May 07, 2015 Data Center Missouri Public Exhibit No. 105 Service Commission Issues: Transmission Revenue, Transmission Expense, FAC Inclusion Witness: Aaron J. Doll Type of Exhibit: Rebuttal Testimony Sponsoring Party: Empire District Electric Case No. ER-2014-0351 Date Testimony Prepared: March 2015

Filed

Before the Public Service Commission of the State of Missouri

Rebuttal Testimony

of

Aaron J. Doll

March 2015



Emploc Exhibit No. 105 Date 4-14-15 Reporter XF File No. ER-2014-0351

TABLE OF CONTENTS REBUTTAL TESTIMONY OF AARON J. DOLL ON BEHALF OF THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. ER-2014-0351

<u>SUBJECT</u>	PAGE
INTRODUCTION	1
ANNUALIZATION OF THE 447 REVENUE AND 555 EXPENSE ACCOU	NTS 2
TRANSMISSION REVENUE AND EXPENSE	
RECOMMENDATION REGARDING THE CONTINUATION OF THE FA	AC 5

AARON J. DOLL REBUTTAL TESTIMONY

REBUTTAL TESTIMONY OF AARON J. DOLL ON BEHALF OF THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. ER-2014-0351

1 INTRODUCTION

2 Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS FOR 3 THE RECORD.

- A. Aaron J. Doll. I am the Manager of Market Settlements and Systems for The Empire
 District Electric Company ("Empire" or "Company"). My business address is 602
 South Joplin Avenue, Joplin, Missouri.
- 7 Q. ARE YOU THE SAME AARON DOLL THAT PROVIDED DIRECT
 8 TESTIMONY IN THIS CASE BEFORE THE MISSOURI PUBLIC SERVICE
 9 COMMISSION ("COMMISSION")?
- 10 A. Yes.

11 Q. WHAT ISSUES WILL YOU BE ADDRESSING IN REBUTTAL?

A. My rebuttal testimony will address the Commission Staff's ("Staff") annualization of
the 447 and 555 revenue and expense accounts for base fuel calculation in the fuel
adjustment clause ("FAC"), the inclusion of applicable transmission revenue and
expense charges in the FAC, and the continuation of the FAC. In response to the
Office of the Public Counsel ("OPC") witness Mantle's direct testimony, I will also

1		address the "completeness" of information Empire provided regarding the costs and
2		revenues requested for inclusion in the requested continuation of the FAC.
3	<u>ANN</u>	UALIZATION OF THE 447 REVENUE AND 555 EXPENSE ACCOUNTS
4	Q.	PLEASE DESCRIBE ISSUES YOU HAVE INDENTIFIED AS PART OF
5		YOUR REVIEW OF STAFF'S ANNUALIZATION OF THE 447 REVENUE
6		AND 555 EXPENSE ACCOUNTS?
7	A.	First, in the workpapers provided by Staff witness Kim Bolin entitled "IM Sales,"
8		real-time virtual sales totaling \$233,412.31, appear to be included twice. This results
9		in either an overstatement of non-energy test year sales revenue or an overstatement
10		of test year energy sales revenue. This oversight has been brought to Staff's
11		attention, and Staff agreed to look at the issue during the technical conference. The
12		revised Staff EMS run dated February 26, 2015, however, does not appear to reflect a
13		correction for this overstatement.
14		Second, in the Staff's fuel base calculation, \$16,707,084 is removed from the 555
15		accounts to reflect the elimination of the cost associated with off-system sales
16		("OSS") due to the implementation of the Southwest Power Pool Integrated
17		Marketplace ("SPP IM"). However, the corresponding 447 revenue accounts, which
18		reflect OSS revenue, do not appear to be removed from the Staff's base factor,
19		thereby artificially lowering the base fuel rate by \$6,214,261.
20		Third, in Staff's fuel base calculation, the SPP IM revenues and expenses do not
21		appear to be properly represented. For example, operating reserve revenues are
22		annualized to reflect 12 months of the SPP IM, but energy related purchases, Auction

23 Revenue Rights ("ARR")/Transmission Congestion Rights ("TCR") revenue and

1	expense, and all SPP IM sales only reflect two months of activity. This creates a
2	misbalance in the "three-legged stool" of generation costs, SPP IM sales, and SPP IM
3	purchases.

4 TRANSMISSION REVENUE AND EXPENSE

5 Q. PLEASE DESCRIBE ANY ISSUES YOU HAVE IDENTIFIED IN YOUR 6 REVIEW OF STAFFS ANNUALIZATION OF TRANSMISSION COSTS AND 7 REVENUES.

8 A. The only issue I have identified with regard to Staff's annualization of transmission 9 costs and revenues is related to the fuel base calculation, specifically Schedule 7 Firm 10 Point-to-point ("PTP") transmission revenue. In the workpapers provided to 11 determine the base fuel rate, it appears Staff failed to include Schedule 7 Firm PTP 12 revenue as an offset to net 565 transmission expense. This creates a mismatch in the 13 level of net transmission expenses included in Staff's overall revenue requirement 14 with Staff's net transmission cost included in the calculation of Staff's proposed FAC 15 base.

16 Q. DO YOU AGREE WITH STAFF'S RATE DESIGN RECOMMENDATION

RELATED TO THE EXCLUSION OF SPP SCHEDULE 1A AND FERC

18 SCHEDULE 12 TRANSMISSION EXPENSE FROM THE FAC?

19 A. No.

17

20 Q. PLEASE EXPLAIN.

A. The SPP Schedule 1A transmission rate, which is approved by the FERC, is designed
 to recover the costs associated with administration of SPP's Open Access
 Transmission Tariff ("OATT"). Since Empire is a network service customer, these

1		costs are unavoidable. Furthermore, the 1a rate charged by SPP for tariff
2		administration:
3		• is designed to serve as a monthly cap for expense recovery rather than an
4		estimated expense rate which means monthly rate reductions are possible;
5		• is based upon projected expenses for the calendar year thus making it likely to
6		change annually; and,
7		• is calculated based upon the prior year monthly average coincidental demand
8		thus making it variable.
9		Schedule 12 transmission costs are collected on behalf of the FERC by SPP for the
10		purpose of recovering FERC administration costs associated with transmission
11		service. Since Empire is a network service customer, these costs are unavoidable.
12		Furthermore, the rate assessed by FERC:
13		• is based upon the estimation of current year expense thus making it likely to
14		change annually;
15		• is subject to over/under true-up in the following year thus making it likely to
16		change annually; and
17		• is calculated based upon prior month energy (MWh) delivered thus making it
18		variable.
19	Q.	ARE THERE ANY ADDITIONAL REASONS FOR INCLUSION OF THESE
20		CHARGES IN THE FAC?
21	A.	Yes. These costs are difficult to forecast, so there is a high probability that whatever
22		level is included in base rates under Staff's recommendation will be inaccurate. For
23		example, in June 2015 SPP will assume the responsibility of reliability coordinator

1		for Heartland Consumers Power District, Basin Electric Power Cooperative, and
2		Western Area Power Administrations Upper Great Plains Region. As a result, it is
3		not unreasonable to expect that the inclusion of such significant load will impact
4		Schedule 1A charges in the near future (Schedule 12 will not be impacted per FERC
5		order).
6	<u>REC</u>	OMMENDATION REGARDING THE CONTINUATION OF THE FAC
7	Q.	DO YOU AGREE WITH OPC WITNESS LENA MANTLE'S REASONING
8		REGARDING HER RECOMMENDATION TO DISCONTINUE EMPIRE'S
9		FAC?
10	A.	No. Ms. Mantle recommended discontinuing Empire's FAC for the three primary
11		reasons paraphrased below:
12		1. Incomplete explanation of costs and revenues proposed to flow through
13		the FAC per minimum filing requirements defined in 4 CSR 240-
14		3.161(3)(H) and (I).
15		2. Insufficient explanation regarding the magnitude, certainty, volatility, and
16		inability of company to manage costs and revenues requested for
17		inclusion.
18		3. Stabilization of fuel costs.
19	Q.	DID EMPIRE PROVIDE A COMPLETE EXPLANATION OF COSTS AND
20		REVENUES REQUESTED FOR FAC INCLUSION AS PART OF ITS FAC
21		CONTIUATION REQUEST?
22	A.	Yes. Between Empire's direct testimony, supplemental direct testimony, and various
23		supporting documents included in the initial filing, Empire has provided more

1		detailed information regarding costs and revenues requested for FAC inclusion than
2		in any case since the inception of Empire's FAC. Empire witness Tarter will also
3		respond to Ms. Mantle's allegations that Empire has failed to satisfy the
4		Commission's information requirements when a request for FAC continuation is
5		made by a utility.
6	Q.	OPC WITNESS MANTLE INDICATES THAT YOUR SCHEDULE ADJ-2 IS
7		AN EXAMPLE OF EMPIRE'S FAILURE TO COMPLY WITH THE
8		COMMISSION'S FAC CONTINUATION RULE. HOW DO YOU RESPOND?
9	A.	I disagree with her representation. Schedule AJD-2 provides a great deal of detail
10		surrounding Empire's FAC continuation request. Ms. Mantle references page one (1)
11		in Schedule ADJ-2 in my supplemental testimony as failing to provide an explanation
12		of costs. I believe Ms. Mantle is referring to page one (1) in Schedule AJD-2 which
13		provides general ledger subaccounts and descriptions for all costs and revenues
14		requested for continued inclusion in the FAC. Schedule AJD-2 additionally provided
15		details regarding charges and revenues associated with the SPP IM. These details
16		included:
17		• Individual IM charge types when not disaggregated into individual
18		subaccounts;
19		• Netting procedure for each subaccount;
20		• Discontinuation of subaccounts when applicable; and,
21		• Charges related to Plum Point's pseudo-tie out of MISO.
22		Furthermore, Empire has provided additional information to assuage the concerns
23		voiced by OPC by providing the aforementioned supplemental testimony, responding

- to various data requests, and participating in a conference call with Ms. Mantle to
 obtain feedback regarding the level of detail desired for the supplemental testimony
 and schedules.
- 4 Q. DID EMPIRE PROVIDE ADEQUATE INFORMATION REGARDING THE
 5 MAGNITUDE, UNCERTAINTY, VOLATILITY, AND INABILITY OF THE
 6 COMPANY TO MANAGE THE COSTS AND REVENUES THAT ARE
 7 REQUESTED TO FLOW THROUGH THE FAC?
- 8 A. Yes. For an explanation on the adequacy of information regarding fuel and purchased
 9 power costs, please see the rebuttal testimony of Empire witness Todd Tarter. With
 10 regard to transmission costs and revenues, the workpapers accompanying my direct
 11 testimony clearly demonstrate the volatility Ms. Mantle cites as not having been
 12 provided with the Company's direct testimony.
- Q. DOES COMMISSION RULE 4 CSR 240-20.090(2)(C), AS REFERENCED BY
 OPC WITNESS MANTLE IN HER DIRECT TESTIMONY, REQUIRE
 DIRECT TESTIMONY CONCERNING MAGNITUDE, UNCERTAINTY,
- 16 AND INABILITY TO MANAGE?
- A. No. This appears to be a misinterpretation of the Commission's rule. The rule
 provides is a list of items that the Commission will consider when determining
 inclusion in an FAC, not a requirement as to the contents of direct testimony.
 Regardless, volatility and magnitude is clearly visible in the workpapers supplied to
 support Empire's rate case and to support my direct testimony.

22 Q. HAS THE OPC BEEN GIVEN A COPY OF THESE WORKPAPERS?

23 A. Yes.

Q. WOULD YOU CITE A SPECIFIC EXAMPLE OF THE VOLATILITY FOUND IN THE WORKPAPERS PROVIDED TO THE OPC?

3 Α. Yes. In my workpapers, I have provided six months of actual transmission expense 4 and revenues and six months of estimated transmission expense and revenues. The 5 Schedule 11 Base Plan Funding (BPF) – Regional expense in the workpapers show a 6 monthly expense of \$477.486 for January 2014, and a monthly expense of \$642.394 7 for February 2014, nearly a \$165,000 monthly increase. Furthermore, my December 8 2014 estimate for BPF-Regional expense was \$719,154, which was an increase of 9 \$50,745 from June 2014, the last actual expense available at the time. Another 10 example of volatility would be BPF-Zonal expense which was \$112,732 in January 11 2014, and estimated to be reduced by \$96,674 to \$16,059, by December 2014. These 12 are just a few of the examples of volatility that are provided in my workpapers.

13 WITH MS. MANTLE'S YOU AGREE STATEMENT THAT **O**. DO "...NOTHING IN THE RECORD BEFORE THE COMMISSION AT THIS 14 15 POINT SUGGESTS THE FUTURE WILL BE ANY DIFFERENT FOR EDE" 16 THAN THE HISTORY SUGGESTS?

A. No. In fact, it is difficult to determine a time in Empire's recent history where the
future will likely be a more significant departure from history than the present. Ms.
Mantle has ignored a number of significant factors that are decidedly different than
much of the historical information she references:

The commencement of the SPP IM. The SPP IM has changed how
 Empire's generators are committed and dispatched, how Empire's generation
 is compensated, how Empire provides operating reserves, how Empire serves

its native load, how bilateral power deals are consummated, and how the
power flows on the grid causing transmission congestion are managed. In
reality, with the advent of the SPP IM, any market, regulatory, or
environmental change that affects a single market participant will likely affect
all SPP market participants.

- The proliferation of wind in SPP. SPP has more than doubled its wind
 nameplate capacity since 2008 and wind capacity is expected to continually
 increase in the near future. The proliferation of wind affects the amount of
 quick start generation online, generation set-points, ramping ability needed
 online, the cycling of baseload and intermediate baseload generators,
 operating reserve requirements, compensation for wind, etc.
- 12 The change in environmental regulations. The Mercury and Air Toxic 13 Standards ("MATS"), which limits mercury, particulate matter, and SO₂ at the 14 various generating units within SPP have changed. More specifically, 15 Empire's generation fleet is currently bearing out the effects of these changes 16 with the environmental retrofit of Asbury, the retirement of Riverton unit 7, 17 and the conversion of Riverton units 8 & 9 to natural gas until their retirement 18 next year. Furthermore, the Clean Power Plan was proposed on June 2, 2014, 19 to cut carbon emissions, and the EPA is currently reviewing comments before 20 unveiling the final rule in the summer 2015. This rule will potentially impact 21 not only Empire, but the entire SPP IM and may ultimately require a 22 completely different generation mix to serve load. As the generation mix 23 changes, so too does the cost of power, the congestion on the grid, the

1		availability of natural gas particularly in the winter, the risk associated with
2		natural gas price and volume fluctuations, etc. In short, many things about the
3		way electrical load is served will change.
4	Q.	WHAT POSITION HAS THE MIDWEST CONSUMER ENERGY GROUP
5		("MCEG") TAKEN REGARDING THE CONTINUATION OF EMPIRE'S
6		FAC?
7	A.	MCEG witness Maini agrees with OPC witness Mantle regarding a lack of volatility
8		in fuel prices as grounds for elimination of the FAC. Additionally, Ms. Maini
9		concurs with Ms. Mantle regarding the specific types of fuel costs that should be
10		allowed to flow through the FAC. Furthermore, Ms. Maini addresses her concerns
11		about the lack of an adequate analysis of benefits associated with the SPP IM. Ms.
12		Maini contends that Empire's estimate of net fuel and purchased power ("FPP")
13		savings are: (1) rooted in an old study performed by Ventyx, (2) premature for a
14		nascent market, and (3) unreasonable due to the lack of "1 full year" of data. As a
15		result, Ms. Maini recommends that the Commission eliminate the FAC. However,
16		Ms. Maini contends that if the Commission finds it reasonable to continue the FAC, it
17		should exclude transmission costs from recovery.
18	Q.	DO YOU AGREE WITH MS. MAINI'S ASSESSMENT REGARDING THE

19

LACK OF VOLATILITY IN FUEL COSTS?

A. No. Regarding Ms. Maini's assessment of a lack of fuel cost volatility as grounds for
elimination of the FAC, please see my response above regarding Ms. Mantle's similar
concern.

Q. DO YOU AGREE WITH MS. MAINI'S RECOMMENDATION ON THE TYPES OF CHARGES THAT SHOULD BE ALLOWED IN AN FAC?

3 No. It is not clear whether Ms. Maini has a complete understanding of Empire's A. 4 participation in the SPP IM. In Ms. Maini's direct testimony, she concurs with Ms. 5 Mantle regarding the following types of costs that should flow through the FAC: 6 "...variable fuel commodity costs, variable fuel transportation costs, purchased 7 power, the transmission costs of purchased power, and off-system sales". The references to OSS, in both Ms. Maini's testimony and Ms. Mantle's testimony, 8 9 imply that an on-system world still exists in SPP where native load is supplied 10 through the company's owned generation fleet, purchased power agreements 11 ("PPA"), and bilateral deals. This view is not correct, in the SPP IM, all generation, 12 whether obtained through owned generation, PPAs, or imported from outside SPP, 13 will be sold into the market, and the generation needed to serve native load is 14 purchased from the market. Furthermore, Ms. Mani's inclusion of "transmission 15 associated with purchased power" is confusing considering her costs 16 recommendation to remove SPP transmission costs in the latter portion of her 17 testimony. Empire serves 100% of its native load with power purchased from the 18 SPP IM; therefore, the SPP transmission costs required to serve that load should be 19 included in the FAC. Empire is currently a network customer of SPP and thus 20 required to pay SPP, as the regional transmission service provider, its share of 21 various transmission costs and upgrades.

22 Q. DO YOU AGREE WITH MS. MAINI'S ASSESSMENT REGARDING 23 DISALLOWANCE OF SPP TRANSMISSION COST INCLUSION IN THE

FAC DUE TO LACK OF MARKET DATA REQUIRED TO DEMONSTRATE MARKET BENEFITS?

A. No. Ms. Maini misinterprets my direct testimony by concluding that the inclusion of
SPP transmission revenue and expense is dependent upon proving benefits received
from the SPP IM in comparison to a historical market.

6 Q. PLEASE EXPLAIN.

A. My direct testimony discusses the manner in which Empires customer's native load is
served from the SPP IM. My testimony then attributes benefits of the SPP IM as
contingent upon having the necessary transmission facilities for a regional
commitment and dispatch. These benefits include but are not limited to:

- Lower costs as evident by a reduction in online capacity;
- Lower operating reserve requirements;
- Significantly less transmission curtailments; and,
- Increased reliability due to the consolidation of 16 balancing authorities to
 one.
- As evidenced from the items above, as well as external analysis and internal monthly backcasts, the SPP IM has provided numerous benefits to Empire customers. Some of these benefits have resulted in a more reliable delivery of power and some have resulted in increased efficiencies causing reductions in FPP costs which are already returned to the customers via the current FAC.

21 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

22 A. Yes.

AFFIDAVIT OF AARON J. DOLL

STATE OF MISSOURI)) ss COUNTY OF JASPER)

On the <u>6th</u> day of March, 2015, before me appeared Aaron J. Doll, to me personally known, who, being by me first duly sworn, states that he is Manager of Market Settlements & Systems of The Empire District Electric Company 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.

Aaron J. Doll

Subscribed and sworn to before me this <u>6th</u> day of March, 2015.

ANGELA M. CLOVEN Notary Public - Notary Seal State of Missouri Commissioned for Jasper County My Commission Expires: November 01, 2015 Commission Number: 11262659 **Notary Public** My commission expires: