Exhibit No.:	
Issues:	Rate Design
Witness:	Donald Johnstone
Type of Exhibit:	Surrebuttal Testimony
Sponsoring Party:	MEUA
Case Number:	ER-2016-0023
Date Testimony Prepared:	May 16, 2016

The Empire District Electric Company (EDEC)

Case No. ER-2016-0023

Prepared Surrebuttal Testimony of

Donald Johnstone

On behalf of

Midwest Energy Users' Association (MEUA)

May, 2016

Competitive Energy DYNAMICS

Before the
Missouri Public Service Commission

The Empire District Electric Company
(EDEC)

Case No. ER-2016-0023

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For the
Surrebuttal Testimony of Donald Johnstone

Before the
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(EDEC)

Case No. ER-2016-0023

Prepared Rebuttal Testimony of Donald Johnstone

Q PLEASE STATE YOUR NAME AND ADDRESS.

A My name is Donald Johnstone and my address is 384 Black Hawk Drive, Lake Ozark, Missouri, 65049. I am employed by Competitive Energy Dynamics, L. L. C.

Q ARE YOU THE SAME DONALD JOHNSTONE THAT SUBMITTED PREFILED DIRECT TESTIMONY IN THIS PROCEEDING?

A Yes. My qualifications and experience are summarized in Appendix A to my direct testimony.

SUMMARY OF ISSUES ADDRESSED AND RECOMMENDATIONS

Q WHAT ISSUES WILL YOU ADDRESS IN THIS SURREBUTTAL TESTIMONY?

A I address the spread of the increase and two matters of class cost allocation, production cost allocation and distribution cost allocation. Also, I continue to support rates that are primarily based on the cost of services provided.

At a more detailed level, I respond to the rebuttal testimonies of EDEC, Staff and MECG. EDEC raised issues with the Staff's fuel cost model that effect the relative costs of base, intermediate and peaking generation. These costs are important to Staff's use of the Base, Intermediate, Peaking (BIP) method of production cost allocation in the class cost-of-service study.

MECG submitted a class cost-of-service study that began with Staff's model and then made adjustments. As such, the MECG class cost-of-service study suffers from the same deficiencies as Staff's regarding the deviation from a normal cost allocation method for demand related distribution costs.

Q WHAT RECOMMENDATIONS DO YOU HAVE IN THIS REBUTTAL TESTIMONY?

A My recommendations follow:

- I continue to recommend use of an appropriate class cost-of-service study as a primary determinant in setting the revenue responsibility for each class and also as a primary determinant in the design of the rates within each customer class. Unfortunately, however, there are problems in the studies presented.

- The Staff BIP study relies on a production costing model that does not appear to produce accurate results at the granular level needed to support the BIP allocation method.
- Staff and MECG studies use an inappropriate demand allocation factor for distribution costs.
- The results of the current class cost-of-service studies, while they have the noted deficiencies and limitations, all have consistency in several conclusions. The relative cost responsibility for the residential class should increase, and the relative cost responsibility should decrease for the General Power, Feed Mill and Lighting classes. These several conclusions are also consistent with the class cost-of-service study relied upon by the Commission in ER-2014-0351.
- Once the surrebuttal testimonies of the parties are submitted and considered, and based on the record adduced in this proceeding, MEUA will finalize its recommendation. Based on what is known to date, MEUA makes the following recommendations at this time.
    - MEUA joins in the proposals of EDEC, Staff, and MECG to hold the Feed Mill and Lighting rates at the present level – no increase. This will result in an appropriate downward adjustment in the relative cost responsibility for the purposes of this case.
    - MEUA joins in the proposals of EDEC, Staff, and MECG to increase in the relative cost responsibility for the Residential class. The proposals are in a range that is reasonable.

- MEUA joins in the proposals of EDEC, Staff, and MECG to decrease the relative cost responsibility of the General Power rate. Again, the proposals are in a range that is reasonable.
- MEUA recommends the consideration of adjustments to the relative cost responsibilities of the remaining classes to the extent that a proper class cost-of-service study emerges in the surrebuttal round of testimony.
- In due course MEUA will provide final rate recommendations based on the record adduced in this proceeding.

PRODUCTION COST ALLOCATION

Q DO YOU CONTINUE TO SUPPORT COST OF SERVICE AS THE PRIMARY BASIS FOR SETTING RATES?

A Yes. A fully allocated embedded class cost-of-service study, properly done and in combination with rates that reasonably reflect the costs determined by the study, leads to a result with numerous positive attributes, as addressed in my earlier testimonies in this docket.

Q IS THERE ANY CONSENSUS IN REGARD TO A PRODUCTION COST ALLOCATION METHOD?

A No. Staff has submitted studies that reflect either BIP method or an Average and Peak method. MECG has submitted a study that adopts an Average and Excess method.

Q ARE THERE ANY PROBLEMS WITH STAFF'S BIP METHOD IN THIS CASE?

A Yes. In rebuttal testimony EDEC witness Tarter raised issues with the Staff's production cost model that was used to estimate net production cost. The issues raised by Mr. Tarter in turn raise questions as to whether the BIP cost of service results, in consideration of problems in its inputs, can produce the intended cost-based result. More specifically, it appears that Staff's production cost model did not capture important aspects of the operation of generation facilities such as the extent of the output of the peaking facilities. In turn, Staff's BIP model can do no more than reflect the inputs. Staff's BIP class cost-of-service study necessarily suffers due to infirmities in the production inputs to the model.

Q WHAT ARE THE SPECIFIC PRODUCTION COST CONCERNS RAISED BY MR. TARTER?

A His concerns are raised in response to a question that addresses Fuel and Purchased Power (FPP) costs in the context of the base factor for the Fuel Adjustment Clause (FAC). The question and his answer follow:

> **Q. DO YOU HAVE ANY CONCERNS ABOUT THE MODELING AND ASSUMPTIONS THAT STAFF USED TO DEVELOP ITS PROPOSED FAC BASE FACTOR?**
>
> A. Yes. Aside from the Riverton Unit 12 issue discussed above, I found four primary areas of concern with Staff's initial FPP analysis. I will refer to these as: (1) the Staff model approach; (2) the generation mix resulting from Staff's dispatch model; (3) the State Line Combined Cycle ("SLCC") heat rate in Staff's model; and (4) the values of renewable energy credits ("RECs") and air quality control system ("AQCS") consumables that Staff used to calculate its initial FAC base factor. (Ex.___, Tarter Surrebuttal, p.3)

Q WHAT OPINION DOES MR. TARTER OFFER IN REGARD TO STAFF'S DISPATCH MODEL?

A After some explanation (See Ex.___ Tarter Surrebuttal, pp.3-5) he states:

> I am not sure if Staff has considered the market correlations in its modeling that I mentioned earlier, and given the generation levels yielded by Staff's

> dispatch model for Empire's resources (which cannot determine the revenues that individual resources receive), it does not appear that Staff's model has been refined enough to produce reasonable results.

This is a matter of concern. As with any model the quality of the results of Staff's BIP model necessarily depends on the quality of the inputs. Consequently, if the production model does not accurately reflect EDEC generation, costs, and revenues, then neither does the BIP model. In fact, even if Staff and EDEC were to agree on a bottom line number for FPP expense, the concerns with the generation mix would remain for the purposes of the BIP class cost-of-service study.

Q DOES MECG PROPOSE A DIFFERENT PRODUCTION ALLOCATION METHOD?

A Yes, MECG presents a study in which it substituted an average and excess method for production cost allocation. This method in large part constitutes a peak responsibility method that shares the benefits of the diversity in peak loads among the classes. However, the study is based on adjustments to the Staff's class cost-of-service study model and thereby incorporates the same distribution demand allocations based on coincident peaks – not a normal approach.

DISTRIBUTION COST ALLOCATION

Q DID YOU PREVIOUSLY ADDRESS THE DEFICIENCY IN STAFF'S ALLOCATION OF DEMAND RELATED DISTRIBUTION COSTS?

A Yes. The matter is addressed in my rebuttal testimony (Ex. ___) beginning at page 8. MECG's class cost-of-service study, in relying on the bulk of Staff's model as its starting point, suffers from any deficiencies not addressed in its adaption of the model. A particular deficiency arises from the use of coincident peaks in distribution

demand allocation factors. The deficient approach assumes a level of diversity that does not exist in the distribution system, as explain in my rebuttal testimony.

MEUA'S RECOMMENDED SPREAD OF THE RATE INCREASE

Q IN CONSIDERATION OF THE STAFF AND MECG CLASS COST-OF-SERVICE STUDIES, DO YOU HAVE A CHANGE IN YOUR RECOMMENDATION FOR THE SPREAD OF THE INCREASE?

A Yes. MEUA continues to recommend the approach taken by the Commission in EDEC's last case, elimination of a significant amount of the variations from costs with no class receiving a decrease. However, the Staff and MECG class cost-of-service studies have flaws. Nevertheless, as the record continues to develop, some preliminary conclusions are possible. Based on what is known to date, MEUA makes the following recommendations.

- MEUA joins in the proposals of EDEC, Staff, and MECG to hold the Feed Mill and Lighting rates at the present level – no increase. This will result in an appropriate downward adjustment in their relative cost responsibility for this case.
- MEUA joins in the proposals of EDEC, Staff, and MECG to increase the relative cost responsibility for the Residential class. The proposals are in a range that is reasonable.
- MEUA joins in the proposals of EDEC, Staff, and MECG to decrease the relative cost responsibility of the General Power rate. Again, the proposals are in a range that is reasonable.

- MEUA recommends the consideration of adjustments to the relative cost responsibilities of the remaining classes to the extent that a proper class cost-of-service study emerges in the whole record.

In due course MEUA will provide final rate recommendations based on the record adduced in this proceeding

Q DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A Yes it does.

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service	))))	ER-2016-0023

Affidavit of Donald E. Johnstone

State of Missouri	)	
	)	SS
County of Camden	)	

Donald E. Johnstone, being first duly sworn, on his oath states:

1. My name is Donald E. Johnstone. I am a consultant and President of Competitive Energy Dynamics, L. L. C. I work at 384 Black Hawk Drive, Lake Ozark, MO 65049. I have been retained by Stuart W. Conrad on behalf of the Midwest Energy Users' Association.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony in written form for introduction into evidence in the above captioned proceeding.

3. I hereby swear and affirm that my testimony is true and correct and show the matters and things they purport to show.

Donald E. Johnstone

Subscribed and sworn to this 16th day of May, 2016.

Notary Public

ASHLEY CAMPBELL
Notary Public - Notary Seal
State of Missouri, Miller County
Commission # 16886455
My Commission Expires Feb 10, 2020