Exhibit No.:

Issues:	Class Cost of Service Rate Design
Witness:	James C. Watkins
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Surrebuttal Testimony
Case No.:	ER-2008-0093
Date Testimony Prepared:	April 25, 2008

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

SURREBUTTAL TESTIMONY

OF

JAMES C. WATKINS

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2008-0093

Jefferson City, Missouri

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the matter of The Empire District Electric Company of Joplin, Missouri's application for authority to file tariffs increasing rates for electric service provided to customers in the Missouri service area of the Company	))))	Case No. ER-2008-0093

AFFIDAVIT OF JAMES C. WATKINS

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

James C. Watkins, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 5 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal 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.

James C. Watkins

Subscribed and sworn to before me this 25th day of April, 2008.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086

Notary Public

SURREBUTTAL TESTIMONY

OF

JAMES C. WATKINS

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2008-0093

Q. Please state your name and business address.

A. My name is James C. Watkins and my business address is Missouri Public Service Commission, 200 Madison Street, P. O. Box 360, Jefferson City, Missouri 65102.

Q. Who is your employer and what is your present position?

A. I am employed by the Missouri Public Service Commission (Commission) and my title is Manager, Economic Analysis, Energy Department, Operations Division.

Q. Are you the same James C. Watkins that prefiled direct and rebuttal testimony in this case?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of this testimony is to address W. Scott Keith's rebuttal testimony on behalf of The Empire District Electric Company (Empire) regarding the rate design of any fuel adjustment clause (FAC) authorized by the Commission in this case. In particular, I will address the following issues:

1. The need for a seasonally differentiated "base cost of fuel and purchased power energy," and

2. The appropriate calculation of the cost adjustment factors (CAF).

Q. What is Mr. Keith's objection to the Staff's position that "base" costs should be determined by season?

A. Mr. Keith summarizes his objection on page 4, lines 8-10, of his rebuttal testimony as follows:

> The average energy cost differentials do not support the additional complexity required to implement the Staff recommendation concerning a seasonal base in the FAC.

Q. How much complexity is involved in determining "base" costs by season?

A. Mr. Keith shows the calculation of the seasonal "base" costs in his Rebuttal Schedule WSK-1. The "base" cost is determined by summing the "NSI FPP$ Cost w/o Dmd" over the relevant months, then dividing by the sum of the "NSI Energy MWh" over the same months. This is not a "complex" calculation.

Q. How significant is the seasonal differential in fuel costs?

A. As shown in Mr. Keith's Rebuttal Schedule WSK-1 and described on page 3, lines 17-22 of his rebuttal testimony, in normal weather conditions the "summer" costs of $30 per megawatt-hour are $3 per megawatt-hour higher than in the "winter." Thus, summer base fuel and purchased power costs are roughly 10% higher in the winter. I consider 10% higher costs to be quite significant. In the "Extreme Summer/Mild Winter" scenario shown in Rebuttal Schedule WSK-1 this differential is almost doubled with a $5.66 per megawatt-hour higher summer cost that is over 21% higher than the winter costs. This is surely significant unless Empire's rate schedules have energy charges with insignificant digits to the right of the decimal. A $3 per megawatt-hour differential equates to $0.0030 per kilowatt-hour. Empire's rate schedules have energy charges that are precise to the nearest $0.0001.

Additionally, Empire has proposed a Cost Adjustment Factor (CAF) for its FAC that is rounded to the nearest $0.00001.

Another way of looking at this problem is to consider the scenario in which costs in the accumulation periods are exactly the same as in the "base." If seasonal costs are compared to seasonal "base" costs, there is no difference in either season; however, if these costs are compared to a single annual "base," there is a $4.5 million cost-recovery shortfall in the summer and a $4.5 million excess cost recovery in the winter.

There is really no justification for overcharging customers for part of the year and undercharging them for the rest of the year. Certainly Mr. Keith's claim that the calculation of seasonal "base" costs is "complex," even if true, would not justify his proposed rate design.

Q. What is Mr. Keith's second concern with the Staff's proposed FAC rate design?

A. Mr. Keith states on page 6, lines 3-6, of his rebuttal testimony that the Staff's position that costs "at the generator" should be loss adjusted to delivery voltage is unclear and his proposal to use his two "expansion factors" will capture the differences in line losses.

Q. How should base costs be determined?

A. "Base" costs should be determined in exactly the way Mr. Keith determined those factors in his Rebuttal Schedule WSK-1. That is, total fuel and purchased power costs from the fuel run ("at the generator") should be divided by Net System Input (load "at the generator"). To determine the "base" cost "at the secondary meter" the "cost at the generator" should be multiplied by 1.0728. To determine the "base" cost "at the primary meter" the "cost at the generator" should be multiplied by 1.0520. These loss adjustments are from Empire's most recent loss study.

Q. What "base" costs are recommended by the Staff?

A. The following table shows the Staff's recommended "base" costs:

Table JCW-1

FAC "Base" Costs ($/kWh)	Summer	Winter
At the Generator	$0.0301	$0.0273
At Primary (Loss adjustment factor: 1.0520)	$0.0316	$0.0287
At Secondary (Loss adjustment factor: 1.0728)	$0.0323	$0.0293

Q. Is this the method that Empire has proposed in its FAC?

A. No. Empire has proposed to determine costs by allocating the total costs among the jurisdictions, then applying "expansion factors" to correct for line losses.

Q. Is there a problem with using these "expansion factors" to correct for line losses?

A. Yes. First, the jurisdictional allocation factors do not account in any way for the differences in the mix of customers by metering voltage between jurisdictions. Second,the "expansion factors" applied to Missouri jurisdictional costs depend on the relative level of sales to primary customers vs. secondary customers, which is constantly changing over time. Thus, it would be mere coincidence if revenue collections actually recovered the correct total, even if sales were perfectly forecasted.

Q. Why would sales need to be forecasted?

A. The purpose of the Recovery Period is to recover or refund any total dollar differences in fuel costs between "base" and "actual" fuel costs. In order to determine a rate

for the Cost Adjustment Factor that will recover or refund the total differences in fuel costs as closely as possible, the Cost Adjustment Factor has to be calculated using the best available estimate of sales during the Recovery Period. The best estimate of sales during the Recovery Period is not likely to be actual sales during the Accumulation Period.

Q. Please summarize your recommendations on behalf of the Staff.

A. First, the "base" cost of fuel and purchased power energy should be determined "at the generator" for each season, then adjusted for losses to the meter. The recommended "base" values are shown in Table JCW-1.

Second, the Cost Adjustment Factor should be determined by dividing FAC by forecasted sales during the Recovery Period, not actual sales for the Accumulation Period.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.