

Exhibit No.:  
Issue: Fuel Adjustment, Rate Case Costs, Ice  
Storm, Project Costs, Asbury Environmental  
Upgrades and Rate Design  
Witness: W. Scott Keith  
Type of Exhibit: Surrebuttal Testimony  
Sponsoring Party: Empire District Electric  
Case No. ER-2011-0004  
Date Testimony Prepared: April 2011

**Before the Public Service Commission**

**of the State of Missouri**

**Surrebuttal Testimony**

**of**

**W. Scott Keith**

**April 2011**

TABLE OF CONTENTS  
OF  
W. SCOTT KEITH  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION  
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<b><u>SUBJECT</u></b>	<b><u>PAGE</u></b>
<b>INTRODUCTION</b> .....	1
<b>POSITION</b> .....	1
<b>PURPOSE</b> .....	1
<b>FUEL ADJUSTMENT MECHANISM</b> .....	3
<b>RATE CASE EXPENSE</b> .....	5
<b>ICE STORM AMORIZATION</b> .....	13
<b>CARBON SEQUESTRATION/COMPRESSED AIR STORAGE PROJECTS</b> .....	14
<b>ENVIRONMENTAL UPGRADES AT ASBURY</b> .....	17
<b>STAFF RATE DESIGN</b> .....	18
<b>OPC RATE DESIGN</b> .....	19

SURREBUTTAL TESTIMONY  
OF  
W. SCOTT KEITH  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. ER-2011-0004

1 **INTRODUCTION**

2 **Q. STATE YOUR NAME AND ADDRESS PLEASE.**

3 A. My name is W. Scott Keith and my business address is 602 Joplin Street, Joplin,  
4 Missouri.

5 **POSITION**

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

7 A. I am presently employed by The Empire District Electric Co. (“Empire” or “the  
8 Company”) as the Director of Planning and Regulatory. I have held this position  
9 since August 1, 2005. Prior to joining Empire, from 1995 to July 2005, I was  
10 Director of Electric Regulatory Matters in Kansas and Colorado for Aquila, Inc.

11 **Q. ARE YOU THE SAME W. SCOTT KEITH THAT EARLIER PREPARED  
12 AND FILED DIRECT AND REBUTTAL TESTIMONY IN THIS RATE  
13 CASE BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION  
14 (“COMMISSION”) ON BEHALF OF EMPIRE?**

15 A. Yes.

16 **PURPOSE**

17 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

18

1 A. My surrebuttal testimony will discuss several issues related to Empire’s Fuel  
2 Adjustment Clause (“FAC”) that have been raised by the Commission Staff  
3 (“Staff”) and the Office of the Public Counsel (“OPC”) in their respective rebuttal  
4 testimonies in this rate case. My surrebuttal testimony will also respond to  
5 comments made by the OPC in connection with rate case expense, the amortization  
6 of ice storm costs, and elimination of carbon sequestration and compressed air  
7 storage costs. I will also respond to Staff rebuttal testimony concerning the  
8 potential environmental upgrades at Empire’s Asbury generating unit. In addition, I  
9 will address the customer charge recommendations made by the Staff and the OPC.  
10 Specifically, I will address the following:

- 11 • The new FAC base calculation proposed by the Staff;
- 12 • The OPC’s support of Staff’s proposed change in the 95/5 percent energy cost  
13 sharing mechanism to an 85/15 percent sharing mechanism;
- 14 • The OPC’s recommendations concerning rate case expenses in this case;
- 15 • The OPC’s recommendations concerning a change in the amortization of ice storm  
16 costs;
- 17 • The OPC’s recommendations concerning the elimination of carbon sequestration  
18 and compressed air storage costs;
- 19 • The Staff’s comments concerning Asbury Environmental Upgrades;
- 20 • The Staff’s proposed customer charges for the residential rate classification; and,
- 21 • The OPC’s position that Empire’s current monthly customer charges for residential  
22 customers should not be raised.

1 **FUEL ADJUSTMENT MECHANISM**

2 **Q. HAVE YOU REVIEWED THE FAC POSITIONS TAKEN BY STAFF**  
3 **WITNESS BARNES IN HIS REBUTTAL TESTIMONY IN THIS CASE?**

4 A. Yes. I reviewed Mr. Barnes' rebuttal testimony in this case.

5 **Q. DO YOU HAVE ANY CONCERNS WITH THE FAC POSITIONS TAKEN**  
6 **BY MR. BARNES IN HIS REBUTTAL TESTIMONY?**

7 A. Yes.

8 **Q. PLEASE DESCRIBE YOUR CONCERNS.**

9 A. Empire's primary concerns with Mr. Barnes rebuttal testimony are related to the  
10 level of the FAC base he is sponsoring. In addition, Empire is still opposed to the  
11 85/15 percent sharing mechanism being sponsored by Staff.

12 **Q. WHY IS EMPIRE OPPOSED TO THE NEW STAFF FAC BASE THAT IS**  
13 **RECOMMENDED BY MR. BARNES IN HIS REBUTTAL TESTIMONY?**

14 A. The FAC base proposed in Staff's rebuttal is still unreasonably low and will not  
15 allow Empire a sufficient opportunity to earn the return on equity authorized by the  
16 Commission in this case. The FAC base proposed in Barnes' rebuttal testimony  
17 understates the average cost of energy that Empire is facing in 2011, when the rates  
18 set in this case will be in effect and thereby would deny Empire an opportunity to  
19 recover increases in its prudently incurred energy costs.

20 **Q. WAS THE STAFF'S FAC BASE CALCULATED THE SAME WAY IN ITS**  
21 **DIRECT AND REBUTTAL?**

22 A. No. The FAC base proposed by the Staff in Mr. Barnes' rebuttal testimony is the  
23 result of a different calculation than the FAC base sponsored by the Staff in its

1 direct case. The changes that the Staff has apparently made to the Staff's FAC  
2 calculation in its direct case are not explained or fully supported in Staff witness  
3 Barnes' rebuttal testimony.

4 **Q. DOES THE STAFF'S REBUTTAL FAC BASE CALCULATION EXCLUDE**  
5 **KNOWN AND MEASUREABLE CHANGES IN FUEL AND ENERGY**  
6 **COSTS?**

7 A. Yes. The Staff's proposed FAC bases, both in the direct case and the new FAC  
8 base being presented in Mr. Barnes' rebuttal testimony, ignore known and  
9 measurable changes in the cost of coal, rail transportation, wind farm energy, and  
10 natural gas storage costs, among others. These omissions will directly and  
11 negatively impact Empire's opportunity to earn the return on equity authorized in  
12 this case especially when coupled with Staff's proposal to automatically disallow  
13 15 percent of any prudently incurred increases in the Company's fuel and purchased  
14 power costs. Empire witness Todd Tarter will address the specific energy  
15 cost/price changes that the Staff has omitted from its estimate of Empire's ongoing  
16 energy costs in Staff's rebuttal testimony.

17 **Q. HAVE YOU REVIEWED THE REBUTTAL TESTIMONY FILED BY OPC**  
18 **WITNESS RYAN KIND IN THIS CASE?**

19 A. Yes.

20 **Q. DOES THE OPC SUPPORT THE STAFF'S RECOMMENDATION THAT**  
21 **THE EXISTING FAC SHARING MECHANISM BE CHANGED FROM**  
22 **95%/5% TO 85%/15%?**

23 A. Yes.

1 **Q. HOW DOES EMPIRE RESPOND TO THE FAC POSITION TAKEN BY**  
2 **OPC’S WITNESS KIND?**

3 A. Empire is opposed to the Staff’s change in the FAC sharing mechanism and  
4 likewise disagrees with the OPC’s position supporting the Staff’s FAC  
5 recommendation. As I mentioned in my rebuttal testimony, Staff’s proposal is a  
6 penalty, not an incentive, counter to the intent of the Missouri statute that is the  
7 basis of the Commission’s FAC rule and is at odds with 4 CSR 240-20.090(2)(A).  
8 The Staff’s sharing proposal will result in an automatic disallowance of fifteen  
9 percent of Empire’s prudently incurred energy cost increases, which will directly  
10 impact the Company’s opportunity to earn its authorized return on equity. It also  
11 has the potential to be detrimental to Empire’s credit quality given the positive  
12 statements made by S&P concerning the existing FAC and the 95/5 percent sharing  
13 mechanism. The following is an excerpt from the S&P credit report referenced by  
14 the Staff at page 15 of the Staff Report-Cost of Service:

15 These characteristics are tempered by a historically challenging regulatory  
16 environment in Missouri, which we view as “less credit supportive.” However, the  
17 Missouri Public Service Commission (MPSC) appears to be becoming more  
18 responsive to the company’s rate needs, as evidenced by approval of settlement  
19 agreements and *implementation of fuel adjustment clause (FAC) that enables the*  
20 *company to recover 95% of changes in fuel and purchased power costs in a timely*  
21 *manner(emphasis added)*

22 **RATE CASE EXPENSE**

23 **Q. HAVE YOU REVIEWED THE OPC REBUTTAL TESTIMONY FILED BY**  
24 **SHAWN LAFFERTY CONCERNING RATE CASE EXPENSE?**

25 A. Yes. I have reviewed the rebuttal testimony filed by Mr. Lafferty.

26 **Q. DO YOU AGREE WITH OPC POSTION THAT ONLY RATE CASE**

1           **EXPENSES THAT BENEFIT RATEPAYERS SHOULD BE INCLUDED IN**  
2           **EMPIRE’S OVERALL REVENUE REQUIREMENT?**

3    A.    No. The OPC’s proposal is counter to the regulatory model that has been put in  
4           place for the benefit of Missouri ratepayers and that has been used in Missouri for  
5           many years.

6    **Q.    HOW SO?**

7    A.    The investor-owned utility industry in Missouri is heavily regulated by the  
8           Commission. This system of regulation was put in place for the protection of utility  
9           customers, not the utility. All of Empire’s tariffs and rules and regulations  
10          governing the services that it offers the public are subject to Commission approval,  
11          and cannot be changed without the approval of the Commission. Many of these  
12          tariff changes can only be proposed during the course of a general rate case. In  
13          addition to the rate case rules, the Commission has numerous rules that govern how  
14          utilities operate. For example, the Commission requires that utilities file such  
15          things as depreciation studies, integrated resource plans, vegetation management  
16          reports, service and infrastructure management reports and reliability reports.  
17          There are regulatory compliance costs associated with all of the Commission’s rules  
18          and regulations. Utilities have historically been allowed to recover prudent and  
19          reasonable regulatory compliance costs, such as rate case costs, as part of the  
20          utility’s overall revenue requirement.

21   **Q.    WHY?**

22   A.    The benefits associated with regulation in Missouri rest with the customer, not the  
23          utility. This is certainly the case with the laws governing rate changes, which



1 provide a long suspension period before any changes in rates or rules and  
2 regulations can occur. In these types of Commission proceedings there is also an  
3 extensive audit and review of Empire's operations by the OPC, Staff and other  
4 parties so that all factors affecting the Company's operations can be taken into  
5 consideration by the Commission when it renders its decision on the proposed rate  
6 changes.

7 **Q. HOW LONG IS THE PROCESSING PERIOD IN A MISSOURI RATE**  
8 **CASE?**

9 A. The rate case procedure used in Missouri allows a 10-month suspension period after  
10 the requested tariff effective date (which is usually 30 days after a tariff filing)  
11 during which the audit, discovery and formal hearing process take place. This rate  
12 case process can be very costly depending upon the issues that are developed over  
13 the course of the audit, discovery and formal hearing process. For example,  
14 Empire's current rate case includes issues surrounding the reasonableness of the  
15 construction expenditures on the Iatan and Plum Point generating units. In order to  
16 meet its burden of proof on this issue, Empire will incur additional rate case costs  
17 and expenses that would not be the case in a more routine rate case. For example,  
18 some of the support for the Iatan expenditures may by necessity be provided by  
19 individuals who are not Empire employees.

20 **Q. IS THE COMMISSION REQUIRED TO SUSPEND TARIFFS SEEKING TO**  
21 **INCREASE RATES AND TO HOLD HEARINGS ON THOSE TARIFFS?**

22 A. No, the Commission is not required to suspend a utility's tariff filing; that decision  
23 is wholly within the Commission's discretion. And if the Commission did not

1 suspend the tariff, a large portion of the Company's rate case expense would be  
2 unnecessary. Even if the Commission elected not to suspend a tariff filing, the  
3 Company would still incur some rate case expense in order to comply with the  
4 provisions of the Commission's rules that require a utility seeking an increase in  
5 rates to include with its tariff filing testimony fully supporting the proposed  
6 increase.

7 **Q. DO YOU AGREE WITH MR. LAFFERTY'S STATEMENT THAT RATE**  
8 **CASE EXPENSES ARE CONTROLLED BY EMPIRE?**

9 A. No. During the eleven-month processing period in a rate case in Missouri there are  
10 a number of issues and disputes that can arise. The resolution of these  
11 disputes/issues can involve additional costs and the use of consultants and attorneys  
12 that were not anticipated when a rate case was initially filed. Many of these issues  
13 can involve positions taken by the other parties to the rate case, such as Staff, OPC,  
14 or an industrial customer etc. Empire management has no direct control over the  
15 number of issues or disputes that can arise and has limited ability to control the cost  
16 associated with the resolution of these issues.

17 **Q. DOES EMPIRE AGREE WITH MR. LAFFERTY'S POSITION THAT ALL**  
18 **OF THE OUTSIDE CONSULTING FEES EMPIRE HAS INCURRED IN**  
19 **CONNECTION WITH THIS RATE CASE SHOULD BE EXCLUDED**  
20 **FROM EMPIRE'S REVENUE REQUIREMENT?**

21 A. No. Empire has an obligation to support the various proposals included in its rate  
22 case. In certain instances this requires the use of expert testimony from outside the  
23 Empire organization. In this case, the cost of equity, class cost of service study and

1 depreciation study, of which the latter two were required under Commission rules  
2 or prior Commission rulings, required the use of outside independent consultants to  
3 develop the required analysis and provide expert testimony supporting the analysis.  
4 The costs that Empire has incurred in connection with each of these studies or  
5 analyses have been prudent and reasonable and cost effective for Empire and  
6 ultimately its customers.

7 **Q. IS IT UNUSUAL OR IMPRUDENT FOR A UTILITY TO RETAIN AN**  
8 **OUTSIDE EXPERT TO PERFORM AN INDEPENDENT APPRAISAL OF**  
9 **THE COST OF EQUITY IN CONNECTION WITH A RATE CASE?**

10 A. No. In fact, it has been my experience over the last 38 years in the utility business  
11 that the use of outside expert financial consultants to provide an independent  
12 opinion on the cost of equity is the norm, not the exception. An outside appraisal  
13 of the cost of equity for a utility provides the Commission with an independent  
14 analysis of the cost of equity that is difficult for an employee of the utility to  
15 perform.

16 **Q. DOES EMPIRE PERFORM CLASS COST OF SERVICE STUDIES ON A**  
17 **ROUTINE BASIS?**

18 A. No. Empire does not develop a class cost of service study for each and every rate  
19 case it files. Several rate cases and several rate adjustments may occur before  
20 another cost of service study becomes necessary or required. Thus, in Empire's  
21 case it is more cost effective to retain an outside consultant to help guide the  
22 analysis when a class cost of service study is required rather than retain a full time  
23 employee to perform all aspects of such an analysis.

1 **Q. WERE EMPIRE EMPLOYEES INVOLVED WHEN THE CLASS COST OF**  
2 **SERVICE STUDY FOR THIS CASE WAS PREPARED?**

3 A. Yes, they were. This enables Empire to hold down the costs associated with the  
4 study and take advantage of the employee training that occurs while doing some of  
5 the lower level analysis work that is required to perform a class cost of service  
6 study. In this particular case much of the detailed analysis work was performed by  
7 Empire employees under the guidance of the outside consultant. The consultant  
8 performed the final class cost of service allocations using a proprietary cost of  
9 service model, provided an expert opinion regarding the results of the study, made  
10 recommendations on rate design and provided expert direct testimony supporting  
11 the results of class cost of service study in the rate case.

12 **Q. DID BLACK & VEATCH PERFORM OTHER SERVICES FOR EMPIRE IN**  
13 **CONNECTION WITH THIS RATE CASE?**

14 A. Yes. Black & Veatch was retained to assist in the development of a depreciation  
15 study, which was required by the Commission's rules. In addition to performing  
16 the study, the Staff had requested that the next time Empire filed a depreciation  
17 study that Empire analyze its property records and present the property record  
18 information in a specific format. In order to accomplish the tasks the Staff had  
19 requested for this depreciation study, Empire retained and then hired Max Sheffield  
20 as a full time employee since Empire did not have sufficient internal staff to  
21 perform the work the Staff had requested.

22 **Q. HAS EMPIRE RETAINED OUTSIDE CONSULTANTS IN CONNECTION**  
23 **WITH PAST MISSOURI DEPRECIATION STUDIES?**

1 A. Yes. As has been typical in past Empire depreciation studies, an outside consultant  
2 was retained to provide an independent expert opinion regarding Empire's existing  
3 depreciation rates and where appropriate, recommend changes to those rates such  
4 that the depreciation rates matched the useful life of the property, given Empire's  
5 experience with net salvage.

6 **Q. HOW WOULD YOU CHARACTERIZE THE CHARGES BILLED BY**  
7 **THESE OUTSIDE CONSULTANTS IN THIS RATE CASE?**

8 A. They are reasonable, prudent and necessary.

9 **Q. PLEASE EXPLAIN.**

10 A. As I mentioned earlier, the use of an outside, independent consultant to determine  
11 the cost of equity in a rate case is reasonable and necessary given the obligation the  
12 Company has to fully support its rate case. The fees that have been charged by  
13 Financial Strategy Associates in connection with this study are reasonable and  
14 prudent.

15 The Max Sheffield fees related to the depreciation study and the Black & Veatch  
16 fees for work performed in connection with the depreciation study and class cost of  
17 service study are also reasonable, prudent and necessary. Both the class cost of  
18 service study and depreciation study submitted by Empire in this proceeding were  
19 required by the Commission. Empire structured the approach to both studies in  
20 such a way that the overall costs incurred in connection with the studies were as  
21 low as possible.

22 **Q. DO YOU AGREE WITH MR. LAFFERTY'S SUGGESTION AT PAGES 18**  
23 **AND 19 OF HIS REBUTTAL TESTIMONY THAT THE COST OF EQUITY**

1           **ANALYSIS FOR RATE CASES AND THE PERIODIC DEPRECIATION**  
2           **AND COST OF SERVICE STUDIES SHOULD BE PERFORMED BY**  
3           **EMPIRE EMPLOYEES?**

4    A.    No. It would not be efficient or effective in terms of the overall cost and  
5           presentation. The independent analysis of the cost of equity in rate cases is  
6           reasonable, necessary, and prudent. An independent review of the cost of equity is  
7           essentially required for rate case purposes if the Company is going to fully support  
8           its position on the cost of equity. Likewise, it is reasonable, necessary and prudent  
9           to use an outside consultant to provide a periodic independent review of the  
10          Company's depreciation rates because of the unique expertise required to perform  
11          such a review. Lastly, it is reasonable, necessary and prudent to retain an  
12          independent outside expert in connection with a rate case in which cost of service  
13          and rate design are scheduled to become issues as was the case in this rate case.  
14          Certain aspects of the analysis work required under the cost of service and  
15          depreciation studies are already performed by Empire employees, but in order to  
16          use Empire personnel in the most efficient and cost effective manner possible,  
17          Empire has elected to leave the more specialized aspects of each of these projects to  
18          an outside professional.

19    **Q.    DOES EMPIRE HAVE ANY EMPLOYEES WHO CAN PROVIDE THE**  
20           **KIND OF ANALYSES AND TESTIMONY PROVIDED BY THE EXPERTS**  
21           **EMPIRE HAS RETAINED IN THIS CASE?**

22    A.    No. At the present time, Empire has no employees with the necessary time and  
23           experience to provide these types of analyses. In addition, as I mentioned earlier, it

1 is important to present an independent, outside opinion on these matters in a rate  
2 case, and this type of presentation would be difficult for an Empire employee to  
3 duplicate.

4 **Q. DID THE OPC SUGGEST THAT THE REQUIRED RETURN ON EQUITY,  
5 DEPRECIATION STUDY AND COST OF SERVICE STUDY BE  
6 PERFORMED BY EMPIRE PERSONNEL?**

7 A. Yes.

8 **Q. WOULD EMPIRE INCUR ADDITIONAL COSTS IF IT WERE TO  
9 PERFORM THESE STUDIES IN HOUSE?**

10 A. Yes. For example, the preparation of the studies and the continuing professional  
11 education requirements associated with the performance and presentation of the  
12 analyses would cause an increase staffing levels. In addition, Empire would have to  
13 develop or purchase software to perform the required analyses.

14 **Q. DID THE OPC INCLUDE ANY OF THE ADDITIONAL COSTS THAT  
15 WOULD BE ASSOCIATED WITH SUCH A CHANGE IN PROCEDURE IN  
16 EMPIRE'S REVENUE REQUIREMENT IN THIS RATE CASE?**

17 A. No. The OPC proposed an adjustment that eliminated 100 percent of the consulting  
18 costs Empire has incurred in these areas in this case, but did not include any of the  
19 additional costs Empire would incur to implement such a policy, such as an  
20 increase in overall staffing levels, training costs or an increase in software costs.

21 **ICE STORM AMORIZATION**

22 **Q. HAVE YOU REVIEWED THE OPC'S POSTION ON ICE STORM  
23 AMORTIZATION THAT IS CONTAINED IN THE REBUTTAL**

1           **TESTIMONY OF OPC WITNESS SHAWN LAFFERTY?**

2    A.    Yes.

3    **Q.    DO YOU AGREE WITH HIS RECOMMENDATION THAT THE**  
4           **AMORTIZATION PERIOD PREVIOUSLY APPROVED BY THE**  
5           **COMMISSION FOR PAST ICE STORM COSTS BE CHANGED AT THIS**  
6           **TIME?**

7    A.    No. The amortization period previously approved by the Commission with respect  
8           to these costs is reasonable for purposes of the revenue requirement in this case,  
9           and Mr. Lafferty's suggestion that it will result in an over-recovery of ice storm  
10          costs for Empire is speculative.

11 **Q.    HAS EMPIRE FULLY RECOVERED THE COSTS ASSOCIATED WITH**  
12 **THE 2007 ICE STORMS?**

13 A.    No. The amortization period for each ice storm started shortly after the events took  
14          place. As a result, Empire has already absorbed a substantial portion of the ice  
15          storm costs that were incurred in connection with these two ice storms, 19 months  
16          in the case of the first ice storm and 8 months in the case of the second ice storm.  
17          Mr. Lafferty's recommendation did not take this into account. In addition, Empire  
18          does not earn a return on this deferred asset and the lengthening of the amortization  
19          period will adversely impact Empire's return on assets.

20 **CARBON SEQUESTRATION/COMPRESSED AIR STORAGE PROJECTS**

21 **Q.    HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF OPC**  
22 **WITNESS TED ROBERTSON REGARDING THE CARBON**  
23 **SEQUESTRATION/COMPRESSED AIR STORAGE PROJECTS?**



1 A. Yes.

2 **Q. PLEASE DESCRIBE THESE PROJECTS.**

3 A. The carbon sequestration project involves a series of test holes at various power  
4 plant sites around the state of Missouri to determine if it is feasible to sequester  
5 carbon near power plants. This project is currently funded by Department of  
6 Energy (DOE) and six utilities, including KCPL GMO, City Utilities of Springfield,  
7 KCPL, Ameren, Associated Electric Cooperative, Inc. and Empire. The results of  
8 the first test hole drilled near Springfield, Missouri indicated that the potential for  
9 storage of carbon in southwest Missouri is unfavorable. There are currently plans  
10 to continue the testing of underground storage sites in Missouri at several other  
11 power plant sites, including Iatan, Lake Road, Thomas Hill and Rush Island.

12 The compressed air storage project involved a test of the viability/feasibility of  
13 using compressed air storage to store excess wind energy during off-peak hours and  
14 then release the stored energy for use during on-peak hours. This system, if  
15 feasible, would have enabled Empire to the efficiency of its wind farm supply  
16 resources, which produce power on an intermittent basis. The test involved the use  
17 of an existing salt mine near Lyons, Kansas, and involved Empire, BSC Holdings,  
18 Inc., the mine owner, and Sega Inc. The test proved that the project was feasible  
19 from a technical standpoint, but was not cost effective in terms of the cost of the  
20 energy produced.

21 **Q. DO YOU AGREE WITH THE OPC RECOMMENDATION THAT THE**  
22 **COSTS ASSOCIATED WITH THESE PROJECTS SHOULD BE**  
23 **COMPLETELY ELIMINATED FROM EMPIRE'S ONGOING REVENUE**

1           **REQUIREMENT?**

2    A.    No. Both of these projects are directly tied to the provision of electric service in the  
3           Empire service area and are valid utility costs that should be considered for  
4           recovery from Empire’s customers within the context of a rate case. In fact, the  
5           carbon sequestration project took place very near to Empire’s service area in  
6           Springfield, Missouri and the compressed air experiment was related to improving  
7           the efficiency of Empire wind energy resources. The complete elimination of these  
8           types of projects from Empire’s revenue requirement would act as a disincentive  
9           towards this type of research and development. In addition, the carbon  
10          sequestration research in Missouri is ongoing, and Empire with the other project  
11          participants is attempting to expand the research to other power plant sites in  
12          Missouri.

13   **Q.    HAVE ALTERNATIVE SUPPLY RESOURCES SUCH AS COMPRESSED**  
14   **AIR BEEN INCLUDED IN EMPIRE’S INTERGRATED RESOUC**  
15   **PLANNING (“IRP”)?**

16   A.    Yes. The Commission’s IRP rules require a comprehensive review of many supply  
17          alternatives every three years. By investigating specific supply alternatives such as  
18          compressed air, Empire can incorporate the results from its investigation into the  
19          IRP process by using information it has developed independently rather than relying  
20          on generic industry information.

21   **Q.    IS EMPIRE REQUIRED TO ADDRESS THE POTENTIAL IMPACT OF**  
22   **FUTURE ENVIRONMENTAL REGULATIONS IN THE IRP PROCESS?**

23   A.    Yes. Future environmental rules concerning carbon and their future impact on

1 Empire's supply-side resources are one of the most prominent issues addressed in  
2 Empire's IRP.

3 **Q. IS THE POTENTIAL FOR CARBON SEQUESTRATION IMPORTANT TO**  
4 **EMPIRE?**

5 A. Yes. If there are future restrictions on the release of carbon dioxide, carbon  
6 sequestration will become very important. This project was designed to test that  
7 process and provide valuable information concerning the process. The information  
8 gathered will be used in Empire's future integrated resource planning.

9 **ENVIRONMENTAL UPGRADES AT ASBURY**

10 **Q. HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF STAFF**  
11 **WITNESS JOHN A. ROBINETT?**

12 A. Yes.

13 **Q. DO YOU AGREE WITH MR. ROBINETT'S CHARACTERIZATION OF**  
14 **THE FUTURE ENVIRONMENTAL UPGRADES AT EMPIRE'S ASBURY**  
15 **UNIT AS SPECULATIVE (PAGE 22, LINE 11, REBUTTAL TESTIMONY)?**

16 A. No. The Environmental Protection Agency ("EPA") is actively considering the  
17 implementation of new rules that would require Empire to install new  
18 environmental equipment at Asbury if the unit is to continue to be operated. The  
19 entire electric industry in the United States, both public and private, is in the  
20 process of planning how to cope with these new environmental rules. The new  
21 rules will have a major impact on Empire and the industry in general, and their  
22 impact should be taken into account in not only the IRP process, but as to what  
23 impact the new rules will have on costs, such as depreciation expense and

1 depreciation rates and the retirement date of generation facilities.

2 **Q. WHAT ENVIRONMENTAL UPGRADES ARE IN THE PLANNING STAGE**  
3 **AT ASBURY?**

4 A. Empire is currently considering the feasibility of the installation of a scrubber, bag-  
5 house and activated carbon system at Asbury to meet the new environmental  
6 requirements associated with the Clean Air Interstate Rule (“CAIR”) and its  
7 replacement; the Clean Air Transport Rule (“CATR”); the Coal Combustion  
8 Residuals rule (“CCR”) related to ash, mercury and hazardous air pollutants  
9 (Hq/HAPS) and carbon dioxide (CO<sub>2</sub>).

10 **Q. ARE THESE NEW ENVIRONMENTAL RULES EXPECTED TO HAVE AN**  
11 **IMPACT ON OTHER EMPIRE GENERATING UNITS?**

12 A. Yes. There are two coal-fired units located at the Riverton sits that will be  
13 converted to natural gas or retired as a result of the new environmental rules.

14 **STAFF RATE DESIGN**

15 **Q. HAVE YOU REVIEWED THE REBUTTAL TESTIMONY FILED BY**  
16 **STAFF WITNESS MICHAEL S. SCHEPERLE?**

17 A. Yes.

18 **Q. DOES EMPIRE AGREE WITH THE STAFF’S PROPOSED MONTHLY**  
19 **CUSTOMER CHARGES FOR RESIDENTIAL CUSTOMERS OF \$13?**

20 A. No. Both Empire and Staff presented cost of service studies that supported raising  
21 the customer charges to higher levels. For example, the Staff’s cost of service  
22 estimated Empire’s current residential customer cost at \$17.43 per month. This is  
23 substantially higher than Empire’s existing monthly customer charge of \$12.52.

1 Yet, the Staff only recommended a \$0.48 increase in the residential customer,  
2 despite this cost support. Empire recommends that the residential customer charge  
3 be increased to \$15 per month. Doing so will better match the customers fixed  
4 charge with the fixed costs incurred by Empire.

5 **OPC RATE DESIGN**

6 **Q. HAVE YOU READ THE REBUTTAL TESTIMONY OF OPC WITNESS**  
7 **BARBARA A. MEISENHEIMER?**

8 **A.** Yes.

9 **Q. WHAT DID THE OPC RECOMMEND REGARDING EMPIRE'S**  
10 **CUSTOMER CHARGES?**

11 **A.** The OPC recommended that no increase in Empire's customer charges.

12 **Q. DO YOU AGREE WITH THE OPC'S POSITION?**

13 **A.** No. Empire's monthly customer costs are higher than the existing residential  
14 customer charge and the monthly customer charge to residential customers should  
15 be raised to reflect these costs. Both the Empire and Staff cost of service studies  
16 support an increase in the residential customer charge.

17 **Q. DO YOU AGREE WITH OPC WITNESS MEISENHEIMER'S**  
18 **CONTENTION THAT HIGHER CUSTOMER CHARGES DIMINISH THE**  
19 **PRICE SIGNAL THAT ENCOURAGES ENERGY CONSERVATION?**

20 **A.** No, not if the customer charge is based upon cost. A higher than cost-justified  
21 volumetric charge, which is the result of the OPC's position, will also raise a  
22 customer's bill during periods of hotter and/or colder than normal weather when  
23 consumption of electricity tends to increase. The OPC's position supports the

1 continuation of a mismatch in fixed and variable cost recovery, with the majority of  
2 the cost recovery taking place as though it were variable, when in reality the  
3 majority of Empire's costs are fixed.

4 **Q. HOW DOES THE OPC'S POSITION ON VARIABLE COST RECOVERY**  
5 **MESH WITH THE MOVEMENT TOWARDS THE IMPLEMENTATION**  
6 **OF MORE ENERGY EFFICIENCY BY ELECTRIC UTILITIES?**

7 A. It does not mesh. The OPC's position in this case is at odds with this trend and  
8 raises one of the traditional barriers to the utility implementation of energy  
9 efficiency even higher. It also distorts prices signals to customers in that it  
10 overstates the cost savings that occur when a customer lowers his or her usage.

11 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

12 A. Yes.

