Exhibit No.:
Issue: On-System Fuel and Purchased Power Expense
Witness: Todd W. Tarter
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2010-0130
Date Testimony Prepared: April 2010

Before the Public Service Commission
Of the State of Missouri

Rebuttal Testimony

of

Todd W. Tarter

April 2010

EMPIRE
SERVICES YOU COUNT ON

REBUTTAL TESTIMONY OF
TODD W. TARTER
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2010-0130

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Todd W. Tarter. My business address is 602 S. Joplin Avenue, Joplin, Missouri.

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

A. The Empire District Electric Company ("Empire" or "Company"). My title is Manager of Strategic Planning.

Q. ARE YOU THE SAME TODD W. TARTER THAT EARLIER PREPARED AND FILED DIRECT TESTIMONY IN THIS RATE CASE BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION ("COMMISSION") ON BEHALF OF EMPIRE?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will comment on the Commission Staff's ("Staff") position on the on-system fuel and purchased power ("FPP") expense level for setting the base FPP rate as proposed in the direct testimony of Staff witness Mr. Mark Oligschlaeger.

Q. WHAT IS EMPIRE'S POSITION ON ENERGY COST RECOVERY IN THIS CASE?

A. Empire is recommending the continuation of a fuel adjustment clause ("FAC"). In our direct filing, Empire recommended no change to the base fuel and purchased power rate in the FAC. At this time, Empire's position remains that no change to the base is needed until the completion of the Plum Point and Iatan 2 generating units. Empire only suggests

an update to: 1) the off-system margin component of the base FPP rate to incorporate the Staff's recommended change in how off-system sales flow-through the FAC, and 2) the inclusion of renewable energy credits ("REC") as a component of the base FPP rate, if the Commission accepts Staff's recommendation to modify or include each of the items as part of the FAC. Please refer to the rebuttal testimony of Empire witness W. Scott Keith for more information on these topics. Empire will continue to monitor on-system FPP expenses. As I mentioned earlier, Empire proposes no changes to the FPP expense component of the FAC base until Plum Point and Iatan 2 are complete and in service. As currently envisioned, the FAC base can be adjusted in the Iatan 2 rate case.

Q. WHY IS ESTABLISHING THE APPROPRIATE LEVEL OF FUEL AND PURCHASED POWER EXPENSE IN THE BASE RATE IMPORTANT?

A. First, the current FAC does not recover or return 100% of the FPP expenses above or below the FPP expenses included in base rates. With the current FAC, Empire collects 95% of prudently incurred FPP costs that are above the base. Likewise, Empire refunds 95% of prudently incurred FPP costs below the base. Second, since future FPP costs are unknown, an adequate estimate is needed so potential balances that require either refunds or additional collections do not become overly large. In order to be fair to both the Company and its customers the base fuel expense should reflect the expected FPP cost level as accurately as possible.

Q. HOW HAS THE CURRENT BASE FPP LEVEL IN EMPIRE'S FAC COMPARED TO THE ACTUAL FPP EXPENSE DURING THE PERIOD THAT EMPIRE'S FAC HAS BEEN IN PLACE?

A. There have been three cost accumulation periods since Empire's FAC was approved. The

first accumulation period ranged from September 2008 through February 2009. During that period Empire under collected approximately $1.9 million in FPP costs. The second accumulation period ranged from March 2009 through August 2009. During that period Empire over collected approximately $820 thousand in FPP costs. The third period ranged from September 2009 through February 2010. During that period Empire under collected approximately $3.1 million in FPP costs. During the entire period the FAC has been in place (from September 2008 through February 2010) Empire has roughly a net $4.2 million under collection of FPP expenses. In other words, during the entire period to date, actual FPP expenses have been slightly higher than the FPP expenses in base rates. Specifically, during the entire 18-month period Empire's FAC has been in effect, the total Missouri FPP expense has been 2.2 percent (2.2%) over the level of FPP expense established in base rates and the FAC base.

Q. WHAT IS STAFF RECOMMENDING FOR THE ON-SYSTEM FPP COMPONENT FOR THE FAC BASE IN THIS CASE?

A. Staff's direct filing recommends lowering the FAC base.

Q. HOW DID STAFF ESTABLISH THE PROPOSED FAC BASE IN ITS DIRECT FILING?

A. Staff used a computer production cost model to estimate the on-system FPP expense on Empire's electric system for a period of one year. Staff developed and used a set of assumptions for inputs into the model.

Q. HAVE YOU REVIEWED STAFF'S FPP MODEL OUTPUT AND THE STAFF'S WORKPAPERS IN THIS AREA?

A. Yes.

Q. DO YOU HAVE ANY CONCERNS ABOUT THE MODEL ASSUMPTIONS THAT STAFF USED TO DEVELOP ITS PROPOSED FAC BASE?

A. Yes. I have noted several areas in Staff's assumptions that concern me. My concerns are primarily related to the following areas: generation mix, scheduled maintenance days for coal units, natural gas prices, solid fuel prices (coal and petroleum coke) and the Meridian Way Wind Farm capacity factor.

Q. IN GENERAL, WHAT IS THE OVERALL IMPACT ON THE FAC BASE OF THESE STAFF ASSUMPTIONS?

A. With the exception of the Meridian Way wind farm capacity factor assumed by Staff, each of the Staff assumptions in the areas of concern listed above tend to lower the FAC base estimate. Since all of the afore mentioned Staff assumptions are near the low side of the range, the cumulative impact of all these assumptions being introduced into the computer production cost model results in the Staff's model yielding an estimated value for the annualized on-system FPP expense used to establish the FAC base that is much too low.

Q. PLEASE EXPLAIN THE GENERATION MIX THE STAFF USED IN ITS PRODUCTION COST MODEL.

A. The Staff has used a mix of generation resources that does not reflect the mix of Empire's generation resources that will actually be in place when the rates set in this case will take effect. Rates set in this case will most likely not be in effect until at least September 2010. Yet, Staff's model includes a full year of the 162 MW Westar Jeffrey coal purchase. The Westar purchased power contract, which is a relatively low cost resource, will expire May 31, 2010 several months before the rates in this case become effective. In addition, as a matter of note, Staff's model did not include the Plum Point generating unit, which is

scheduled to be in place during the period of time when rates set in this case will be effective. As a result, the Staff's model has produced a FPP expense estimate that excludes the impact of the major change in generating resources Empire will have in place during the rate effective period. In so doing, Staff's estimates produce an FAC base that is not representative of the future.

Q. WHAT ARE YOUR CONCERNS WITH THE STAFF'S ASSUMPTION ON THE SCHEDULED MAINTENANCE DAYS FOR COAL UNITS?

A. The Staff has understated the number of maintenance days needed for Empire's coal units in its model. Staff utilized fewer scheduled maintenance days for Empire's coal units in its model run compared to both Empire's maintenance history, and the normalized maintenance schedule from the FPP model used in Case No. ER-2008-0093, which established the current FPP expense in base rates and the FAC base. Of particular concern are the scheduled maintenance assumptions for Iatan and Riverton Unit 7. As shown in the tables below, the understated number of maintenance days leads to the Staff model calculating more generation from these relatively low cost units than has historically been achieved on a long-term average basis. Moreover the actual history includes off-system sales and the Staff's model does not.

Scheduled Maintenance Days

	Iatan	Riverton 7
Actual 10 Year Average (2000-2009)	30	20
NERC GAR Report data for similar size units	29	18
Normalized for current rates (Case No. ER-2008-0093)	30	25
Staff Direct Case Assumptions (Case No. ER-2010-0130)	24	12

Generation (MWH)

	Iatan	Riverton 7
Actual 5 Year Average 2005-2009 (includes off-system sales)	524,845	174,096
Actual 10 Year Average 2000-2009 (includes off-system sales)	531,697	172,396
Actual 15 Year Average 1995-2009 (includes off-system sales)	559,558	169,320
Staff Direct Case Output (Case No. ER-2010-0130) (excludes off-system sales)	603,814	189,754

Q. PLEASE EXPLAIN YOUR CONCERNS REGARDING THE NATURAL GAS PRICE ASSUMED IN STAFF'S FPP MODEL.

A. Staff utilized a weighted average gas price by weighting Empire's hedged natural gas position price for 2010 and spot natural gas prices from 2009. The primary problem with the Staff's natural gas pricing assumption is related to the weighting of hedged gas prices and spot gas prices. Staff used a weighting of 81% hedged price and 19% spot price. This weighting is based on Empire's Natural Gas Position Report for 2010, which assumes an expected natural gas burn based on the Company's budget projection for 2010, and includes the impact of the Plum Point and Iatan 2 generating units and the expiration of the Westar power contract. The Staff model does not include the impact of any of these generating changes and is therefore not comparable to Empire's 2010 generation mix. Thus, the natural gas hedge position weighting of 81% based on Empire's expected natural gas consumption from the Company's 2010 budget is not applicable to the Staff's production cost model run. In addition, the Staff FPP projection and Empire's 2010

budget have different net system input levels, different FPP costs, different unit outages, and even different generating resources as I mentioned earlier.

Q. HOW DOES THE QUANTITY OF NATURAL GAS BURNED IN THE STAFF'S MODEL COMPARE TO EMPIRE'S 2010 BUDGET FORECAST?

A. The Staff model run calculates a significantly lower natural gas burn than Empire's 2010 forecast. The Company's 2010 budget included a natural gas burn of around 9,075,803 MMBtu, with 7,325,800 MMBtu hedged for a hedged weighting of 81%. The Staff's model assumes a natural gas burn of around 8,241,947 MMBtu and a hedged weighting, given Empire's hedge positions in 2010, of about 89%. If Staff had utilized the 89% hedge weighting for the natural gas in its model, it would have raised the weighted average natural gas price and the Staff's FPP expense.

Q. WHAT CONCERNS DO YOU HAVE WITH STAFF'S ASSUMPTIONS REGARDING SOLID FUEL PRICES?

A. The solid fuel price (coal and petroleum coke) assumption used in Staff's model should be indicative of the pricing that is expected when rates in this case become effective. From my review of Staff's work papers, it appears, that in general, Staff utilized lower solid fuel prices than the Company expects to incur for 2010. These solid fuel prices, including transportation costs, should be updated using information that will produce a more accurate estimation of the solid fuel costs Empire will actually incur in the 2010 time-frame.

Q. WHAT ASSUMPTIONS DID THE STAFF MODEL MAKE REGARDING THE MERIDIAN WAY WIND FARM?

A. The Staff's model assumed a twenty-nine percent (29%) capacity factor for the Meridian Way Wind Farm. This is a lower than expected capacity factor for this resource. The

Meridian Way Wind Farm has an expected capacity factor closer to roughly forty percent (40%). During the test year, the Meridian Way Wind Farm was on partial outage due to gearbox problems. It is unclear to me whether this outage influenced the Staff's assumptions on availability for this resource.

Q. PLEASE SUMMARAIZE YOUR REBUTTAL TESTIMONY.

A. Empire is requesting a continuation of an FAC tariff. In conjunction with an FAC, it is important to correctly set the appropriate level of on-system FPP expense in the FAC. At this time, Empire is recommending no change to the FAC base. If the Commission changes how the FAC handles off-system sales or REC revenue, the FAC base will need to be modified to properly reflect those changes. Empire has several concerns regarding the Staff's FPP model run in this case. All of the concerns Empire has identified to-date indicate the Staff's model has understated the on-system FPP cost and the Staff's proposed FAC base. The concerns we have identified are primarily related to the Staff's assumptions regarding generation mix, the Staff's scheduled maintenance days for coal units, the Staff's natural gas price, the Staff's assumptions regarding solid fuel prices and the Staff's assumption regarding the Meridian Way Wind Farm capacity factor.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

AFFIDAVIT OF TODD W. TARTER

STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 31 day of March, 2010, before me appeared Todd W. Tarter, to me personally known, who, being by me first duly sworn, states that he is the Manager of Strategic Planning 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.

Todd W. Tarter

Subscribed and sworn to before me this 31 day of March, 2010.

Vicki L. Kramer-Gibson
Notary Public

My commission expires: 10-30-10.

VICKI L. KRAMER-GIBSON
Notary Public - Notary Seal
STATE OF MISSOURI
Jasper County - Comm#06482169
My Commission Expires Oct. 30, 2010