GMO-244

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Issues:	Class Cost-of-Service Rate Design
Witness:	Michael S. Scheperle
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Surrebuttal Testimony
File No.:	ER-2010-0356
Date Testimony Prepared:	January 12, 2011

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

SURREBUTTAL TESTIMONY

OF

MICHAEL S. SCHEPERLE

KCP&L GREATER MISSOURI OPERATIONS COMPANY

FILE NO. ER-2010-0356

Jefferson City, Missouri
January 2011

Staff Exhibit No GMO-244
Date 1/18/11 Reporter LMB
File No ER-2010-0356

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service	)))))	File No.: ER-2010-0356

AFFIDAVIT OF MICHAEL S. SCHEPERLE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Michael S. Scheperle, 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 8 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.

Michael S. Scheperle
Michael S. Scheperle

Subscribed and sworn to before me this 12th day of January, 2011.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Susan L. Sundermeyer
Notary Public

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KCP&L GREATER MISSOURI OPERATIONS COMPANY

FILE NO. ER-2010-0356

Q. Please state your name and business address.

A. My name is Michael S. Scheperle and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

Q. Are you the same Michael S. Scheperle who filed direct testimony in this proceeding on December 1, 2010, both in question and answer format and as part of the Missouri Public Service Commission Staff's (Staff) Rate Design and Class Cost-of-Service Report, and who filed on December 17, 2010, rebuttal testimony in question and answer format?

A. Yes, I am.

Q. What is the purpose of your surrebuttal testimony?

A. I respond to the Class Cost-of-Service (CCOS) rebuttal testimonies of (1) KCP&L Greater Missouri Operations Company (GMO) witness Paul Normand regarding the Production-Capacity allocator; (2) GMO witness Tim M. Rush regarding his rate design recommendations; and (3) compare rate design recommendations by other parties.

Production-Capacity Allocator

Q. With regard to how Staff developed its Production-Capacity allocator by the BIP method, Mr. Normand states on pages 5-6 of his rebuttal testimony that Staff's approach

is similar to his approach, but that Staff's use of total annual energy "results in a double dip allocation of base units to lower load factor classes" and that Staff's use of NCP (non-coincident peak) data "incorrectly increase[s] the cost allocation to the Residential class for what are total integrated system costs." Do you agree with Mr. Normand's criticisms?

A. No. GMO uses the generating units it owns to meet 80% of the energy and capacity needs of its MPS and L&P customers and purchased power contracts for the remaining 20%. GMO's purchased power contracts include Gray County Wind contract, Nebraska Public Power District (NPDD) Cooper contract and spot. Staff considers the generating units GMO owns together with its purchased power to be included in Staff's base allocation component of the BIP method, since GMO meets approximately 20% of GMO's customers' energy and capacity needs with purchased power. By considering purchased power in the base component, Staff is not using a higher level of energy delivery than is typically produced by base units, Mr. Normand's criticism. Furthermore, in its BIP method for GMO Staff calculates both a base component and a peak component. GMO has no intermediate generating facilities; therefore, the methodology for the intermediate component has no impact when using the BIP method to derive Production-Capacity allocators for GMO. The peak component is calculated by subtracting the already allocated base component. Therefore, Staff does not double dip in its BIP methodology, as usage characteristics (including purchases) are calculated in the base component, and the peak component simply found by subtracting the already calculated base component.

Q. What about Mr. Normand's criticism that Staff's use of NCP data "incorrectly increase[s] the cost allocation to the Residential class for what are total integrated system costs"?

A. Both Staff's and GMO's BIP methods are based on classifying generating facilities as either base facilities or peaking facilities (no intermediate component). GMO classified the peak component based on coincident peak (CP) less base component. Staff classified the peak component based on NCP less base component. Staff uses NCP information to alleviate free ridership. Free ridership is when service rendered completely off-peak is not assigned any responsibility for capacity costs. Street lights are not on during the day and therefore would not be allocated any capacity costs at all if CP information is used as GMO proposes. Because, Staff uses NCP information in the peak component, there is no free ridership and the allocation factor is more stable and equitable method than using a CP method.

Rate Design Recommendations

Q. What is GMO's response to Staff's rate design proposal?

A. In the rebuttal testimony of Mr. Rush GMO asks the Commission to ignore Staff's proposed rate design and, instead, adopt GMO's request that its requested increase be spread to all customer classes and all rate elements on an equal percentage basis.

Q. How does GMO support its rate design request?

A. They are not supported by GMO's own CCOS studies, which show that for certain customer classes the rate schedule revenue responsibility of the class far exceeds GMO's cost to serve the class (revenue exceeds cost to serve - Tables 3A and 3B, Paul Normand, Direct Testimony, pages 20 & 21). Staff is not aware of any support for GMO's rate design proposal.

Q. How would one determine whether the rate schedule revenue responsibility of a class exceeds the utility's cost to serve the class?

A. One way to do this is by the use of the Index of Return. For example, GMO's CCOS study shows for MPS a Small General Service (SGS) Index of Return of 1.37. GMO's study shows for L&P a General Service (GS) Index of Return of 2.34 and a Large General Service (LGS) Index of Return of 1.24. An Index of Return above 1.0 indicates the revenue responsibility of the customer class exceeds GMO's cost to provide service to that class; therefore, to equalize revenue responsibility and cost-of-service, rate revenue responsibility should be reduced for these classes. GMO's CCOS study shows for MPS an Index of Return of 0.69 for Large Power Service (LPS) and for L&P an Index of Return of .65 for LPS. These Indices of Return indicate that GMO's cost to serve the LPS classes exceeds the revenue responsibility of these classes and therefore, that the rates for those classes, on an overall revenue neutral basis, should be increased.

Q. Would an equal percentage increase lessen or eliminate these Index of Return variations?

A. No. The way to lessen or eliminate these Index of Return variations is to adopt Staff recommendations that, instead of increasing the rates (revenue responsibility) of each class by the same percentage, adjustments should be made to move the revenue responsibility of each customer class closer to GMO's cost to serve that class, as determined by an adequate CCOS study.

Q. Are the concerns with Staff's rate design proposal Mr. Rush expresses on page 4 of his rebuttal testimony, i.e., "that it did not take into account the customer shifts for the non-residential classes that will likely result from its proposal" and it "does not explore the disruption of the relationship between classes, leading to the potential rate switching impact of its proposal" valid?

A. No. I believe Mr. Rush is wrong. For example, Staff recommended the same percentage increase for numerous non-residential rate schedules. Staff recommended the system average increase be applied to the following MPS rate schedules:

- Small General Service – Primary and Secondary
- Large General Service – Primary
- Large General Service – Secondary
- Large Power Service – Primary
- Large Power Service – Secondary

Since each component of each rate schedule receives the same percentage increase, no rate switching should occur.

Staff recommended the system average increase less 0.93% be applied to the following rate schedules for MPS:

- Small General Service – No Demand
- Small General Service – Short Term without Demand

Customers who take service under the SGS (No Demand and Short Term without Demand) rate schedules are very small customers, where the demand is assumed to not exceed 30 kW. The customers taking service under all other non-residential rate schedules (excluding lighting) have demand meters and their capacity demands exceed 30 kW. Since usage characteristics dictate customer qualifications for certain rate schedules, no rate switching should occur between SGS (No demand) and SGS (Short Term without Demand) as, under Staff's rate design proposal, each component of these rate schedules would receive the same percentage increase, and the demands of these customers would not exceed 30 kW.

Q. Do you agree with Mr. Rush that Staff's rate design recommendation for L&P may lead to potential rate switching by L&P customers?

A. No. I believe Mr. Rush is wrong for L&P also. For example, Staff recommends the same percentage increase be applied to numerous non-residential rate schedules. Staff recommends the same increase percentage be applied to the following L&P rate schedules (system average less 2.1%):

- General Service – General Use
- General Service – Limited Demand
- General Service – Short Term
- General Service – Separate Meter SH/WH
- Large General Service – Primary, Secondary and Substation

Since each component of each rate schedule receives the same percentage increase, no rate switching should occur.

Staff recommends the system average increase plus 0.83% be applied to the following non-residential rate schedule.

- Large Power Service – Time of Use (Primary, Secondary, Substation, Transmission)

The LPS rate schedule is available to very large commercial or industrial customers who have a very high load factor, and the customer must have, or be willing to assume, a minimum demand of 500 kW. GS (General Use) and LGS customers only have to be willing to assume, a minimum demand of 40 kW. Any rate switching that might occur should be minimal. Staff recommends that it is time to start moving the revenue responsibilities of customer classes (generally correlating to rate schedules) closer to GMO's cost to serve them.

Comparison of Rate Design Recommendations

Q. Have you prepared a summary of the rate design proposal the parties have presented in their prefiled direct and rebuttal cases?

A. Yes. For ease of reference, in Schedule MSS-S1 (MPS) and Schedule MSS-S2 (L&P), I have summarized the revenue neutral results for all the parties that presented rate design testimony in their direct or rebuttal cases. Included in each schedule is: identification of the sponsoring party, the approximate percentage change by rate schedule, and footnotes detailing each proposal based on a Commission ordered increase to GMO's rates in this case.

Q. What specifically does the Commission need to order to implement Staff's recommendation on the issues you've addressed in prefiled testimony?

A. The Commission would need to order the following changes to the MPS rate schedules:

1. The following MPS customer classes receive the system average increase, as the revenue responsibilities of these customer classes are close to GMO's cost to serve them:
    - Residential – Regular
    - Residential – Space Heating
    - Small General Service – Secondary and Primary
    - Large General Service – Primary
    - Large General Service – Secondary
    - Large Power Service – Primary
    - Large Power Service – Secondary
    - Special – Thermal Energy Storage
2. The following MPS customer classes receive no increase for the first $5 million, because their current revenue responsibilities exceed GMO's cost of serving them. For any Commission ordered increase above $5 million, that the additional amount above

$5 million be allocated on an equal percentage basis to the following MPS customer classes:

- Residential – Other
- Small General Service – No Demand
- Small General Service – Short Term without Demand

3. The MPS Lighting customer class receives the system average percent increase plus an additional approximate 1% increase, because the current revenue responsibility of that customer class is less than GMO's cost to serve it.

And, Staff recommends the following changes to the L&P rate schedules:

1. Allocate the first $3 million of any Commission ordered increase as an equal percentage increase to the rate schedules for the following L&P customer classes, as their revenue responsibilities are less than GMO's cost to serve them:
   - Residential – Regular
   - Residential – Other
   - Residential – Space Heating
   - Large Power Service – Time of Use (TOU) for Primary, Secondary, Substation and Transmission (1 rate schedule)
2. Allocate any Commission ordered increase above $3 million to all L&P rate schedules on an equal percentage basis.

Additionally, Staff recommends that GMO:

1. Complete its evaluation of Light Emitting Diode (LED) Street and Area Lighting (SAL) systems and, no later than 12 months of the effective date of the Commission's Report and Order in this case, file proposed LED lighting tariff sheet(s) to offer a LED SAL demand-side program, unless GMO's analysis shows that a LED SAL demand-side program would not be cost-effective, and if a LED SAL demand-side program is not cost-effective, update the Staff as to the finding's rationale and file a proposed tariff sheet(s) that would provide LED SAL services at cost to its customers.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.