROM
 JOINT DISPATCH RELATED TO THE MERGER APPLICANTS'
 ASSUMPTION REGARDING EXPANDED SALES OPPORTUNITIES FOR THE
 MERGED ENTITY?

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5 A. In a perfectly competitive off-system energy market, there would be no need 6 for joint dispatch of the merged power supply systems. This is illustrated in Schedules 2 7 and 3, where it is clear that with a perfect off-system energy market, there is no 8 difference in overall costs between the stand-alone dispatches and the joint dispatch. 9 However, the off-system energy market is not perfect. In a perfectly competitive market, 10 the amount offered by any individual supplier has no discernible effect on the market-11 clearing price. This is not necessarily the case for wholesale energy markets. Therefore, 12 on a stand-alone basis, the energy-cost reductions truly available from the market may 13 only represent, for example, 90% of the energy-cost reductions available from joint 14 dispatch. In this example, 90% of energy-cost reductions would be attributable to the off-15 system energy market opportunities and 10% to joint dispatch. There is no way to 16 determine on either an ex ante or ex post basis what the exact percentage distribution is 17 between these two components.

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Q. IN YOUR OPINION, IS THERE ANY GOOD WAY TO INCLUDE THE DIFFERENCES IN SALE OPPORTUNITIES FOR THE MERGED UTILITY IN AN *EX POST* CALCULATION OF ENERGY COST SAVINGS?

A. I cannot think of any good way to do this. Let me explain my answer in terms
of the potential complexities of attempting to make such a calculation. In the Midwest,
off-system energy markets for power are based on bilateral transactions between specific

1 sellers and specific buyers. At this time the Midwest does not have a centralized spot 2 market for electricity. Thus, one possible form of expanded opportunities comes from an 3 expanded scope and information base for the traders. In this regard, I should note that the 4 traders for UCU as a regulated entity should be identified in the Electric Allocations 5 Agreement as being devoted to serving the regulated business and therefore separate from 6 any other unregulated power marketing divisions of UCU. UCU believes that it is more 7 aggressive in the trading of electricity than SJLP, and therefore, post merger, it will find 8 more opportunities for energy trades. Because there will be only one power marketing 9 group after the merger, there is no way in which greater power marketing opportunities 10 can be measured and proven subsequent to the merger. I am not saying that estimates of 11 increased opportunities cannot be made prior to the merger, but there is no reason to 12 believe that these estimates of past history will prove to be true in the future markets. For 13 example, with market hubs and electronic trading, bilateral (decentralized) power markets 14 are moving towards greater price discovery for all participants. As this evolution of the 15 power marketing industry goes forward, it will be impossible to separate out what 16 opportunities in the off-system energy markets are attributable to UCU's greater 17 aggressiveness.

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Q. ARE THERE ANY OTHER POTENTIAL REASONS FOR

19 INCREASED OFF-SYSTEM ENERGY MARKET OPPORTUNITIES IN THE 20 POST-MERGER ENVIRONMENT?

A. Yes, one possible explanation is that when the two control areas for MPS and SJLP become a single control area, the barriers of pancaked transmission rates will be reduced and the opportunities for the off-system energy market may be increased. With

the availability of regional transmission service, the barrier of pancaked transmission
 rates should be significantly reduced, if not eliminated. However, the Merger Applicants
 have not quantified what portion, if any, of the increased off-system energy market
 opportunities are due to decreased barriers to entry in the transmission system.

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Q. WHAT IS THE MERGER APPLICANTS' PROPOSAL FOR THE MERGED ENTITY TO HAVE A SINGLE CONTROL AREA?

7 A. As a condition for the joint dispatch of the MPS and SJLP power resources, 8 the two systems must be either be interconnected through regional network transmission 9 service or directly connected by transmission lines owned or leased by the Merger 10 Applicants. According to the direct testimony of Merger Applicants' witness Richard C. 11 Kreul, one of the proposals for the interconnection of the MPS and SJLP systems is to 12 use the network service provisions of an Regional Transmission Organization (RTO) that 13 includes both control areas in its region. Absent this possibility, a transmission line will 14 be constructed to directly connect MPS and SJLP. If this transmission line is constructed, 15 Mr. Kreul is recommending either option 2-C of leasing the Lake Road – Nashua 16 transmission line from Kansas City Power & Light Company, which would rebuild the 17 line, or option 2-B of building a new transmission line from south of the Lake Road 18 substation to Nashua, at an estimated cost of \$7.9 million. In addition, the Merger 19 Applicants propose to operate the MPS and SJLP divisions as a single control area, which will require additional investments of \$1 million, as described at page 10 of Mr. Kreul's 20 21 direct testimony. This investment of approximately \$8.9 million on transmission will be 22 somewhat offset by lower human resource costs from going to a single control area 23 operator. Subsequent to the Merger Applicants' filing, UCU has submitted a request for

network service from SPP. Depending on the administrative fee for this service, network
 service could be a less expensive way of integrating the two systems into a single control
 area.

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Q. WHAT IS YOUR INTERPRETATION OF THE PROJECTED \$8.9 MILLION INVESTMENT IN TRANSMISSION?

6 A. In order to justify this investment, the Merger Applicants need to show the 7 direct relationship between increased off-system energy market opportunities and the 8 costs incurred for interconnecting the MPS and SJLP systems. Instead of doing so, the 9 Merger Applicants have assumed that by interconnecting the MPS and SJLP systems, their off-system energy market opportunities will increase, resulting in "savings[†] of over 10 11 \$100 million for the next ten years. On an ex post basis, one way to measure the actual 12 impact on "savings" from interconnecting the two systems is to calculate the incremental profits that result directly from the elimination of pancaked transmission rates. Also, 13 14 incremental profits could be calculated for any reductions in transmission congestion 15 coming from the additional investment in transmission or the integration of the two 16 systems through network service. Then as an *ex post* measure of savings, these 17 incremental profits could be compared to whatever transmission costs are incurred to 18 interconnect the two systems.

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Q. WHAT OTHER FORMS OF SAVINGS FROM JOINTLY

20 DISPATCHING THE TWO SYSTEMS CAN POTENTIALLY BE MEASURED

21 ON AN EX POST BASIS?

1 A. Clearly, any improvements in the heat rate at the Lake Road plant can be 2 measured by using the pre-merger heat rate for the Lake Road plant in the stand-alone 3 dispatch for SJLP performed as a part of the Electric Allocations Agreement. 4 Decreased cost of natural gas for SJLP is more problematic. To perform this 5 analysis, when the stand-alone dispatch is performed as a part of the Electric Allocations 6 Agreement, the price of natural gas for SJLP would need to be adjusted to what it would 7 have been absent the merger. There may not be any good way of making this estimate. 8 Finally, there may be additional energy savings from having a different capacity 9 mix for the merged system when compared to the stand-alone systems. In order to 10 calculate this on an *ex post* basis, when the stand-alone dispatches are performed, the 11 capacity mix for the stand-alone dispatches would need to be specified for capacity 12 additions that would have been implemented absent the merger. Estimates of the 13 capacity additions for stand-alone utilities would be based on current capacity expansion 14 plans. However, our recent experience with electric resource plans show that these plans 15 are subject to continual change. The longer the time after the completion of the merger, 16 the less accurately will these old resource plans represent what would have been done on 17 a stand-alone basis for MPS and SJLP.

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Q. HAVE YOU ATTEMPTED TO QUANTIFY ANY OF THESE

19 MERGER-RELATED SAVINGS?

A. Yes. I asked Mr. Lin to run stand-alone dispatches for MPS and SJLP over
the same ten year period used in the Merger Applicants' calculation of merger savings.
However, in these additional stand-alone dispatch runs, I asked Mr. Lin to make the offsystem sales opportunities identical to those used for the joint dispatch runs. When Mr.

Lin compared the results of the stand-alone dispatch runs to the joint-dispatch runs, he
 found that the \$100 million "savings" had been reduced to only \$6.8 million. This is the
 level of what I would call true merger savings related to potential upgrades in heat rates,
 savings in natural gas costs and changes in capacity mix.

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Q. ARE YOU TESTIFYING THAT THE MERGER APPLICANTS HAVE NOT PROVIDED SUFFICIENT PROOF OF THE \$100 MILLION IN CLAIMED MERGER-RELATED ENERGY SAVINGS FROM JOINT DISPATCH?

8 A. Yes. It is the Staff's position that only \$6.8 million of the \$100 million in 9 energy cost savings can be directly related to the merger. The Merger Applicants have 10 failed to include any testimony in their direct filing that would provide evidence that the 11 increased sales opportunities estimated for the merged company are reasonably likely to 12 occur. Even if their estimates of increased sales opportunities are reasonable, the Merger 13 Applicants have failed to include any testimony in their direct filing that would provide 14 evidence that such increased sales opportunities would not be available for the stand-15 alone companies. The Commission should expect that the surrebuttal testimony will 16 include testimony that the Merger Applicants believe supports their position. If this 17 occurs, the Staff should be given the opportunity to respond to such testimony.

18Q. DOES THE ELECTRIC ALLOCATIONS AGREEMENT PROPOSED19BY THE MERGER APPLICANTS INCLUDE ANY SPECIFICATION OF THE20TYPES OF CHANGES IN INPUTS TO THE STAND-ALONE DISPATCH THAT21ARE REQUIRED TO CALCULATE ENERGY COST SAVINGS FROM THE22MERGER ON AN EX POST BASIS?

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A. Unfortunately, the Electric Allocations Agreement does not contain any 1 specific language for the changes that are required to calculate these savings on an ex 2 post basis. As discussed above in my rebuttal testimony, the only indication that the 3 4 Electric Allocations Agreement intends to incorporate changes brought about by the merger is the vague statement that the "own-load re-dispatch will reflect applicable pre-5 merger operating practices and conditions." If this type of vague language is allowed in 6 7 the Electric Allocations Agreement, there will be significant arguments about what this phrase means in future rate cases. In addition, the wording of this language implicitly 8 9 assumes that pre-merger operating practices and conditions are relevant for MPS and SJLP as stand-alone utilities into the future. The Merger Applicants have provided no 10 11 testimony in their direct filing regarding evidence to support this assumption. Q. WHAT DO YOU RECOMMEND TO CORRECT THE FLAWS IN THE 12 **ELECTRIC ALLOCATIONS AGREEMENT?** 13

A. I have attached as Schedule 4-1 and 4-2 to my rebuttal testimony my
suggested revisions to the Electric Allocations Agreement proposed by the Merger
Applicants. For purposes of comparison, in the attached Schedule 4-1, a strike-through is
used for words that are to be removed and shading is used for words that are to be added.
In the attached Schedule 4-2, the revised Electric Allocations Agreement appears in the
edited form.

Q. WHAT CHANGES ARE YOU RECOMMENDING WITH RESPECT
TO ALLOCATION OF WHAT HAS BEEN CHARACTERIZED BY THE
MERGER APPLICANTS AS ENERGY COST SAVINGS?

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1	A. As a part of their proposed regulatory plan, the Merger Applicants recommend
2	that all of the savings in energy costs be allocated to SJLP. I am recommending that
3	since the Electric Allocations Agreement presumably would be in effect until the
4	"effective time of retail competition in Missouri," that the allocations set out in that
5	agreement not reflect a specific sharing proposal for a regulatory plan. Instead, the
6	Electric Allocations Agreement should reflect an equitable sharing of the energy costs
7	from the joint dispatch of the power supply resource of the two previously separated
8	systems. In this regard, I recommend that energy costs be allocated between MES and
9	SJLP in proportion to the stand-alone costs calculated for each system in that sature
10	month. These stand-alone calculations for MPS and SJLP should use the same
11	generating unit and interchange parameters, as developed in the joint dispatch model,
12	including the same availability for off-system energy sales as used to calibrate the joint
13	dispatch model to actual energy costs for each month. The following sentence in the
14	Merger Applicants' proposed Electric Allocations Agreement should be stricken "In
15	addition, own load re-dispatch will reflect pre-merger operating practices and
16	conditions."
17	Q. WHAT WOULD BE THE RESULTING ESTIMATED PERCENT
18	ALLOCATIONS OF ENERGY COSTS BETWEEN MPS AND SJLP?
19	A. I have calculated the estimated percent allocations for MPS and SJLI for two
20	cases. First, for purposes of rebuttal to the Merger Applicants' regulatory plan, have
21	calculated the stand-alone energy costs using the Merger Applicants' assumption of
22	limited off-system sales opportunities, resulting in \$99.5 million less in energy costs from
23	the joint dispatch compared to the stand-alone dispatches. It should be emphasized that

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1	these are not the allocations that the Merger Applicants' are proposing in their $r\varepsilon_{ij}$ gulatory
2	plan, where all of the purported energy savings are allocated to SJLP.
3	Second, for purposes of illustrating estimates based on the Staff's recommended
4	Electric Allocations Agreement I have calculated the stand-alone energy costs for MPS
5	and SJLP on the assumption that the stand-alone entities will have the same off-system
6	sales opportunities as the merged entity. This calculation assumes that the joint $\{ispatch$
7	will result in \$6.8 million less in energy costs than the stand-alone dispatches.
8	Q. WHAT ARE THE RESULTING ALLOCATION PERCENTAGES FOR
9	MPS AND SJLP FOR EACH OF THESE TWO CASES?
10	A. For the case of \$99.5 million in purported energy cost savings, the allocation
11	of energy costs and therefore energy cost-related savings is 82.5% for MPS (energy cost
12	savings of \$82.1 million) and 17.5% for SJLP (energy cost savings of \$17.4 mil ion).
13	For the case of \$6.8 million in energy savings, allocation of energy cost and
14	therefore energy cost-related savings is 84.5% for MPS (energy cost savings of \$5.7
15	million) and 15.5% for SJLP (energy cost savings of \$1.1 million).
16	B. REGULATORY PLAN FOR POWER SUPPLY COSTS
17	Q. WHAT IS MEANT BY THE TERM "REGULATORY PLAN" A S
18	THAT TERM IS APPLIED TO POWER SUPPLY COSTS?
19	A. In the context of this merger, the "regulatory plan" as that term is applied to
20	power supply cost is a special treatment of those costs that will allow the merged entity to
21	retain some portion of the "savings" estimated as resulting from the merger over a
22	specified time period. The framework for the regulatory plan is how power \sup_{F}^{\downarrow} ly costs
23	will be treated for each of the two divisions. Specifically, in the case of MPS, since there

1	will likely be at least one, if not two, rate cases filed by MPS with this Commission
2	within the next five years, the regulatory plan should specify how to treat generation
3	costs in the context of these potential MPS rate cases. On the other hand, the regulatory
4	plan also includes a rate freeze at SJLP, in which case the regulatory plan really does not
5	need to say anything about the treatment of generation costs for SJLP.
6	Q. SHOULD THE BASIC ELECTRIC ALLOCATIONS AGREEMENT
7	INCLUDE CALCULATIONS AND ALLOCATIONS OF ENERGY COST
8	RELATED OPPORTUNITIES FOR A PROPOSED REGULATORY PLAN?
9	A. No. Because these special calculations and allocations for the regula ory plan
10	are temporary, it is my opinion that they should not be included in the basic Electric
11	Allocations Agreement. Instead, they should be an appendix or attachment to the basic
12	Electric Allocations Agreement that would be in effect for a limited period of tine.
13	Q. WHAT SHOULD BE THE OBJECTIVE IN THE ALLOCATIO, N OF
14	ENERGY COSTS FOR THE PURPOSE OF A REGULATORY PLAN?
15	A. The objective in the allocation of energy costs should be to give the nerged
16	entity an opportunity to retain some portion of the energy cost-related opportunities
17	brought about by the merger. I purposefully used the words "energy cost-related
18	opportunities," rather than the words "energy cost-related savings," because measuring of
19	"energy cost-related savings" on an ex post basis is impossible.
20	Q. WHAT DOES MR. HOLZWARTH PROPOSE FOR ALLOCATING
21	THE ENERGY COST-RELATED OPPORTUNITES?

A. Mr. Holzwarth proposes to allocate all of the energy cost-related opportunities to SJLP based on the argument that "none of the savings would be possible absert: the 3 merger."

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ALLOCATING THE ENERGY COST-RELATED OPPORTUNITIES TO &JLP?

Q. DO YOU AGREE WITH MR. HOLSWARTH'S REASONING FOR

6 A. No. First, only a very small fraction (\$6.8 million of \$100 million) of what 7 Mr. Holzwarth is calling "savings" are true merger savings. Therefore, the premite of 8 Mr. Holzwarth's statement is not valid. Second, even if his premise were valid, since the 9 same argument could be made for MPS, it does not provide a rationale for an equitable 10 allocation of these energy cost-related opportunities.

11 The true rationale for the allocation of one hundred percent of these energy cost-12 related opportunities to SJLP is that it is a part of the regulatory plan sponsored by UCU 13 witness John W. McKinney. Under that plan all of the energy cost-related opportunities 14 are allocated to SJLP, which is under a rate freeze for the first five years of a ten-year 15 plan designed to allow the Merger Applicants to recover enough merger savings to cover 16 at least 50% of the acquisition premium. In addition, over the second five years after the 17 merger, the regulatory plan calls for all energy cost-related opportunities to continue to be assigned to SJLP. During this same ten-year period, rate cases can be filed for MFS. In 18 19 those rate cases, the energy costs for MPS would be based on a stand-alone dispatch for 20 the MPS system with ratepayers receiving no benefits from the energy cost-related 21 opportunities. This requirement for MPS follows from allocating all of the energy cost-22 related opportunities to SJLP. Thus, under the regulatory plan proposed by the Merger

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1	Applicants, MPS ratepayers would not share in any energy cost-related opportunities	
2	from the merger for a ten-year period from the consummation of the merger.	
3	Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION	
4	REGARDING ANY PLAN TO SHARE ENERGY COST-RELATED	
5	OPPORTUNITIES?	
6	A. First, the Commission should reject the Merger Applicants' proposed	
7	regulatory plan. Second, if the Commission decides that some type of regulatory plan	
8	should be included as a condition for the approval of this merger, I recommend that the	
9	Commission set out the policy guidelines for that regulatory plan in its order. These	
10	guidelines need only include a specification of the parameters discussed previously in my	
11	rebuttal testimony – sharing percentage, length of time and type of plan.	
12	Q. IF THE COMMISSION WOULD MAKE SUCH A DETERMINATION,	
13	CAN YOU GIVE A SPECIFIC ILLUSTRATION OF THE POLICY GUIDELINES	
14	FOR THE REGULATORY PLAN RELATED TO ENERGY COST-RELA TED	
15	OPPORTUNITIES?	
16	A. An example of a policy guideline for the regulatory plan related to energy cost-	
17	related opportunities is: profits from increased off-system energy sales opportunities are	
18	to be shared between ratepayers and shareholders on a 50-50 basis over the first 5 years	
19	following the consummation of the merger.	
20	Q. WHAT CALCULATIONS ARE NECESSARY TO IMPLEMENT THIS	
21	POLICY GUIDELINE?	
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22	A. For purposes of rate or complaint cases for either MPS or SJLP over this	
22 23	A. For purposes of rate or complaint cases for either MPS or SJLP over this sharing period, generation costs would be determined by running a stand-alone dispatch	

of supply sources for the utility, including purchased power, but excluding any sales
 opportunities. The power supply costs from these runs would be decreased by the
 appropriate allocation of profits from off-system sales from the joint dispatch for the
 combined resources of both the MPS and SJLP divisions.

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Q. WHAT IS THE APPROPRIATE ALLOCATION OF PROFITS FROM OFF-SYSTEM SALES FOR MPS?

7 A. Recall that the Merger Applicants' assumption about limited sales 8 opportunities included \$164 million of \$216 million in total profits over the ten-year 9 period. Over the first five years, this translates to \$59.4 million of \$79.2 million total 10 profits, leaving \$19.8 million in profits from increased opportunities to be divided equally 11 between the customers and shareholders over that same five-year period. This can be 12 accomplished by allocating 84.6% of the profits from sales to MPS, 2.9% of profits from sales to SJLP, leaving 12.5% (= 100% -(84.8%+2.9%)) of total profits going to 13 14 shareholders. Notice that 12.5% of the \$79.2 million is \$9.9 million, or one half of the 15 \$19.8 million in profits from increased off-system energy sales opportunities. The 16 percentages recommended for allocation to MPS and SJLP are based on factoring up 17 profits from current sales levels on an equal percentage basis. The sum of these 18 additional profits over current sales levels also equals \$9.9 million, or one-half of the 19 \$19.8 million in profits from increased off-system energy sales opportunities.

Q. ARE PROFITS FROM EXPANDED OFF-SYSTEM ENERGY SALES
OPPORTUNITIES THE ONLY SOURCE OF ENERGY COST-RELATED
OPPORTUNITIES THAT MIGHT BE INCLUDED IN A POLICY OF

1 ALLOCATING ENERGY COST-RELATED OPPORTUNITES EQUALLY 2 **BETWEEN RATEPAYERS AND SHAREHOLDERS?** 3 A. No. In addition, the synergies from joint dispatch also represent energy cost-4 related opportunities and could be divided equally between ratepayers and shareholders 5 over the initial 5 year period after the merger. The estimate of these savings for the first 6 five years is an additional \$22 million. 7 Q. HOW WOULD YOU CALCULATE THE JOINT DISPATCH 8 SYNERGIES ON AN EX POST BASIS? 9 A. These synergies can easily be calculated as the difference between the sum of 10 power supply costs for the stand-alone dispatches and the joint dispatch, excluding sales. 11 The 50% of these synergies going to ratepayers can then be allocated between MI'S and 12 SJLP based on each division's percentage of stand-alone dispatch costs, excluding sales. 13 Q. WHAT ARE THE ESTIMATED LEVELS FOR THESE ENERGY 14 **COST-RELATED OPPORTUNITIES GOING BETWEEN SHAREHOLDERS** 15 AND RATEPAYERS? 16 A. The calculations for the first five years of the merger are shown on Schedule 5 17 attached to my rebuttal testimony. Profits from sales going to MPS and SJLP combine to 18 87.5% with shareholders being allocated the remaining 12.5%. Recall that 12.5% is one 19 half of the increment in profits from expanded off-system sale opportunities. 20 Joint dispatch synergies are allocated on a 50-50 basis between ratepayers and 21 shareholders, with MPS receiving just under 41.2% and SJLP receiving just over 8.8%. 22 With "perfect regulation" or under a plan for flowing savings back to ratepayers, both

shareholders and ratepayers could expect to receive approximately \$20.9 million over the
 five-year period.

Q. ASSUMING THAT THE REGULATORY PLAN ONLY APPLIES TO RATE OR COMPLAINT CASES, HOW MUCH INCREASED OPPORTUNITIES WILL SHAREHOLDERS ACTUALLY RETAIN?

6 A. If the regulatory plan does not include a refund mechanism, but depends 7 totally on the filing of rate or complaint cases, the shareholders will actually retain more 8 than 50% of the increased opportunities. Assume that during the five-year period only 9 one rate case is filed by UCU for both SJLP and MPS for the year 2001 and no 10 subsequent rate or complaint cases are filed during this period. Then the difference 11 between the allocations from the remaining years and those for 2001 would actually go to 12 shareholders. This difference is approximately \$48 million in additional earnings going 13 to shareholders. However, it appears that MPS may also have to file for an additional 14 rate increase in 2002. Then the difference between the MPS allocations from the 15 remaining three years and those for 2002 would go to shareholders instead. This would 16 reduce the earnings going to shareholder to slightly more than \$16 million in additional 17 earnings.

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Q. WHAT IS REQUIRED TO IMPLEMENT THIS REGULATORY'

A. I have attached an example of what is required to implement this regulatory
plan for power supply costs as Schedule 6 to my rebuttal testimony. As stated
previously, this schedule should not be included in the basic Electric Allocations
Agreement, but instead be an attachment to that agreement.

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Q. WHAT ARE THE ADVANTAGES OF THIS REGULATORY PLAN FOR SHARING ENERGY COST-RELATED OPPORTUNITIES?

3 A. First, the 50-50 sharing mechanism allows UCU an equal opportunity to share in the increased energy cost-related opportunities following the merger. Second, because 4 5 of the profits from off-system sales going to shareholders, it gives UCU an incentive to maximize its opportunities for sales in the off-system energy market. Third, because 6 additional sharing for shareholders occur if UCU does not file for rate increases for the 7 8 MPS division, it provides an incentive for UCU to minimize its overall costs and put off 9 filing for subsequent rate increases during the sharing period. Fourth, the calculations 10 necessary to implement this regulatory plan are very straightforward. Fifth, given the 11 specificity of the allocations in the regulatory plan, UCU is protected from the Staff filing 12 a complaint case that attempts to recover what the plan allocates to shareholders.

Q. HOW DOES THIS COMPARE TO THE REGULATORY PLAN PROPOSED BY THE MERGER APPLICANTS?

15 A. As indicated earlier in my testimony, the regulatory plan proposed by the 16 Merger Applicants does not allocate any of the energy cost-related opportunities to MPS 17 ratepayers over a ten-year period. In addition, SJLP ratepayers are only allocated slightly 18 more than \$1.5 million per year in total merger benefits over the second five-year period 19 after the completion of the merger. This regulatory plan is targeted to recover 50% of the 20 acquisition premium over a ten-year period, and, as I will discuss in the next section of 21 my testimony, allocates a significant portion of the energy cost-related opportunities from 22 the UCU-SJLP merger to pay off the acquisition premium related to the UCU-EDE 23 merger.

Q. ARE YOU RECOMMENDING THE REGULATORY SHARING PLAN FOR ENERGY COST-RELATED OPPORTUNITIES THAT IS SHOWN IN SCHEDULE 6?

A. I am not recommending a regulatory sharing plan for energy cost-related
opportunities. My primary reservation about supporting a regulatory sharing plan for
energy cost-related opportunities in the context of this merger case is that only \$6.8
million of the \$100 million of these energy cost-related opportunities are true merger
savings. If the Commission adopts a regulatory sharing plan that includes the Merger
Applicants' estimate, it should be for reasons other than sharing in true merger savings.

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Q. DOES SCHEDULE 6 INCLUDE ANY SHARING OF THE CAPACITY COST SAVINGS?

12 A. I have not included any sharing of savings in generation capacity costs in 13 Schedule 6. If the Commission adopts policy guidelines that include a 50-50 sharing of 14 savings in capacity cost, I would recommend that the merged utility would have to 15 document those savings at the time it files a rate case. Since the difference in capacity 16 costs over the first four years of the merger is based on a difference of 10 megawatts of 17 short-term capacity purchase, and in the first three years the merged utility will not be 18 making any short-term capacity purchases, it will be difficult to document the level of ex 19 post savings in capacity costs. The merged utility will need to gather reliable info mation 20 on capacity sales in order to determine the cost savings. In my opinion, the megawatt 21 levels ascribed to merger savings in capacity costs are small enough that they are fairly 22 insignificant over the first ten years of the merger, where they average 9 megawatts per 23 year.

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1	Q. HOW SHOULD THE NET INCREASE IN TRANMISSION COSTS
2	FROM THE MERGER BE TREATED IN THE REGULATORY PLAN?
3	A. As indicated earlier in my testimony, the alternatives for transmission to
4	integrate the two systems into a single control area are not yet determined. It appears that
5	network service through a regional transmission entity may be the least costly method of
6	integrating the two systems. I would simply include these additional transmission costs
7	as part of the merged utility's cost of service. The method for allocating this increase in
8	costs between the two divisions would depend on how these additional costs were
9	incurred. For example, if the additional transmission costs are the SPP administrative
10	charges for network service, then these costs would be allocated based on each division's
11	share of megawatt hours.
12	C. EFFECTS OF THE EDE MERGER
13	Q. WHAT EFFECT WILL THE PROPOSED UCU MERGER WITH EDE
14	HAVE ON THE ELECTRIC ALLOCATIONS AGREEMENT?
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	A. As a third division involved in the joint dispatch, EDE will need to be added
16	A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement.
16 17	 A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement. Q. WHAT EFFECT DOES ADDING EDE IN THE JOINT DISPATCH
16 17 18	 A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement. Q. WHAT EFFECT DOES ADDING EDE IN THE JOINT DISPATCH HAVE ON THE ESTIMATE OF INCREASED OPPORTUNITIES WITH
16 17 18 19	 A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement. Q. WHAT EFFECT DOES ADDING EDE IN THE JOINT DISPATCH HAVE ON THE ESTIMATE OF INCREASED OPPORTUNITIES WITH RESPECT TO ENERGY COSTS?
16 17 18 19 20	 A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement. Q. WHAT EFFECT DOES ADDING EDE IN THE JOINT DISPATCH HAVE ON THE ESTIMATE OF INCREASED OPPORTUNITIES WITH RESPECT TO ENERGY COSTS? A. I asked Mr. Lin to make additional power supply cost runs that include EDE.
16 17 18 19 20 21	 A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement. Q. WHAT EFFECT DOES ADDING EDE IN THE JOINT DISPATCH HAVE ON THE ESTIMATE OF INCREASED OPPORTUNITIES WITH RESPECT TO ENERGY COSTS? A. I asked Mr. Lin to make additional power supply cost runs that include EDE. First, all of the cases run for UCU and SJLP were run for UCU and EDE. In this way,
16 17 18 19 20 21 22	 A. As a third division involved in the joint dispatch, EDE will need to be added to the Electric Allocations Agreement. Q. WHAT EFFECT DOES ADDING EDE IN THE JOINT DISPATCH HAVE ON THE ESTIMATE OF INCREASED OPPORTUNITIES WITH RESPECT TO ENERGY COSTS? A. I asked Mr. Lin to make additional power supply cost runs that include EDE. First, all of the cases run for UCU and SJLP were run for UCU and EDE. In this v/ay, the increased opportunities in energy costs could be calculated separately. Second, new
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dispatch runs, the increased opportunities could be determined for each merger separately
 and then compared to the increased opportunities from the three-way merger.

The results of these comparisons are shown on Schedule 7.1 attached to my testimony. What Schedule 7.1 shows is that in the first five years there is only \$1 7 million difference in energy cost-related opportunities ("savings") between the two separate mergers and the three-way merger. This difference increases to \$17 million when the last five years are added.

8 If the Merger Applicants' purported savings of \$246 million is accepted, the 9 estimates of stand-alone allocations of energy costs and energy cost-related savings 10 among the three divisions is 46.6% to MPS (\$114.8 million in savings), 42.2% to EDE 11 (\$103.8 million in savings) and 11.2% to SJLP (\$27.5 million in savings).

Q. IF ONLY TRUE MERGER-RELATED SAVINGS IN ENERGY (COST ARE INCLUDED, WHAT IS THE ESTIMATE OF SAVINGS FOR THE U(CUSJLP-EDE MERGER?

A. Mr. Lin made stand-alone dispatch runs for all three utilities assuming the same opportunities were available to each utility in the off-system sales market as were assumed to be available for the merged entity. The results were savings of \$12.1 million over the same ten-year period. If the merger savings are only \$12.1 million, the extimate of stand-alone allocations of energy costs and energy cost-related savings are 43.1% MPS (\$5.2 million in savings), 48.2% EDE (\$5.8 million in savings) and 8.7% SJLP (\$5.1 million in savings).

Q. WHAT IS THE PROPER ALLOCATION OF THE ENERGY COSTRELATED OPPORTUNITIES BETWEEN THE TWO MERGERS?

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1	A. The proper allocation of the energy cost-related opportunities between the two
2	mergers is in proportion to the energy cost-related opportunities from the separate
3	mergers. With somewhat lower energy cost-related opportunities from the UCU SJLP-
4	EDE merger, allocation in proportion to the benefits from the separate (stand-alone)
5	mergers prevents any cross subsidies going from one merger to the other.
6	Q. IS THIS IN AGREEMENT WITH WHAT THE MERGER
7	APPLICANTS FILED FOR ALLOCATIONS OF BENEFITS BETWEEN THE
8	TWO MERGERS?
9	A. No, it is not. Schedule 7.2 compares the allocations proposed by the Merger
10	Applicants to the allocations that would prevent cross subsidies. This comparison shows
11	that over the first five-year period, the Merger Applicants' proposal would result in just
12	under a \$20 million subsidy going from the UCU-SJLP merger to the UCU-EDE merger,
13	and that cross subsidy increases to almost \$38 million over the ten-year period.
14	Q. WHAT EFFECT DID THE UCU MERGER WITH EDE HAVE ON
15	THE MERGER APPLICANTS' PROPOSED REGULATORY PLAN?
16	A. First, the Merger Applicants have not filed a proposed regulatory plan that
17	reflects the energy cost-related opportunities from the UCU-SJLP merger alone. All
18	schedules and work papers related to the Merger Applicants' proposed regulatory plan
19	assume a UCU-SJLP-EDE merger. Because the Merger Applicants have no regulatory
20	plan for the UCU-SJLP merger alone, and since this case only applies to that merger, the
21	Commission should reject the Merger Applicants' proposed regulatory plan. If the
22	Commission allows the Merger Applicants to submit a proposed regulatory plan for
23	UCU-SJLP merger alone in its surrebuttal testimony, then the Commission should allow

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the Staff an opportunity to file additional testimony to that yet undetermined regulatory
 plan.

Second, the Merger Applicants' proposed UCU-SJLP-EDE regulatory plan for
energy cost-related opportunities will result in MPS ratepayers not receiving any benefits
and will also result in SJLP ratepayers subsidizing EDE ratepayers in order to pay off the
acquisition premium offered by UCU to EDE shareholders. Thus, the Commission
should reject the Merger Applicants' proposed regulatory plan.

8 Q. WHAT EFFECT WOULD THE PROPOSED MERGER WITH EDE
9 HAVE ON THE REGULATORY PLAN FOR ENERGY COST-RELATED
10 OPPORTUNITIES?

A. Over the first five years, the impact of the UCU-SJLP-EDE merger on the
UCU-SJLP merger is to reduce energy cost-related opportunities by less than 2%. There
would therefore be little impact on the regulatory plan. In essence, there would still be a
50-50 sharing of additional profits and joint dispatch synergies between ratepayers and
shareholders. Specific calculations for the UCU-SJLP-EDE merger require allocation
factors for the three companies rather than the two. I have made these calculations,
which are shown on Schedule 8 attached to my testimony.

18 III. MERGER-RELATED MARKET POWER

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Q. HAVE YOU PERFORMED AN ANALYSIS OF HORIZONTAL

20 MARKET POWER SPECIFICALLY FOR THE UCU-SJLP MERGER?

A. No, I have not. In my opinion, such an analysis is not critical for this merger.
Specifically, based on the work that was done for the Staff in the Kansas City Power &
Light Company – Western Resources Inc. merger, the proposed merger between UCU

and SJLP would result in the merged entity having less than 6% of the market share in
 the northern SPP region. The month-by-month calculation of market shares for the UCU SJLP merger is shown on Schedules 9.1 and 9.2 attached to my testimony.

I also reviewed the Merger Applicants' filing on market power at the Federal Energy Regulatory Commission, and while I do not agree with the use of destination markets for analyzing horizontal market power, this analysis did not indicate that the proposed merger would result in any significant problems with market concentration with respect to the merged entity. Based on these two reviews, there appears to be little incremental value in performing additional horizontal market power studies on market concentration for this proposed merger.

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Q. DOES THIS MEAN THAT THERE ARE NO HORIZONTAL MARKET POWER PROBLEMS IN THE MPS AND SJLP SERVICE TERRITORIES?

14 A. No. Horizontal market power can exist in each of these service territories in 15 the form of what are called load pockets. These load pockets are geographic areas within 16 the service territories where the transmission system will not allow competitive 17 generation to provide services to a significant percentage of end-use customer loads on a 18 year-around basis. Currently, such load pockets do not pose a problem because the loads 19 within the service territories are served by the incumbent utilities on a regulated basis. 20 However, if the state of Missouri implements retail competition at a future date, then 21 significant horizontal market power may exist for the incumbent utility within these load 22 pockets.

 1
 Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO

 2
 POTENTIAL HORIZONTAL MARKET POWER RELATED TO LOAD

 3
 POCKETS?

A. I recommend, as a condition for the approval of this merger, that the Merger
Applicants agree to submit a study showing what percentage of load can be served from
competitive generation sources throughout their merged service territory.

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Q. WHAT IS VERTICAL MARKET POWER AND WHY IS IT

RELEVANT TO THIS PROPOSED MERGER?

9 A. Vertical market power is the ability of a supplier to restrict the access for 10 competitors to any markets that are crucial in the supply chain. In competitive electricity 11 supply the most crucial restriction that a supplier can impose is on the use of the 12 transmission system. In Order No. 888 and Order No. 889, the FERC recognized this 13 impediment to competition in the wholesale electricity markets and ordered all utilities 14 subject to its jurisdiction to unbundle their transmission rates and offer transmission 15 service on a non-discriminatory basis. Even under this open access to transmission, as 16 long as this service is being offered on a utility-by-utility basis, the utility could restrict 17 the amount of service it offers to favor its own generation, and with pancaked 18 transmission rates, incumbent utilities would maintain an unfair competitive advantage. 19 Subsequent to Order No. 888 and Order 889, the FERC recently issued Order No. 2000 in 20 which FERC jurisdictional utilities are required to either join a Regional Transmission 21 Organization (RTO) or explain what efforts and obstacles have prevented the FERC 22 jurisdictional utility from doing so. The effect of joining the RTO is twofold: 23

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1) The determination of available transmission capability will be made by an organization that is independent of the utility; and

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2) The RTO will have a regional transmission rate that will eliminate the competitive advantage of the incumbent utility from rate pancaking.

Q. IS IT IMPORTANT THAT THE MERGED UTILITY, UCU-SJLP, JOIN AN RTO?

5 A. Yes, it is important in order to eliminate any ability by the merged utility to 6 manipulate the availability of transmission capability on its system. It is also important 7 in order to eliminate pancaked transmission rates. The elimination of pancaked 8 transmission rates will increase both the competitiveness and the energy cost efficiency in 9 the wholesale electricity market. It is unlikely that the merger will be completed by the 10 October 15, 2000 deadline that the FERC has set for utilities that are not already 11 participating in a regional transmission entity in conformance with the eleven 12 Independent System Operator (ISO) principles enumerated in Order No. 888, to file an 13 explanation of their efforts to join an RTO and what obstacles have prevented the utility 14 from doing so. This deadline is extended to January 15, 2001 for jurisdictional utilities 15 that have joined a regional transmission entity in conformance with the eleven ISO 16 principles enumerated in Order No. 888. Thus, the timing of the merger utility joining an 17 RTO is complicated by the FERC filing dates.

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Q. WHAT DO YOU PROPOSE TO RESOLVE THIS COMPLICATION?

A. As a condition of approval for this merger, the separate utilities should be
required to make a commitment to join the <u>same</u> regional transmission entity that meets
the eleven ISO principles enumerated in Order No. 888 before the October 15, 2000
deadline of Order No. 2000. At this point in time it appears that UCU and SJLP could
join either the SPP or the Midwest ISO (MISO), as these are the only two regional
entities that have requested approval by the FERC as having met the eleven ISO

principles of Order No. 888. The MISO has received FERC approval and the SPP is
 awaiting FERC approval on its application.

Q. DO YOU HAVE A RECOMMENDATION AS TO WHICH OF THESE
4 TWO REGIONAL ENTITIES THE MERGED UTILITY SHOULD JOIN?

5 A. No, I do not. The MISO has the advantage of having already been approved 6 by the FERC and is larger in size and scope from the SPP. However, the SPP has the 7 advantage of already providing regional transmission service and providing that service 8 at a relatively low cost. In addition, these regional entities are in the process of 9 discussing a possible merger, a possible umbrella relationship or a possible functional 10 elimination of seams between the two. Any of these solutions would lead to making a 11 decision as to which RTO to join based on the cost to the merged utility. Whether those 12 solutions can be worked out before the October 15, 2000 deadline is not known at this 13 time.

As indicated earlier in my testimony, UCU has requested network service from the SPP. That service would be available upon completion of the merger and the merged utility would be able to begin joint dispatch almost immediately. The MISO will not be providing service until the summer of 2001, and even then, it may not have the systems in place to provide network service to a new member. Thus, if the objective is to begin benefiting from the energy cost-related opportunities from the merger at the earliest possible date, joining the SPP RTO appears to be the better choice.

Q. DOES THE ADDITION OF EDE TO THE MERGER HAVE ANY
IMPACT ON EITHER HORIZONTAL MARKET POWER OR THE CHOICE OF
REGIONAL TRANSMISSION ENTITY?

1 A. As shown on Schedules 10.1 and 10.2 attached to my testimony, the addition 2 of EDE to the merger increases the merged entity's market share to a range of 4.1% to 3 9.0%, with an average of 6.7%. These levels of concentration should not pose horizontal 4 market power concerns in the northern SPP region. EDE is already a member of the SPP, 5 and has signed the agency agreement to be a part of the regional tariff. UCU is also a 6 member of the SPP, but has not yet signed the agency agreement to be a part of the 7 regional tariff. SJLP is a member of the Mid-Continent Area Power Pool (MAPP), 8 having left the SPP a few years ago. The MAPP and the MISO have agreed to merge 9 their regional transmission service functions, excluding the regional reliability council 10 functions of MAPP. Adding EDE to the UCU-SJLP merger would appear to favor 11 having both UCU and SJLP join the SPP. However, the UCU-SJLP-EDE merger poses 12 some interesting questions.

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13 With respect to electricity markets, SJLP is clearly linked into MAPP with its 14 contract for power from the Nebraska Public Power District. EDE is clearly linked with 15 the SPP RTO, having signed the SPP RTO agency agreement. These two utilities tend to 16 engage in generation transactions in different areas of the country. UCU's MPS current 17 generation transactions tend to reflect both the SPP and the MAPP regions, as well as transactions east into what will be the MISO region. The addition of EDE makes the 18 decision respecting which RTO to join more complicated, but I do not believe that it 19 20 necessarily results in the merged utility having to join a specific regional transmission 21 entity.

1	Q. DO YOU SEE UCU JOINING ONE REGIONAL TRANSMISSION
2	ENTITY AND SJLP JOINING ANOTHER PRIOR TO THE OCTOBER 15, 2000
3	DEADLINE AS A VIABLE SHORT-TERM SOLUTION?
4	A. No. Because the merged utility will have a single control area for its
5	generation and load, it must join the same regional transmission entity.
6	Q. IF THE MERGED UTILITY RECEIVES NETWORK
7	TRANSMISSION SERVICE FROM THE REGIONAL TRANSMISSION
8	ENTITY, WHAT WILL BE THE COST TO MISSOURI RETAIL CUSTOMERS?
9	A. The only cost from receiving network service will be the administrative fee of
10	the regional transmission entity. While the merged utility must pay a transmission rate
11	plus an administrative fee for network transmission service, for both the MISO and the
12	SPP, the merged utility would receive back from the regional transmission entity a
13	payment equal to the what it paid in cost for the transmission rate.
14	IV. SUMMARY
15	Q. HAVING TESTIFIED ON THREE ISSUES, DO YOU SEE ANY
16	COMMON THREADS THAT DRAWS ALL THREE AREAS TOGETHER?
17	A. Yes. First, there is a connection between market power and the incremental
18	energy cost-related opportunities that the Merger Applicants claim to be merger-related,
19	energy cost savings. Second, there is a connection between the incremental energy cost-
20	related opportunities and the acquisition premium.
21	Q. WHAT IS THE CONNECTION BETWEEN MARKET POWER AND
22	THE INCREMENTAL ENERGY COST-RELATED OPPORTUNITIES IF THEY
23	ARE TRULY MERGER-RELTATED?

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1	A. In its market power studies (submitted to the FERC and provided to the Staff),
2	the Merger Applicants assume that any capacity that is economic (at or below an assumed
3	market price) can compete in a destination market except in the following two situations:
4	1) when transmission costs are added, the capacity becomes non-economic; or
5	2) transmission availability restricts access into the destination market.
6	Thus, the only explanation for the merged entity to have increased energy cost-related
7	opportunities in the off-system sales market that is consistent with its market power study
8	is either the elimination of transmission costs or the elimination of transmission
9	constraints brought about by the merger. An alternative explanation is that the
10	assumptions going into the market power studies are incorrect and because of the
11	imperfections in the off-system energy markets, the merged entity is able to achieve the
12	increase in energy cost-related opportunities through the exercise of market power. My
13	market power analysis of the electricity markets indicates that the alternative explanation
14	of the merged entity having significant market power is not plausible. Therefore, the
15	only consistent explanation that the Commission should accept of the energy cost-related
16	opportunities being merger-related is through the elimination of transmission costs or
17	transmission constraints brought about by the merger. Since the Merger Applicants have
18	no testimony or evidence to support this position, the Commission should reject the claim
19	that the increase in energy cost-opportunities are merger-related.

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Q. WHAT IS THE CONNECTION BETWEEN THE INCREASE IN ENERGY COST-RELATED OPPORTUNITIES AND THE ACQUISTION PREMIUM?

1 A. Shareholders cannot accurately factor into their value of UCU and SJLP stock 2 the potential earnings from the increase in energy cost-related opportunities until the 3 Commission has made a determination regarding the regulatory treatment (sharing 4 between ratepayers and shareholder) of these earnings. Thus, current stock prices would 5 tend not to reflect higher earnings for either the separate or merged entities. In making its 6 offer to SJLP shareholders, UCU did factor in the higher earnings from these energy cost-7 related opportunities and this has put UCU in a position of requesting recovery of a 8 portion of the acquisition premium that is to be paid to SJLP shareholders.

9 As pointed out previously, it is the incorrect causal chain for the acquisition 10 premium offered to dictate what the Commission policy should be regarding a regulatory 11 sharing plan. The Staff recommendation to reject the Merger Applicants' regulatory plan 12 does not mean that the merged entity will not benefit from the increase in energy cost-13 related opportunities. At a minimum, under continued regulation of retail rates the 14 merged entity will benefit through regulatory lag. At the other extreme, if Missouri 15 moves to retail competition and generation is split off as a separate, deregulated entity, 16 then the separate generation company will receive all the benefits of increased energy 17 cost-related opportunities.

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Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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In the Matter of the Joint Application of UtiliCorp United Inc. and St. Joseph Light & Power Company for Authority to Merge St. Joseph Light & Power Company With and into UtiliCorp United Inc., and, In Connection Therewith, Certain Other Related Transactions.

) CASE NO. EM-2000-292

AFFIDAVIT OF MICHAEL S. PROCTOR

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Michael S. Proctor, of lawful age, on his oath states: that he has participated in the preparation of the foregoing written testimony in question and answer form, consisting of $\frac{244}{2}$ pages of testimony to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Michae

Subscribed and sworn to before me this day of May, 2000.

Notary Publi

My commission expires

SHARON 5 WILES NOTARY PUBLIC STATE OF MISSOURI COLE COUNTY MY COMMISSION EXP. AUG. 23.2003

CASE 1:	Market Price	Below Decremental Cost
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	Assumptions on Utility Costs and Market Price		
Uti	lity A		
	Incremental cost above meeting native load	= \$20/MWh for first 100 MWh	
С. 5.		\$25/MWh for next 100 MWh	
	Decremental cost below meeting native load	= \$18/MWh for first 100 MWh	
	-	\$15/MWh for first 100 MWh	
Uti	lity B		
	Incremental cost above meeting native load	= \$28/MWh for first 100 MWh	
		\$30/MWh for next 100 MWh	
1 🗟	Decremental cost below meeting native load	= \$25/MWh for first 100 MWh	
		\$20/MWh for next 100 MWh	
Ma	rket Price for Electricity		
	Buy or Sell Electricity at a market price	= \$18/MWh	

- ¹	Dispatches, Sales & Purchases							
A.	Stand Alone Dispatch							
Util	ity A	Uti	ity A					
1	Incremental costs are above market	1	Incremental costs are above market					
	price and therefore cannot sell.	i sang	price and therefore cannot sell.					
2.	Decremental costs are at or below	2.	Decremental costs are at or below					
	market price and therefore cannot buy.		market price and therefore cannot buy.					
3.	Therefore, there is no change in	3.	Therefore, there is no change in					
· ·	generation and/or profits.		generation and/or profits.					
Util	ity B	Uti	ity B					
	Will replace \$25 and \$20 generation		Will replace \$25 and \$20 generation					
	-100 MWh x \$25 /MWh = -\$2,50)	-100 MWh x \$25 /MWh = -\$2,500					
	<u>-100 MWh</u> x \$20 /MWh = -\$2,00	<u>)</u>	<u>-100 MWh</u> x \$20 /MWh = -\$2,000					
998 A 97 - 1	-200 MWh -\$4,50) 	-200 MWh -\$4,500					
÷.	with \$18 generation from the market		with \$18 generation from the market					
	200 MWh x \$18 /MWh = \$3,60	<u>게</u>	200 MWh x \$18 /MWh = \$3,600					
	at a net savings of	<u>]</u>	at a net savings of -\$900					
Cha	ange in Cost -\$90)]Ch	ange in Cost -\$900					

Summary of Results					
Stand Alone Dispatch	1.1.20	Joint Dispatch			
Inc (Dec) Generation - A	0	Inc (Dec) Generation - A	0		
Inc (Dec) Generation - B	-200	Inc (Dec) Generation - B	-200		
Total Incremental Generation	-200	Total Incremental Generation	-200		
Costs of Purchases - A	\$0	Costs of Purchases - A	\$0		
Costs of Purchases - B	\$3,600	Costs of Purchases - B	\$3,600		
Net Revenues from Sales/Purch	\$3,600	Total Revenues from Sales	\$3,600		
Inc (Dec) Generation Costs - A	\$0	Inc (Dec) Generation Costs - A	\$0		
Inc (Dec) Generation Costs - B	-\$4,500	Inc (Dec) Generation Costs - B	-\$4,500		
Total Incremental Gen Costs	-\$4,500	Total Incremental Gen Costs	-\$4,500		
Savings from Purchases - A	\$0	Savings from Purchases - A	\$0		
Savings from Purchases - B	\$900	Savings from Purchases - B	\$900		
Total Savings from Purchases	\$900	Total Savings from Purchases	\$900		

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CASE 2: Market Price Between Dec & Inc Cost

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	Assumptions on Utility Cos	sts and Market Price
Utii	ity A	n an
	Incremental cost above meeting native load	= \$20/MWh for first 100 MWh
		\$25/MWh for next 100 MWh
19 de 1	Decremental cost below meeting native load	= \$18/MWh for first 100 MWh
1 O 10		\$15/MWh for next 100 MWh
Util	ity B	
	Incremental cost above meeting native load	= \$28/MWh for first 100 MWh
		\$30/MWh for next 100 MWh
	Decremental cost below meeting native load	= \$25/MWh for first 100 MWh
		\$20/MWh for next 100 MWh
Mar	rket Price for Electricity	
	Buy or Sell Electricity at a market price	= \$23/MWh

Dispatches, Sales & Purchases						
Stand Alone Dispatch						
Utility A	Utility A					
Will sell 100 MWh at an	Will replace \$25 gen at Utility B with \$20					
incremental cost of	generation at an incremental cost of					
100 MWh x \$20 /MWh = \$2,000	100 MWh x \$20 /MWh = \$2,000					
and receive incremental revenues of:						
100 MWh x \$23 /MWh = <u>\$2,300</u>						
resulting in a profit of: \$300						
Utility B. Contraction of the second states of the	Utility B					
Will replace \$25 generation at a	Will replace \$25 gen with \$20 gen from					
decremental cost of:	Utility A at a decremental cost of					
-100 MWh x \$25 /MWh = -\$2,500	-100 MWh x \$25 /MWh = -\$2,500					
with purchased power at a cost of						
100 MWh x \$23 /MWh = \$2,300						
at a net savings of \$200						
Change in Cost -\$500	Change in Cost -\$500					

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CASE 2: Market Price Between Dec & Inc Cost

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Summary of Results					
Stand Alone Dispatch		Joint Dispatch			
Inc (Dec) Generation - A	100	Inc (Dec) Generation - A	100		
Inc (Dec) Generation - B	-100	Inc (Dec) Generation - B	-100		
Net Inc/Dec Generation	0	Total Incremental Generation	0		
Revenues from Sales - A	\$2,300	Revenues from Sales - A	\$0		
Costs of Purchases - B	-\$2,300	Costs of Purchases - B	\$0		
Net Revenues from Sales/Purch	\$0	Total Revenues from Sales	\$0		
Inc (Dec) Generation Costs - A	\$2,000	Inc (Dec) Generation Costs - A	\$2,000		
Inc (Dec) Generation Costs - B	-\$2,500	Inc (Dec) Generation Costs - B	-\$2,500		
Net Inc/Dec Gen Costs	-\$500	Net Inc/Dec Gen Costs	-\$500		
Profits from Sales - A	\$300	Profits from Sales - A	\$0		
Profits from Sales - B	\$0	Profits from Sales - B	\$0		
Total Profits from Sales	\$300	Total Profits from Sales	\$0		
Balance - A	\$0	Balance - A	-\$2,000		
Balance - B	\$200	Balance - B	\$2,500		
Total Balance*	\$200	Total Balance	\$500		

*Balance = (Revenues from Sales - Inc (Dec) Generation Costs) - (Profits from Sales)

Joint Dispatch All	ocation Rule	· •	-			
Whenever one utility's generation is substituted for another, the utility receiving the generation will pay the utility supplying the generation its						
opportunity cost = incremental gen	eration cost + lo	SS	of p	rofits		
Utility A's opportunity cost for serving 100 MWh's	of load on Utility I	3 is	the i	ncreme	nta	:
Cost of the generation	100 MWh	х	\$20	/MWh	=	\$2,000
plus the loss of profits 100 MWh x \$3 /MWh = \$30						\$300
equals opportunity cost.					-	\$2,300

	Net Position of Each Utility After Allocation Rule						
Util	ity A	Uti	lity B				
	Incremental Cost	-\$2,000	Incremental Cost	\$2,500			
	Revenues from Sales	\$0	Revenues from Sales	\$0			
1	Allocation Transfer	\$2,300	Allocation Transfer	-\$2,300			
	Total	\$300	Total	\$200			

	Stand Alone Position Before Joint Dispatch							
Util	ity A			Utility	B			
	Incremental	Cost	-\$2,000	l In	cremental Cost	\$2,500		
.	Revenues fro	om Sales	\$2,300	R	evenues from Sales	-\$2,300		
	Total		\$300	Т	otal	\$200		

Schedule 2.2

CASE 3: Market Price Above Incremental Cost

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A	Assumptions on Utility Costs and Market Price					
Utility A		ing a stranger by a stranger by the stranger by				
Incremental cost ab	ove meeting native load	= \$20/MWh for first 100 MWh				
		\$25/MWh for next 100 MWh				
		\$18/MWh for first 100 MWh				
		\$30/MWh for next 100 MWh				
Decremental cost b	elow meeting native load	= \$18/MWh for first 100 MWh	_			
		\$15/MWh for first 100 MWh				
Utility B						
Incremental cost ab	ove meeting native load	= \$25/MWh for first 100 MWh				
		\$30/MWh for next 100 MWh				
Decremental cost b	elow meeting native load	= \$25/MWh for first 100 MWh				
		\$20/MWh for next 100 MWh				
Market Price for Electr	city					
Buy or Sell Electricit	y at a market price	= \$30/MWh				

Dispatches, Sales & Purchases						
Stand Alone Dispatch	Joint Dispatch					
Utility A	Utility A					
	Replaces \$25 gen at Utility B with \$20					
	generation at an incremental cost of					
Sells 300 MWh at a cumulative	100 MWh x \$20 /MWh = \$2,000					
incremental cost of	Sells 200 MWh at a cumulative					
100 MWh x \$20 /MWh = \$2,000	incremental cost of					
100 MWh x \$25 /MWh = \$2,500	100 MWh x \$25 /MWh = \$2,500					
<u>100 MWh x \$28 /MWh = \$2,800</u>	<u>100 MWh_</u> x \$28 /MWh = \$2,800					
300 MWh \$7,300	200 MWh \$5,300					
and receive incremental revenues of:	and receive incremental revenues of:					
300 MWh x \$30 /MWh ≃ \$9,000	200 MWh x \$30 /MWh = \$6,000					
resulting in a profit of \$1,700	resulting in a profit of \$700					
Utility B	Utility B					
	Replace \$25 gen with \$20 gen from					
	Utility A at a decremental cost of					
	-100 MWh x \$25 /MWh = -\$2,500					
	Sells 200 MWh at a cumulative					
	incremental cost of					
Sells 100 MWh at a cumulative	100 MWh x \$25 /MWh = \$2,500					
incremental cost of	$100 \text{ MWh} \times $28 / \text{MWh} = $2,800$					
100 MWh x \$28 /MWh = \$2,800	200 MWh \$5,300					
and receives incremental revenues of:	and receives incremental revenues of:					
100 MWh x \$30 /MWh = \$3,000	200 MWh x \$30 /MWh = \$6,000					
resulting in a profit of \$200	resulting in a profit of \$700					
Change in Cost -\$1,900	Change in Cost -\$1,900					

Schedule 3.1

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	Summary of Results						
Stand Alone Dispatch		Joint Dispatch					
Net Inc (Dec) Generation - A	300	Net Inc (Dec) Generation - A	300				
Net Inc (Dec) Generation - B	100	Net Inc (Dec) Generation - B	100				
Total Net Inc (Dec) Generation	400	Total Net Inc (Dec) Generation	400				
Revenues - Sales (Purch) - A	\$9,000	Revenues from Sales - A	\$6,000				
Revenues - Sales (Purch) - B	\$3,000	Revenues from Sales - B	\$6,000				
Total Revenues from Sales	\$12,000	Total Revenues from Sales	\$12,000				
Net Inc (Dec) Gen Costs - A	\$7,300	Net Inc (Dec) Gen Costs - A	\$7,300				
Net Inc (Dec) Gen Costs - B	\$2,800	Net Inc (Dec) Gen Costs - B	\$2,800				
Total Net Inc (Dec) Gen Costs	\$10,100	Total Net Inc (Dec) Gen Costs	\$10,100				
Profits from Sales - A	\$1,700	Profits from Sales - A	\$700				
Profits from Sales - B	\$200	Profits from Sales - B	\$700				
Total Profits from Sales	\$1,900	Total Profits from Sales	\$1,400				
Balance - A	\$0	Balance - A	-\$2,000				
Balance - B	\$0	Balance - B	\$2,500				
Total Balance*	\$0	Total Balance	\$500				

CASE 3: Market Price Above Incremental Cost

*Balance = (Revenues from Sales - Inc (Dec) Generation Costs) - (Profits from Sales)

Joint Dispatch Allocation Rule Whenever one utility's generation is substituted for another, the utility receiving the generation will pay the utility supplying the generation its opportunity cost = incremental generation cost + loss of profits Utility A's opportunity cost for serving 100 MWh's of load on Utility B is the incremental: Cost of the generation 100 MWh's of load on Utility B is the incremental: Cost of the generation plus the loss of profits 100 MWh x \$20 /MWh = \$2,000 plus the loss of profits 100 MWh x \$10 /MWh = \$1,000 equals opportunity cost. \$3,000

	Net Position of Each Utility After Allocation Rule							
Uti	lity A	lity B	÷ 					
	Incremental Cost	-\$7,300	~~~	Incremental Cost	-\$2,800			
e Roma	Revenues from Sales	\$6,000	218.	Revenues from Sales	\$6,000			
· 次	Allocation Transfer	\$3,000	2017). 1317)	Allocation Transfer	-\$3,000			
	Total	\$1,700		Total	\$200			

Stand Alone Position Before Joint Dispatch				
Ut	ility A	e ng in Ast	Utility B	· · ·
	Incremental Cost	-\$7,300	0 Incremental Cost	-\$2,800
	Revenues from Sales	\$9,000	Revenues from Sales	\$3,000
1.1.7 V	Total	\$1,700	Total =	\$200
SJLP – MPS ELECTRIC ALLOCATIONS AGREEMENT

This Electric Allocations Agreement (Allocations Agreement) is in regard to the Missouri Public Service (MPS), a division of UtiliCorp United Inc. (UCU) and Saint Joseph Light and Power Company (SJLP), Divisions of UtiliCorp United Inc. (UCU).

ARTICLE I – TERM OF AGREEMENT

- 1.01 This SJLP-MPS Electric Allocations Agreement shall become effective at the closing of the Merger, or such later date as may be fixed by any required regulatory acceptance.
- 1.02 This SJLP MPS <u>Electric</u> Allocations Agreement shall continue from year-toyear thereafter until terminated by the Effective Time of Retail Competition in Missouri.

ARTICLE II – DEFINITIONS

- 2.01 Generation Dispatch & Energy Trading shall be a center operated by UCU for solely devoted to the optimal utilization of system power resources for the supply of power and energy for the Company MPS and SJLP.
- 2.02 Divisions shall be MPS and/or SJLP.
- 2.03 Economic Dispatch shall be the distribution of total power resource requirements among alternative sources for system economy with due consideration of system security.

ARTICLE III – PURPOSE

3.01 Purpose of This Agreement The purpose of the SJLP – MPS Electric Allocations Agreement is to provide the basis for the allocation of generation and purchased power resources and costs under the operation of UCU to achieve optimal economies consistent with reliable electric service and reasonable utilization of natural resources; and to establish the basis for capacity commitments within the Company.

ARTICLE IV – Allocations

4.01 Planning and Authorization of Generation Capacity For planning purposes, UCU shall coordinate each Division's forecast of System Capacity to meet the overall System Capacity Responsibility and Capacity Margin.

4.02 Capacity Margin Requirements

- Capacity Margin requirements for MPS and SJLP shall be determined on a combined load basis and shall be in accordance with the Southwest Power Pool (SPP) and Mid-America Power Pool (MAPP) criteria for reserve planning. Capacity Margin requirements for SJLP shall be in accordance with the Mid-America Power Pool (MAPP).
- 4.03 Assignment of Existing Generation Capacity and Capacity Costs to Divisions Each Division shall have assigned to it such generating capacity and associated costs as were owned or contracted for by it prior to the closing of the merger to supply its System Peak Responsibility.

4.04 Allocation of New Generation Capacity to Divisions

Prior to June 1 each year, new generation capacity owned or contracted for by UCU shall be allocated in such a way as to equalize on a pro-rata basis any capacity in excess of the respective reserve requirements of each Division. The capacity reserve margin is calculated by the following.

- a. The capacity sum is the assigned existing capacity plus allocated new capacity;
- b. The ratio is the Division capacity sum divided by the <u>sum of the</u> noncoincident peak demand of the Divisions; and
- c. The capacity reserve margin is the ratio minus 1.
- 4.05 Allocation of New Generation Capacity Costs to Divisions Unless otherwise specified, the cost of all new generation capacity owned or contracted for by MPS shall be allocated in such a way as to equalize the costs per kilowatt of new generation capacity between Divisions across the Company. The exceptions are listed below.
 - a. If new generation capacity is built in such a way that facilities use existing generation or generation sites assigned to a Division under 4.03, then UCU shall obtain estimates of the cost savings from the shared facilities from at least three outside sources.
 - b. The cost savings attributable to shared facilities will be the average of the estimates obtained from outside sources.
 - c. The estimated cost savings will be credited as a decrease in allocated costs to the Division with the shared facilities, and will be debited as an increase in allocated costs to other Divisions.
- 4.06 Economic Dispatch

The UCU Dispatch Center shall perform Economic Dispatch by scheduling energy output of the generation resources to obtain the lowest cost of energy for serving System demand consistent with operating and security constraints, including voltage control, stability, loading of facilities, operating guides, interconnection contracts fuel commitments, environmental requirements and continuity of service to customers. I

4.07 Exchange With Other Utilities

The UCU Dispatch Center shall coordinate and direct off-system purchases and sales of energy necessary to meet system requirements or to improve system economy for the Divisions.

4.08 Allocation of Energy Costs

In order to maximize the economic benefits available to UCU, UCU will dispatch the power supply resources of MPS and SJLP in a centralized manner (centralized joint dispatch). To accomplish this, energy costs for SJLP and MPS resulting from centralized dispatch of the combined generating units and purchased power resources will be determined in the following manner:

- a. Accounting information for energy costs incurred each month will be maintained separately for each Division.
 - 1. Energy costs from generation resources assigned to each division under 4.03 will be assigned to that same Division.
 - 2. Energy costs from generation resources allocated to each Division under 4.04 will be allocated to that same Division using the same allocation factor used for allocating new generation.
 - 3. Energy costs from other generation resources outside the combined centers system will be allocated to each Division on equal dollars per megawatt-hour basis.
- b. The RealTime® production cost model will be used to simulate monthly fuel and interchange energy costs purchases and sales using data based on actual operating statistics for the subject month. Monthly operating statistics will include data for all power resources which were utilized plus historical and anticipated performance characteristics of power resources not utilized. Generating unit operating parameters used in the RealTime® model will be established using actual hourly generation values. These operating parameters will then be adjusted, if necessary, until RealTime® model output statistics for the joint dispatch reflect actual production and interchange purchases and sale data (i.e., fuel costs, heat rates, maintenance outages, etc.) for the subject month. The monthly costs (net of profits from interchange sales) resulting from the joint dispatch of the calibrated RealTime® model will be the first component used in the overall calculations of energy costs. Once the model is calibrated to the actual generation parameters, it will be permitted to re dispatch the generating resources along with actual interchange transactions that occurred during the month in order to meet the actual joint hourly load profile of the Company.
- c. The MPS and SJLP systems will then be modeled on an "own-load" redispatch a stand-alone dispatch basis for the subject month. Generating unit and interchange parameters, as developed in the joint dispatch model (step b, above), will be used as input data for the stand alone production cost simulations to be performed for each Company. In addition, own load re-dispatch will reflect applicable pre-merger operating practices and conditions.

- d. Each Division's incremental or decremental energy cost for the month will be determined as the difference between actual (step a. above) and the modeled cost (step c. above). The sum of the incremental costs and the decremental costs shall represent the cost savings achieved through centralized dispatch. The stand-alone costs (step c. above) of SJLP and MPS will then each be reduced factored by on an equal percentage basis to equal the total costs determined from the joint dispatch (step b. above) of the cost savings. Subject to the conditions set out in the Regulatory Plan attachment to this Electric Allocations Agreement, the result will be the adjusted energy cost for the month for SJLP and MPS.
- e. The Divisions shall reconcile energy costs each month. The Division(s) which incurred additional costs during the month for the benefit of the other Division(s) shall receive from the benefiting Division(s) a credit equal to the difference between the costs incurred for the month (step a. above) and the adjusted energy cost (step d. above).

ARTICLE V – CENTRAL DISPATCH CENTER

5.01 Central Power Dispatch Center

UCU shall provide and operate a Central Power Dispatch Center (CPDC) adequately equipped and staffed to meet the requirements for efficient, economical and reliable operation as contemplated by this Electric Allocations Agreement.

5.02 Communications and Other Facilities

The CDPC shall provide communications and other facilities necessary for:

- a. the metering and control of the generating and transmission facilities.
- b. the dispatch of electric power and energy; and
- c. such other purposes as may be necessary for optimum operation of the system and the implementation of this Allocations Agreement.

ARTICLE VI - GENERAL

6.01 Regulatory Authorization This Allocations Agreement is subject to regulatory approval by the Missouri Public Service Commission. UCU shall seek all necessary regulatory authorizations for this Electric Allocations Agreement.

6.02 Effect on Other Agreements This Electric Allocations Agreement shall not modify the obligation of other agreements between the Divisions and others not parties to this Electric Allocations Agreement.

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> Schedule 4.2 Page 1 of 4

4.02 Capacity Margin Requirements

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Capacity Margin requirements for MPS and SJLP shall be determined on a combined load basis and shall be in accordance with the Southwest Power Pool (SPP) and Mid-America Power Pool (MAPP) criteria for reserve planning.

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- a. The capacity sum is the assigned existing capacity plus allocated new capacity;
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- c. The MPS and SJLP systems will then be modeled on a stand-alone dispatch basis for the subject month. Generating unit and interchange parameters, as developed in the joint dispatch model (step b, above), will be used as input data for the stand^T₂alone production cost simulations to be performed for each Company.
- d. The stand-alone costs (step c. above) of SJLP and MPS will then each be factored on an equal percentage basis to equal the total costs determined from the joint dispatch (step b. above). Subject to the conditions set out in

the Regulatory Plan attachment to this Electric Allocations Agreement, the result will be the adjusted energy cost for the month for SJLP and MPS.

e. The Divisions shall reconcile energy costs each month. The Division(s) which incurred additional costs during the month for the benefit of the other Division(s) shall receive from the benefiting Division(s) a credit equal to the difference between the costs incurred for the month (step a. above) and the adjusted energy cost (step d. above).

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ILLUSTRATIVE REGULATORY PLAN FOR ENERGY-COST OPPORTUNITIES UCU-SJLP MERGER

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4.

Allocation - Energy Relat	ed	2001	2002	2003	2004	2005	Total
Profits from Off-System Sales	3	\$4,813,702	\$14,244,593	\$17,585,438	\$18,907,248	\$23,681,346	\$79,232,327
Allocation to MPS	84.6%	\$4,072,392	\$12,050,926	\$14,877,281	\$15,995,532	\$20,034,419	\$67,030,549
Allocation to SJLP	2.9%	\$139,597	\$413,093	\$509,978	\$548,310	\$686,759	\$2,297,737
Allocation to Shareholders	12.5%	\$601,713	\$1,780,574	\$2,198,180	\$2,363,406	\$2,960,168	\$9,904,041
Joint Dispatch Synergies		\$3,524,359	\$4,060,765	\$4,441,205	\$4,647,908	\$5,307,973	\$21,982,210
MPS Stand Alone w/o Sales		82.14%	81.41%	82.56%	82.57%	82.78%	82.34%
SJLP Stand Alone w/o Sales		17.86%	18.59%	17.44%	17.43%	17.22%	17.66%
Allocation to MPS	50%	\$1,447,432	\$1,653,027	\$1,833,426	\$1,9 18,898	\$2,196,935	\$9,049,717
Allocation to SJLP	30 /0	\$314,747	\$377,356	\$387,177	\$405,056	\$457,052	\$1,941,388
Allocation to Shareholders	50%	\$1,762,180	\$2,030,383	\$2,220,603	\$2,323,954	\$2,653,987	\$10,991,105

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ATTACHMENT REGULATORY PLAN FOR ENERGY COSTS

This regulatory plan attachment to the Electric Allocations Agreement applies to the first \underline{X} years after the completion of the merger between UCU and SJLP. The purpose of this regulatory plan is to set out the treatment of energy costs for the purposes of determining revenue requirements in the setting of rates for either MPS or SJLP before the Missouri Public Service Commission.

1. Stand-Alone Energy Cost Determination.

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The stand-alone energy costs for MPS and SJLP shall be determined for the appropriate test year as set out in section 4.08, subsection c of the Electric Allocations Agreement except for the following modification.

- a. If the heat rate at Lake Road 4 is improved from pre-merger levels, then the heat rate used in the SJLP stand-alone dispatch will be modified to its pre-merger level.
- b. The stand-alone dispatch shall be run without off-system sales.
- 2. Allocation of Profits from Off-System Sales

The purpose of this calculation is to determine reduced energy costs from pre-merger levels of off-system sales and 50% of any increase in profits from increases in off-system sales from pre-merger levels.

- a. Of the test-year-normalized profits from off-system sales, 84.6% shall be allocated to MPS.
- b. Of the test-year-normalized profits from off-system sales, 2.9% shall be allocated to SJLP.
- 3. Allocation of Savings from Joint Dispatch

The purpose of this calculation is to determine reduced energy costs in the amount of 50% of the reduction in energy costs from the joint dispatch of power supply resources.

- a. The joint dispatch energy costs for MPS and SJLP shall be determined as set out in section 4.08, subsection b of the Electric Allocations Agreement except that the joint dispatch shall be run without off-system sales.
- b. The amount of savings from joint dispatch shall be calculated as the difference between the sum of the energy costs from the stand-alone dispatches in 1 above and the joint dispatch in 3.a above.
- c. Of the savings calculated in 3.a above, 50% will be allocated between MPS and SJLP based on the percent of energy costs from the stand-alone dispatches in 1 above.
- 4. Total Energy Costs for Purposes of Test-Year Revenue Requirements. For either MPS or SJLP the energy costs to be included in test-year revenue requirements will be the stand-alone costs calculated in 1 above, minus both the allocation of profits from off-system sales calculated in 2 above and the allocation of savings from joint dispatch calculated in 3 above.

ALLOCATIONS OF ENERGY COST RELATED OPPORTUNITIES BETWEEN MERGERS

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	FIRST 5 YEARS											
MERGER	SEPARATE	JOINT A	LLOCATIONS	DIFFERENCE								
UCU-SJLP	\$41,823,026	38.71%	\$41,152,673	-\$670,353								
UCU-EDE	\$66,214,031	61.29%	\$65,152,731	-\$1,061,300								
TOTAL	\$108,037,057	100.00%	\$106,305,404	-\$1,731,653								

	TEN YEAR TOTAL										
MERGER	SEPARATE	JOINT A	LLOCATIONS	DIFFERENCE							
UCU-SJLP	\$99,542,978	37.77%	\$92,953,286	-\$6,589,692							
UCU-EDE	\$164,019,689	62.23%	\$153,161,674	-\$10,858,015							
TOTAL	\$263,562,667	100.00%	\$246,114,960	-\$17,447,707							

MERGER APPLICANTS PROPOSED ALLOCATIONS OF ENERGY COST RELATED OPPORTUNITIES BETWEEN MERGERS

		FIRST 5 YEARS											
MERGER	SEPARATE	JOINT A	LLOCATIONS	PROPOSED	DIFFERENCE								
UCU-SJLP	\$42,421,139	39.67%	\$41,438,081	\$21,926,122	-\$19,511,958								
UCU-EDE	\$64,516,005	60.33%	\$63,020,925	\$82,532,886	\$19,511,960								
TOTAL	\$106,937,144	100.00%	\$104,459,006	\$104,459,008	\$2								

	TEN YEAR TOTAL											
MERGER	SEPARATE	JOINT A	LLOCATIONS	PROPOSED	DIFFERENCE							
UCU-SJLP	\$104,344,060	39.32%	\$94,792,613	\$56,978,464	-\$37,814,149							
UCU-EDE	\$160,999,286	60.68%	\$146,261,733	\$184,075,888	\$37,814,155							
TOTAL	\$265,343,346	100.00%	\$241,054,346	\$241,054,352	\$6							

ILLUSTRATIVE REGULATORY PLAN FOR ENERGY-COST OPPORTUNITIES UCU-SJLP-EDE MERGER

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Allocation - Energy Relat	ted	2001	2002	2003	2004	2005	Total
Profits from Off-System Sales	3	\$9,439,834	\$23,705,466	\$29,786,942	\$30,012,391	\$39,809,427	\$132,754,060
Allocation to MPS	64.9%	\$6,126,452	\$15,384,847	\$19,331,725	\$19,478,042	\$25,836,318	\$86,157,385
Allocation to SJLP	2.3%	\$217,116	\$545,226	\$685,100	\$690,285	\$915,617	\$3,053,343
Allocation to EDE	7.8%	\$736,307	\$1,849,026	\$2,323,381	\$2,340,966	\$3,105,135	\$10,354,817
Allocation to Shareholders	25.0%	\$2,359,959	\$5,926,367	\$7,446,736	\$7,503,098	\$9,952,357	\$33,188,515
Joint Dispatch Synergies		\$6,769,117	\$7,025,456	\$8,028,751	\$8,568,137	\$9,326,815	\$39,718,276
MPS Stand Alone w/o Sales		50.31%	49.05%	49.83%	49.96%	49.77%	49.79%
SJLP Stand Alone w/o Sales	/	10.94%	11.20%	10.52%	10.55%	10.35%	10.68%
EDE Stand Alone w/o Sales	/	38.74%	39.76%	39.65%	39.49%	39.88%	39.53%
Allocation to MPS		\$1,702,941	\$1,722,855	\$2,000,183	\$2,140,367	\$2,320,883	\$9,887,229
Allocation to SJLP	50%	\$370,308	\$393,296	\$422,392	\$451,805	\$482,838	\$2,120,640
Allocation to EDE		\$1,311,310	\$1,396,577	\$1,591,800	\$1,691,896	\$1,859,686	\$7,851,269
Allocation to Shareholders	50%	\$3,384,559	\$3,512,728	\$4,014,376	\$4,284,069	\$4,663,408	\$19,859,138

Market Shares of Relevant Economic Capacity	by N	Nonth and	Load I	Duration
UCU-SJLP Merger				

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LCG Reported	Jan	-99	Feb	-99	Mat	r-99	Apr	-99	May	/-99	Jun	-99
Market Shares	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
Associated Electric Coop	2,285	2,236	2,285	2,220	1,742	1,683	2,203	2,147	1,509	1,491	2,285	2,220
City of Independence	126	126	126	126	126	126	126	126	126	126	126	59
Board of Public Utilities-KC, KS	418	418	418	418	418	418	418	418	279	287	411	411
Kansas City Power & Light	2,354	2,388	2,565	2,401	1,827	1,655	2,119	1, 9 75	2,796	2,571	2,796	2,423
Munis in Kansas	50	0	0	0	0	0	0	0	0	0	23	0
Munis in Missouri	34	23	34	23	34	23	23	23	23	23	84	23
City of Springfield	381	381	381	381	381	381	325	323	189	192	381	381
Soutwestern Pwr Adm	1,270	0	1,346	0	1,270	0	961	0	1,181	0	1,209	0
Western Resources	3,890	3,797	3,734	3,499	3,059	3,093	2,981	2,750	2,890	2,839	3,968	3,173
Imports from MAIN	1,067	761	1,657	717	1,064	146	617	76	1,151	586	1,506	381
Imports from MAPP	47	98	364	0	682	224	728	552	737	260	740	77
Imports from SPP	554	383	225	182	558	488	536	491	456	343	545	411
UtiliCorp	456	456	456	456	456	456	456	456	232	245	464	368
St Joseph L&P	93	93	93	0	93	70	93	70	93	23	93	0
Empire District Electric	320	286	320	286	320	286	318	286	160	164	319	286
Total MW	13,345	11,446	14,004	10,709	12,030	9,049	11,904	9,693	11,822	9,150	14,950	10,213
Total Hours	400	344	366	306	400	344	499	221	358	386	350	370
UtiliCorp Market Share	3.42%	3.98%	3.26%	4.26%	3.79%	5.04%	3.83%	4.70%	1.96%	2.68%	3.10%	3.60%
SJLP Market Share	0.70%	0.81%	0.66%	0.00%	0.77%	0.77%	0.78%	0.72%	0.79%	0.25%	0.62%	0.00%
EDE Market Share	2.40%	2.50%	2.29%	2.67%	2.66%	3.16%	2.67%	2.95%	1.35%	1.79%	2.13%	2.80%
Merged Market Share MW	549	549	549	456	549	526	549	526	325	268	557	368
Merged Market Share %	4.11%	4.80%	3.92%	4.26%	4.56%	5.81%	4.61%	5.43%	2.75%	2.93%	3.73%	3.60%
Premerger HHI Change in HHI	1,663 5	2,022 6	1,588 4	2,102 0	1,376 6	1,964 8	1,480 6	1,832 7	1,584 3	2,108 1	1,522 4	2,083 0

Market Shares of Relevant Economic Capacity by Month and Load Duration UCU-SJLP-EDE Merger

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LCG Reported	<u> </u>	-99	Feb	-99	Ma	-99	Apr	-99	May	/-99	Jun	-99
Market Shares	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
Associated Electric Coop	2,285	2,236	2,285	2,220	1,742	1,683	2,203	2,147	1,509	1,491	2,285	2,220
City of Independence	126	126	126	126	126	126	126	126	126	126	126	59
Board of Public Utilities-KC, KS	418	418	418	418	418	418	418	418	279	287	411	411
Kansas City Power & Light	2,354	2,388	2,565	2,401	1,827	1,655	2,119	1,975	2,796	2,571	2,796	2,423
Munis in Kansas	50	0	0	0	0	0	0	0	0	0	23	0
Munis in Missouri	34	23	34	23	34	23	23	23	23	23	84	23
City of Springfield	381	381	381	381	381	381	325	323	189	192	381	381
Soutwestern Pwr Adm	1,270	0	1,346	٥	1,270	0	961	0	1,181	0	1,209	0
Western Resources	3,890	3,797	3,734	3,499	3,059	3,093	2,981	2,750	2,890	2,839	3,968	3,173
Imports from MAIN	1,067	761	1,657	717	1,064	146	617	76	1,151	586	1,506	381
Imports from MAPP	47	98	364	0	682	224	728	552	737	260	740	77
Imports from SPP	554	383	225	182	558	488	536	491	456	343	545	411
UtiliCorp	456	456	456	456	456	456	456	456	232	245	464	368
St Joseph L&P	93	93	93	0	93	70	93	70	93	23	93	0
Empire District Electric	320	286	320	286	320	286	318	286	160	164	319	286
Total MW	13,345	11,446	14,004	10,709	12,030	9,049	11,904	9,693	11,822	9,150	14,950	10,213
Total Hours	400	344	366	306	400	344	499	221	358	386	350	370
UtiliCorp Market Share	3.42%	3.98%	3.26%	4.26%	3.79%	5.04%	3.83%	4.70%	1.96%	2.68%	3.10%	3.60%
SJLP Market Share	0.70%	0.81%	0.66%	0.00%	0.77%	0.77%	0.78%	0.72%	0.79%	0.25%	0.62%	0.00%
EDE Market Share	2.40%	2.50%	2.29%	2.67%	2.66%	3.16%	2.67%	2.95%	1.35%	1.79%	2.13%	2.80 <u>%</u>
Merged Market Share MW	869	835	869	742	869	812	867	812	485	432	876	654
Merged Market Share %	6.51%	7.30%	6.21%_	6.93%	7.22%	8.97%	7.28%	8.38%	4.10%	4.72%	5.86%	6.40%
Premerger HHI	1,663	2,022	1,588	2,102	1,376	1,964	1,480	1,832	1,584	2,108	1,522	2,083
Change in HHI	24	30	22	23	30	45	31	39	: 11	12	20	20

Market Shares of Relevant Economic Capacity by Month and Load Duration UCU-SJLP-EDE Merger

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LCG Reported	Jul	-99	Aug	-99	Sep	-99	Oct	-99	Nov	/-99	Dec	-99
Market Shares	Peak	Off-Peak										
Associated Electric Coop	2,285	2,236	2,285	2,236	2,285	2,220	1,661	1,623	2,285	2,236	2,285	2,236
City of Independence	126	126	126	126	126	59	126	126	126	126	126	126
Board of Public Utilities-KC, KS	418	418	418	418	418	323	418	418	418	418	418	418
Kansas City Power & Light	2,831	2,796	2,831	2,796	2,796	2,461	2,796	2,571	2,796	2,686	2,796	2,796
Munis in Kansas	310	0	124	0	23	0	0	0	0	0	0	0
Munis in Missouri	114	23	75	23	23	23	34	23	34	23	34	23
City of Springfield	421	381	381	381	381	381	381	381	381	381	381	381
Soutwestern Pwr Adm	1,060	0	1,079	0	1,121	0	1,039	0	1,312	0	1,435	0
Western Resources	4,390	3,797	4,338	3,797	3,890	3,185	3,130	3,054	3,797	3,743	3,797	3,797
Imports from MAIN	1,541	887	1,964	1,076	1,059	167	862	415	1,057	339	1,291	963
Imports from MAPP	1,121	510	1,741	884	544	15	277	42	532	129	406	700
Imports from SPP	812	306	562	261	446	476	392	326	419	296	454	304
UtilCorp	564	456	533	456	456	380	456	456	456	456	456	456
St Joseph L&P	93	70	93	93	93	23	93	70	93	70	93	93
Empire District Electric	430	286	393	286	319	286	293	286	295	286	296	286
Total MW	16,516	12,292	16,943	12,833	13,980	9,999	11,958	9,791	14,001	11,189	14,268	12,579
Total Hours	399	345	392	352	351	369	407	337	387	333	354	390
UtiliCorp Market Share	3.41%	3.71%	3.15%	3.55%	3.26%	3.80%	3.81%	4.66%	3.26%	4,08%	3.20%	3.63%
SJLP Market Share	0.56%	0.57%	0.55%	0.72%	0.67%	0.23%	0.78%	0.71%	0.66%	0.63%	0.65%	0.74%
EDE Market Share	2.60%	2.33%	2.32%	2.23%	2.28%	2.86%	2.45%	2.92%	2.11%	2.56%	2.07%	2.27%
Merged Market Share MW	1,087	812	1,019	835	868	689	842	812	844	812	845	835
Merged Market Share	6.58%	6.61%	6.01%	6.51%	6.21%	6.89%	7.04%	8.29%	6.03%	7.26%	5.92%	6.64%
Premerger HHI	1,426	1,920	1,436	1,814	1,622	2,187	1,613	2,032	1,601	2,163	1,581	1,857
Change in HHI	25	24	21	24	22	25	28	38	21	29	20	25