

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of The Empire District            )  
Electric Company's 2012 Update                )  
Summary Report Being Filed Pursuant        )  
to 4 CSR 240-22.080                            )                **File No. EO-2012-0294**

**REVISED STAFF REPORT**

**COMES NOW** the Staff ("Staff") of the Missouri Public Service Commission ("Commission") and respectfully states as follows:

1. On Thursday, April 19, 2012, Staff filed its Staff Report concerning the 2012 Annual Update of The Empire District Electric Company ("Empire"). In that report, Staff identified four deficiencies in Empire's update.

2. Shortly after the filing, counsel for Staff was contacted by counsel for Empire, who indicated a belief that certain of the deficiencies identified by Staff related to rules from which Empire had received variances or waivers.

3. Staff has confirmed that Empire did obtain waiver or variance of the indicated rules, thus Empire was not deficient with respect to those deficiencies identified as 3 & 4 in Staff's initial report, and C & D in Staff's cover pleading to that report.

4. Staff modifies its prior conclusion and recommendation to read as follows:  
Empire's Annual Update and the discussions at the annual update workshop generally indicated compliance with Chapter 22 Rules and prior agreements.<sup>1</sup> However, in certain instances, Empire has not satisfied certain aspects of applicable rules and agreements. Those instances are:

---

<sup>1</sup> *Agreement* approved by the Commission on December 21, 2011 in File No. EE-2012-0095, and *Nonunanimous Stipulation and Agreement* approved by the Commission on April 27, 2011 in File No. EO-2011-0066.

- A. Failure to robustly explore the cost effectiveness of performing its load analysis and load forecast at the class cost-of-service level, as required by prior agreements, with a goal of achieving compliance with 4 CSR 240-22.020(37) and 4 CSR 240-22.030(7)(A), from which Empire has repeatedly sought waivers;
- B. Failure to utilize a 20 year planning horizon for its capacity planning, consistent with 4 CSR 240-22.020(43), 4 CSR 240-22.020(51), 4 CSR 240-22.020(52), 4 CSR 240-22.080(2)(D) and 4 CSR 240-22.080(3)(B);

3. To remedy these deficiencies, Empire should make a filing including, at a minimum, Empire's commitment and plan to address in its future Chapter 22 filings, Staff's comments in this report concerning Empire's load analysis and load forecasting process.

4. Staff's Revised Report, attached hereto as Appendix A, discusses these matters more fully.

**WHEREFORE**, Staff respectfully submits its Revised Staff Report regarding Empire's Annual Update.

Respectfully Submitted,

**/s/ Sarah L. Kliethermes**

Sarah L. Kliethermes  
Senior Counsel  
Missouri Bar No. 60024

Attorney for the Staff of the  
Missouri Public Service Commission  
P. O. Box 360  
Jefferson City, MO 65102  
Phone: (573) 751-6726  
Fax: (573) 751-2690  
E-mail: [sarah.kliethermes@psc.mo.gov](mailto:sarah.kliethermes@psc.mo.gov)

**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 23rd day of April, 2012.

**/s/ Sarah L. Kliethermes**

**MISSOURI PUBLIC SERVICE COMMISSION**

**REVISED STAFF REPORT ON**

**EMPIRE DISTRICT ELECTRIC COMPANY**

**CHAPTER 22  
ELECTRIC UTILITY RESOURCE PLANNING  
2012 ANNUAL UPDATE FILING**

**FILE NO. EO-2012-0294**

**April 23, 2012**

**JEFFERSON CITY, MISSOURI**

## **Table of Contents**

Background.....	1
Summary.....	1
4 CSR 240-22.080(3).....	1
Dates of Filings and Activities.....	2
Staff’s General Comments.....	3
Staff’s Comments Concerning Load Analysis and Load Forecast Process.....	3
Staff Comments Concerning Capacity Balance Sheet.....	5

## **Background**

On March 20, 2012, The Empire District Electric Company (“Empire” or “Company”) filed its 2012 Integrated Resource Plan Annual Update Report (“Annual Update”) in File No. EO-2012-0294, as required by 4 CSR 240-22 Electric Utility Resource Planning. This is the first annual update report filed by Empire to comply with 4 CSR 240-22.080(3) of the Missouri Public Service Commission’s (“Commission”) recently revised Chapter 22 rules<sup>1</sup>. This Report provides the Commission Staff’s (“Staff”) comments concerning Empire’s Annual Update, annual update workshop and compliance with 4 CSR 240-22.080(3).

## **Summary**

Empire’s Annual Update and the discussions at the annual update workshop generally indicated compliance with Chapter 22 Rules and prior agreements.<sup>2</sup> However, in certain instances, Empire has not satisfied certain aspects of applicable rules and agreements. Those instances are:

1. Failure to robustly explore the cost effectiveness of performing its load analysis and load forecast at the class cost-of-service level, as required by prior agreements, with a goal of achieving compliance with 4 CSR 240-22.020(37) and 4 CSR 240-22.030(7)(A), from which Empire has repeatedly sought waivers; and
2. Failure to utilize a 20 year planning horizon for its capacity planning, consistent with 4 CSR 240-22.020(43), 4 CSR 240-22.020(51), 4 CSR 240-22.020(52), 4 CSR 240-22.080(2)(D) and 4 CSR 240-22.080(3)(B);
3. To remedy these deficiencies, Empire should address in its future Chapter 22 filings Staff’s comments in this report concerning Empire’s load analysis and load forecasting process.

### **4 CSR 240-22.080(3)**

(3) Beginning in 2012, on or about April 1 of every year in which the utility is not required to submit a triennial compliance filing, each electric utility shall host an annual update workshop with the stakeholder group. The utility at its discretion may host additional update workshops when conditions warrant. Any additional update workshops shall follow the same procedures as the annual update workshop.

---

<sup>1</sup> 4 CSR 240-22 Rules effective June 30, 2011.

<sup>2</sup> *Agreement* approved by the Commission on December 21, 2011 in File No. EE-2012-0095, and *Nonunanimous Stipulation and Agreement* approved by the Commission on April 27, 2011 in File No. EO-2011-0066.

(A) The purpose of the annual update workshop is to ensure that members of the stakeholder group have the opportunity to provide input and to stay informed regarding the—

1. Utility's current preferred resource plan;
2. Status of the identified critical uncertain factors;
3. Utility's progress in implementing the resource acquisition strategy;
4. Analyses and conclusions regarding any special contemporary issues that may have been identified pursuant to 4 CSR 240-22.080(4);
5. Resolution of any deficiencies or concerns pursuant to 4 CSR 240-22.080(16);  
and
6. Changing conditions generally.

(B) The utility shall prepare an annual update report with both a public version and a highly-confidential version to document the information presented at the annual update workshop and *shall file the annual update reports with the commission no less than twenty (20) days prior to the annual update workshop*. The depth and detail of the annual update report shall generally be commensurate with the magnitude and significance of the changing conditions since the last filed triennial compliance filing or annual update filing. *If the current resource acquisition strategy has changed from that contained in the most-recently-filed triennial compliance filing or annual update filing, the annual update report shall describe the changes and provide updated capacity balance spreadsheets required pursuant to 4 CSR 240-22.080(2)(D)*. If the current resource acquisition strategy has not changed, the annual update report shall explicitly verify that the current resource acquisition strategy is the same as that contained in the most-recently-filed triennial compliance filing or annual update filing.

(C) *The utility shall prepare a summary report that shall list and describe any action items resulting from the workshop to be undertaken by the utility prior to next triennial compliance filing or annual update filing. The summary shall be filed within ten (10) days following the workshop.* If there are no changes as a result of the workshop, the utility is required to file a notice that it will not be making any changes to its annual update report.

(D) Stakeholders may file comments with the commission concerning the utility's annual update report and summary report within thirty (30) days of the utility's filing of the summary report.

(Emphasis added)

### **Dates of Filings and Activities**

Following are the dates of filings and activities related to this case:

- September 9, 2011 – Empire filed Application for Variance Concerning Commission Rule 4 CSR 240-22.080 in File No. EE-2012-0095;
- December 5, 2011 – Agreement filed in File No. EE-2012-0095;
- December 21, 2011 – Agreement approved in File No. EE-2012-0095;

- March 15, 2012 – filing of notice of stakeholder workshop in Commission’s electronic filing system (“EFIS”);
- March 20, 2012 – filing of Annual Update in EFIS;
- March 23, 2012 - filing of PowerPoint presentation for workshop in EFIS;
- March 27, 2012 – annual update workshop held at Commission’s offices in Jefferson City, MO; and
- April 12, 2012 – filing of Forecast of Capacity Balance for IRP Update in EFIS.

### **Staff’s General Comments**

Staff provides the following general comments concerning the stakeholder workshop, Annual Update, and summary report:

- The annual update workshop held on March 27, 2012 in Jefferson City, MO was attended by Empire, Staff, The Office of Public Counsel, Missouri Department of Natural Resources, and Dogwood Energy, LLC;
- The PowerPoint presentation used by Empire during the stakeholder workshop was an effective and efficient way to review the contents of the Annual Update;
- The Annual Update and the stakeholder workshop achieved their overall purpose to ensure that members of the stakeholder group have the opportunity to provide input and to stay informed regarding:
  1. Utility’s current preferred resource plan;
  2. Status of the identified critical uncertain factors;
  3. Utility’s progress in implementing the resource acquisition strategy;
  4. Analyses and conclusions regarding any special contemporary issues that may have been identified pursuant to 4 CSR 240-22.080(4);
  5. Resolution of any deficiencies or concerns pursuant to 4 CSR 240-22.080(16); and
  6. Changing conditions generally; and
- Empire’s change in forecasting methodology brings it closer to compliance with 4 CSR 240-22.030 and should result in a more accurate forecast.

### **Staff’s Comments Concerning Load Analysis and Load Forecast Process**

The most significant change in Empire’s resource planning process shown in this report is the movement of Empire from using a per customer regression model to forecast energy and



demand to an econometric model that includes the use of economic variables and end-use information. Staff commends Empire for this change. It moves Empire closer to compliance with 4 CSR 240-22.030 and should result in a more accurate forecast. The change in forecasting methodology has made a large impact on Empire's resource plan as described later in this report.

As provided in Paragraph 12b. of the *Nonunanimous Stipulation and Agreement* in File No. EO-2011-0066, Empire agreed to the following:

Staff's Recommendation to Grant Variances and Clarification Requested by Empire for its 2010 Electric Resource Planning Submission, March 31, 2010, File No. EE-2010-0246, Paragraph 30:

This outlines Empire's prior agreement with Staff to develop a plan addressing the feasibility of changing the Company's forecasting method for the IRP filing that will follow the September 2010 filing. This plan will include a proposed time line and cost estimate that can be used for further discussions. The plan will consider the use of economic variables; forecasting at the class cost of service level; and the requirements in the Load Analysis and Forecasting rule that will be in place at the time of the IRP filing that is subsequent to the September 2010 filing.

On March 21, 2012, during its annual update workshop, Empire provided favorable results regarding the use of economic variables and end-use modeling (load analysis) for the long term forecasting of electric energy and demand. However, Empire did not provide any analysis either supporting or refuting forecasting at the class cost-of-service level as required by prior agreements.<sup>3</sup> Instead, Empire provided the results of forecasting at the revenue class level (residential, commercial, and industrial). Empire contracted a portion of the load forecasting effort to Itron, Inc. ("Itron"). In the workshop, Staff asked an analyst from Itron, who was available by telephone, if he had evaluated load at the class cost-of-service level. His reply was that class cost-of-service forecasting was not evaluated, because the forecasts were "stable" at the revenue class level.

4 CSR 240-22.030 provides the minimum standards for maintaining historical databases, developing load forecasts and documentation. It is written on the basis that load analysis and load forecasting is developed to the "Major" class level. 4 CSR 240-22.020(37) defines Major class as the class cost-of-service class of the utility. Further, 4 CSR 240-22.030(7)(A) states:

The utility shall produce forecasts of monthly energy usage and demands at the time of the summer and winter peaks by major class for each year of the planning

---

<sup>3</sup> As a condition of waiver approved in File No. EE-2010-0246 and as included in the *Nonunanimous Stipulation and Agreement* in File No. EO-2011-0066.

horizon, and shall describe and document those forecasts in its triennial compliance filings. Where applicable, these major class forecasts shall be separated into their jurisdictional components.

To date, Empire has not included in its Chapter 22 filings load forecasts at the major class level as defined by 4 CSR 240-22.020(37) or a detailed analysis of why major class level forecasting was considered and not pursued. If Empire prefers to forecast at a class level other than the major classes, i.e. class cost-of-service classes, in its triennial filing, it should have already filed for a variance to do so and provided a detailed analysis sufficient to support its variance request.<sup>4</sup> Staff recommends that, if Empire intends to file in its triennial filing the load forecast process at the level that it presented in its annual report, Empire file as soon as possible its request, along with the supporting documentation that it agreed to acquire in the *Nonunanimous Stipulation and Agreement* in File No. EO-2011-0066.

### **Staff Comments Concerning Capacity Balance Sheet**

As a result of its revised load forecast,<sup>5</sup> Empire modified its 5-year business plan to delay, from 2015 to 2016, the project to convert Riverton 12 from a combustion turbine generator to a combined cycle turbine generator.<sup>6</sup> The change in peak demand forecast and the delay of the Riverton 12 conversion project caused Empire to change its capacity balance sheet.<sup>7</sup>

However, the updated capacity balance sheet Empires filed did not include all of the line items on page 23, *Forecast of Capacity Balance (MW)* of the revised Chapter 22 rules.

Specifically, the following Chapter 22 subsections apply to this situation:

4 CSR 240-22.080(3)(B): ... The depth and detail of the annual update report shall generally be commensurate with the magnitude and significance of the changing conditions since the last filed triennial compliance filing or annual update filing. If the *current resource acquisition strategy* has changed from that contained in the most-recently-filed triennial compliance filing or annual update

---

<sup>4</sup> 4 CSR 240-22.080(13) states in part: “Upon written application made at least twelve (12) months prior to a triennial compliance filing, ... the commission may waive or grant a variance from a provision of 4 CSR 240-22.030-4 CSR 240-22.080 for good cause shown. The commission may grant an application for waiver or variance filed less than twelve (12) months prior to the triennial compliance filing upon a showing of good cause for the delay in filing the application for waiver or variance.”

<sup>5</sup> See Table 4 Net Peak Demand Forecast Comparison and Table 5 Annual Energy Forecast Comparison in Empire’s *2012 Integrated Resource Plan Annual Update Report*.

<sup>6</sup> See Table 6 Preferred Plan Project Comparison in Empire’s *2012 Integrated Resource Plan Annual Update Report* for a list of project during the five year business plan which may have been impacted by the annual update process.

<sup>7</sup> See Table 8 Load and Capacity Balance Report – 5-Year Plan (March 2012) in Empire’s *2012 Integrated Resource Plan Annual Update Report* and also see slide number 18 of the PowerPoint presentation file on March 23, 2012 in File No. EO-2012-0294.

filing, the annual update report shall describe the changes and provide updated capacity balance spreadsheets required pursuant to 4 CSR 240-22.080(2)(D).

4 CSR 240-22.020(43): *Planning horizon* means a future time period of at least twenty (20) years' duration over which the costs and benefits of alternative resource plans are evaluated.

4 CSR 240-22.020(51): *Resource acquisition strategy* means a preferred resource plan, an implementation plan, a set of contingency resource plans, and the events or circumstances that would result in the utility moving to each contingency resource plan. It includes the type, estimated size, and the timing of resources that the utility plans to achieve in its preferred resource plan.

4 CSR 240-22.020(52): *Resource plan* means a particular combination of demand-side and supply-side resources to be acquired according to a specified schedule over the planning horizon.

(Emphasis added)

The above citations from Chapter 22 rules are clear that the planning horizon is 20 years and not implementation period (4 CSR 240-22.020(25): Implementation period means the time interval between the triennial compliance filing required of each utility pursuant to 4 CSR 240-22.080.) Therefore, the capacity balance sheet should have contained information for the entire 20-year planning horizon, not just for the 2012-2016. Because Empire is making a full compliance filing on April 1, 2013 (less than eleven months from now) and Empire has not completed the work necessary to provide a capacity balance sheet that it has confidence in, Staff is not recommending, for this annual report filing, that the Commission require Empire to provide a twenty year capacity balance sheet.

Following Staff's request to do so, Empire filed on April 12, 2012 a capacity balance sheet for 2012 – 2016 which does include all of the line items on page 23, *Forecast of Capacity Balance (MW)* of the revised Chapter 22 rules.

Empire's concerns about providing a 20-year capacity balance sheet reveal that it believes the change in the forecast has had a very significant impact on the Company's *resource acquisition strategy*. Because Empire is making a full compliance filing on April 1, 2013 (less than eleven months from now), Staff is not recommending that the annual update be revised to include the updating of other major assumptions (in addition to the load forecast) and performance of requirements in 4 CSR 240-22.060 Integrated Resource Plan and Risk Analysis and 4 CSR 240-22.070 Resource Acquisition Strategy Selection as part of the annual update

filing. Empire will be in the process of analyzing the impact of this new forecast along with updating other major assumptions soon if it has not started this process already. A recommendation to update the annual report would likely pull resources away from the more comprehensive triennial filing that is due to be filed in less than a year.

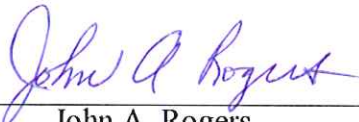
**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of The Empire District            )  
Electric Company's 2012 Update                )  
Summary Report Being Filed Pursuant         )  
to Rule 4 CSR 240-22.080                        )            File No. EO-2012-0294

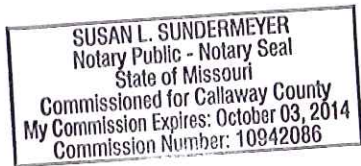
**AFFIDAVIT OF JOHN A. ROGERS**

STATE OF MISSOURI    )  
                                  ) ss  
COUNTY OF COLE     )

John A. Rogers, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Revised Staff Report on pages 1-3 + 5-7, and the facts therein are true and correct to the best of his knowledge and belief.

  
\_\_\_\_\_  
John A. Rogers

Subscribed and sworn to before me this 23<sup>rd</sup> day of April, 2012.



  
\_\_\_\_\_  
Notary Public

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of The Empire District            )  
Electric Company's 2012 Update                )  
Summary Report Being Filed Pursuant        )  
to Rule 4 CSR 240-22.080                        )            File No. EO-2012-0294

**AFFIDAVIT OF DAVID C. ROOS**

STATE OF MISSOURI    )  
                                  ) ss  
COUNTY OF COLE     )

David C. Roos, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Revised Staff Report on pages 3, 4 & 5, and the facts therein are true and correct to the best of his knowledge and belief.

  
\_\_\_\_\_  
David C. Roos

Subscribed and sworn to before me this 23<sup>rd</sup> day of April, 2012.

SUSAN L. SUNDERMEYER  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Callaway County  
My Commission Expires: October 03, 2014  
Commission Number: 10942086

  
\_\_\_\_\_  
Notary Public