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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
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IN THE MATTER OF THE APPLICATION OF) DOCKET NO. E-01933A-07-0401
TUCSON ELECTRIC POWER COMPANY FOR)
APPROVAL OF ITS DEMAND-SIDE)
MANAGEMENT PROGRAMS FOR YEARS 2008)
- 2012 COMPACT FLUORESCENT LAMP)
BUYDOWN PROGRAM.)
)
)
)

**REQUEST FOR ADDITIONAL
FUNDING FOR CFL BUY-DOWN
PROGRAM**

Tucson Electric Power Company ("TEP" or "Company"), through undersigned counsel, hereby respectfully requests the Arizona Corporation Commission ("Commission") to approve an increase in funding for TEP's Demand-Side Management Program ("DSM") Compact Fluorescent Lamp ("CFL") Buydown Program ("Program") for 2008 through 2012. Additionally, TEP respectfully requests the Commission to approve recovery of all costs of associated with the Program through the DSM Surcharge that will be effective June 1, 2009. Attached, as Exhibit 1, is TEP's "Request for Additional Funding" for the Program.

In Decision No. 70383 (June 13, 2008), the Commission approved TEP's CFL Program. During the first 6 months after implementation of the Program — July through December 2008 — CFL sales were an overwhelming success. In the first 6 months, customers purchased 395,491 CFL lamps through the Program, which represents 129.5% of the projected 305,471 lamp sales for the entire year of 2008. Moreover, preliminary CFL sales for January and February 2009 suggest that demand for CFL lamps remains robust.

Due to initial success of the Program, TEP is proposing an enhanced budget and Program benefit as outlined in Exhibit 1. Exhibit 1 also compares the proposed enhanced budget and benefit to the original budget and benefit approved in Decision No. 70383.

1 The incremental increase in the DSM Surcharge to recover the cost will be \$0.0000832 for
2 2009, as shown below.

3

Budget Increase Amount	Projected kWh Sales (2009)	DSM Adjustor (incremental)
\$790,724	9,505,340,000	\$0.0000832

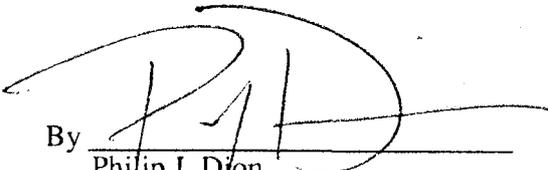
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8 With the increased funding allowance, TEP anticipates lamp sales to increase from 314,635
9 lamps (the approved 2009 budget maximum) to 1,073,919 lamps. The weighted average Total
10 Resource Cost Test ("TRC") for the Program, with increased funding, will increase from 2.05 to
11 5.08.

12 WHEREFORE, TEP respectfully requests Commission to approve 1) increased funding for
13 the Program, and 2) recovery of all costs associated with the Program through the DSM Surcharge
14 that will be effective June 1, 2009.

15 RESPECTFULLY SUBMITTED this 9th day of April 2009.

16
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filed this 9th day of April 2009 with:

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By *Mary Appolito*

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Exhibit 1

Tucson Electric Power Company's

Request for Additional Funding

for its

**Demand-Side Management Programs
Compact Fluorescent Lamp Buydown
Program for Years 2008-1012**

Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program

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Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program

I. Introduction

In Decision No. 70383 (June 13, 2008), the Arizona Corporation Commission (“Commission”) approved Tucson Electric Power Company’s (“TEP” or “Company”) Demand-Side Management (“DSM”) Program Compact Fluorescent Lamp (“CFL”) Buydown Program (“Program”) for 2008 through 2012. During the first 6 months after implementation of the Program - July through December 2008 - CFL sales were an overwhelming success. In the first 6 months, customers purchased 395,491 CFL lamps through the Program, which represents 129.5% of the projected 305,471 lamp sales for the entire year of 2008. Moreover, preliminary CFL sales results for January and February 2009 suggest that demand for CFL lamps remains robust.

Due to the initial success of the Program, TEP is proposing an enhanced budget and Program benefit as outlined below in Table 2 through Table 5, as compared to the original budget and benefit approved in Decision No. 70383.

With the increased funding allowance, TEP anticipates lamp sales to increase from 314,635 lamps (the approved 2009 budget maximum) to 1,073,919 lamps. The weighted average Total Resource Cost Test (“TRC”) for the Program, with increased funding, will increase from 2.05 to 5.08.

TEP respectfully requests Commission to approve 1) increased funding for the Program, and 2) recovery of all costs associated with the Program through the DSM Surcharge that will be effective June 1, 2009.

Budget Increase Amount	Projected kWh Sales (2009)	DSM Adjustor (incremental)
\$790,724	9,505,340,000	\$0.0000832

II. 2008 Program Details

The CFL Buydown program promotes energy efficient (“EE”) Energy Star-approved lighting products. TEP selected Ecos Consulting, Inc. (“ECOS”) as the implementation contractor (“IC”) to deliver the Program in the TEP service territory. Qualified products include CFLs in a wide range of sizes and configurations. Discount pricing is passed on to consumers through a negotiated agreement with lighting manufacturers and retailers. The Program is an up-stream intervention program, and operates by soliciting discount pricing from manufacturers through a bid process, then distributing qualifying products through retailers in TEP’s service region. Customers are referred to participating retailers to purchase products. Participating retailers include, but are not limited to, Costco, Home Depot, Lowes, WalMart, Sam’s Club, Ace Hardware, and 99 Cent stores.

By September 2008, only 3 months after implementation, it was obvious that the success of the Program would be far greater than anticipated. TEP’s options were to i) discontinue Program promotion in October 2008, allow additional funding for 2008; ii) reduce the variety of products and the number of retailers participating; or iii) reduce the manufacturer’s buydown to slow product sales. TEP discussed options with ECOS, and decided that TEP would increase the budget allowance for the year and ECOS would reduce the number of optional lamp styles and the number of retailers through the end of 2008. ECOS also reduced the manufacturer’s buydown on some of the more popular products to slow participation. By taking these alternative steps, TEP was able to slow lamp sales and continue Program promotions through December 31, 2008 without exceeding the original annual budget.

Information in Table 1, below, shows the actual monthly sales for various CFL products and provides the end-of-year total for CFL sales at 395,491 lamps. This information was also used to determine the percentage distribution by lamp type in the new cost-benefit analysis to provide a more accurate estimate of future energy savings.

**Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program**

Table 1 - Actual CFL Sales July-December 2008

CFL Wattage Sold	Incandescent Wattage Replaced	Total July 2008	Total July - Aug 2008	Total July - Sept 2008	Total July - Oct 2008	Total July - Nov 2008	Total July - Dec 2008
7	40	0	0	738	3,246	5,892	7,800
9	40	0	696	1,352	1,352	1,384	1,384
9	40	0	4,836	10,040	10,040	10,040	10,040
11	40	1,652	5,640	8,440	10,472	12,816	15,200
13	60	0	0	965	21,437	40,285	50,812
13	60	8,040	32,193	74,546	91,369	104,640	145,451
14	65	0	1,726	3,422	5,354	7,134	8,668
14	50	0	224	478	710	859	912
14	60	0	824	1,610	1,934	2,080	2,482
14	60	0	15,108	22,432	30,884	39,256	47,756
15	60	0	0	0	188	812	936
15	65	1,296	5,268	9,048	12,741	17,001	23,325
18	75	3,378	9,390	15,018	19,470	23,184	23,586
19	75	0	542	1,046	1,448	1,884	2,218
23	120	496	2,543	3,835	5,188	6,720	10,825
23	90	0	210	468	744	986	1,106
23	100	3,018	12,963	21,553	29,324	37,904	42,741
42	150	0	46	90	144	185	249
Cumulative Sales by Month		17,880	92,209	175,081	246,045	313,062	395,491

III. Program Eligibility

The Program is available to all TEP customers, but normally attracts residential and small commercial customers.

IV. Rationale for Increased Funding

Additional funding is required to maximize the ability for TEP to meet the following Program objectives.

- Reduce peak demand and energy consumption for residential and small business customers;
- Increase the purchase and installation of CFLs;
- Increase the availability of EE lighting products in the marketplace; and
- Increase the awareness and knowledge of retailers and TEP customers on the benefits of EE lighting products.

TEP believes customers will get the wrong signal about the importance of EE, if TEP promotes a program for only a few months each year and then discontinues the promotion due to lack of funding. The request for additional funding shows TEP's commitment to achieving the maximum energy reduction possible by allowing a very successful Program to continue with maximum efforts for success through out each year.

TEP wishes to increase funding availability to allow for full-scale operations, consistent consumer education, unrestricted retailer participation and a full-line of CFL product promotions without the need to slow participation during the year. ECOS, the IC contractor, has provided a budget estimate they believe is reasonable to allow for full-scale operations consistently throughout the year.

Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program

V. Budget Comparison

The budget shown in Table 2, below, represents the original budget approved for this Program in Decision No. 70383. The proposed budget request for 2009 – 2012 is included in Table 3, below, and provides the actual spending for 2008 (6 months). Tables 2 and 3 include an escalation rate of 3% per year. A breakdown of the proposed budget detail is shown in Table 6 in Section VII.

Table 2 - 2008 – 2012 Original Program Budget

Year	2008	2009	2010	2011	2012
Total Budget	\$700,000	\$721,000	\$742,630	\$764,909	\$787,856
Incentives	\$473,480	\$487,684	\$502,315	\$517,384	\$532,906
Admin/ Implementation Costs	\$226,520	\$233,316	\$240,315	\$247,525	\$254,950
Incentives as % of Budget	67.6%	67.6%	67.6%	67.6%	67.6%

Table 3 - Proposed 2009-2012 Program Budget

Year	6 Mo 2008	2009	2010	2011	2012
Total Budget	\$494,338	\$1,490,724	\$1,535,446	\$1,581,509	\$1,628,954
Incentives	\$373,393	\$1,251,537	\$1,289,083	\$1,327,756	\$1,367,589
Admin/Implementation Costs	\$43,385	\$239,187	\$246,362	\$253,753	\$261,366
Incentives as % of Budget	75.5%	84.0%	84.0%	84.0%	84.0%

VI. Sales, Demand and Energy Savings Comparison

Information in Table 4, below, represents the original projection of energy savings for the Program approved in Decision No. 70383. Table 5, below, shows the new projection of energy savings for 2009-2012 for the Program with Commission approval for TEP's request for additional funding. Table 5 uses the actual energy savings results for 2008 (6 months). The significant increase in actual kW and kWh compared to the original Program design occurs because TEP can now use actual lamp sales by wattage rather than an estimate of the percent distribution by lamp wattage used in the original projection. It is more accurate to calculate a future result on current sales than to estimate participation rates.

Table 4 - 2008-2012 Original Sales, Demand and Energy Savings Projection

Year	2008	2009	2010	2011	2012
Projected Lamp Sales	305,471	314,635	324,074	333,796	343,810
Non-Coincident Peak (kW)	11,470	11,815	12,169	12,534	12,910
Coincident Peak (kW)	1,147	1,181	1,217	1,253	1,291
Energy Savings (kWh)	9,796,898	10,090,805	10,393,530	10,705,335	11,026,495

Table 5 - Sales, Demand and Energy Savings Projections

Year	6 Mo 2008	2009	2010	2011	2012
Projected Lamp Sales	395,491	1,073,919	1,106,136	1,139,320	1,173,500
Non-Coincident Peak (kW)	20,182	54,801	56,445	58,139	59,883
Coincident Peak (kW)	2,018	5,480	5,645	5,814	5,988
Energy Savings (kWh)	22,239,790	60,390,057	62,201,758	64,067,811	65,989,845

Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program

VII. Budget Allocation for 2008 - 2012

The annual budget for 2009 - 2012 of \$1,490,724 will be allocated as shown in Table 6, below. For comparison purposes, the 2008 accrual allocation for the first 6 months of the Program is shown in Table 7, below. The most significant changes will be a higher dollar allocation for incentives, increased marketing and IC training, and a decrease in the percentage of IC direct expense. TEP believes this budget will maximize the success of the Program.

Table 6 - 2009-2012 Budget Allocation

2009 Budget Allocation Estimate		
Total Program Budget for 2009	\$1,490,724	(%)
Program Management and Planning	\$14,907	1.0%
TEP Managerial & Clerical	\$5,963	40.0%
TEP Travel & Direct Expenses	\$1,193	8.0%
Overhead	\$7,752	52.0%
<i>Total Administrative Cost</i>	<i>\$14,907</i>	<i>100.0%</i>
Total Marketing Allocation	\$29,814	2.0%
Internal Marketing Expense	\$5,963	20.0%
Subcontracted Marketing Expense	\$23,852	80.0%
<i>Total Marketing Cost</i>	<i>\$29,814</i>	<i>100.0%</i>
Total Direct Implementation	\$1,438,549	96.5%
Financial Incentives to Upstream Participants	\$1,251,537	87.0%
Consumer Education -- Labor	\$43,156	3.0%
Implementation Contractor Direct Expense	\$129,469	9.0%
Travel and Training	\$14,385	1.0%
<i>Total Direct Installation Cost</i>	<i>\$1,438,549</i>	<i>100.0%</i>
Total EM&V Cost Allocation	\$7,454	0.5%
EM&V Activity	\$4,175	56.0%
EM&V Overhead	\$3,279	44.0%
<i>Total EM&V Cost</i>	<i>\$7,454</i>	<i>100.0%</i>
<i>Total Program Cost</i>	<i>\$1,490,724</i>	<i>100.0%</i>

Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program

Table 7 - 2008-2012 Budget Allocation

2008 Actual Allocation (6 Months Only)		
Total Program Budget	\$494,338	(%)
Program Management and Planning	\$9,887	2.0%
TEP Managerial & Clerical	\$3,955	40.0%
TEP Travel & Direct Expenses	\$791	8.0%
Overhead	\$5,141	52.0%
<i>Total Administrative Cost</i>	<i>\$9,887</i>	<i>100.0%</i>
Total Marketing Allocation	\$2,472	0.5%
Internal Marketing Expense	\$544	22.0%
Subcontracted Marketing Expense	\$1,928	78.0%
<i>Total Marketing Cost</i>	<i>\$2,472</i>	<i>100.0%</i>
Total Direct Implementation	\$474,564	96.0%
Financial Incentives to Upstream Participants	\$374,906	79.0%
Consumer Education - labor	\$14,237	3.0%
Implementation Contractor Direct Expense	\$80,676	17.0%
Travel and Training	\$4,746	1.0%
<i>Total Direct Installation Cost</i>	<i>\$474,564</i>	<i>100.0%</i>
Total EM&V Cost Allocation	\$7,415	1.5%
EM&V Activity	\$4,153	56.0%
EM&V Overhead	\$3,262	44.0%
<i>Total EM&V Cost</i>	<i>\$7,415</i>	<i>100.0%</i>
<i>Total Program Cost</i>	<i>\$494,338</i>	<i>100.0%</i>

VIII. Measurement, Evaluation and Research Plan

TEP selected Summit Blue Consulting to provide Measurement, Evaluation and Research (“MER”) work for all approved DSM programs. Summit Blue will provide TEP with ongoing feedback on Program progress and enable management to adjust or correct the Program measures to be more effective, provide a higher level of service, and be more cost beneficial. Integrated data collection will provide a high quality data resource for evaluation activities.

IX. Projected Environmental Benefits

Information in Table 8, below, outlines the projected environmental benefits this Program will provide, if TEP is able to meet energy savings projections outlined in Table 5 in Section VI.

Table 8. Projected Environmental Benefits, 2008 - 2012

Water Savings	137,444,631	Gallons
SOx	656,985	lbs
NOx	1,091,310	lbs
CO ₂	573,968,778	lbs

Tucson Electric Power Company
Compact Fluorescent Lamp Buydown Program

X. Program Cost Effectiveness

The cost effectiveness of each measure and each Program, as a whole, was assessed using the TRC test, the Societal Cost (“SC”) test and the Ratepayer Impact Measure (“RIM”) test. Measure analysis worksheets showing all energy savings, cost and cost-effectiveness calculations are included in Appendix 1.

The cost effectiveness analysis requires estimation of:

- Net demand and energy savings attributable to the Program;
- Net incremental cost to the customer of purchasing qualifying products;
- TEP’s Program administration costs;
- Present value of Program benefits including TEP Avoided Costs (“AC”) over the life of the measures; and
- TEP lost revenues.

In addition to estimating the savings from each measure, this analysis relies on a range of other assumptions and financial data. Table 9, below, summarizes data used in the cost effectiveness analysis and the data sources.

Table 9. Cost-Effectiveness Analysis Assumptions

Conservation Life (yrs):	6.21
Program Life (yrs):	5
Demand AC (\$/kW):	\$111.90
Summer Energy AC (\$/kWh):	\$0.07100
Winter Energy AC (\$/kWh):	\$0.05170
Ratio of Non-Incentive to Incentive Costs	19.1%
IRP Discount Rate:	8.50%
Social Discount Rate	5.00%
NTG Ratio:	60%

Table 10, below, provides a summary of the benefit/cost analysis results for this Program.

Table 10. Benefit/Cost Analysis Results Summary

Cost Effectiveness Tests	TRC	SC	RIM
Benefit/Cost Ratio	4.55	5.08	0.46

Tucson Electric Power Company Compact Fluorescent Lamp Buydown Program

Appendix 1 – Measure Level Energy Savings and Benefit Cost Calculations

Incentive Calculations
RL130 – Retrofit Residential Incandescent to Integral Compact Fluorescent Lighting (CFL)

PROGRAM DATA		RATE DATA		OPERATING DATA		OTHER FACTORS				
Conservation Life (yrs):	6.21	Rate:	0.00	On-Pk Op. Hours:	181	Line Loss Factor:	9.50%			
Program Life (yrs):	5	\$/kW:	0.09082	Off-Pk Op. Hours:	823	Capacity Reserve Factor:	0.00%			
Demand AC (\$/kW):	\$111.90	\$/kWh, On-Peak:	0.07897	Summer Ratio:	50%	Application:	ROB			
Summer On-pk Energy AC (\$/kWh):	\$0.07100	\$/kWh, Off-Peak:	0.07897	Winter Ratio:	50%	Cost Basis:	Incremental Equip			
Summer Off-pk Energy AC (\$/kWh):	\$0.05170			Concidence Factor:	0.10					
Winter On-pk Energy AC (\$/kWh):	\$0.05170			HVAC Interaction Factor (Demand)****:	0.00					
Winter Off-pk Energy AC (\$/kWh):	\$0.05170			HVAC Interaction Factor (Energy)****:	0.00					
Ratio of Non-inc to Incentive Costs	19.1%									
IRP Discount Rate*****:	8.50%									
Social Discount Rate	5.00%									
NTG Ratio:	60%									
						ECOS 2008 Op Hrs 2.75 hrs/day X 365 1,004 Off 823.28 On 180.72 On				
						ECOS 2008 Cooling Added 5 kWh/year Per lamp per ECOS				
INCENTIVE CALCULATIONS										
Fixture Type	Inc. Fixture Watt Range	CFL Fixture Lumen Range	CFL Fixture Watts*	Non-Concident Demand Savings (kW)	On-pk Energy Savings (kWh)	Off-pk Energy Savings (kWh)	B/C			
								IRP PV Benefit (\$)	Social PV Benefit (\$)	PV Program Cost (\$)
40	40	7	7	0.033	11	27	3.4			
40	40	9	9	0.031	11	26	3.2			
40	40	9	9	0.031	11	26	3.2			
40	40	11	11	0.029	10	24	3.0			
40	40	13	13	0.047	14	39	3.4			
60	60	13	13	0.047	14	39	3.4			
60	60	13	13	0.047	14	39	3.4			
65	65	14	14	0.051	14	42	4.8			
50	50	14	14	0.036	12	30	4.8			
60	60	14	14	0.046	13	38	5.4			
60	60	14	14	0.046	13	38	5.4			
60	60	14	14	0.046	13	38	5.4			
60	60	14	14	0.046	13	38	5.4			
65	65	15	15	0.050	14	41	5.4			
75	75	18	18	0.057	15	47	5.4			
75	75	19	19	0.056	15	46	4.9			
120	120	23	23	0.097	23	80	4.4			
90	90	23	23	0.067	17	55	4.4			
100	100	23	23	0.077	19	63	4.4			
150	150	42	42	0.108	25	85	4.4			
Weighted Average				0.051	14.24	42.00	5.08			
				12.35	13.80	2.72	4.55			
				1.17	9%	9.63	28%			

Actual Lamp Watts and Replacement
Watts from Dec 2008 ECOS Report

Average Rebate for
ea from 2008
ECOS email

New breakdown using
Summit Cost
Assumptions' tab

Actual Wtg Factor
From Dec 2008
ECOS Report