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Witness: David E. Dismukes, Ph.D
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Case No.: ER-2014-0351
Date Testimony Prepared: March 9, 2015

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*

OPC Exhibit No. 301
Date 4-15-15 Reporter XF
File No. ER-2014-0351

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

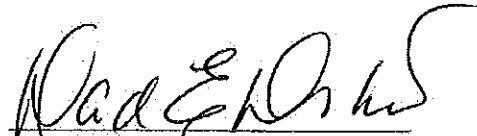
In the Matter of The Empire District Electric)
Company for Authority to File Tariffs Increasing) Case No. ER-2014-0351
Rates for Electric Service Provided to Customers)
in the Company's Missouri Service Area.)

AFFIDAVIT OF DAVID DISMUKES

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

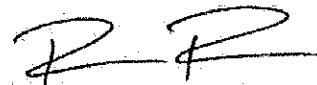
David Dismukes, of lawful age and being first duly sworn, deposes and states:

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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REBUTTAL TESTIMONY
OF
DAVID E. DISMUKES

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2014-0351

1 I. INTRODUCTION

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

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

7 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

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

11 Q. HOW IS YOUR TESTIMONY ORGANIZED?

12 A. My testimony is organized into the following sections:

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

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

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

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

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

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

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

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

12 **Q. PLEASE SUMMARIZE MECG'S TWO CCROSS PROPOSALS.**

13 A. MECG's first CCROSS proposal consists of a recommendation to allocate
14 production plant costs using either (1) a Coincident Peak ("CP") allocation based on the
15 three highest summer and three highest winter CPs, (referred to as the 6CP method), or
16 (2) an Average and Excess ("AED") method also based on the six highest non-
17 coincident peaks ("AED6NCP"). The AED6NCP method is MECG's preferred
18 production plant allocation choice. MECG's second CCROSS proposal rests with the
19 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.

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

3 **Q. WHAT IS THE DIFFERENCE BETWEEN YOUR PRODUCTION PLANT**
4 **FACTOR AND THE RECOMMENDATIONS OF MEGC UNDER THE AED**
5 **APPROACH?**

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

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

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

1 meaningful difference in results rests with the estimates for the total electric building
2 class,³

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

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

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

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

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

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

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

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

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

15 A. The "revenue neutral" adjustment shifts revenue among rate classes without
16 changing the utility's total system test year return or total revenue. Revenues are
17 generally shifted among rate classes by taking revenues from over-earning classes and
18 applying those to under-earning classes with the ultimate goal of moving all classes
19 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 Sheperle, 3:25-26, 4:1-4.

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

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

9 **Q. DO YOU AGREE WITH STAFF'S RECOMMENDATION?**

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

15 **Q. PLEASE SUMMARIZE THE MECG'S REVENUE DISTRIBUTION**
16 **RECOMMENDATIONS.**

17 A. MECG believes that the CCROSS should be used as the primary guiding principle
18 in allocating the revenue requirement to rate classes and informing rate design.⁷ The
19 first step in MECG's revenue distribution is a revenue neutral adjustment that moves all
20 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.

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

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

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

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

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

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

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

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

11 A. Yes. Staff states that its CCROSS resulted in a monthly residential customer
12 charge of \$18.50.¹⁰ However, taking into consideration a number of factors including
13 rate simplicity, stability, customer understandability and public policy, Staff
14 recommended limiting the customer charge increase to the level of the average
15 residential class increase.¹¹ Despite this recommendation, Staff identified recent
16 instances where the Commission decided not to increase customer charges due to the
17 energy efficiency policy under MEEIA.¹² However, it appears that in this case Staff
18 bases its recommendation on the results of its CCROSS indicating that an increase is
19 warranted.

20 **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.

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

12 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY ON MARCH 9,**
13 **2015?**

14 A. Yes.

Comparison of Production Plant Allocation Factors by Party

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| Party | Residential (RG) | Commercial (CB) | Commercial Small Heating (SH) | General Power (GP) | Special Transmission Praxair (SC-P) | Total Electric Building (TEB) |
|-------------------------------|---------------------|--------------------|--|--------------------------|--|--|
| <u>Company</u> | | | | | | |
| AED12CP | 44.43% | 8.24% | 2.28% | 19.10% | 0.89% | 8.75% |
| <u>MECG</u> | | | | | | |
| AED6NCP | 49.95% | 8.33% | 2.18% | 15.88% | 0.92% | 8.40% |
| <u>OPC</u> | | | | | | |
| 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% |
| <u>Staff¹</u> | | | | | | |
| 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

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| Party | Feed Mill (PFM) | Large Power (LP) | Miscellaneous Services (MS) | Street Lights (SPL) | Private Lights (PL) | Special Lights (LS) |
|-------------------------------|--------------------|------------------------|-----------------------------------|---------------------------|---------------------------|---------------------------|
| <u>Company</u> | | | | | | |
| AED12CP | 0.02% | 15.30% | 0.00% | 0.48% | 0.40% | 0.09% |
| <u>MECG</u> | | | | | | |
| AED6NCP | 0.02% | 13.25% | 0.00% | 0.55% | 0.43% | 0.10% |
| <u>OPC</u> | | | | | | |
| 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% |
| <u>Staff¹</u> | | | | | | |
| 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 CCROSS. 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.