

Exhibit No.:
Issues: DSM Cost-Recovery and
Program operation
Witness: Adam Bickford
Sponsoring Party: Missouri Department of
Natural Resources –
Division of Energy
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2011-0004

REBUTTAL TESTIMONY
OF
ADAM BICKFORD
MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENERGY

April 18, 2011

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

EMPIRE DISTRICT ELECTRIC COMPANY

RATE CASE

CASE NO. ER-2011-0004

****DENOTES HIGHLY CONFIDENTIAL INFORMATION****

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1 **I. Introduction**
2

3 **Q. Please state your name and business address.**

4 A. My name is Adam Bickford. My business address is Missouri Department of
5 Natural Resources, Division of Energy, 1011 Riverside Drive, P.O. Box 176,
6 Jefferson City, Missouri 65102-0176.

7
8 **Q. Are you the same Adam Bickford who filed Direct Testimony on behalf of**
9 **the Missouri Department of Natural Resource, Division of Energy**
10 **previously in this case?**

11 A: Yes, I am.

12 **Q. On whose behalf are you testifying?**

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

15 **Q. What is the purpose of your rebuttal testimony in these proceedings?**

16 A. To respond to the revisions to Empire’s Demand Side Management (DSM)
17 program portfolio proposed by Empire witness Sherrill McCormack in her Direct
18 Testimony.

19 **Q. Please summarize your testimony.**

20 A. My testimony will address

- 21 1. Empire’s plan to extend its existing portfolio by three years, to address the
22 transition to DSM programs under the Missouri Energy Efficiency
23 Investment Act (MEEIA)¹
- 24 2. Empire’s request to have its DSM collaborative transition its various
25 program years to a calendar year basis;
- 26 3. Empire’s request to change the CPC to an advisory group;

¹ Section 393.1075, RSMo.

1 4. Empire's request to change the amortization of its DSM program costs in its
2 regulatory asset account to 3 years.

3
4 **II. General Program Changes in Empire's DSM Portfolio**
5

6 **Q. What parts of its current DSM portfolio has Empire asked to change?**

7 A. In her direct testimony, Empire witness Sherrill McCormack requested several
8 changes to Empire's existing DSM portfolio:

- 9 1. Extending its current portfolio for three years. This addresses the transition
10 from DSM programs operated under Empire's Regulatory Plan² (the
11 "Regulatory Plan", which is scheduled to end at the conclusion of this rate
12 case) and DSM programs under the Missouri Energy Efficiency Investment
13 Act (MEEIA)³.
- 14 2. Requesting that all DSM programs operate on a calendar-year basis,
15 starting January 1, 2011⁴.
- 16 3. Requesting that Empire's current energy collaborative group (the "CPC") be
17 changed to an advisory group⁵.
- 18 4. Changing the amortization term of Empire's DSM Regulatory Asset account
19 from 10 years to three years⁶.

20
21 **Q. Does MDNR have any objections to these changes?**

22 A. MDNR does not object to Empire's request to coordinate its programs so that
23 they operate on a calendar year basis. Nor does MDNR object to changing
24 Empire's DSM collaborative to an advisory group. MDNR does not object to

² *Stipulation and Agreement*, In the Matter of the Empire District Electric Company's Application for Certificate of Public Convenience and Necessity and Approval of an Experimental Regulatory Plan Related to Generation Plant. Case No. EO-2005-0263

³ See McCormack, Direct Testimony, ER-2011-0004, Page 13, Lines 13 and 14.

⁴ Ibid, Page 14, Line 1-4.

⁵ Ibid, Page 15, Lines 1-11.

⁶ Ibid, Page 14, Lines 7-9.

1 Empire's request to shorten its amortization period for DSM cost recovery from
2 ten years to three years. MDNR objects to Empire's proposal to merely
3 continue its programs at the current level and funding for the next three years.

4
5 **III. Cost Recovery and Length of Amortization**

6 **Q. What is MDNR's position on Empire's request to reduce its DSM**
7 **regulatory asset account amortization from ten to three years?**

8 A. Missouri is entering a transitional phase in its energy efficiency policy. The
9 rules implementing MEEIA are scheduled to be implemented before the end of
10 this rate case. However, these rules may be delayed by various legal and
11 legislative challenges. Empire has proposed to continue its programs at
12 current expenditure levels for the next three years to address the gap between
13 its current Regulatory Plan and the implementation of the MEEIA rules. It has
14 also proposed that DSM costs incurred after the conclusion of the Regulatory
15 Plan be booked into a regulatory asset account with a three year amortization.

16 Cost-effective demand-side management economically reduces energy
17 consumption. The State of Missouri has recognized the value of implementing
18 cost-effective DSM programs in MEEIA:

19
20 It shall be the policy of the state to value demand-side investments equal to traditional
21 investments in supply and delivery infrastructure and allow recovery of all reasonable and
22 prudent costs of delivering cost-effective demand-side programs. In support of this policy,
23 the commission shall:

- 24 (1) Provide timely cost recovery for utilities;
25 (2) Ensure that utility financial incentives are aligned with helping customers use
26 energy more efficiently and in a manner that sustains or enhances utility
27 customers' incentives to use energy more efficiently; and
28 (3) Provide timely earnings opportunities associated with cost-effective measurable
29 and verifiable efficiency savings.⁷
30

31 Lengthy amortization of utility DSM costs provides a clear disincentive to
32 DSM investment, contrary to MEEIA. Empire's recommendation to reduce the

⁷ Section 393.1075, RSMo.

1 years of amortization from ten (10) to three (3) years may reduce its
2 disincentive to invest in cost-effective DSM programs.

3 MDNR is an advocate of the overall MEEIA goal of achieving all cost
4 effective DSM savings. Reducing the disincentives through timely cost-
5 recovery is consistent with the MEEIA's policy direction and should help to
6 create a regulatory environment that will incentivize investments in DSM
7 programs.

8 Empire is best suited to determine whether shortening the amortization
9 period of its DSM account will provide sufficient incentives for spending its
10 allocated DSM budget. MDNR does not object to a three-year amortization for
11 expenses incurred after the completion of the Regulatory Plan. Expenses that
12 were incurred under its Regulatory Plan⁸ should be amortized under the terms
13 of that plan.

14 **IV. Empire's DSM Program Implementation**

15 **Q. What is your objection to Empire's continuation of its DSM portfolio at its**
16 **current levels for the next three years?**

17 **A.** MDNR's objection to Empire's request to simply continue its programs for the
18 next three years stems from Empire's overall lack of performance on its
19 existing DSM portfolio. As pointed out in my direct testimony in this case,⁹
20 Empire has been slow to develop and implement its programs and has not
21 expended even the limited funds it has allocated for DSM programs. In 2009,
22 the last full year available at the time direct testimony was filed in this case,
23 Empire spent 67.5% of its allocated program budget. In that same year,
24 MDNR calculated that Empire's participation rate was 60.5% of what it
25

⁸ *Stipulation and Agreement*, In the Matter of the Empire District Electric Company's Application for Certificate of Public Convenience and Necessity and Approval of an Experimental Regulatory Plan Related to Generation Plant. Case No. EO-2005-0263.

⁹ See Adam Bickford Direct Testimony, Case No. ER-2011-0004, Page 6, Lines 10-16.

1 expected¹⁰. After five years of program implementation experience, the
2 programs should be demonstrating more success.

3 Continuing this pattern of low spending and low participation over the
4 next three years is not consistent with Missouri's goal of achieving all cost-
5 effective demand-side savings stated in MEEIA.

6 **Q. Have there been any DSM-related developments for Empire since you**
7 **filed your direct testimony?**

8 A. Yes, Empire has recently agreed to work with its IRP stakeholder
9 advisory group to expand its program offerings and to analyze the levels of
10 participation and incentive levels of its programs and develop a plan to
11 maximize cost-effective savings in each program.¹¹ As part of the
12 Nonunanimous Stipulation and Agreement filed on April 1, 2011 in Empire's
13 2011 IRP case, Case No. EO-2011-0066¹² (the "April 1 Stipulation and
14 Agreement"), Empire has agreed to expand the program offerings in its existing
15 DSM portfolio and, under certain conditions to seek Commission approval to
16 implement three additional rebate programs over the next three years, from the
17 balance of 2011 through 2013. In the April 1 Stipulation and Agreement,
18 Empire also agreed to work with its stakeholders to improve its DSM planning
19 and implementation to better meet the DSM savings goals in the proposed
20 MEEIA rules.

¹⁰ See Bickford, Direct Testimony ER-2011-0004, Page 7 Line 8-23.

¹¹ *Nonunanimous Stipulation and Agreement*, In the Matter of Empire District Electric Company's 2010 Filing Pursuant to 4 CSR 240 -22 Electric Utility Resource Planning. File No. EO-2011-0066. Paragraphs 9, 10 and 11.

¹² *ibid.* Paragraph 9.

1 In the event the Commission approves the April 1 Stipulation and
 2 Agreement, these additional programs will move Empire off the path of simply
 3 maintaining the status quo for the next three years and in the right direction.
 4 However, significant movement will be needed to work toward the MEEIA goal
 5 of achieving all cost-effective DSM savings. Schedules AB-2011-1R and AB-
 6 2011-2R show the short-term and longer-term impacts of Empire’s DSM plans
 7 from its 2011 IRP as a percentage of forecast load to illustrate why Empire
 8 should not simply continue with its current level of DSM program activity.

9 Schedule AB-2011-1R shows Empire’s DSM savings as a percentage of
 10 load from its preferred plan for the two years of the April 1 Stipulation and
 11 Agreement that have incremental MEEIA savings goals.¹³ Two levels of
 12 savings are reported, one for its preferred plan, and one including the
 13 incremental savings from the three additional programs included in the April 1
 14 Stipulation and Agreement. This table shows that DSM savings without the
 15 additional programs is ** [REDACTED] ** percent of load in 2012 and ** [REDACTED] ** percent of
 16 load in 2013. Adding the additional programs from the April 1 Stipulation and
 17 Agreement increases the DSM savings to ** [REDACTED] ** percent of load in 2012 and
 18 ** [REDACTED] ** percent of load in 2013. In contrast, the proposed MEEIA savings
 19 goals are 0.30 percent in 2012 and 0.50 percent in 2013. These figures show
 20 the relatively low performance of Empire’s programs.

21 Schedule AB-2011-2R presents information over a longer term. The
 22 schedule compares the DSM savings as a percentage of load from Empire’s
 23 most aggressive DSM case, the High CO₂ cost scenario¹⁴, to the MEEIA goals
 24 from 2012 to 2020. This scenario, if it had been adopted by Empire as its
 25 preferred plan, would have implemented all of Empire’s DSM programs,

¹³ Savings goals in the proposed MEEIA rules (4 CSR 240-20.094(2)(A)) begin in 2012.

¹⁴ Applied Energy Group, 2010. *The Empire District Electric Company Demand-Side Resource Potential Study, 2011-2013*. August, 2010. Page ES-2.

1 including the programs in the April 1 Stipulation and Agreement and its
 2 Commercial and Industrial programs, starting in 2011. DSM savings in the
 3 High CO₂ cost scenario begin at ** [REDACTED] ** percent of load in 2012 and falls to
 4 ** [REDACTED] ** percent of load in 2020. The proposed MEEIA savings goals increase
 5 from 0.30 percent of load in 2012 to 1.90 percent of load in 2020. This long-
 6 term pattern suggests a systemic problem in Empire’s DSM program planning
 7 that Empire should address in its next Chapter 22 filing. Paragraph 11 of the
 8 April 1 Stipulation and Agreement includes provisions for Empire and the
 9 stakeholders to work with an outside contractor to improve Empire’s program
 10 implementation strategies.

11 **Q. How were the savings levels in Empire’s preferred plan and its High CO₂**
 12 **scenario derived?**

13 A. These savings levels were based on a demand-side potential study conducted
 14 by the Applied Energy Group (AEG), Empire’s DSM contractor. This study
 15 imposed an arbitrary budget constraint (1% of Empire’s Missouri Jurisdictional
 16 Revenue) on its estimates of maximum achievable potential, contrary to
 17 standard industry analytic practice.¹⁵ Because of this constraint, the estimates
 18 of savings in Empire’s potential study are lower than they should be. This is an
 19 additional area that the April 1 Stipulation and Agreement seeks to address.

¹⁵ *Nonunanimous Stipulation and Agreement*, In the Matter of Empire District Electric Company's 2010 Filing Pursuant to 4 CSR 240 -22 Electric Utility Resource Planning. File No. EO-2011-0066. Paragraphs 10 and 33.

1

2 **Q. What actions should the Commission consider relative to the**
3 **performance of Empire's DSM programs?**

4 A. Commission approval of the April 1 IRP Stipulation and Agreement and
5 Empire's appropriate implementation of that agreement will address DSM
6 program implementation for this case. MDNR requests that the Commission
7 direct Empire to address its DSM program planning in its next Chapter 22 filing
8 in a way that is consistent with MEEIA.

9

10 **Q. Does this conclude your testimony?**

11 A. Yes. Thank you.

Schedule AB-2011-1R Short-Term DSM savings from preferred plan, with and without additional programs from IRP stipulation and agreement

****Highly Confidential in its Entirety****

Schedule AB-2011-2R Long-Term DSM savings from High CO₂ cost scenario

****Highly Confidential in its Entirety****