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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2010-0036

DIRECT TESTIMONY

OF

LAURA WOLFE

ON

BEHALF OF

MISSOURI DEPARTMENT OF NATURAL RESOURCES

ENERGY CENTER

Jefferson City, Missouri
December 18, 2009

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Laura Wolfe. My business address is Missouri Department of Natural Resources, Energy Center, 1101 Riverside Drive, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Q. By whom and in what capacity are you employed?

A. I am employed by the Missouri Department of Natural Resources as an Energy Specialist in the Energy Policy and Analysis Program in the Missouri Energy Center (MEC). The MEC is located within the Missouri Department of Natural Resources, an agency of state government with its executive office located in Jefferson City, Missouri.

Q. What is the Missouri Energy Center?

A. The Missouri Energy Center (EC) is a division within the Missouri Department of Natural Resources (DNR) and is the designated state energy office in Missouri responsible for the administration of the federal Low Income Weatherization Assistance Program (LIWAP) and the federal State Energy Program (SEP) established by the United States Congress in 1978, which is managed nationally by the United States Department of Energy (USDOE). The SEP consists of several statewide energy efficiency programs administered by the EC and funded by the USDOE.

The DNR is vested with the powers and duties set forth in Chapter 640.150, RSMo.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the Missouri Department of Natural Resources ("MDNR"), an intervenor in these proceedings.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science in Business Administration in 1985 from Central Methodist College (n.k.a., Central Methodist University) in Fayette, Missouri, and a Master's in Public Administration in 1990 from the University of Missouri-Columbia. In addition to governmental accounting, purchasing, facilities management, and regulatory compliance auditing experience, I have worked in a variety of positions regarding utility regulation including as a Utility Regulatory Auditor III for the Commission from 1996 to 1999, a Costing Administrator and later Docket Manager for Sprint (n.k.a., CenturyLink) from 1999 to 2002, and as a Utility Regulatory Specialist in the Federal Gas Group at the Commission from 2002 to 2007. I have been an Energy Specialist with MDNR since 2007

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your direct testimony in these proceedings?

A. The purpose of my testimony is to comment on the demand side management ("DSM") programs of Union Electric Company d/b/a AmerenUE ("AmerenUE") and to encourage AmerenUE to increase the levels of savings consistent with other states

and consistent with what is learned from the DSM potential study to be completed by AmerenUE by the end of the year.

III. COMMENTS ON AMERENUE DEMAND SIDE MANAGEMENT PROGRAMS

Q. What DSM programs is AmerenUE currently offering?

A. AmerenUE's witness, Mr. Stephen Kidwell, provided a good overview of AmerenUE's current DSM programs. A review of AmerenUE's tariffs in effect as of December 16, 2009 provides details regarding six energy efficiency programs (four programs for its business customers and two residential programs) and one demand response program. Two of the energy efficiency programs available to AmerenUE business customers are the Standard Incentive Program and the Custom Incentive Program. The participants who purchase standard electric equipment that meets AmerenUE's increased efficiency requirements can earn fixed cash payments. Typical electric equipment meeting the requirements necessary for the fixed cash payments include lighting, heating, ventilation and air conditioning equipment ("HVAC"), refrigeration and motors.

AmerenUE also offers financial assistance to business customers for cost-effective energy efficiency measures not included in the standard incentive in the Custom Incentive Program. Financial assistance is available to AmerenUE business customers making energy efficiency improvements to existing facilities by purchasing

energy efficient equipment, modernizing facilities or making industrial process improvements.

AmerenUE's third energy efficiency program for business customers is designed to assist building owners in making their new construction projects even more efficient, AmerenUE's New Construction Incentive Program rewards both designers and building owners for using energy efficient design. Technologies include building orientation and passive solar design, daylight harvesting, efficient electric lighting and HVAC systems as well as other measures to create buildings that exceed existing new construction efficiency requirements.

AmerenUE's fourth energy efficiency program for business customers is its Retro-Commissioning Program. This program seeks to capture energy and demand reductions from existing facilities by optimizing building system energy use and overall efficiency. AmerenUE provides energy assessment services and assistance in implementing identified solutions to customers to insure that their systems are operating at optimal energy efficiency.

As for residential energy efficiency programs, AmerenUE has implemented the Lighting and Appliance Program. This program is intended to reduce energy use in residential lighting and appliance products by encouraging selection of ENERGY STAR® qualified products through Market Transformation efforts. AmerenUE has also implemented the Multi-Family Program. This program is designed to deliver cost-effective energy efficiency services to AmerenUE's residential customers who

own and operate multi-family properties, while also benefiting the tenants of those buildings. The Program focuses on whole-building and common area improvements.

AmerenUE offers one demand response program: Rider L. This program uses price signals as an incentive for the customer to reduce load. When AmerenUE determines the price signal is appropriate, the customer is notified and the customer decides how much load to reduce. If the price offered is sufficient to induce the customer to act, i.e., reduce load, the customer will receive payment at a price as defined in the AmerenUE's tariffs. If the customer does not reduce load, there is no penalty assessed nor is there an impact on the rate the customer pays.

Q. Do you agree with Mr. Kidwell's assessment of the success and effectiveness of these various programs?

A. Yes. It is much too early to tell how effective and successful the residential energy efficiency and demand response programs are. The early indications for the business energy efficiency programs are encouraging.

Q. Are you also encouraged by AmerenUE's plans to implement additional residential customer energy efficiency programs?

A. Yes, I am. The extension of the Multifamily Program to provide direct installation of energy efficient measures in income-qualified tenant units and the Home Performance with ENERGY STAR® Program will both be valuable additions to AmerenUE's energy efficiency portfolio. AmerenUE's recently launched residential energy efficiency website is also a good energy efficiency tool to provide to customers.

Q. Overall, do you think AmerenUE is doing an adequate job of rolling out DSM programs?

A. Over all, AmerenUE has made a very good start at establishing a successful DSM portfolio of programs. There is still much work to do, but AmerenUE has laid some good groundwork to build a successful DSM portfolio.

IV. ENERGY SAVINGS GOAL

Q. What do you advise AmerenUE do to continue to build a successful DSM portfolio?

A. I would advise AmerenUE to set an aggressive, achievable goal of energy savings. This can then be used to measure the success of the portfolio of energy efficiency programs that AmerenUE has implemented and will implement.

Q. Has AmerenUE detailed an energy savings goal for the DSM programs?

A. Yes. Mr. Kidwell detailed in his direct testimony AmerenUE's goals for the first three programs years of its DSM portfolio as established in AmerenUE's latest IRP filing. The energy savings goal detailed in Mr. Kidwell's testimony for the first three program years is 800,000 MWh cumulatively.

Q. Do you think this goal is achievable?

A. Yes. In its Report and Order in ER-2007-0002, the Commission ruled that (emphasis added):

> AmerenUE is given a goal of reducing peak demand and ***energy growth*** by 10 percent in 2009/2010;

15 percent by 2011/2012;
20 percent by 2013/2014; and
25 percent by 2015/2016.[1]

By using these goals during the IRP analysis, AmerenUE determined the goals stated in Mr. Kidwell's testimony. The Commission also noted in the Report and Order that AmerenUE did not oppose these goals and that AmerenUE indicated that much greater reductions may be achieved in the future.[2]

The goal to achieve energy savings of 800,000 MWh is a reasonable and realistic goal for a ramp-up period for DSM programs, which is what AmerenUE is doing.

Q. Is this a reasonable long range energy savings goal, i.e., beyond the initial ramp up years?

A. No. MDNR believes that electric utilities with established DSM programs in Missouri should set much higher targets for energy savings than this, and MDNR believes that recent state legislation supports a more aggressive approach to energy efficiency for electric utilities.

Q. Can you detail the legislation to which you refer?

A. Yes. I am referring to Senate Bill 376, particularly § 393.1124.4, RSMo:

[1] In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area, *Report and Order,* Effective June 1, 2007, page 112.
[2] In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area, *Report and Order,* Effective June 1, 2007, page 110. (Direct Testimony of Michael L. Moehn, Exhibit 035, page 16. Lines 12-14.)

> The commission shall permit electric corporations to implement commission-approved demand-side programs proposed pursuant to this section with the goal of achieving all cost-effective demand-side savings.

The point of emphasis here is "the goal of achieving all cost-effective demand-side savings." In order to identify "all cost-effective demand-side savings", the electric utility must be very diligent in seeking out demand-side measures in the integrated resource planning process.

Q. Is there information regarding energy savings levels that Missouri electric utilities should aim to achieve?

A. Yes. A good source for information is the American Council for an Energy Efficient Economy ("ACEEE"). In March of 2009, ACEEE published a very informative report entitled Meeting Aggressive New State Goals for Utility-Sector Energy Efficiency: Examining Key Factors Associated with High Savings .[3] In particular, this report provides a review of the states that a panel of experts consider the top energy efficiency states: Minnesota, Texas, Iowa, Wisconsin, California, Massachusetts, Connecticut, Vermont, New York, Oregon, New Jersey, Washington, Rhode Island, and Nevada. This study should give AmerenUE an understanding of what can be achieved. Many of these states achieved annual energy savings of 0.70% to over 1.0% of total annual energy sales in 2006 and 2007.

[3] *Meeting Aggressive New State Goals for Utility-Sector Energy Efficiency: Examining Key Factors Associated with High Savings;* Martin Kushler, Dan York, and Patti White; American Council for Energy Efficient Economy, ACEEE Report Number U091, March 29, 2009.

In addition, ACEEE provides a database of state energy efficiency efforts. A quick review of that database revealed several states (Illinois, Iowa, Michigan, Minnesota, Ohio and Wisconsin) currently have policies or regulatory proceedings under way to ramp up to achieve energy savings between 1 and 2 percent of annual energy sales.[4]

Another good resource is the National Action Plan for Energy Efficiency ("NAPEE"). The NAPEE was developed by more than 60 leading organizations that joined together to develop a plan with a goal to achieve all cost-effective energy efficiency by the year 2025.[5] Many of the energy efficiency programs that have been operating successfully for several years were examined during the preparation of the NAPEE. A key finding of this research is that:

> Many state and regional studies have found that pursuing economically attractive, but as yet untapped energy efficiency could yield more than 20 percent savings in total electricity demand nationwide by 2025. These savings could help cut load growth by half or more, compared to current forecasts. Savings in direct use of natural gas could similarly provide a 50 percent or greater reduction in natural gas demand growth. Potential varies by customer segment, but there are cost-effective opportunities for all customer classes.[6]

Q. What other tools can Missouri electric utilities use to set energy savings goals to achieve?

[4] http://www.aceee.org/energy/state/index.htm
[5] http://www.epa.gov/RDEE/energy-programs/napee/leadership.html
[6] National Action Plan for Energy Efficiency, July 2006, page 6-5.

A. Energy efficiency potential studies are exceptional tools for setting energy savings goals. Studies and data like the ACEEE and the NAPEE studies and database cited above are good measuring sticks of what has been, and therefore can be, achieved. They provide data regarding what has been successful in a variety of states in a variety of regulatory climates. This is useful as a vision of what is possible in Missouri. This data becomes even more useful in guiding utilities in setting energy efficiency goals and designing energy efficiency programs to meet those goals when paired with studies that gauge the potential for energy efficiency determined through a localized study. This information is not so readily available and often is not available at all.

AmerenUE, however, is in the process of completing a potential study. This resource will be invaluable to AmerenUE in setting aggressive and achievable goals for energy savings for its future energy efficiency portfolio of programs.

Q. Does MDNR have a suggested energy savings goal for AmerenUE?

A. MDNR recommends AmerenUE set an energy savings goal that is consistent with what can be learned from the states that have aggressively pursued energy efficiency, as detailed in the studies noted above, and that is consistent with what AmerenUE learns from its own potential study. MDNR encourages AmerenUE to achieve all cost effective DSM savings, consistent with the goal established by SB 376. To identify all cost effective DSM savings, MDNR recommends that in addition to being

informed by its potential study, AmerenUE should model DSM measures that can achieve 1% and 2% of annual energy savings in its next IRP.

Q. Does this conclude your testimony?

A. Yes. Thank you.