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Issues: Rate Design and Class Cost of Service Study
Witness: David E. Dismukes, Ph.D
Sponsoring Party: Public Counsel
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MISSOURI PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY
OF
DAVID E. DISMUKES

EMPIRE DISTRICT ELECTRIC COMPANY
CASE NO. ER-2014-0351

Jefferson City, Missouri
March 9, 2015

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2014-0351

AFFIDAVIT OF DAVID DISMUKES

STATE OF LOUISIANA)
)
PARISH OF EAST)
BATON ROUGE)

David Dismukes, of lawful age and being first duly sworn, deposes and states:

1. My name is David Dismukes. I am an expert witness for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

David Dismukes
Expert Witness

Subscribed and sworn to me this 5th day of March, 2015.

Notary Public ID No. 133884

My Commission expires at Death.

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OF
DAVID E. DISMUKES

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2014-0351

I. INTRODUCTION

Q. PLEASE STATE YOUR FULL NAME, ADDRESS, AND OCCUPATION.

A. My name is David E. Dismukes. My business address is 5800 One Perkins Place Drive, Suite 5-F, Baton Rouge, Louisiana, 70808. I am the same person that provided pre-filed expert witness testimony on the behalf of the Missouri's Office of Public Counsel ("OPC") on February 11, 2015.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of the Commission Staff and the Midwest Energy Consumers Group ("MECG") regarding the class cost of service studies ("CCOSS") and revenue distribution/rate design issues.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is organized into the following sections:

- Response to Staff's Class Cost of Service Study Recommendations
- Response to MECG's Class Cost of Service Study Recommendations
- Response to Staff's and MECG's Revenue Distribution and Rate Design

II. RESPONSE TO STAFF'S CLASS COST OF SERVICE STUDY RECOMMENDATIONS

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS OF COMMISSION STAFF REGARDING THE COMPANY'S PROPOSED CLASS COST OF SERVICE ALLOCATIONS.

A. Staff recommends a number of modifications to the Company's CCOSS model that includes (1) allocating production plant using the Base, Intermediate, and Peak ("BIP") allocation method; 2) allocating the distribution plant accounts 364-368 on the primary or secondary non-coincidental peak ("NCP) demand factors; 3) using the BIP production capacity allocator to allocate off-system sales revenue; 4) allocating payroll taxes on the basis of payroll expenses; and 5) allocating income taxes on each class' earnings.

Q. WHAT ARE YOUR OPINIONS REGARDING STAFF'S PRODUCTION PLANT ALLOCATION METHODS?

A. The BIP method proposed by the Staff is not unreasonable and, at least from a conceptual perspective is very similar to my production plant CCOSS recommendations. The mechanics of Staff's proposed BIP methods do differ from my production plant CCOSS proposals since the underlying BIP calculations rests primarily upon generation supply characteristics rather than customer demand measures. The BIP method, for instance, ranks plant operating costs from highest to lowest and assigns these costs to three specified periods: base hours; intermediate hours; or peak

hours.[1] Base plant is allocated on average demand (energy), intermediate is allocated using the 12 months coincident peak ("12CP') and peak is allocated using the four highest month coincident peaks ("4CP"). From a conceptual perspective, Staff's proposed BIP method is similar to my production plant CCOSS proposals by recognizing the dual-nature of production plant in serving customers (i.e., production plant both produces electricity and is used to meet peak loads).[2] The primary (and small) difference between the two cost allocation approaches rests primarily with the emphasis each takes regarding the importance of the generation, as opposed to the peak load functions of production plant.

III. RESPONSE TO MECG'S CLASS COST OF SERVICE STUDY RECOMMENDATIONS

Q. PLEASE SUMMARIZE MECG'S TWO CCOSS PROPOSALS.

A. MECG's first CCOSS proposal consists of a recommendation to allocate production plant costs using either (1) a Coincident Peak ("CP") allocation based on the three highest summer and three highest winter CPs, (referred to as the 6CP method), or (2) an Average and Excess ("AED") method also based on the six highest non-coincident peaks ("AED6NCP"). The AED6NCP method is MECG's preferred production plant allocation choice. MECG's second CCOSS proposal rests with the methods used to allocate purchased power costs. The Company recommends that

[1] National Association of Regulatory Utility Commissioners, Electric Utility Cost Allocation Manual, January 1992, p 60.
[2] National Association of Regulatory Utility Commissioners, Electric Utility Cost Allocation Manual, January 1992, p 49.

these purchased power costs be allocated on an energy basis whereas MEGC proposes these purchased power costs be allocated on the basis of demand.

Q. WHAT IS THE DIFFERENCE BETWEEN YOUR PRODUCTION PLANT FACTOR AND THE RECOMMENDATIONS OF MECG UNDER THE AED APPROACH?

A. The primary difference between the AED method that I propose and the one offered by MEGC rests with the method of determining the excess demand. Under the approach that I recommend, the excess demand is calculating using 12 CPs whereas MECG uses an excess demand calculation based upon the NCPs for the three highest summer and three highest winter months.

Q. DO THE TWO AED METHODOLOGIES RESULT IN SIGNIFICANT DIFFERENCES IN THE ALLOCATION OF COSTS BETWEEN THE CLASSES?

A. No. DED-R-1 shows the results of all cost of service models presented in this case. The class allocation factors between the method offered by MEGC and the one that I propose under AED approach are quite similar. For example, for the residential class the class allocation factor is 49.98 percent under my recommended AED methodology and its 49.95 percent under MEGC's approach. Likewise, the general power class shows an allocation factor of 16.09 percent and 15.88 percent under my recommendation methodology and MEGC's methodology, respectively. The only

meaningful difference in results rests with the estimates for the total electric building class,[3]

Q. PLEASE ADDRESS MECG'S PURCHASED POWER COST ALLOCATION PROPOSALS.

A. MECG notes that the Company's analysis includes 555 account listings: one associated with purchased power costs (energy) of $42.748 million and a second associated with purchased power costs (demand) of $8.284 million. MECG notes that despite the demand classification of the $8.284 million portion both of these listings were classified as energy-related and allocated on the basis of energy in the Company's CCOSS. MECG has instead classified the $8.284 million as demand-related allocating it to customers on their earlier-proposed AED6NCP production plant demand allocator.

Q. WHAT ARE YOUR OPINIONS REGARDING MECG'S PURCHASED POWER COST ALLOCATION PROPOSALS?

A. MECG's observations regarding the Company's original purchased power allocations is admittedly unclear. I agree that demand-related purchased power costs should be allocated using a demand allocation methodology, if, in fact, these costs are truly demand-related. However, the portion of purchased power costs in question represents a small piece of the overall purchased power amount leading to a very small adjustment and likely very small impact on each classes' achieved RORs. Nevertheless, discovery is outstanding on this issue that should resolve the matter and determine if any modifications are needed to the CCOSS.

[3] The difference in the ROR for this case is 59 basis points.

IV. RESPONSE TO STAFF'S AND MECG's REVENUE DISTRIBUTION AND RATE DESIGN

Q. WOULD YOU PLEASE SUMMARIZE THE STAFF'S REVENUE DISTRIBUTION RECOMMENDATIONS?

A. Yes. Staff is proposing a three-step approach to distributing the revenue increase. First, Staff proposes either to increase or decrease each class' base retail revenues, on a revenue-neutral basis, based upon the results of its proposed CCOSS results.[4] Second, Staff assigns the pre-Missouri Energy Efficiency Investment Act ("pre-MEEIA") revenues to the applicable rate classes.[5] Third, Staff recommends that the proposed revenue increase be assigned to each rate class on the basis of each class' revenue-neutralized retail revenue. However, Staff proposes that the Feed Mill (PFM) and Lighting classes receive no increase based on the results of their CCOSS, because these classes are earning above the system return.[6]

Q. WHAT DOES STAFF MEAN BY A REVENUE-NEUTRAL ADJUSTMENT?

A. The "revenue neutral" adjustment shifts revenue among rate classes without changing the utility's total system test year return or total revenue. Revenues are generally shifted among rate classes by taking revenues from over-earning classes and applying those to under-earning classes with the ultimate goal of moving all classes toward a uniform relative rate of return ("RROR").

[4] Direct Testimony of Michael Sheperle, 3:14-17.
[5] The Special Transmission and Lighting classes are excluded from the Pre-MEEIA revenue increase.
[6] Direct Testimony of Michael Sherperle, 3:25-26, 4:1-4.

Q. HOW DID STAFF PROPOSE TO SHIFT REVENUES BETWEEN OVER AND UNDER-EARNING CLASSES?

A. Staff has recommended revenue neutral adjustments limiting the increase for the residential class to 0.75 percent. Staff's proposed residential increase is considerably smaller than the 8.98 percent increase that would be necessary to bring the residential class to a uniform ROR. Staff's recommendation includes a proposed revenue decrease of 0.85 percent to the Total Electric Building, General Power, and Large Power overearning classes.

Q. DO YOU AGREE WITH STAFF'S RECOMMENDATION?

A. No. I believe it is more appropriate to assign some increase to all classes when the utility is requesting an increase, than to assign no increase to an over-earning class. If the utility requests a rate increase, all customers should share in the increase, but the amount of the increase should be tempered by the classes' ROR relative to the system average.

Q. PLEASE SUMMARIZE THE MECG'S REVENUE DISTRIBUTION RECOMMENDATIONS.

A. MECG believes that the CCOSS should be used as the primary guiding principle in allocating the revenue requirement to rate classes and informing rate design.[7] The first step in MECG's revenue distribution is a revenue neutral adjustment that moves all rate classes to a RROR of 1.0.[8] After making the necessary revenue neutral

[7] Direct Testimony of Kavita Maini, 26:5-7.
[8] Direct Testimony of Kavita Maini, 26:7-9.

adjustments MECG recommends the overall revenue requirement should be distributed across the board to all rate classes on an equal percentage basis.[9]

Q. SHOULD THE COMMISSION UTILIZE MECG'S REVENUE DISTRIBUTION PROPOSALS?

A. I recommend that the Commission reject MECG's proposed revenue distribution. Under MECG's proposal, the residential class would see an increase of 18.6 percent, whereas Special Transmission class and Large Power class would experience a decrease of 7.7 percent and 1.3 percent, respectively. Under MECG's recommendation over $37 million in revenue will be shifted to the Residential class before including any other revenue increase that may be granted in the instant case. Compounding this revenue shift with any increase in this proceeding has the potential of significantly impacting residential customers leading to the possibility of rate shock. For instance, the residential class would see an increase of 18.6 percent increase under the first step of MECG's proposed approach alone. MECG's first step adjustment alone would result in a $25 per month per customer increase even before any additional recommended rate increase is applied.

Q. WHAT RATE INCREASES WOULD ARISE UNDER MECG'S PROPOSALS ONCE THE ALLOWED RATE INCREASE IS FACTORED INTO THE OVERALL REVENUE DISTRIBUTION?

A. The second part of MECG's revenue distribution would apply the remaining part of the rate increase on an across-the-board percentage basis. This increase, coupled

[9] Direct Testimony of Kavita Maini, 26:14-17.

with the first stage uniform ROR increase discussed earlier, would result in significant percent increases for the many customer classes. For instance, under MECG's proposals Residential customers would see a 24 percent increase, Miscellaneous Services customers would see a 35 percent increase, Street Lighting customers would see a 56 percent increase, and Special Lights customers would see a considerable 328 percent increase.

Q. WOULD YOU PLEASE DISCUSS THE STAFF'S RECOMMENDATION TO INCREASE CUSTOMER CHARGES FOR THE RESIDENTIAL; COMMERCIAL; COMMERCIAL SEPARATE HEATING; TOTAL ELECTRIC BUILDING; GENERAL POWER; LARGE POWER; AND SPECIAL TRANSMISSION-PRAXAIR CLASSES?

A. Yes. Staff states that its CCOSS resulted in a monthly residential customer charge of $18.50.[10] However, taking into consideration a number of factors including rate simplicity, stability, customer understandability and public policy, Staff recommended limiting the customer charge increase to the level of the average residential class increase.[11] Despite this recommendation, Staff identified recent instances where the Commission decided not to increase customer charges due to the energy efficiency policy under MEEIA.[12] However, it appears that in this case Staff bases its recommendation on the results of its CCOSS indicating that an increase is warranted.

Q. DO YOU AGREE WITH STAFF'S CUSTOMER CHARGE PROPOSALS?

[10] Staff's Rate Design and Class Cost of Service Report, 42:24-25.
[11] Staff's Rate Design and Class Cost of Service Report, 42:25-26, 43:1-2.
[12] Staff's Rate Design and Class Cost of Service Report, 44:4-14.

A No, I disagree with the Staff's recommendation. As indicated in my direct testimony, the Commission has ordered in other rate cases that customer charges need not be increased, because customers have greater control of their bills when charges are weighted more heavily to variable, as opposed to fixed charges; which also sends better energy efficiency and conservation signals to ratepayers. Moreover, the Company's current customer charges recover nearly 72 percent of the Company's fixed cost, as identified in my direct testimony. Furthermore, my survey of electric utilities operating in the Mid-west shows that Empire's current residential customer charge is the fifth highest in the region. Therefore, I recommend the Commission reject the Staff's recommendation and instead maintain customer charges for customers at their current rates.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY ON MARCH 9, 2015?

A. Yes.

Comparison of Production Plant Allocation Factors by Party

Party	Residential (RG)	Commercial (CB)	Commercial Small Heating (SH)	General Power (GP)	Special Transmission Praxair (SC-P)	Total Electric Building (TEB)
Company						
AED12CP	44.43%	8.24%	2.28%	19.10%	0.89%	8.75%
MECG						
AED6NCP	49.95%	8.33%	2.18%	15.88%	0.92%	8.40%
OPC						
A&P12CP	44.77%	7.74%	2.18%	19.16%	1.20%	9.06%
AED12CP	49.98%	7.89%	2.15%	16.09%	0.82%	8.99%
Staff[1]						
BIP Capacity Allocator	45.97%	7.35%	2.32%	18.38%	1.22%	9.14%
BIP Fuel for Energy Allocator	44.65%	9.44%	2.13%	20.27%	1.16%	8.25%
BIP Fuel in Storage Allocator	41.20%	7.62%	2.23%	20.17%	1.44%	8.99%
BIP O&M Allocator	41.23%	8.63%	2.15%	20.99%	1.39%	8.76%

[1] The Lighting Classes are combined under Staff's CCOSS. The value listed under Miscellaneous Services represents Staff's allocation factor for the lighting classes.

Comparison of Production Plant Allocation Factors by Party

Party	Feed Mill (PFM)	Large Power (LP)	Miscellaneous Services (MS)	Street Lights (SPL)	Private Lights (PL)	Special Lights (LS)
Company						
AED12CP	0.02%	15.30%	0.00%	0.48%	0.40%	0.09%
MECG						
AED6NCP	0.02%	13.25%	0.00%	0.55%	0.43%	0.10%
OPC						
A&P12CP	0.01%	15.15%	0.26%	0.26%	0.20%	0.01%
AED12CP	0.01%	13.59%	0.00%	0.26%	0.20%	0.01%
Staff[1]						
BIP Capacity Allocator	0.01%	14.93%	0.66%			
BIP Fuel for Energy Allocator	0.01%	13.11%	0.98%			
BIP Fuel in Storage Allocator	0.02%	17.56%	0.78%			
BIP O&M Allocator	0.01%	16.29%	0.53%			

[1] The Lighting Classes are combined under Staff's CCOSS. The value listed under Miscellaneous Services represents Staff's allocation factor for the lighting classes.
Sources: Company workpaper Datasheet 2014v4 proprietary; MECG Datasheet 2014v4 PROPRIETARY; Staff's Rate Design and Cost of Service Report; WP-A12CP v3; WP AE12CP Calculation v2.