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Case No: ER-2004-0570  
Date Testimony Prepared: Nov 4, 2004

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

**REBUTTAL TESTIMONY  
OF  
WILLIAM G. EICHMAN**

**NOVEMBER 2004**

REBUTTAL TESTIMONY  
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THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. ER-2004-0570

1 **Q. Please state your name and business address.**

2 A. My name is William G. Eichman. My business address is: P.O. Box 127, Joplin,  
3 Missouri, 64802.

4 **Q. Please describe your educational background, experience, and qualifications.**

5 A. I received a bachelor's degree in Engineering Operations from Iowa State  
6 University in 1978. The Engineering Operations program at Iowa State combined  
7 two engineering disciplines with a core group of business classes. The two  
8 engineering disciplines for my program were Electrical Engineering and  
9 Industrial Engineering.

10 Following graduation from Iowa State in 1978, I was hired by The Empire  
11 District Electric Company ("Empire") as an Industrial Engineer. My job  
12 responsibilities were (and continue to be) to provide the Customer Service link  
13 between Empire and its largest Industrial customers. This includes analyzing  
14 customers' electricity needs, performing rate analysis, preparing contracts,  
15 coordinating extensions to new and/or expanding Industrial customers, and  
16 performing other customer service activities. In 1995, I was promoted to  
17 Manager of the Wholesale and Industrial Sales department. In 2001, my job title  
18 changed to Manager of Industrial and Commercial Energy Services and our

1 departmental responsibilities were expanded to include some commercial and  
2 residential customer service activities as well.

3 **Q. What is the purpose of your rebuttal testimony?**

4 A. The purpose of this testimony is to respond to the testimony of Staff witness  
5 Janice Pyatte and Intervener witness Maurice Brubaker and to endorse the  
6 concept of modifying the LP rate schedule to compensate customers taking  
7 service at a Transmission voltage level as was suggested in their testimonies.

8 **Q. Is there a need for this modification?**

9 A. Yes. As was discussed in Mr. Brubaker's testimony, there are currently two LP  
10 customers taking service at three individual delivery points (billed as three  
11 separate accounts) that currently take service at 69,000 volts (which is a level of  
12 transmission service). Since these customers built, own, operate, and maintain all  
13 of the distribution facilities below the transmission voltage level (except  
14 metering), Empire's distribution investment (and associated O&M costs) to serve  
15 these customers is minimal compared to the typical LP customers. In essence,  
16 Empire is providing no distribution facilities for these transmission voltage LP  
17 customers other than metering.

18 **Q. Which FERC distribution accounts are included in the LP rate category?**

19 A. Portions of FERC accounts 360, 361, and 362 (which include distribution  
20 substation structures, equipment, and land) and portions of FERC accounts 364,  
21 365, 366, and 367 (which include distribution poles, conductors, conduits, and  
22 other distribution equipment and devices located beyond the substations) are  
23 allocated to the LP rate class based on non-coincident demand. In addition, a

1 portion of FERC account 370 (metering) is also allocated to the LP rate and  
2 collected on a “per customer” basis through the “Customer Charge”.

3 **Q. What portion of the distribution equipment described above is utilized to**  
4 **serve LP customers taking service at Transmission Voltage?**

5 A. The only distribution equipment owned and maintained by Empire to serve  
6 transmission voltage LP customers is the metering (FERC account 370). This  
7 metering is more expensive than the metering for the typical LP customer and the  
8 method(s) of addressing these costs are discussed later in this testimony.

9 **Q. How would you characterize the method proposed by Mr. Brubaker to**  
10 **determine a demand-based “Distribution Credit” to recognize the avoided**  
11 **distribution investment and associated O&M costs?**

12 A. It is appropriate. Empire has reviewed Mr. Brubaker’s proposal and concurs that  
13 the methodology is reasonable, but Empire does NOT at this time endorse any  
14 “adjustments” to the calculation that are based on “assumptions” that may  
15 “imply” acceptance of a lower level of rate relief than was requested in this case.  
16 We do concur, however, that some type of “true-up” adjustment to Mr.  
17 Brubaker’s calculations may eventually be appropriate, but not until AFTER the  
18 total actual revenue requirements associated with this case (and the LP class) are  
19 determined.

20 **Q. Is the methodology used by Mr. Brubaker to calculate the proposed**  
21 **“Distribution Credit” on the LP rate the same as the methodology previously**  
22 **used to calculate the “Substation Charge” on the SC tariff?**

23 A. No.

1 **Q. What are the differences?**

2 A. The methodology used in 1995 to determine the “Substation Charge” on the SC  
3 tariff is different than the methodology being proposed for the “Distribution  
4 Credit” on the LP rate.

5 The current “Substation Charge” indicated on the SC tariff was derived using a  
6 “direct assignment” type of methodology. In theory, the “Substation Charge” on  
7 the SC tariff, represents Empire’s actual costs of owning, operating, and  
8 maintaining the specific substation serving the specific SC customer. Since the  
9 SC tariff has no allocations of Empire’s “common”, distribution facilities, the  
10 “Substation Charge” on the SC tariff is necessary to insure that Empire is  
11 compensated for its actual substation investment. Empire provides no distribution  
12 facilities beyond the substation at the SC customer’s location.

13 However, the LP tariff DOES HAVE an allocation of “common distribution  
14 facilities” for not only substations, but also other ancillary distribution facilities  
15 beyond the substations. Because the three Transmission customers on the LP  
16 tariff are providing all of their own distribution facilities (substations and  
17 ancillary distribution facilities), it is necessary to devise a method to “remove” the  
18 prorated “common” distribution allocations from the “base LP rate” when it is  
19 applied to transmission level customers. The “Distribution Credit” methodology  
20 proposed by Mr. Brubaker appears to effectively and appropriately accomplish  
21 this objective.

1 **Q. How would Mr. Brubaker’s proposed “Distribution Credit” be coordinated**  
2 **with the implementation of the “Distribution Facilities Charge” proposed by**  
3 **Ms. Pyatte?**

4 A. It appears that the two concepts are similar. Although Ms. Pyatte did not provide  
5 all of the details regarding the calculation of the “Distribution Facilities Charge”,  
6 she stated that the charge would be a method of collecting the “customer related”  
7 distribution costs on a “customer-specific” basis. It appears that she is proposing  
8 “removing” the distribution costs from the current “demand rate” and then adding  
9 a “Distribution Facilities Charge”. If the proposed “Distribution Facilities  
10 Charge” truly represents the costs of all distribution facilities other than metering  
11 (FERC accounts 360 through 367) that are assigned to the LP rate, then it seems  
12 that it would be appropriate to “waive” the “Distribution Facilities Charge” for  
13 transmission level LP customers instead of giving them a “Distribution Credit”  
14 (or to set the “Distribution Credit” equal to the “Distribution Facilities Charge”).  
15 On the other hand, if the “Distribution Facilities Charge” only represents a portion  
16 of the distribution costs necessary to serve the LP customer class, there may need  
17 to be an additional “Distribution Credit” given to the Transmission customers in  
18 this class to insure that the Transmission LP customers are not subsidizing the  
19 distribution facilities of other LP customers.

20 **Q. Are there any other adjustments that should be considered with respect to**  
21 **Transmission level customers?**

22 A. Yes. The metering at two of the three delivery points referenced above is at the  
23 69,000 volt level (which means that the meters are measuring the substation

1 losses). Since the LP rate schedule was designed on the premise that the billing  
2 determinants would be “loss-adjusted” to the Primary voltage level, an  
3 appropriate “loss adjustment factor” will need to be derived. In the 1995 Missouri  
4 rate case that included the development of the current SC tariff, a loss factor of  
5 0.0035% was determined to approximate the losses of a substation transformer.  
6 In the case of the primary metered Special Contract (SC) tariff, the “adjusted”  
7 demand and Kwhrs are determined by “multiplying” the metered quantities by  
8 1.0035 (to achieve the appropriate billing determinants for the SC tariff).

9 Using the same methodology in reverse; for “Transmission-metered” LP  
10 customers, the adjusted demand and Kwhrs would be determined by “dividing”  
11 the respective quantities by 1.0035 (to achieve the correct billing determinants for  
12 the LP class).

13 Two of the “Transmission” accounts on the LP rate are metered at Transmission  
14 voltage and would be entitled to a transmission metering adjustment. The third  
15 “Transmission” account is actually metered on the distribution side of the  
16 customer-owned Substation, and would therefore not be eligible for any  
17 “metering adjustments”.

18 **Q. How do the costs of Transmission Metering compare to Distribution**  
19 **Metering costs?**

20 A. Every metering installation is different, but a rough estimate would indicate that  
21 Transmission Metering for LP sized loads might be on the order of ten times the  
22 cost of metering at the Distribution voltage level. The cost difference is due  
23 nearly entirely to the higher costs of transmission class CT’s and PT’s

1 **Q. How was this additional metering cost addressed for the LP accounts with**  
2 **Transmission metering?**

3 A. The cost of metering was not an issue for the initial Transmission LP account,  
4 since the metering is installed on the distribution voltage side of this customer's  
5 substation transformer (at a cost comparable to the "typical" metering installation  
6 for Primary metered LP customers).

7 However, Transmission level metering was installed for the two newest  
8 Transmission LP accounts. In these two cases, the customer provided and  
9 installed the CT's and PT's, with the understanding that these items would be  
10 conveyed to Empire at no cost. In this case, the cost of Empire's portion of these  
11 two metering installations was comparable to (or slightly less expensive than) the  
12 typical "Primary" metering installations that are installed for LP customers.

13 Although we are not currently aware of any other prospective Transmission  
14 customers, it will continue to be Empire's policy in the future to recover the  
15 excess costs from the individual customers requesting transmission metering.

16 This can be accomplished with "aid-to-construction" contributions (cash or in-kind) or  
17 by implementing a monthly facilities charge using our existing Rider XC.

18 **Q. Does this conclude your rebuttal testimony?**

19 A. Yes.