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AZ CORP COMMISSION
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March 1, 2016

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Re: Notice of Filing – Tucson Electric Power Company’s Annual Demand-Side Management (“DSM”) Progress Report, Docket No. E-00000U-16-0069

The Electric Energy Efficiency Standards set forth in the Arizona Administrative Code, Section R14-2-2409.A, require Tucson Electric Power Company (“TEP”) to submit an annual DSM progress report for each of its Commission-approved DSM programs by March 1st. TEP hereby files its DSM Progress Report for 2015. The Measurement, Evaluation and Research Report listed in Appendix 1 of the DSM Progress Report contains confidential information and is being provided directly to Commission Staff.

If you have any questions, please contact me at (520) 884-3680.

Sincerely,

Melissa Morales
Regulatory Services

cc: Barbara Keene, Utilities Division, ACC
Compliance Section, ACC

Arizona Corporation Commission
DOCKETED

MAR 03 2016



Tucson Electric Power Company
2015 ANNUAL DSM PROGRESS REPORT

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Definitions

The Arizona Administrative Code (“AAC”)

Arizona Department of Housing (“ADOH”)

Arizona Public Service (“APS”)

Commercial and Industrial (“C&I”)

The Arizona Corporation Commission (“Commission”)

Consumer Education – program to provide general consumer education about energy-efficiency improvements.

The United States Department of Energy (“DOE”)

Demand-Side Management (“DSM”)

Energy Efficiency (“EE”)

The United States Environmental Protection Agency (“EPA”)

Governor’s Office of Energy Policy (“GOEP”)

Heating, Ventilation and Air Conditioning (“HVAC”)

Implementation Contractor (“IC”) – A contractor hired to implement a program.

Low Income Home Energy Assistance Program (“LIHEAP”)

Measurement, Evaluation, and Research (“MER”) – The process of identifying current baseline efficiency levels and the market potential of DSM measures; performing process and program evaluations including the verification of installed energy efficient measures and reported savings; and identifying additional energy efficiency research opportunities.

Navigant Consulting, Inc. (“NCI”)

Program Implementation – The implementation of programs including administration, fiscal management of costs for labor, overhead, implementation contractors, or other direct program delivery.

Program Marketing – The marketing of programs and increasing DSM consumer awareness (direct program marketing as opposed to general consumer education).

Planning and Administration – Planning, developing, and administering programs including management of program budgets, oversight of the RFP process, oversight of ICs, program development, program coordination, customer participation, and general overhead expenses.

Program Development, Analysis, and Reporting – Research and development of new DSM program opportunities, analysis of existing and proposed programs and measures, and the tracking and reporting of participation, savings, and benefits. Associated costs are essential to comply with the ACC reporting and rules requirements.

Rebates & Incentives – Payments made to customers or contractors as rebates or incentives.

The Residential Energy Services Network (“RESNET”)

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Request for Proposal (“RFP”) – the process through which proposals are solicited from contractors or vendors.

the **Standard** – the Electric Energy Efficiency Standards as defined in the State of Arizona Administrative Code Article 24.

Training and Technical Assistance – Energy-efficiency training and technical assistance for utility employees, contractors, or building officials.

Tucson Electric Power Company (“TEP” or “Company”)

UNS Electric, Inc. (“UNSE”)

UNS Gas, Inc. (“UNSG”)

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2015 DSM PROGRESS REPORT

1. An analysis of the Company's progress toward meeting the annual energy efficiency standard

1.1 Progress Towards the Standard

In accordance with the Commission's Decision No. 71819 (August 10, 2010) and Arizona Administrative Code Section R14-2-2409 (effective January 1, 2011), TEP submits this annual DSM progress report for calendar year 2015. This report includes information for all of TEP's residential, non-residential, and low-income customer programs that were in place during this reporting period.

In the Commission's Decision No. 74885 (December 31, 2014), the Commission approved TEP's 2014 EE Plan for use in 2015. Decision No. 74885 approved continuation of TEP's existing DSM programs for Program Year 2015 and provided new programs and measures. New measures included measures that were demonstrated to be cost-effective by Staff analysis and measures that had been previously demonstrated to be cost-effective by Staff analysis and have been previously approved for use by APS and/or UNSE. TEP's 2016 EE Plan was submitted on June 1, 2015 & heard by the Commission on February 2, 2016. The Commission's Decision No. 75450 (February 11, 2016) on TEP's 2016 EE Plan approved new programs and measures that will facilitate TEP's progress to meet the Standard in 2016. TEP will either request an extension from the Commission to use the current EE plan for 2017 with societal cost and benefits based on actual program data or will file a new EE Plan for 2017 by June 1, 2016.

For the calendar year 2015, the Commission granted TEP a waiver for meeting the Standard in AAC Section R14-2-2404(B) due to market conditions and economic challenges. Notwithstanding, TEP was able to meet the cumulative Standard for 2015. TEP's DSM savings, expenditures, societal benefits, incentives, and environmental savings are summarized in Table 1 through Table 5 as noted below.

Table 1	Cumulative Energy Savings As Compared to The Standard
Table 2	DSM Energy Savings By Program
Table 3	DSM Expenses By Program
Table 4	Societal Benefits and Performance Incentive for 2015
Table 5	Lifetime Environmental Savings By Program

TEP's cumulative energy savings as a comparison to the Standard are reported in Table 1 below. In 2015 TEP's cumulative annual savings as a percent of previous year retail sales was 9.535 percent while the savings target in the Standard for 2015 was 9.5 percent.

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TABLE 1 – 2015 CUMULATIVE DSM SAVINGS

Year	Retail Energy Sales (MWh)	Incremental Annual Energy Savings (MWh)	Cumulative Annual Energy Savings (MWh)	Cumulative Annual Savings as a Percent of previous year Retail Sales	Cumulative EE Standard
2010	9,291,788				
2011	9,332,107	139,539	139,539	1.502%	1.25%
2012	9,264,818	105,655	245,194	2.627%	3.00%
2013	9,278,918	177,425	422,619	4.562%	5.00%
2014	8,520,347	221,215	643,834	6.939%	7.25%
2015	8,431,556	168,600	812,435	9.535%	9.50%

Freeport-McMoran Inc’s DSM Surcharge Exemption

Per Decision No. 74885 Freeport-McMoran Inc’s (“FMI”) Sierrita Mine location has been exempted from the DSM surcharge contingent upon FMI providing TEP with “an annual count of the number and horsepower of high efficient motors installed at the Sierrita Mine and data on any energy efficiency measures/projects which are installed at the Sierrita Mine, sufficient to enable the calculation of energy savings.” During this reporting period, FMI reported installing high-efficiency motors, variable speed drives and LED lighting. FMI reported a total of 11 high efficiency motors installed in 2015 with a total horsepower rating of 55. Based upon the information provided by FMI, TEP estimates that FMI will save approximately 1,939 MWh annually for these measures installed in 2015.

Freeport-McMoran Inc’s 2015 Estimated Energy Savings

Measures	Annual kWh Savings
Motors	880
Lighting	33,985
VFD	1,904,058
Total:	1,938,923 kWh

Annual and Lifetime Savings

The DSM portfolio annual and lifetime energy savings are reported in Table 2. Savings are separated into the following categories:

- Capacity Savings (MW)
- Annual MWh Savings
- Annual Therm Savings
- Lifetime MWh Savings
- Lifetime Therm Savings

TEP is including energy savings toward the Standard for changes in energy efficient building codes per AAC R14-2-2404 (E). Energy savings from the Energy Codes and Standards program are reported in Table 2 below.

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TABLE 2 - DSM ENERGY SAVINGS BY PROGRAM

Program	Capacity Savings MW	Annual MWh Savings	Annual Therm Savings ^b	Lifetime MWh Savings	Lifetime Therm Savings ^b
Residential Programs					
Low-Income Weatherization	0.10	472	3,570	6,335	63,088
Residential New Construction	1.03	1,361	63,749	39,553	1,912,469
Shade Tree Program	0.19	450	0	17,980	0
Efficient Products	7.06	74,563	0	543,901	0
Existing Homes Retrofit and Audit Direct Install	3.72	4,621	19,262	85,751	372,723
Multi-Family	0.06	706	0	4,823	0
Appliance Recycling	0.25	1,827	0	14,619	0
Non-Residential Programs					
C&I Comprehensive Program	5.80	31,259	0	443,382	0
Small Business Direct Install	1.03	9,902	0	133,085	0
Commercial New Construction Program	1.09	2,069	0	62,067	0
Bid For Efficiency (Pilot)	0.06	550	0	5,370	0
Retro-Commissioning	0.13	272	0	2,718	0
CHP Program (Pilot)	0	0	0	0	0
Behavioral Sector					
Behavioral Comprehensive	0.66	7,159	74,731	53,610	672,580
Support Sector					
Consumer Education and Outreach	NA	NA	NA	NA	NA
Energy Codes and Standards	3.96	19,182	0	19,182	0
Utility Improvement Sector					
Conservation Volt Reduction	0	539	0	539	0
Generation Improvement and Facilities Upgrade	0	0	0	0	0
C&I Direct Load Control Program ^a	18.48	13,671	0	13,671	0
Portfolio Totals	43.61	168,600	157,742	1,446,585	2,957,771

^aCapacity savings for Commercial & Industrial Direct Load Control reflect the maximum capacity available for reduction events. Annual MWh savings for Commercial & Industrial Direct Load Control reflect the credit available toward the Standard per A.A.C. R 14-2-2404 (C). TEP is also including an energy savings credit toward the Standard for changes in energy efficient building codes per A.A.C. R 14-2-2404 (E).

^bAnnual Therm Savings and Lifetime Therm Savings for Low-Income Weatherization are not included in the Portfolio Totals

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1.2 DSM Annual Expenses

The annualized expenses for each program are reported in Table 3. Expenses are separated into the following categories:

- Rebates and Incentives
- Training and Technical Assistance
- Consumer Education
- Program Implementation
- Program Marketing
- Planning and Administration
- Measurement, Evaluation, and Research

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TABLE 3 - DSM EXPENSES BY PROGRAM

DSM Program	Rebates and Incentives	Training and Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning and Admin	Measurement, Evaluation, and Research	Program Total Cost
Residential Programs								
Low-Income Weatherization	\$269,243	\$1,840	\$129	0	\$8,817	\$201	\$979	\$281,208
Residential New Construction	\$371,600	\$6,756	\$2,195	\$44,558	\$21,082	\$24	\$21,747	\$467,963
Shade Tree Program	\$233,521	\$97	0	(\$31)	\$7,870	\$568	\$1,407	\$243,431
Efficient Products	\$2,351,344	\$6,613	\$1,255	\$813,857	\$115,512	\$3,310	\$28,882	\$3,320,773
ENERGY STAR® Lighting (CFL)	0	0	0	\$806	\$2,400	\$80	0	\$3,286
Existing Homes Retrofit and Audit Direct Install	\$1,832,004	\$745	\$1,456	\$1,067,681	\$78,953	0	\$16,281	\$2,997,121
Multi-Family	\$83,245	\$325	0	\$3,417	\$2,843	\$8,241	\$1,637	\$99,708
Appliance Recycling	\$55,440	0	0	\$112,606	\$71,451	\$1,520	\$1,120	\$242,137
Home Energy Reports	0	0	0	0	0	0	\$355	\$355
Total for Residential Programs	\$5,196,397	\$16,375	\$5,035	\$2,042,894	\$308,929	\$13,944	\$72,408	\$7,655,981
Non-Residential Programs								
C&I Comprehensive Program	\$1,857,797	\$12,328	\$5,969	\$977,840	\$85,440	0	\$60,770	\$3,000,145
Small Business Direct Install	\$1,097,175	\$11,265	\$6,663	\$658,976	\$71,506	\$10,281	\$11,425	\$1,867,290
Commercial New Construction Program	\$204,955	\$656	\$289	\$94,068	\$14,818	\$33	\$16,180	\$330,998
Bid For Efficiency (Pilot)	\$121,094	\$386	\$177	\$14,400	\$2,458	\$51	\$1,404	\$139,970
Retro-Commissioning	\$17,377	\$357	\$77	\$18,930	\$2,258	\$53	\$585	\$39,636
CHP Program (Pilot)	0	0	0	0	0	0	0	0
Total for Non-Residential Programs	\$3,298,397	\$24,992	\$13,175	\$1,764,214	\$176,479	\$10,418	\$90,364	\$5,378,039
Behavioral Sector								
Behavioral Comprehensive	\$439,109	\$5,355	0	\$169,972	\$46,550	\$2,965	\$1,400	\$665,351
Total for Behavioral Sector	\$439,109	\$5,355	0	\$169,972	\$46,550	\$2,965	\$1,400	\$665,351
Support Sector								
Consumer Education & Outreach Program	0	\$771	\$66,730	\$59,107	\$298,407	\$937	\$40	\$425,992
Energy Codes and Standards	0	0	0	0	0	0	0	0
Total for Support Sector	0	\$771	\$66,730	\$59,107	\$298,407	\$937	\$40	\$425,992
Utility Improvement Sector								
Conservation Volt Reduction	0	0	0	0	0	0	0	0
Generation Improvement and Facilities Upgrade	0	0	0	0	0	0	0	0
C&I Direct Load Control Program	0	\$9,670	\$1,150	\$423,551	\$12,810	\$383	\$3,208	\$450,771
Total for Utility Improvement Sector	0	\$9,670	\$1,150	\$423,551	\$12,810	\$383	\$3,208	\$450,771
Portfolio Totals								
	\$8,933,903	\$57,163	\$86,090	\$4,459,738	\$843,176	\$28,645	\$167,420	\$14,576,134
							Program Costs	\$14,576,134
							Program Development, Analysis, & Reporting	\$895,994
							TOTAL	\$15,472,128

