Exhibit No.:

Issue: Transmission Reclassification

Witness: Glenn Blake

Type of Exhibit: Direct Testimony

Sponsoring Party: Empire District Electric

Case No. EO-2009-0233

Date Testimony Prepared: April 2009

#### **Before the Missouri Public Service Commission**

**Direct Testimony** 

 $\mathbf{of}$ 

**Glenn Blake** 

**April 2009** 

#### GLENN BLAKE DIRECT TESTIMONY

## TABLE OF CONTENTS OF GLENN BLAKE THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

| SUBJECT                      | <u>PAGE</u> |
|------------------------------|-------------|
| INTRODUCTION                 | 1           |
| BACKGROUND                   | 1           |
| PURPOSE                      | 2           |
| CLASSIFICATION OF INVESTMENT | 3           |

# DIRECT TESTIMONY OF GLENN BLAKE THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. EO-2009-0233

#### 1 **INTRODUCTION**

| 2. ( | ). | STATE | YOUR | NAME | AND | <b>ADDRESS</b> | PLEASE. |
|------|----|-------|------|------|-----|----------------|---------|
|      |    |       |      |      |     |                |         |

- 3 A. My name is Glenn Blake and my business address is 1806 South Farm Road 205
- 4 Springfield, Missouri.

#### 5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

- 6 A. I am presently employed by G. Blake Consulting. I retired from The Empire
- District Electric Company ("Empire") after twenty-nine years of service. My last
- 8 position at Empire was Director of Operations. Empire has retained me as a
- 9 technical consultant for this and other projects since I retired from Empire.

#### 10 **BACKGROUND**

#### 11 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND FOR THE

- 12 **COMMISSION.**
- 13 A. In 1980, I earned The International Correspondence School's Diploma for
- Electrical Engineering Technology/Power Option. In May 1993, I received a
- Bachelor of Science Degree in Business Management from Southwest Missouri
- State University, Springfield, Missouri.

#### 17 Q. WHAT EXPERIENCE HAVE YOU HAD IN THE FIELD OF PUBLIC

#### 18 UTILITIES?

A. I started with Empire in 1971 as a storeroom clerk. The following year I worked as a lineman and continued as a lineman for four years attaining the status of journeyman lineman. Next, I worked as a substation electrician. In 1976, I moved to the engineering department as a Junior Engineer. In 1983, I was promoted to Assistant Distribution Engineer with responsibilities of supervising the Distribution Engineering Department for the eastern half of the Company. In 1995, I was selected as Director of Operations. I retained that position until my retirement in 2001. Since my retirement from Empire, I have been retained by Empire on several occasions as a consultant.

### 10 Q. HAVE YOU PREVIOUSLY PARTICIPATED IN ANY REGULATORY 11 PROCEEDINGS?

12 A. No.

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#### 13 PURPOSE

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

My testimony will provide additional support for Schedule WSK-1, which is 15 A. attached to the direct testimony of Empire witness W. Scott Keith. Pages 1 through 16 12 of Schedule WSK-1 describe the classification methodology and analysis that I 17 18 helped Empire perform on its transmission and distribution facilities. The analysis included calculating the value of transmission and distribution assets as currently 19 classified on Empire's books and records, and determining how this compares to 20 the classifications that would have occurred under the new definitions under the 21 Southwest Power Pool's ("SPP") Open Access Tariff. 22

#### **CLASSIFICATION OF INVESTMENT**

- 2 Q. HOW HAS EMPIRE HISTORICALLY CLASSIFIED INVESTMENTS IN
- 3 TRANSMISSION AND DISTRIBUTION FACILITIES?
- 4 A. All of the facilities within substations were classified using the original and
- 5 primary function of the substation. All of the investment in lines operating at a
- 6 voltage of 34.5kV or greater was classified as transmission facilities.
- 7 Q. HOW DOES THIS DIFFER FROM SPP'S FERC ACCEPTED
- **8 GUIDELINES?**

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- 9 A. In the case of transmission line investment, the new guidelines examine additional
- criteria in addition to the facilities operating voltage. For facilities rated greater
- than 60kV, the facilities must be a closed loop line or the facilities must serve two
- or more wholesale entities to be considered transmission. For facilities operating
- below 60kV, the FERC's Seven Factor Test is used to determine if the facility
- meets the definition of transmission.
- 15 Q. PLEASE EXPLAIN THE METHODOLOGY EMPIRE USED TO
- 16 COMPARE THE EXISTING CLASSIFICATION SUBSTATION ASSETS
- 17 TO THE CLASSIFICATION THAT WOULD RESULT USING THE SPP
- 18 TARIFF.
- 19 A. Empire's accounting department provided a list from the fixed asset accounting
- system of all substation property units, which numbered over 10,000. As
- 21 mentioned previously, Empire has historically classified all of the assets within a
- substation as either transmission or distribution, in the aggregate depending upon
- 23 the primary function of the substation. However, under the definition of

Transmission Facilities in the SPP OATT, the individual property units within an individual substation are to be broken down into transmission and distribution functions.

#### Q. PLEASE CONTINUE.

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A.

As a first step in the analysis of investment in the 179 substations, Empire identified all of the substations that are exclusively used for either transmission or distribution. The property unit investment in each one of these substations was reviewed to determine if they were consistent with the definition in the SPP OATT. All of the asset classifications within these substations were identified as part of the Empire analysis. This particular part of the analysis involved 117 substations. The remaining 62 substations that had to be analyzed had both transmission and distribution characteristics. As a first step in the analysis of these substations, all property unit items with a cost less then \$5000 (immaterial) were set aside. The next step involved an examination of the remaining major property units with an objective of coding them as distribution, transmission or common assets using the guidelines established in the SPP OATT. After the major property units in an individual substation were classified as distribution or transmission, the common and immaterial property investment within each individual substation was classified as either distribution or transmission based upon the majority of functional usage found during the analysis of major property units. In all cases, the original cost of the property units per the fixed asset system and the estimated related accumulated depreciation were accounted for in the analysis.

This analysis captured the "net book" value of the assets that technically qualified

- for potential reclassification using the SPP OATT transmission definition.
- 2 Q. EXPLAIN THE METHODOLOGY USED TO ANALYZE EMPIRE'S
- 3 TRANSMISSION LINE FACILITIES.
- 4 A. Transmission line investment has been analyzed using the definition per the SPP
- 5 OATT. The largest impact of the SPP definition was related to radial transmission
- 6 lines. All radial transmission lines serving only Empire retail customers were
- 7 classified as distribution for purposes of the analysis. The miles of transmission
- line affected by the SPP definition of distribution was determined by engineering
- based on a review of engineering records.
- 10 Q. WERE THERE LIMITATIONS TO THE LEVEL OF DETAIL
- 11 **CONTAINED IN EMPIRE'S PROPERTY RECORDS?**
- 12 A. Yes. Due to the level of detail contained in Empire's Continuing Property Records
- 13 ("CPR"), the original cost and related accumulated depreciation were calculated in
- total for the various transmission lines by voltage and physical location. This was
- used to determine an average "net book" cost per mile for the various transmission
- line voltages by location. This average cost per mile was applied to the miles of
- transmission line that did not meet the SPP OATT definition of transmission and
- had the possibility of being reclassified as distribution investment. The results of
- this analysis can be found in Schedule WSK-1.
- 20 Q. WHAT WERE THE RESULTS OF YOUR ANALYSIS OF EMPIRE'S
- 21 TRANSMISSION LINE FACILITIES?
- 22 A. The following table displays the results of my analysis:

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| - |  |
|   |  |

|              |         | Radial<br>miles | % HVD  | Installed cost<br>HVD(\$) | Book Value<br>HVD(\$) |
|--------------|---------|-----------------|--------|---------------------------|-----------------------|
|              |         |                 |        |                           |                       |
| Sum of I     | Mileage |                 |        |                           |                       |
| State        | Voltage | Total           |        |                           |                       |
| KS           | 34.5    | 2.07            | 6.8%   | 39,172                    | 15,869                |
|              | 69      | 19.19           | 53.3%  | 1,000,074                 | 639,623               |
| KS<br>Total  |         | 21.26           |        | 1,039,245                 | 655,493               |
| МО           | 34.5    | 9.49            | 22.6%  | 320,996                   | 175,496               |
|              | 69      | 99.90           | 15.0%  | 5,711,600                 | 3,750,903             |
| MO<br>Total  |         | 109.39          |        | 6,032,596                 | 3,926,398             |
| OK           | 34.5    | 9.09            | 100.0% | 238,394                   | 26,388                |
|              | 69      | 5.75            | 19.9%  | 142,887                   | 69,092                |
| OK<br>Total  |         | 14.84           |        | 381,281                   | 95,480                |
| ARK<br>Total |         | 0               |        |                           | 0                     |
| Grand Total  |         | 145.49          |        | 7,453,123                 | 4,677,371             |

- In addition, \$2,004,845 (net book value) of substation assets in Missouri would be moved from distribution to transmission.
- Q. PLEASE DESCRIBE THE TOTAL CHANGE IN TRANSMISSION
  INVESTMENT THAT WOULD OCCUR IF YOUR METHODOLOGY WAS
  USED TO DETERMINE THE CLASSIFICATION OF TRANSMISSION
  AND DISTRIBUTION FACILITES PRIOR TO JANUARY 1, 2008.
- A. In general terms, Empire's overall net investment in transmission facilities would decline by around \$2.9 million and Empire's investment in distribution facilities would increase by an identical amount. The estimated impact of such a change in

- classification on each of the jurisdictional revenue requirements has been included
- 2 in Schedule WSK-1 at page 13.
- **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**
- 4 A. Yes.

#### AFFIDAVIT OF GLENN BLAKE

| STATE OF MISSOURI ) ) ss COUNTY OF JASPER )   |
|---|
| On the day of April, 2009, before me appeared Glenn Blake, to me personally known, who, being by me first duly sworn, states that he is a consultant with G. Blake Consulting Inc. and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief. |
| Han Blake   |
| Subscribed and sworn to before me thisday of April, 2009.   |
| Notary Public   |
| My commission expires: (27/3)   |
| JESSICA C OLLIS  Notary Public-Notary Seal State of Missouri, Greene County  Commission # 07182808  My Commission Expires Aug 7, 2011   |