

Exhibit No.
Issues: Transmission Revenue and Expense;
Net Base Fuel Cost
Witness: Aaron J. Doll
Type of Exhibit: Direct Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2016-0023
Date Testimony Prepared: October 2015

**Before the Public Service Commission
of the State of Missouri**

Direct Testimony

of

Aaron J. Doll

October 2015



SERVICES YOU COUNT ON

Empire Exhibit No. 3
Date 6-2-16 Reporter KKF
File No. ER-2016-0023



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AARON J. DOLL
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
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1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

3 A. Aaron J. Doll. I am the Manager of Market Settlements and Systems for The Empire
4 District Electric Company (“Empire” or “Company”). My business address is 602
5 South Joplin Avenue, Joplin, Missouri.

6 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
7 BACKGROUND.**

8 A. I graduated from Missouri State University in 2003 with a Bachelor of Science
9 Degree in Psychology and a Minor in Philosophy. Additionally, I received my
10 Masters of Business Administration from Missouri State University in 2008. I have
11 worked for Empire for eight and a half years, formerly in the Planning and
12 Regulatory Department and currently in the Supply Management Department.

13 **Q. WHAT ARE YOUR PRIMARY DUTIES AT EMPIRE?**

14 A. I am in charge of the accounting/settlement and informational technology (IT) areas
15 in the Supply Management department. My primary responsibility has evolved from
16 preparing the operations, accounting, and information technology for the Southwest
17 Power Pool (“SPP”) Integrated Marketplace (“IM”) to managing the back-office
18 functions and ensuring that the information systems used in daily operations are
19 functional and efficient. The back office functions involve verifying and submitting

1 meter data, FERC reporting, transmission service request renewal, and the
2 distribution of various internal reports relating to fuel, natural gas procurement,
3 transmission, etc. I have additional responsibilities that include the budgeting of
4 transmission revenue and expense, as well as the monthly accounting and reporting of
5 transmission invoices and variances. The information technology functions involve
6 the implementation and maintenance of the Power Costs Inc. software application,
7 system administration, and system hardware maintenance.

8 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MISSOURI PUBLIC**
9 **SERVICE COMMISSION (“COMMISSION”)?**

10 A. Yes, I testified on behalf of Empire on the topic of weather and rate normalization in
11 Commission Case Nos. ER-2010-0130 and ER-2011-0004, and on the topic of the
12 SPP IM and annualized transmission revenue and expense in Case No. ER-2014-
13 0351. I testified on behalf of The Empire District Gas Company in Case No. GR-
14 2009-0434, on the topic of weather normalization. I have also testified before the
15 Arkansas Public Service Commission on behalf of Empire in Docket No. 10-052-U,
16 on the topic of weather normalization, and in Docket 07-076-TF, on the topic of
17 Empire’s 2012 Energy Efficiency Cost Recovery (“EECR”) Tariff. I have also
18 testified on behalf of Empire in the state of Oklahoma in Cause No. PUD 201100082,
19 on the topic of weather normalization.

20 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY THIS CASE?**

21 A. I will address the annualization of transmission revenue and expense and the level of
22 transmission revenue and expense included in the net base fuel cost (“NBFC”).
23 Additionally, I will be supporting the amount of Transmission Congestion Rights
24 (“TCR”) and Auction Revenue Rights (“ARR”) that are included in the NBFC.

1 **TRANSMISSION REVENUE AND EXPENSE**

2 **Q. WHAT IS THE EXPECTED LEVEL OF ANNUALIZED TRANSMISSION**
3 **REVENUE AND EXPENSE YOU ARE SUPPORTING?**

4 A. My workpapers support \$18,618,125 in annualized transmission expense and
5 \$7,567,828 in annualized transmission revenue on a total company basis.

6 **Q. WHAT METHOD DID YOU USE TO ANNUALIZE TRANSMISSION**
7 **REVENUE AND EXPENSE?**

8 A. To the extent that I had the necessary data to forecast any expected changes from
9 historical levels, I forecasted the anticipated level of increase/decrease for each
10 charge. If the charges were unable to be forecast due to a lack of supporting data, I
11 used a 7+5 method, which entails using seven months of actual data (January 2015 –
12 July 2015) and then averaged the remaining months (August 2015 – December 2015)
13 from the seven prior months.

14 **Q. WHAT DATA SOURCE DID YOU USE TO FORECAST TRANSMISSION**
15 **CHARGES REFERENCED IN THE QUESTION ABOVE?**

16 A. I used data from the SPP-produced semi-annual Annual Transmission Revenue
17 Requirement (ATRR) Cost Allocation Forecast to forecast Empire's expected
18 transmission expense by charge type. The SPP forecast estimates the cost impacts of
19 additions and upgrades in SPP from 2006 through 2021. The estimation includes the
20 impacts of base plan funded (BPF) projects and balanced portfolio projects (regional
21 and zonal), as well as associated annual depreciation, transmission owners net plant
22 carrying charge (NBCC), updated load ratio share (LRS), etc.

23 **NET BASE FUEL COST**

1 **Q. WHAT LEVEL OF TRANSMISSION REVENUE AND EXPENSE ARE YOU**
2 **PROPOSING TO INCLUDE IN THE NBFC CALCULATION?**

3 A. At this time, Empire is proposing to include \$5,861,084 of transmission expense and
4 no transmission revenue. The figure reflects 50% of the expected MISO transmission
5 expense and 34% of the expected SPP transmission expense, exclusive of Schedule
6 1A SPP administration and Schedule 12 FERC administration, through February
7 2016.

8 **Q. WHAT IS THE ORIGIN OF THE ALLOCATIONS (34% SPP & 50% MISO)?**

9 A. The allocations were agreed to by the parties in Empire's recently completed general
10 rate case, Case No. ER-2014-0351, and were approved by the Commission in that
11 case. These allocations have been applied by Empire for recovery of transmission
12 expense since rates resulting from Case No. ER-2014-0351 took effect. The data
13 used in the calculations was updated through July 2015 to reflect a larger sample of
14 figures from the SPP IM and to ensure the allocators were still commensurate. The
15 inclusion of certain transmission expense, but no transmission revenue, was also
16 agreed to by the parties and approved by the Commission in Case No. ER-2014-0351.

17 **TRANSMISSION CONGESTION RIGHTS/ AUCTION REVENUE RIGHTS**

18 **Q. WHAT ARE TRANSMISSION CONGESTION RIGHTS AND AUCTION**
19 **REVENUE RIGHTS?**

20 A. In the SPP IM, Transmission Congestion Rights (TCR) have replaced the use of
21 energy and native load schedules as congestion hedges. TCR are financial
22 instruments, defined along a nodal path with a source location and sink location that
23 entitle the owner to a stream of hourly revenues or charges based on the difference in
24 day-ahead (DA) marginal congestion costs (MCC) along that path. TCR are either

1 seasonal or monthly in duration and can be on-peak and/or off-peak products. A TCR
2 may either be purchased during a TCR auction (annual/monthly) or may be self-
3 converted from an Auction Revenue Right (ARR). Owners of confirmed physical
4 firm transmission rights are entitled to candidate ARR's which can then be nominated
5 for allocation during an ARR allocation (annual/monthly). If a candidate ARR is
6 nominated for allocation and the allocation is granted, the holder may now either hold
7 the ARR, in which case they would be entitled to any charges or revenues resulting
8 from the auction clearing prices during a TCR auction or may attempt to self-convert
9 the ARR into a TCR.

10 **Q. WHAT AMOUNT OF ARR & TCR REVENUE IS INCLUDED IN THE**
11 **PROPOSED NBFC FOR THIS CASE?**

12 A. The amount of ARR/TCR revenue included in the proposed NBFC for this case is
13 \$3,494,681.

14 **Q. HOW DID YOU ARRIVE AT THIS FIGURE?**

15 A. The figure is a function of estimated volumes and estimated prices rooted in historical
16 values. The volume of TCR's used to calculate the total ARR/TCR revenue to be
17 included in NBFC are from Empire's internal 2016 budget process which used actual
18 volumes from the SPP 2015/2016 Annual TCR Auction. However, because the
19 auction spanned from June 1, 2015 through May 31, 2016, the same volumes
20 procured for June 1, 2015 through December 31, 2015 were used as a proxy for the
21 same period in 2016. Regarding the auction clearing prices (ACP) used to calculate
22 the ARR/TCR revenue, actual ACP for January 1, 2016 through May 31, 2016 were
23 used for the first five months of 2016 while the June 1, 2015 through December 31,
24 2015 prices were reduced by approximately 20% to reflect estimated prices for the

1 same time period in 2016. The aforementioned 20% reduction in ACP was used to
2 reflect a lessening of congestion due to the continued development of the bulk
3 transmission system in SPP.

4 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

5 **A. Yes.**

