Exhibit No. Issues: Plant Operating & Maintenance Expense Adjustments; Riverton Unit 12 Long Term Maintenance Tracker Witness: John M. Woods Type of Exhibit: Direct Testimony Sponsoring Party: Empire District Electric Case No.: ER-2016-0023 Date Testimony Prepared: October 2015

Direct Testimony

of

John M. Woods

October 2015



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DIRECT TESTIMONY OF JOHN M. WOODS THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. ER-2016-0023

1 I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. John M. Woods. My business address is 602 Joplin Street, Joplin, Missouri.

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

- 5 A. The Empire District Electric Company ("Empire" or "Company"), as the Plant
- 6 Manager-Empire Energy Center.

7 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

8 A. I graduated from the University of Missouri-Columbia in 1988, with a Bachelor
9 of Science Degree in Mechanical Engineering.

10 Q. PLEASE GIVE AN OVERVIEW OF YOUR PROFESSIONAL 11 EXPERIENCE.

12 A. I was employed by Empire immediately following my graduation from the 13 University of Missouri-Columbia in May 1988. From May 1988 until August 14 1993, I was employed as a Plant Engineer at the Asbury Generating Station. My 15 duties included assisting in power plant construction projects, including the 16 conversion of the plant to burn Powder River Basin coal, and various operations 17 and maintenance ("O&M") activities. In August 1993, I took a position as 18 Production Staff Specialist in the corporate office in Joplin. My duties included 19 tracking of plant capital and O&M expenses, involvement in regulatory issues,

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1 evaluation of new generating resource options, assisting in the construction of 2 new plants, and assisting in the modeling and tracking of fuel and purchased 3 power costs. In 1995, my title was changed to Life Extension Manager with 4 similar duties but more responsibilities in the area of plant life extension planning. 5 I also performed the duties of the Fuel Contracts Manager on an interim basis 6 from 1995 to 1996, which involved purchasing of coal, providing for coal 7 transportation, and the purchase of natural gas and fuel oil for the plants. In the 8 fall of 1999, I took a position as Results Manager at Empire's State Line plant. 9 My position included assisting the project team for the construction, 10 commissioning, and operation of a 500 megawatt ("MW") combined cycle plant 11 at Empire's State Line plant known as State Line Combined Cycle ("SLCC"). 12 SLCC went into commercial operation in June of 2001. In January 2007, I took 13 on the position of Maintenance Manager-SLCC. In this role, I was responsible 14 for all aspects of the maintenance of SLCC. This included managing routine 15 maintenance, major maintenance and some operational aspects of the unit. In 16 December 2012, I was promoted to my current position, Plant Manager-Energy 17 Center. I am responsible for all aspects of power plant operations and 18 maintenance at the Empire Energy Center, a 272 MW peaking plant. I also 19 oversee Empire's interests in Iatan 1, Iatan 2, and Plum Point, Empire's jointly 20 owned generating facilities.

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Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

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1	А.	I support Empire's proposed adjustments in the area of annual O&M expenses at
2		Empire's Riverton 12 combined cycle unit. I also support the proposed adjustment
3		to the base level in the Riverton Long Term Maintenance Contract tracker.

4 II. RIVERTON COMBINED CYCLE OPERATING & MAINTENANCE 5 EXPENSE

6 Q. WHICH POWER PLANTS DOES EMPIRE OPERATE?

A. Empire solely owns and operates four power plants: the Asbury Power Plant
("Asbury"), the Riverton Power Plant ("Riverton"), the Energy Center Power
Plant ("Energy Center"), and the Ozark Beach Dam and Hydroelectric Plant
("Ozark Beach"). Empire also operates and jointly owns the State Line Power
Plant ("State Line"). Empire solely owns State Line Unit 1 and jointly owns
SLCC with Westar Energy. Empire owns 60 percent of SLCC, and Westar owns
the remaining 40 percent.

14 Q. WHAT IS THE 5 YEAR AVERAGE LEVEL OF NON-LABOR O&M FOR 15 THE RIVERTON PLANT?

A. For the period of May 2009 through April 2014, non-labor O&M expenses for the
Riverton Plant averaged \$1,365,356 per year. This amount represents 100 percent
of the non-labor O&M expenses at the Riverton Plant and represents the amount
of expenses adopted in Case No. ER-2014-0351 for this facility. O&M expenses
during this period included Riverton Units 7, 8, and 9 (which have recently been
retired) and Riverton Units 10, 11, and 12, operating in simple cycle
configuration.

Q. ARE YOU PROPOSING A NON-LABOR ADJUSTMENT TO THE BASE LEVEL OF EXPENSES ADOPTED IN THIS CASE?

A. Yes. I am sponsoring an adjustment of \$823,269 to bring total non-labor O&M
expenses for these plants to \$2,188,625, on a total company basis. This represents
100 percent of the non-labor O&M expenses at the Riverton Plant.

6 Q. WHAT DOES THIS LEVEL OF O&M EXPENSE REPRESENT?

A. This level of expense represents the average annual non-labor O&M budget for
the Riverton 12 combined cycle unit, in 2016 dollars. This does not include the
Program Parts & Scheduled Outage Service expense, any outage related expenses
required for unforeseen repairs, or air quality control standard ("AQCS")
consumable expenses, namely ammonia in the case of Riverton 12 combined
cycle.

13 Q. HOW DID EMPIRE DETERMINE THE LEVEL OF ANNUAL 14 OPERATING EXPENSE FOR THE RIVERTON 12 COMBINED CYCLE 15 UNIT?

A. Empire performed an analysis of the non-labor, non-outage related O&M expense
at the State Line Combined Cycle plant. The results of this analysis was used to
project the same type of expenditures for the Riverton 12 combined cycle unit.

19 III. RIVERTON UNIT 12 PROGRAM PARTS & SCHEDULED OUTAGE 20 SERVICE CONTRACT TRACKER

21 Q. WHY IS AN ADJUSTMENT NEEDED FOR THE RIVERTON 12
22 TRACKER?

1	A.	The Revised Stipulation and Agreement and List of Issues, filed on April 8, 2015,
2		in Case No. ER-2014-0351, established the Riverton 12 Long-Term Maintenance
3		Contract tracker base at \$2.7 million, Missouri jurisdictional. An adjustment to
4		Staff's Accounting Schedule (EMS Revised 3-26-2015) was needed to reflect this
5		established tracker base.

6 Q. DO YOU RECOMMEND CONTINUING THE RIVERTON 12 LONG7 TERM MAINTENANCE O&M TRACKER?

A. Yes. The Riverton 12 Long-Term Maintenance O&M tracker was established in
Case No. ER-2014-0351, with revised base rates taking effect on July 26, 2015.
Not enough historical activity has occurred since the completion of Case No. ER2014-0351 to allow for the discontinuation of the tracker.

12 Q. DO YOU PROPOSE ANY ADJUSTMENTS TO THE TRACKER?

13 Yes. Total annual Program Parts & Scheduled Outage Service Contract expenses A. 14 during combined cycle operation are projected to range from \$3.9 million to \$5.2 15 million annually starting in 2016. Empire's filing reflects the mid-point of this 16 range for a tracker base level of \$4.6 million or \$3.9 million on a Missouri 17 Jurisdictional basis. This represents an increase of \$1.2 million to the current Please refer to Schedule JMW-1 for further details on the 18 tracker base. 19 calculation of these values.

20 Q. WHY IS THERE A RANGE FOR THE LEVEL OF PROJECTED 21 MAINTENANCE CONTRACT EXPENSES?

A. The costs of this contract are driven by the number of starts and hours ofoperation experienced by the new combined cycle unit. While Empire believes

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this unit will be cycled (turned on and off) almost daily and run for the majority of the day when it is dispatched in the relatively new Southwest Power Pool Integrated Marketplace, we will not know for certain until the unit begins regular participation in the market. Schedule JMW-1 reflects the range of hours and starts Empire is projecting. This relative uncertainty of the operating characteristics of this unit and the associated maintenance contract costs exemplify the necessity of a range and the continuation of the tracker.

8 Q. HOW WOULD YOU CHARACTERIZE THIS LEVEL OF COST FOR 9 NON-LABOR O&M COSTS AT EMPIRE'S OWNED AND OPERATED 10 GENERATION UNITS?

- 11 A. It is reasonable.
- 12 **Q.** WHY?

A. The State Line Combined Cycle plant has been in operation since June 2001, a period of 14 years. The non-labor, non-outage related level of O&M has stabilized, and the plant can be considered to be well past any start up or design issues that would affect O&M expense on a non-recurring basis. Therefore, it is appropriate and reasonable to base the non-labor, non-outage related maintenance expense for the Riverton 12 combined cycle on this experience.

19 Q. DOES EMPIRE SUGGEST ANY OTHER TREATMENT RELATED TO 20 ONGOING O&M EXPENSE AT RIVERTON?

A. Yes, Empire suggests that a tracker be used for ALL Riverton non-labor O&M
expense, in addition to the existing Program Parts & Scheduled Outage Services
Contract expense tracked expenses.

1Q.WHY DOES EMPIRE FEEL THAT A TRACKER WOULD BE2APPROPRIATE IN THIS SITUATION?

3 A. The level of annual operating expenses Empire proposes is based on Empire's 4 experience with the State Line Combined Cycle plant, which can be characterized 5 as a mature operational plant. The Riverton 12 combined cycle will be a new 6 plant. The non-labor, non-outage related O&M expenses will vary during the first 7 several years of operation due to issues that are typically related to the first 8 several years of operation of a new plant of this type. In addition, prediction of 9 the level of expenses covered under warranty by the original construction 10 contractor, Burns & McDonnell, caused by equipment failure during the first year 11 of operation versus those that are due to normal wear and tear covered by Empire, 12 also make it difficult to project initial O&M expenses. For these reasons, it is 13 appropriate to implement a tracker for the identified O&M expenses, similar to 14 the trackers approved for Iatan 2, Iatan Common, and Plum Point in previous 15 Empire cases when newly constructed plants were placed into service.

16 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

17 A. Yes, it does.

STATE OF MISSOURI)) ss COUNTY OF JASPER)

On the <u>14th</u> day of October, 2015, before me appeared John M. Woods, to me personally known, who, being by me first duly sworn, states that he is the Plant Manager – Energy Center 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.

John M. Woods

Subscribed and sworn to before me this <u>14th</u> day of October, 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 dun!

My commission expires: