

ORIGINAL
Tucson Electric Power Company



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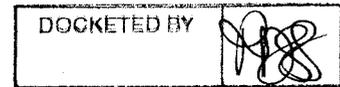
One South Church, Post Office Box 711
Tucson, Arizona 85702

September 1, 2010

Mr. Steven Olea
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Arizona Corporation Commission
DOCKETED

SEP 1 2010



Re: Docket Nos. E-01933A-07-0402 and E-01933A-05-0650,
ACC Decision No. 70628 (December 1, 2008)

Mr. Olea,

Pursuant to ACC Decision No. 70628 and Section 9.6 of the Tucson Electric Power Company Proposed Rate Settlement Agreement, dated May 29, 2008, Tucson Electric Power Company ("TEP") is required to submit semi-annual Demand-Side Management ("DSM") program progress reports on March 1st and September 1st of each year in accordance with Commission Staff's recommendations. Enclosed please find TEP's Semi-Annual DSM Program Progress Report for the reporting period of January 1, 2010 through June 30, 2010. The marketing materials for the reported DSM programs are being filed directly with Commission Staff on the attached CD.

Also enclosed is an additional copy that the Company requests you date-stamp and return in the self-addressed, stamped envelope for our files.

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

Sincerely,

Jessica Bryne
Regulatory Services

Enclosures: Report and CD

cc: Docket Control, ACC
Barbara Keene, ACC (with CD)
Compliance, ACC
Shannon Kanlan, ACC

AZ CORP COMMISSION
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Tucson Electric Power Company

Semi- Annual DSM Progress Report

January through June 2010

Tucson Electric Power Company

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: January through June 2010

This progress report includes the following information for all Tucson Electric Power Company (“TEP”) Demand-Side Management (“DSM”) programs in place from January through June 2010, including programs for residential, non-residential, and low-income customers:

- brief description of the programs;
- program modifications;
- program goals, objectives, and savings targets;
- levels of participation;
- description of evaluation and monitoring activities and results;
- kW, kWh, and therm savings;
- problems encountered and proposed solutions;
- costs incurred during the reporting period disaggregated by type of cost, such as administrative costs, rebates, and monitoring;
- findings from all research projects;
- Terminated programs; and
- other significant information.

A summary detailing all DSM Program expenses is provided in Table 1; program energy savings are provided in Table 2; societal benefits are provided in Table 3; lifetime environmental savings are provided in Table 4; and program savings and expenses since inception are provided for all programs in Table 5.

Tucson Electric Power Company

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD:
January through June 2010

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SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: January through June 2010

Table 1

DSM PROGRAM EXPENSES: JANUARY - JUNE 2010

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Residential Programs							
Low-income Weatherization	\$ 140,878	\$ 2,573	\$ -	\$ 7,102	\$ 3,750	\$ 6,423	\$ 160,726
Guarantee Homes	\$ 176,650	\$ 2,214	\$ 4,942	\$ 348,212	\$ 36,707	\$ 31,035	\$ 599,760
Shade Trees	\$ 89,170	\$ -	\$ -	\$ 5,212	\$ -	\$ 3,929	\$ 98,311
ENERGY STAR® Lighting (CFL)	\$ 702,638	\$ 136	\$ -	\$ 130,639	\$ 14,418	\$ 35,332	\$ 883,162
Efficient Home Cooling	\$ 318,950	\$ 6,002	\$ -	\$ 32,956	\$ 102,407	\$ 19,161	\$ 479,476
Total for Residential Programs	\$ 1,428,286	\$ 10,925	\$ 4,942	\$ 524,120	\$ 157,281	\$ 95,881	\$ 2,221,435
Support Programs							
Education & Outreach Programs	\$ -	\$ -	\$ 261,192	\$ 2,038	\$ -	\$ 10,957	\$ 274,188
Total for Support Programs	\$ -	\$ -	\$ 261,192	\$ 2,038	\$ -	\$ 10,957	\$ 274,188
Commercial Programs							
Non-Residential Existing Facilities	\$ 538,766	\$ -	\$ 242	\$ 164,244	\$ 380	\$ 29,912	\$ 733,544
Small Business	\$ 742,240	\$ -	\$ 2,771	\$ 178,074	\$ 373	\$ 39,062	\$ 962,521
Efficient Commercial Building Design	\$ 22,067	\$ -	\$ -	\$ 37,304	\$ -	\$ 2,471	\$ 61,842
Total for Commercial Programs	\$ 1,303,073	\$ -	\$ 3,013	\$ 379,622	\$ 753	\$ 71,446	\$ 1,757,907
Portfolio Totals	\$ 2,731,359	\$ 10,925	\$ 269,147	\$ 905,781	\$ 158,034	\$ 178,284	\$ 4,253,529

Program Costs	\$ 4,253,529
Measurement, Evaluation & Research (MER)	\$ 400,328
Baseline Study	\$ 74,512
TOTAL	\$ 4,728,369

Definitions

Rebates & Incentives – total amount spent on customer rebates, incentives, and payments made to agencies for installation of low-income weatherization measures.

Training and Technical Assistance – total amount spent on energy efficiency training and technical assistance.

Consumer Education – total dollars that are used to support general consumer education about energy efficiency improvements.

Program Implementation – program delivery costs associated with implementing programs, including implementation contractor labor and overhead costs, as well as other direct program delivery costs.

Program Marketing – includes all expenses related to marketing programs and increasing DSM consumer awareness (direct program marketing costs as opposed to general consumer education).

Planning and Administration – costs to plan, develop, and administer programs including management of program budgets, oversight of the request for proposal (“RFP”) process, oversight of implementation contractors, program development, program coordination, and general overhead expenses.

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SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: January through June 2010

Measurement, Evaluation, and Research (“MER”) – identification of current baseline efficiency levels and the market potential of DSM measures; process evaluations; verification of installed energy efficient measures; tracking of savings; and identification of additional energy efficiency research. Costs include the development of a database to track participation and savings.

Performance Incentive – share (%) of DSM net economic benefits, capped at either 10% of net benefits or 10% of expenditures, whichever is less. The Performance Incentive was approved in ACC Decision No. 70628 (December 1, 2008).

Baseline Study – expenditures for separate TEP Baseline Study approved in ACC Decision No. 71109 (June 5, 2009).

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Table 2

DSM ENERGY SAVINGS: JANUARY – JUNE 2010

Program	Capacity Savings MW	Annual MWh Savings	Annual Therm Savings	Lifetime MWh Savings	Lifetime Therm Savings
Low-Income Weatherization	0.00	244	2,760	4,315	48,300
Guarantee Home	1.04	1,222	12,669	36,661	12,036
Shade Tree Program	0.00	450	0	8,999	0
ENERGY STAR® Lighting (CFL)	2.90	36,358	0	352,599	0
Efficient Home Cooling	0.39	785	0	11,774	0
Non-Residential Existing Facilities	1.83	8,954	0	136,377	0
Small Business	2.25	8,375	0	137,648	0
Efficient Commercial Building Design	0.03	123	0	2,003	0
Portfolio Totals	8.43	56,511	15,429	690,375	60,336

Table 3

DSM SOCIETAL BENEFITS & PERFORMANCE INCENTIVE: JANUARY – JUNE 2010

DSM Program	Program Cost	Societal Benefits	Societal Costs	Net Benefits
Residential				
Low-Income Weatherization ¹	\$ 160,726	\$ 160,726	\$ 160,726	\$ -
Guarantee Home Program	\$ 599,760	\$ 4,189,025	\$ 1,184,986	\$ 3,004,039
Shade Tree Program	\$ 98,311	\$ 474,307	\$ 127,761	\$ 346,547
ENERGY STAR® Lighting (CFL)	\$ 883,162	\$ 6,687,293	\$ 2,120,056	\$ 4,567,237
Efficient Home Cooling	\$ 479,476	\$ 790,130	\$ 2,133,221	\$ (1,343,091)
Total for Residential	\$ 2,221,435	\$ 12,301,482	\$ 5,726,750	\$ 6,574,731
Non-Residential				
Non-Residential Existing Facilities	\$ 733,544	\$ 5,316,074	\$ 1,518,584	\$ 3,797,490
Small Business	\$ 962,521	\$ 6,927,119	\$ 2,090,181	\$ 4,836,938
Efficient Commercial Building Design	\$ 61,842	\$ 117,143	\$ 74,418	\$ 42,725
Total for Non-Residential	\$ 1,757,907	\$ 12,360,336	\$ 3,683,182	\$ 8,677,153
Portfolio Totals	\$ 3,979,342	\$ 24,661,817	\$ 9,409,932	\$ 15,251,885
Measurement, Evaluation & Research (MER)	\$ 400,328	\$ -	\$ 400,328	\$ (400,328)
Baseline Study	\$ 74,512	\$ -	\$ 74,512	\$ (74,512)
TOTAL	\$ 4,454,181	\$ 24,661,817	\$ 9,884,772	\$ 14,777,045
Performance Incentive Calculation:				
Total Spending ² / Total Net Benefits	\$ 4,293,455			\$ 14,777,045
10% of Spending / Net Benefits	\$ 429,346			\$ 1,477,705
Performance Incentive for 2010	\$ 429,346			

1. Consistent with Commission Staff's analysis in Arizona Corporation Commission Decision No. 70456 (August 6, 2008), the societal benefits for low-income weatherization are equal to or greater than the societal costs when taking the environmental benefits into account.

2. Total spending does not include Low-Income Weatherization per Arizona Corporation Commission Decision No. 70628 (December 1, 2008), which approved the TEP Performance incentive calculation. The Performance Incentive allowed is capped at 10% of Net Benefits or 10% of total spending, whichever is less.

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Table 4

DSM LIFETIME ENVIRONMENTAL SAVINGS: JANUARY – JUNE 2010

Program	Lifetime SO_x Reduction (lbs)	Lifetime NO_x Reduction (lbs)	Lifetime CO₂ Reduction (lbs)	Lifetime Water Reduction (gallons)
Low-Income Weatherization	9,291	11,210	8,831,962	1,984,808
Guarantee Home	78,938	95,245	70,631,025	16,863,959
Shade Tree Program	19,376	23,379	17,230,762	4,139,393
ENERGY STAR® Lighting (CFL)	759,216	916,052	675,159,905	162,195,495
Efficient Home Cooling	25,351	30,588	22,544,599	5,415,950
Non-Residential Existing Facilities	293,648	354,309	261,136,930	62,733,633
Small Business	296,383	357,609	263,569,151	63,317,932
Efficient Commercial Building Design	4,313	5,204	3,835,398	921,388
Portfolio Totals	1,486,516	1,793,595	1,322,939,733	317,572,558

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SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: January through June 2010

Table 5

DSM SAVINGS & EXPENSES SINCE PROGRAM INCEPTION: JANUARY 1992 – JUNE 2010¹

PROGRAM	Start Date	Program Participants/Units		Program Expenses		MW Savings		MWh Savings		Therm Savings		
		Jan - Jun	Program Inception to Date	Jan - Jun	Program Inception to Date	Jan - Jun	Total Annual ^a	Jan - Jun	Total Annual ^a	Jan - Jun	Total Annual ^a	
Commercial												
Lighting	1992	0	1,118	\$ -	\$ 5,619,523	0.00	3.76	0	16,461	N/A	N/A	N/A
Motors	1993	0	228	\$ -	\$ 168,275	0.00	0.02	0	210	N/A	N/A	N/A
HVAC	1994	0	625	\$ -	\$ 917,246	0.00	0.52	0	873	N/A	N/A	N/A
Energy Services	1995	0	11	\$ -	\$ 854,603	0.00	1.35	0	4,455	N/A	N/A	N/A
Non-Residential Existing Facilities	2008	35	92	\$ 733,544	\$ 1,920,025	1.83	4.86	8,954	20,558	N/A	N/A	N/A
Small Business	2008	246	388	\$ 962,521	\$ 2,509,610	2.25	4.33	8,375	17,230	N/A	N/A	N/A
Efficient Commercial Building Design	2008	5	7	\$ 61,842	\$ 249,305	0.03	0.02	123	164	N/A	N/A	N/A
Residential												
Good Cents	1994	0	1,462	\$ -	\$ 2,511,042	0.00	1.57	0	2,287	N/A	N/A	N/A
Eff. Allowance	1993	0	2,917	\$ -	\$ 3,825,566	0.00	1.94	0	2,119	N/A	N/A	N/A
Guarantee Home Program	1999	867	11,286	\$ 599,760	\$ 17,473,675	1.04	23.47	1,222	27,152	12,669	856,231	5,036,731
Shade Tree Program ¹	1992	2,542	68,182	\$ 98,311	\$ 2,185,486	0.00	0.00	450	7,466	N/A	N/A	N/A
ENERGY STAR [®] Lighting (CFL)	2008	692,802	1,897,263	\$ 883,162	\$ 2,374,571	2.90	13.16	36,358	97,037	N/A	N/A	N/A
Efficient Home Cooling	2008	1,923	4,644	\$ 479,476	\$ 1,313,378	0.39	1.58	785	3,791	N/A	N/A	N/A
1. No energy savings reported prior to 2005												
Support Programs												
Education & Outreach	1993	37,890	469,059	\$ 274,188	\$ 8,593,521	N/A	N/A	N/A	290	N/A	N/A	N/A
Low-Income Weatherization ²	1993	92	2,024	\$ 160,726	\$ 3,235,078	N/A	N/A	244	290	2760	23,977	68,629
2. No energy savings reported prior to 2007.												
Measurement, Evaluation & Research (MER) - all programs	NA	NA	NA	\$ 400,328	\$ 1,404,963	NA	NA	NA	NA	NA	NA	NA
Baseline Study	2009	NA	NA	\$ 74,512	\$ 94,508	NA	NA	NA	NA	NA	NA	NA
TOTAL		736,402	2,459,306	\$ 4,728,369	\$ 55,250,374	8.4	56.6	56,511	200,094	15,429	880,208	5,105,360

a. Accumulated savings for one year for all energy efficiency measures installed since program inception.

b. Accumulated savings for all years for all energy efficiency measures installed since program inception.

¹ Historical DSM Program annual savings will decrease as the measure lifetimes expire. Programs with fully expired lifetimes will no longer be reported. Historical programs include Lighting, Motors, HVAC, and Energy Services for commercial participants, and Good Cents and Eff. Allowance for residential participants.

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SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD:

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TEP LOW-INCOME WEATHERIZATION PROGRAM

Description

The Tucson Electric Power Company (“TEP”) Low-Income Weatherization (“LIW”) Program is designed to improve the energy efficiency of homes for customers whose income falls within the defined federal poverty guidelines. Steps taken in this Program will reduce gas and electric bills for eligible customers, improve comfort, and quality of life. Energy savings realized from this Program will allow low-income customers to better utilize the limited income they receive for other necessary items such as rent, food, or medical expenses.

Program Modifications

There have been no program modifications since TEP’s last reporting period.

Program Goals, Objectives, and Savings Targets

The objectives of the program are to:

- Increase the number of homes weatherized each year;
- Reduce average household utility bills by utilizing energy conservation measures in the Weatherization Assistance Program rules; and
- Improve the quality of life for the customers by providing them with a safe and healthy home.

Levels of Participation

A total of 92 households received weatherization assistance during this reporting period. This reflects a serious ramp-up by the agencies as only 20 homes were weatherized during the same time period in 2009.

Evaluation and Monitoring Activities and Results

The Arizona Energy Office (“AEO”), with billing data from TEP and other Arizona gas and electric utilities, is analyzing and tracking energy use in weatherized homes statewide. As their database grows, a more accurate analysis of the impact of weatherization activities will emerge. TEP will now report energy savings from weatherization activities based upon the most recent AEO report. The AEO does not report any kW demand savings.

The July 2010 AEO report is summarized below:

Utility Bill Analysis

- To date, an analysis of 185 homes has been completed on homes utilizing Arizona Public Service Company (“APS”), TEP, UNS Gas and Electric and Southwest Gas Corporation utility data. This analysis is ongoing, and new data will be updated to these values on a quarterly basis.
- Savings to Investment Ratios (“SIR”) are provided for total investment from all funding spent (diagnostics, energy measures, health and safety measures) and for energy related measures only (diagnostics and energy measures).
- Present value is based on 17.5 years measure life, discount rate of 3% and a utility cost escalation rate of 3%.

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- The combined SIR of all jobs reviewed to date for funds spent on diagnostics, energy measures and health and safety measures was 1.16. Health and saving represented 15% of expenditures.
- The combined SIR of all jobs reviewed to date for funds spent on energy measures and diagnostics was 1.37.
- The average saving per home reviewed was 2650 kWh and 30 therms of natural gas (gas therms average includes all electric homes).

kW, kWh, and Therm Savings

The savings for this reporting period are listed below:

No. of Homes	kW savings	kWh savings	Therm savings
92	0.0	243,800	2,760

Problems Encountered and Proposed Solutions

Pima County Community Services (“PCCS”) and Tucson Urban League (“TUL”) have ramped up their workforce and have increased the number of homes being weatherized. TUL has replaced their Chief Executive Officer and Weatherization Director and with concentrated assistance from the AEO seems to be back on track and providing solid weatherization services to the community.

Costs Incurred

Costs incurred for the LIW Program during the reporting period are listed below:

DSM Program	Rebates & Incentives*	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Low-Income Weatherization	\$ 140,878	\$ 2,573	\$ -	\$ 7,102	\$ 3,750	\$ 6,423	\$ 160,726

**Includes \$17,181 for health and safety related repairs*

To avoid the misunderstanding that occurred in 2009 on allowable spending for health and safety related repairs, TEP has discussed with the agencies the correct utilization of these funds. Specifically, health and safety funding is limited to 25% of their overall expenditures. The maximum health and safety allocation is applicable only if the agency spends their entire annual budget. TEP is closely monitoring this portion of the agencies’ funding and will notify an agency if their health and safety budgets are close to exceeding their allowable limit. All health and safety spending measures are approved by the AEO.

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Findings from All Research Projects

No research projects were performed during this reporting period.

Other Significant Information

TEP increased funding by 3% for all agencies in 2010. With the significant increase in homes weatherized so far this year compared to the same time period in 2009, TEP believes the agencies will continue this trend into the second half of 2010 and will come close to spending their entire funding by year end. The agencies are still exploring multi-family opportunities and if an appropriate project comes along both TEP and the AEO strongly support weatherizing these homes.

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SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: January through June 2010

TEP GUARANTEE HOME PROGRAM

Description

The Residential New Construction Program for TEP is marketed under the Guarantee Home Program name. It is a utility sponsored, energy efficient new home construction program based on a foundation of integrated building science. The Guarantee Home Program emphasizes the whole-house approach to improving health, safety, comfort, durability, and energy efficiency. The Program includes on-site inspections and field testing of homes to verify that homes actually perform the way they were designed. Program standards are designed to focus solely on best case practice. Components of the Guarantee Home Program include development of energy efficient construction standards, branding, builder training curriculum, and marketing collateral.

Program Modifications

Decision No. 71638 (April 14, 2010) approved TEP's Pilot Zero-Net Energy Homes Program. This Program is an enhancement of the existing Guarantee Home Program. TEP has been contacting its Guarantee Home Program participating builders to gauge their interest in participating in this pilot. Meritage Homes has expressed a desire to build a demonstration project for Zero-Net Energy Homes. The first homes may be built during the second half of 2010.

Program Goals, Objectives, and Savings Targets

The objectives of the program are to:

- Reduce peak demand and overall energy consumption in new homes;
- Increase new home energy efficiency standards to Guarantee Home Program standards in a minimum of 50% of new homes constructed in the TEP service territory;
- Retain existing builder participation and encourage the participation of new builders;
- Stimulate construction of new homes that are inspected and tested to assure energy performance;
- Assist builder sales agents with promoting and selling energy efficient homes;
- Train builder construction staff and subcontractors in advanced building science concepts to increase energy efficiency through improved design and installation practices; and
- Increase homebuyer awareness and understanding of energy efficient building practices and the benefits of purchasing an energy efficient home.

Levels of Participation

A total of 867 homes were completed to Guarantee Home Program standards during this reporting period, with builders signing contracts committing an additional 742 homes to the Program.

Evaluation and Monitoring Activities and Results

All Guarantee Home Program homes are inspected and tested to ensure standards are met. Billing data is monitored at each home's anniversary of completion. Customers are contacted when necessary to ensure their homes are performing as designed.

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kW, kWh, and Therm Savings

No. of Homes	kW savings	kWh savings	Therm savings
867	1,040	1,222,026	12,669

Problems Encountered and Proposed Solutions

The Pima County housing market has continued to be depressed during the first half of 2010. The number of housing permits in Tucson during 2008 was 3,019. The housing permits for 2009 fell to 2,020. Forecasts have predicted less than 2,000 new homes will be permitted in Pima County during 2010. This reduces the number of homes available to be built to increased energy efficiency standards.

New homes compete against foreclosed homes for buyers making the new home market very challenging. Many national homebuilders building in the Tucson market are beginning to embrace energy efficiency in their homes as a marketing advantage against the foreclosed homes. TEP seeks to help builders build and market energy efficient homes as a logical strategy to distinguish new construction. Homes with enhanced energy efficiency should be more desirable to potential home buyers and reward builders in the marketplace. Builders not participating in a utility sponsored energy efficiency program face increasing market pressure to build energy efficient homes to keep their product competitive.

Costs Incurred

Costs incurred for the Guarantee Home Program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Guarantee Home	\$ 176,650	\$ 2,214	\$ 4,942	\$ 348,212	\$ 36,707	\$ 31,035	\$ 599,760

Findings from All Research Projects

No research projects were undertaken during this reporting period.

Other Significant Information

The Guarantee Home Program markets through a variety of channels including:

- Media outlets (TV, radio, print ads);
- The real estate community with emphasis on builder sales associates;
- The trades community (including HVAC, framing and insulation contractors, among others);
- Consumers and potential new home buyers (increasing consumer demand for energy efficient housing);
- Code officials;
- City housing groups; and
- Guarantee Home Program web page.

A list of marketing materials for this Program is shown in Appendix 2 and available on the attached CD.

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TEP EDUCATION AND OUTREACH PROGRAMS

TEP currently offers educational programs targeting both commercial and residential customers. TEP also offers an Academic Education Program for use in scholastic settings.

RESIDENTIAL AND COMMERCIAL EDUCATION

Description

TEP's residential and commercial education is designed to educate customers on energy use and assist them with energy savings suggestions. TEP's primary tool for energy savings suggestions is the online Energy Advisor which provides the customer with more than 140 energy savings recommendations or measures and can be personalized for weather and utility rates based on the customer's zip code. TEP promotes the Energy Advisor online audit through a variety of advertising promotions such as bill inserts, web advertising, and radio advertising. Also included is educational information on TEP's PowerShift™ Time-of-Use ("TOU") rates.

Program Modifications

There have been no Program modifications during this reporting period. TEP continues to market existing customer and academic education programs, including the Energy Advisor and TOU awareness using the venues listed below:

- Bill inserts and messages;
- Brochures;
- Paid web advertising;
- In-house advertising on tep.com;
- Media Q&A, newspaper and radio ads;
- Tradeshows/Community events and premium giveaways; and
- Call Center training.

Program Goals, Objectives, and Savings Targets

The Program is designed to educate commercial and residential customers on ways to save energy through conservation measures or utilizing TOU rates.

Levels of Participation

Energy Advisor

For this reporting period, 4,543 residential customers and 381 commercial customers accessed the online Energy Advisor, with 3,945 residential customers and 35 commercial customers completing an online energy audit. TEP continues to advertise the Energy Advisor along with other Programs within the Bright Solutions Family Campaign.

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PowerShift™ TOU Customer Participation

146 on Rate 70NB

461 on Rate 70NC

307 on Rate 70ND

49 on Rate 201BN

13 on Rate 201CN

Other Residential TOU Customer Participation

2,531 on Rate 21 (frozen)

4,635 on Rate 70 (frozen)

580 on Rate 201B (frozen)

192 on Rate 201C (frozen)

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

ACADEMIC EDUCATION

Description

TEP offers school education programs that cover a variety of topics related to energy, natural resource conservation, and environmental awareness. These programs are offered to classes ranging from kindergarten through 8th grade. TEP provides age-appropriate curriculum with accompanying teachers' guides about electricity, energy efficiency, and conservation. TEP's Academic Education Program features four programs in particular, including: the Insulation Station (for use in 4th grade), Energy Patrol (for use in any elementary school class), Energy Conservation Bike/Solar Generation Presentations (for use in middle school), and the Electri-City Exhibit (for use in kindergarten through the 3rd grade).

The *Insulation Station* (a program for 4th graders) was approved by the Arizona Corporation Commission ("Commission") in March 1993. The Insulation Station is a hands-on learning kit containing ready-to-assemble model houses and the necessary supplies to conduct science and math activities on insulation and home energy efficiency. Materials provided are model home kits and student workbooks containing charts, graphs, activities, and a home energy audit. TEP requires 4th grade teachers to attend a training session prior to receiving materials.

The *Energy Patrol* is an AEO-sponsored program for elementary school teachers and students approved by the ACC in March 1993. Students monitor classrooms to ensure that lights, computers, and water faucets are turned off when rooms are vacant. The program is designed to help schools reduce energy costs and to teach students and their families how to conserve energy.

The *Electri-City Exhibit* at the Tucson Children's Museum is designed to teach very young children (K-3) about saving energy, as well as electrical safety. TEP also underwrites tours for schools in low-income areas, provides age-appropriate materials to students, and trains docents to augment the presentation, which includes hands-on activities illustrating the energy saving lessons.

The *Energy Conservation Bike/Solar Generation Presentations*: During TEP's Energy Conservation Bike and Solar Generation Presentations, students use the Energy Bike to generate enough electricity to light a light bulb, run a fan or heat up a hair dryer. They compare the amount of energy needed to light incandescent, CFL, and LED light bulbs, and learn about solar energy. Students explore ways they can help conserve energy at home and at school.

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These classroom presentations about Energy Conservation are 50-60 minutes in length and include a pre-visit lesson and post-visit activity; all are aligned with the Arizona Department of Education middle school science standards. Cards stating the students' intentions to save energy at home are collected for potential use to estimate savings.

Program Modifications

The Electri-City school tour and the Energy Conservation Bike presentation have been expanded to include information about renewable energy, specifically solar energy. Solar panels have been installed on the playhouse on the Tucson Children's Museum grounds, and a panel to operate small appliances has been added to the curriculum presented to children by the Museum docents, and to the teacher's guide provided to each teacher prior to the tour. The Energy Bike presentation now includes a demonstration solar panel, showing students how electricity is created from the sun with various hands-on illustrations of its use.

Program Goals, Objectives, and Savings Targets

These programs are all designed to educate students and their families on ways to save energy and to provide hands-on experiences, putting to test the options for saving energy.

Levels of Participation

The table below includes participation for this reporting period. TEP offers teacher trainings and distributes classroom materials.

<i>Program</i>	<i>Number of Schools</i>	<i>Number of Students</i>
Insulation Station*	2 schools/ 9 teachers trained	284
Energy Patrol	2 new schools	700 est.
Energy Conservation/ Environmental classroom materials	93 schools/ 296 teachers	29,212
Energy Efficiency Exhibit (TEP's Electri-City at the Museum)**	32 schools 376 Adults	1,395
Energy Conservation Bike / Solar Generation	19 schools	1,384
TOTAL	148	32,975

*Numbers refer to teachers trained and kits ordered for students.

**Student numbers are those from "low-income" schools for whom TEP paid the entrance fee and bus transportation costs for guided tours of the *Electri-City Exhibit*. They do not reflect total Museum visitors to the site.

The Energy Conservation classroom presentation for middle schools that features the Energy Bike continued to grow in popularity, and the addition of the renewable energy component allowed additional funding and therefore, more presentations. During this reporting period, trained presenters visited a total of 19 schools to reach 1,384 students; 780 6th graders; 428 7th graders; and 134 8th graders; as well as 42 "others", which includes mixed classes of grades. At the end of each session, students filled out pledge cards indicating at least three items they commit to do at home to help save energy, and each student was given a refrigerator magnet listing *10 Ways to Save Energy* to share with his/her family.

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During the spring semester, the Energy Bike team also made community presentations including TEP staff training. The Energy Bike was featured at the following events:

- The Festival of Books at the University of Arizona campus;
- Solar Rock;
- City of Tucson's Earth Day;
- Biosphere 2 Earth Day;
- Pima Community College (Northwest Campus location) Earth Day;
- The Mayors' Future Innovators Night (an evening event during the Southern Arizona Regional Science and Engineering Fair week);
- The Boy Scout-a-Rama; and
- The Tucson Botanical Gardens GreenFest.

ALL EDUCATION & OUTREACH PROGRAMS

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period as TEP does not claim energy savings for its current Education and Outreach Programs. TEP is exploring the option of greatly expanding its Education and Outreach Programs to include more significant neighborhood outreach, direct education and install of energy saving items, and programs that affect consumer behavior. These expanded Programs may allow for measurement and evaluation of energy savings.

kW, kWh, and Therm Savings

There are no kW or kWh savings associated with these Programs.

Costs Incurred

Costs incurred for the Education and Outreach Program during the reporting period are listed below:

DSM Program	Academic Education	Consumer Education	Time of Use Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Education & Outreach	\$ 65,439	\$ 195,753	\$ -	\$ 2,038	\$ -	\$ 10,957	\$ 274,188

Findings from All Research Projects

No research projects were performed during this reporting period.

Other Significant Information

No other significant information to report this period.

A list of marketing materials for this Program is shown in Appendix 2 and available on the attached CD .

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TEP SHADE TREE PROGRAM

Description

The TEP Shade Tree Program has been in place since December 1992. Desert-adapted trees are provided to individual residences, residential neighborhoods, and low-income families, as well as to community areas and schools through TEP's partnership with Tucson Clean and Beautiful. Residents are allowed two, 5-gallon trees per year (four for homes built before 1980), which must be planted on the south, west, or east side of the home. Residents complete an application provided by Tucson Clean and Beautiful either online or by mail which includes the type of tree requested and the location where it will be planted. The resident pays a nominal fee of \$8.00 per tree, and the tree will be delivered to their home by Tucson Clean and Beautiful.

Program Modifications

No modifications were made during this reporting period.

Program Goals, Objectives, and Savings Targets

The goal of the Program is to promote energy conservation and the environmental benefits associated with planting low water use trees. Along with the energy savings trees provide to the homes, trees also provide habitat for wildlife, absorb air and water pollutants, and control storm water runoff and soil erosion, in addition to the aesthetic beauty they provide to neighborhoods and the community.

Levels of Participation

For this reporting period, Tucson Clean and Beautiful delivered a total of 2,542 trees as follows:

- 2,513 five-gallon trees and four fifteen-gallon trees were distributed to approximately 1,436 residential customers;
- three fifteen-gallon trees and 12 five-gallon trees to six schools; and
- ten five-gallon trees to three community projects.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Navigant Consulting (formerly Summit Blue) has been selected as the MER contractor for the TEP DSM Programs (excluding LIW, Guarantee Home, and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected by year end 2010.

kW, kWh, and Therm Savings

No. of Trees	kW savings	kWh savings	Therm savings
2,542	0	449,934	0

Problems Encountered and Proposed Solutions

During this reporting period TEP learned that the database provided by Tucson Clean & Beautiful was maintained by both volunteers and the recently retired Tree Director. As such some of the customer information was not accurate. TEP's new database will track program participation in the customer's account, so having correct customer information such as name and address, will no longer be an issue.

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At this time TEP receives copies from Tucson Clean & Beautiful of the actual customer application for database entry. TEP and Tucson Clean & Beautiful are working towards a paperless solution to gather specific customer information in the future.

Costs Incurred

Costs incurred for the Shade Tree Program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Shade Tree	\$ 89,170	\$ -	\$ -	\$ 5,212	\$ -	\$ 3,929	\$ 98,311

Findings from All Research Projects

No research projects were conducted during this reporting period.

Other Significant Information

The Tree Director for Tucson Clean & Beautiful recently retired after 16 years of service. Tucson Clean & Beautiful has hired a new Tree Director who is updating and modernizing their processes and tracking system. This will ensure more timely and accurate information transfer between Tucson Clean & Beautiful and TEP.

No new marketing materials were developed during this reporting period.

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TEP EFFICIENT HOME COOLING PROGRAM

Description

The TEP Efficient Home Cooling Program promotes the installation of high-efficiency air conditioning and heat pump systems in existing homes in the TEP service territory by providing rebates to customers who purchase high Seasonal Energy Efficiency Ratio ("SEER") air conditioners or heat pumps. Air conditioners and heat pumps are eligible for rebates if they have a SEER rating of 14 or greater. Heating, Ventilating, and Air-Conditioning ("HVAC") contractors must also perform a proper sizing calculation for a customer's home to ensure the new air conditioner or heat pump is correctly sized for their needs.

Program Modifications

No modifications were made during this reporting period.

Program Goals, Objectives, and Savings Targets

This Program is designed to encourage customers in existing homes to purchase higher SEER rated air conditioners or heat pumps when replacing their existing HVAC system.

Levels of Participation

For this reporting period, TEP paid rebates on 1,923 HVAC units as follows:

Quantity	Equipment Type	SEER	Incremental Cost
490	Air Conditioner	14	\$425.53
170	Heat Pump	14	\$419.74
134	Air Conditioner	15	\$879.96
163	Heat Pump	15	\$847.93
570	Air Conditioner	16	\$1,313.00
98	Heat Pump	16	\$1,279.91
117	Air Conditioner	17	\$1,714.12
40	Heat Pump	17	\$1,768.38
109	Air Conditioner	18	\$2,118.04
32	Heat Pump	18	\$1,897.23
1,923			

In addition 3,358 \$25 rebates were paid to contractors during this reporting period (1,524 of these were from units installed during the 4th quarter of 2009 but were paid to the contractors in February 2010). TEP currently has 132 participating contractors signed to the program.

Evaluation and Monitoring Activities and Results

Navigant Consulting (formerly Summit Blue) has completed preliminary measurement and evaluation for this program. Updates for adjusted gross savings and incremental costs for this program are used in this report. Final MER results for all TEP DSM Programs are expected by year end 2010.

kW, kWh, and Therm Savings

No. of Units Installed	kW savings	kWh savings	Therm savings
1,923	388	784,920	0

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Problems Encountered and Proposed Solutions

TEP continues to encounter some difficulties with processing applications. As of June 30, 2010 there are 50 applications "on hold" from 30 separate contractors for various reasons. While providing a proper sizing calculation continues to be one reason for the delays, during this time period missing invoices or incomplete application forms (signatures, model numbers, etc) account for about two-thirds of the delays.

The proper sizing calculation requirement continues to be a roadblock with some HVAC contractors, causing delays in rebate processing. These delays create extra administrative time as well as heightened customer frustration. Many of our participating contractors will provide a Manual J sizing calculation as required. However, some have difficulties with this requirement because they've never pursued proper training. Also, changes are occurring in Pima County as the County is now requiring Manual J calculations to pull permits as required in Section M1401.3 and N1101 of the International Residential Code. TEP is working with the County to provide resources to help the contractors find accredited Manual J training opportunities.

TEP scheduled a Manual J Training Class on March 19, 2010. Invitations with follow up notifications were sent to all participating contractors. Nine HVAC companies attended with 11 representatives (2 companies sent 2 attendees). Due to the low interest in this and previous classes, TEP will now offer partial scholarships to any contractor who shows proof of attendance at any accredited Manual J Training class. Local HVAC business organizations can also coordinate a Manual J Training Class with TEP providing partial scholarships for their attendees. Finally, the Electric League of Arizona ("ELA") offers several Manual J Training classes throughout the year and TEP has partnered with them to offer partial scholarships to local contractors. The ELA has an established notification structure in place that reaches HVAC contractors throughout Arizona. Information regarding these opportunities is located on TEP's website.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing*	Planning & Admin	Program Total Cost
Efficient Home Cooling	\$ 318,950	\$ 6,002	\$ -	\$ 32,956	\$ 102,407	\$ 19,161	\$ 479,476

*Includes \$83,950 in contractor rebates

Findings from All Research Projects

No research projects were conducted during this reporting period.

Other Significant Information

No other significant information to report this period. A list of marketing materials for this Program is shown in Appendix 2 and available on the attached CD.

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TEP ENERGY STAR® LIGHTING PROGRAM

Description

The TEP ENERGY STAR® Compact Fluorescent Lamp (“CFL”) Buy-down Program promotes the installation of energy efficient ENERGY STAR® approved lighting products by residential and small commercial customers in the TEP service territory. TEP provides funds to manufacturers of ENERGY STAR® approved CFL products to reduce the cost of CFLs. TEP then partners with local retailers to pass on these savings to the consumer.

Program Modifications

There have no Program modifications this reporting period.

Program Goals, Objectives, and Savings Targets

The program objectives are to:

- Reduce peak demand and overall energy consumption in homes and small businesses;
- Increase the purchase of CFLs;
- Increase the availability of energy efficient lighting products in the marketplace; and
- Increase the awareness and knowledge of retailers and TEP customers on the benefits of energy efficient lighting products.

2010 sales, demand, and energy savings goals:

Year	2010	2011	2012
Projected Lamp sales	1,106,136	1,139,320	1,173,500
Peak Demand Savings (kW)	5,645	5,814	5,988
Energy Savings (kWh)	62,201,758	64,067,811	65,989,845

Levels of Participation

A total of 692,802 CFLs were sold during this reporting period. CFL sales by retailer and number sold by wattage are listed in Appendix 1.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Navigant Consulting (formerly Summit Blue) has been selected as the MER contractor for the TEP DSM Programs (excluding LIW, Guarantee Home, and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected by year end 2010.

kW, kWh, and Therm Savings

No. of CFLs Sold	kW savings	kWh savings	Therm savings
692,802	2,895	36,357,946	0

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Problems Encountered and Proposed Solutions

There is demand for a better quality three way CFL bulbs and a dimmable CFL bulb. TEP is also getting repeated requests for information on LED bulbs. It will take time for the manufacturers to respond and produce a quality ENERGY STAR[®]-rated LED product.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
ENERGY STAR [®] Lighting (CFL)	\$ 702,638	\$ 136	\$ -	\$ 130,639	\$ 14,418	\$ 35,332	\$ 883,162

Findings from All Research Projects

No research projects were conducted during this reporting period.

Other Significant Information

TEP has found that retailer visits are playing a critical role toward the success of the program. Visits focus on proper program information and signage; ensuring product is displayed prominently; checking product inventory; and training staff on the benefits of program participation. TEP performed 354 store visits during this reporting period. In addition, TEP held 103 aisle training events for retail employees.

TEP performed 22 week-end outreach events at various retailers during this reporting period. Outreach events consist of one or more TEP representatives promoting various CFL products and using a CFL lighting display to help educate customers. Outreach events typically last about four hours. Retailers are very appreciative of this type of outreach to their customers and always encourage repeat events at their store. Unfortunately retail store traffic has continued to be slow during this reporting period based on the opinion of the retail store management.

Marketing efforts for this reporting period include:

- CFL bulbs were given away at the annual employee meeting. In addition, CFL Program signage placed in public viewing areas throughout TEP facilities. This gives the program exposure to over 1,200 employees and their family and friends.;
- TEP attended 4 HOA meetings at various residential developments. A CFL presentation was given and one free CFL bulb was given to each household represented so that they could take them home and try them;
- The CFL Program was promoted at over 35 speaking events during this reporting period.
- The promotion with TechniArt Inc. has continued. TechniArt runs an online retail site selling 43 Energy Star CFL products that are available with utility incentives;
- TEP has a bulb display showing an incandescent vs. CFL bulbs. Customers can see the difference in energy used, brightness and colorization. A dimmable fixture was added to the display. This display is used at in-store outreach events, schools, and other events where TEP is exhibiting;
- The CFL program was featured on the radio talk show "Mrs. Green Goes Mainstream" in May;

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- The bulb application guide was displayed at all participating retail stores to help customers select the correct bulb for the correct application. The guide was modeled after the ENERGY STAR® guide;
- A bill insert that was sent to over 320,000 TEP customers in their June/July bill;
- Four calls were made to the 800 number during this reporting period. This is less than one call per month. Callers most often ask where they can purchase CFL bulbs; and
- There were 928 hits on the web site for this program. This has doubled from the last reporting period. The website includes a calendar of events and a retailer locator page.

No new marketing materials for this Program were developed during this reporting period.

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TEP NON-RESIDENTIAL EXISTING FACILITIES PROGRAM

Description

The TEP Non-Residential Existing Facilities Program is a multi-faceted program that will provide incentives to TEP's large commercial customers for the installation of energy-efficiency measures including lighting equipment and controls, HVAC equipment, motors and motor drives, compressed air, and refrigeration. Incentives are offered for measures in each of these categories. The Program also provides customers with the opportunity to propose innovative energy efficiency solutions through customer energy efficiency measures.

Program Modifications

No modifications were made in the Program during this reporting period. In January 2010 TEP submitted a request for increased funding due to the popularity of the Program. The approved funding was completely allocated during this reporting period. As of June 30, 2010, the request for a funding increase has not been approved by the Commission.

Program Goals, Objectives, and Savings Targets

The primary goal of the Program is to encourage TEP's large commercial customers to install energy efficiency measures in existing facilities. More specifically, the Program is designed to:

- Provide incentives to facility operators for the installation of high-efficiency lighting equipment and controls, HVAC equipment, premium efficiency motors and motor controls, energy efficient compressed air and leak-repair measures, and energy-efficient refrigeration system retrofits;
- Overcome market barriers including:
 - Lack of awareness and knowledge about the benefits and cost of energy efficiency improvements;
 - Performance uncertainty associated with energy efficiency projects; and
 - High first costs for energy efficiency measures.
- Assure that the participation process is clear, easy to understand and simple; and
- Increase the awareness and knowledge of facility operators, managers and decision-makers on the benefits of high-efficiency equipment and systems.

Levels of Participation

There were 48 pre-applications and 54 final applications during this reporting period for prescriptive measures. In addition, there were 123 pre-applications and 16 final applications for custom measures. 35 participants were paid a total of \$538,766 in rebates..

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Navigant Consulting (formerly Summit Blue) has been selected as the MER contractor for the TEP DSM Programs (excluding LIW, Guarantee Home, and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected by year end 2010.

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kW, kWh, and Therm Savings

Measure	No. Installed	kW savings	kWh savings	Incremental Cost
Air Compressors	0	0	0	N/A
Chillers	5	379	612,036	\$77,681.48
AC-HP*	75	43	245,931	\$430.92
Refrigeration	3	0	2,242	\$205.33
Motors	98	220	1,954,098	\$5,639.63
Lighting	29,585	884	3,916,394	\$25.62
Custom	6	188	1,410,238	\$21,219.78
Totals	29,772	1,714	8,140,939	N/A

*AC and HP measures installed consists of 41 programmable thermostats and 34 AC or HP units

Problems Encountered and Proposed Solutions

TEP has seen a significant increase in interest and participation in the Program during this reporting period. The budgeted funds for 2010 have been spent or allocated. Funds were transferred from the TEP Efficient Commercial Building Design Program to this Program in accordance with Decision No. 70459 (August 6, 2008). In addition, TEP requested Commission approval for additional funding in January 2010 which has not yet been approved. New applications for Program participation are being placed on a wait list until the additional funding is approved.

Costs Incurred

Costs incurred during this reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Non-Residential Existing Facilities	\$ 538,766	\$ -	\$ 242	\$ 164,244	\$ 380	\$ 29,912	\$ 733,544

Findings from All Research Projects

No research projects were undertaken during this reporting period.

Other Significant Information

Marketing efforts for this reporting period include:

- 32 presentations to:
 - carious business associations and individual businesses;
 - municipal governments within TEP service territory;
 - school systems within TEP service territory; and
 - Davis-Monthan Air Force Base representatives.
- A Trade Ally meeting held in March. 2009 year end results were presented and goals for 2010 were outlined. The contractors were recognized for outstanding performance in 2009;
- In April, the Program was promoted on the radio talk show, "Mrs. Green Goes Mainstream";
- Four education seminars covering refrigeration, day lighting, HVAC and automated chiller cleaning. Contractors and facilities managers from the service area were invited; and
- 2,790 web site hits for this Program. This is an increase over the previous reporting period.

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During this reporting period, TEP helped the City of Tucson develop a "Green Build Certification Program". The TEP Commercial DSM Programs are a key part of the certification program. Businesses participate to stretch their investment dollars. Program presentations are given each time a certification seminar is held.

Due to the increased volume of participation, KEMA, TEP's Implementation Contractor for the Commercial DSM Programs, has added two staff member to their team. One is a Mechanical Engineer who will assist commercial customers and contractors in performing calculations on energy savings and benefit/cost analysis. The second staff member is an Administrative Assistant who will perform data collection and record keeping, and will assist with customer inquiries by telephone.

No new marketing materials were developed during this reporting period.

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TEP SMALL BUSINESS PROGRAM

Description

The TEP Small Business Program is designed to minimize some of the barriers to implementation of energy efficiency improvements in the small business market, such as lack of capital, information search costs, transaction costs, performance uncertainty, and the so-called "hassle factor". Small firms generally concentrate on their core businesses, and do not have the wherewithal to analyze energy use and improve efficiency.

The Program will be an upstream market program providing incentives directly to contractors for the installation of selected high efficiency lighting, HVAC, and refrigeration measures. The incentives would be set at a higher level for this market in order to encourage contractors to market and deliver the Program, thus offsetting the need for TEP marketing and overhead expenses. In order to further reduce the overhead expenses, the Program will employ internet-based measure analysis and customer proposal processing which will make the process easier for both contractors and customers.

The Program includes customer and trade ally education to help them with understanding the technologies being promoted, what incentives are offered, and how the Program functions.

Program Modifications

No modifications were made in the Program during this reporting period. In January 2010 TEP submitted a request for increased funding due to the popularity of the Program. The current funding was completely allocated during this reporting period. As of June 30, 2010, the request for a funding increase has not been approved by the Commission.

Program Goals, Objectives, and Savings Targets

The primary objective of the Program is to encourage TEP's small business customers to install energy efficiency measures in existing facilities. More specifically, the Program is designed to:

- Encourage small business customers to install high-efficiency lighting equipment and controls, HVAC equipment, and energy-efficient refrigeration system retrofits in their facilities;
- Encourage contractors to promote the Program and provide turn-key installation services to small business customers;
- Overcome the unique market barriers of the small business market including:
 - first costs and lack of access to capital for energy efficiency improvements;
 - lack of awareness and knowledge about the benefits and cost of energy efficiency improvements;
 - hassle and transactions costs; and
 - performance uncertainty associated with energy efficiency projects.
- Assure that the participation process is clear, easy to understand and simple; and
- Increase the awareness and knowledge of business owners, building owners and managers, and other decision-makers on the benefits of high-efficiency equipment and systems.

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Savings targets are as follows:

Year	2010	2012	2013
Energy Savings (kWh)	10,594,523	10,912,359	11,239,730

Levels of Participation

162 applications were approved during this reporting period. Of these, 136 were completed. The rate of cancellation of approved applications was only 1%. A total of \$662,792 in rebates was paid to contractors and 81 small businesses participated in the Program during this reporting period.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Navigant Consulting (formerly Summit Blue) has been selected as the MER contractor for the TEP DSM Programs (excluding LIW, Guarantee Home, and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected by year end 2010.

kW, kWh, and Therm Savings

Measure	No. Installed	kW savings	kWh savings	Incremental Cost
Lighting	31,222	2,203	7,834,425	\$62.93
VSD	1	5	3,714	\$210.07
Refrigeration	396	39	446,473	\$248.65
AC and HP*	56	1	90,887	\$212.77
Totals	31,675	2,248	8,375,500	N/A

*AC and HP measures installed consists of 55 programmable thermostats and one AC unit

Problems Encountered and Proposed Solutions

Demand for Program participation is increasing. As a result, more applications were received during the first half of 2010 than the last half of 2009. The entire budget for 2010 has been paid out or allocated. As of June 29, 2010, new applications are being wait listed pending availability of additional funds. There is \$525,622 worth of project reservations that are being carried over from the first half of 2010 into the second half of 2010. Funds were transferred from the TEP Efficient Commercial Building Design Program to this Program in accordance with Decision No. 70459 (August 6, 2008). This will make up a small portion of the incentive money shortfall for 2010.

Lighting retrofit measures are getting the most participation. As a result, savings per dollar spent is below the established goal. More emphasis is being placed on other measures to increase the savings per dollar spent on the Program.

Of the applications received during this reporting period, 160 were for lighting and 12 were for HVAC. TEP plans to increase promotion of other measures to obtain better Program balance.

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Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Small Business	\$ 742,240	\$ -	\$ 2,771	\$ 178,074	\$ 373	\$ 39,062	\$ 962,521

Findings from All Research Projects

No research projects were conducted during this reporting period.

Other Significant Information

Marketing efforts for this reporting period include:

- 32 presentations to:
 - various Business associations and individual businesses;
 - municipal governments within TEP service territory;
 - school systems within TEP service territory; and
 - Davis-Monthan Air Force Base representatives.
- A Trade Ally meeting held in March. 2009 year end results were presented and goals for 2010 were outlined. The contractors were recognized for outstanding performance in 2009;
- In April, the Program was promoted on the radio talk show, "Mrs. Green Goes Mainstream";
- Four education seminars covering refrigeration, day lighting, HVAC and automated chiller cleaning. Contractors and facilities managers from the service area were invited; and
- Twelve contractors, with focus on refrigeration and HVAC, were added to the certified list during this reporting period. Using certified contractors to help promote the Program has proven to be very successful; and
- There were 2,848 hits on the web site for this Program. This is a large increase over the last reporting period. The web has proven to be a successful marketing tool for the Program.

During this reporting period, TEP helped the City of Tucson develop a "Green Build Certification Program". The TEP Commercial DSM Programs are a key part of the certification program. Businesses participate to stretch their investment dollars. Program presentations are given each time a certification seminar is held.

Due to the increased volume of participation, KEMA, TEP's Implementation Contractor for the Commercial DSM Programs, has added two staff member to their team. One is a Mechanical Engineer who will assist commercial customers and contractors in performing calculations on energy savings and benefit/cost analysis. The second staff member is an Administrative Assistant who will perform data collection and record keeping, and will assist with customer inquiries by telephone.

No new marketing materials were developed during this reporting period.

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TEP EFFICIENT COMMERCIAL BUILDING DESIGN PROGRAM

Description

The Efficient Commercial Building Design Program is geared toward the building owner/developer and is designed to encourage improved building energy efficiency in new commercial construction compared to standard building practices.

The Program is a performance-based program that includes design assistance for the design team, performance-based incentives for the building owner and developer, and energy design information resources. Design assistance involves efforts to integrate energy efficiency into a customer's design process as early as possible. The Program would provide incentives to offset the additional design cost of alternative, energy-efficient designs.

In addition to the design incentives and performance-based incentives for the building owner/developer, this Program will provide technical support services to the design community. The Program will provide consumer education and promotional pieces designed to assist building owners/developers in understanding various energy efficiency options and encourage them to explore energy efficiency options.

Program Modifications

No modifications were made during this past reporting period.

Program Goals, Objectives, and Savings Targets

The primary goal of the Program is to encourage energy-efficient new building design for new, non-residential projects in TEP's service area. More specifically, the Program is designed to:

- Provide incentives to building owners/developers to design and build more energy-efficient buildings;
- Provide assistance to design teams to offset the additional cost and time of investigating more energy-efficient design;
- Overcome certain market barriers;
- Assure that the participation process is clear and easy to understand and does not unduly burden the design and construction time schedule or budget process;
- Increase the awareness and knowledge of building owners/developers, architects, engineers, and decision-makers on the benefits of high efficiency buildings design; and
- Encourage building owners/developers and the design community to consider energy efficiency options as early in the design process as possible.

Savings targets are as follows:

Year	2010	2012	2013
Number of Facilities	14	14	15
Energy Savings (MWh)	3,214	3,310	3,410

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Levels of Participation

There were two applications for design assistance and eight applications for building performance during this reporting period.

Four payments totaling \$12,067 for installed performance measures were made during this reporting period. One payment of \$10,000 was made for design assistance. \$95,930 has been reserved for design assistance applications submitted but the work is not completed yet.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Navigant Consulting (formerly Summit Blue) has been selected as the MER contractor for the TEP DSM Programs (excluding LIW, Guarantee Home, and Education & Outreach) and is in the process of implementing a MER plan. Final MER results are expected by year end 2010.

kW, kWh, and Therm Savings

No. of Participants	No. of Buildings	kW savings	kWh savings	Therm savings
5	5	32	122,885	0

Problems Encountered and Proposed Solutions

The slow economy is creating declining interest for project development and design assistance. Longer lead times for active projects are preventing timely completion of new commercial developments.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Efficient Commercial Building Design	\$ 22,067	\$ -	\$ -	\$ 37,304	\$ -	\$ 2,471	\$ 61,842

Findings from All Research Projects

No research projects were conducted during this reporting period.

Other Significant Information

Marketing efforts for this reporting period include:

- 32 presentations to:
 - various Business associations and individual businesses;
 - municipal governments within TEP service territory;
 - school systems within TEP service territory; and
 - Davis-Monthan Air Force Base representatives.
- In April, the Program was promoted on the radio talk show, "Mrs. Green Goes Mainstream";
- Four education seminars covering refrigeration, day lighting, HVAC and automated chiller cleaning. Contractors and facilities managers from the service area were invited; and
- There were 1,819 hits on the website for this Program during this reporting period.

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New commercial construction requires a long lead time. From conception to completion construction can be 20 months or more. This and the current economic recession will make 2010 and onward a challenge. However, TEP is committed to making the Efficient Commercial Building Design Program a success.

No new marketing materials were developed during this reporting period.

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APPENDIX 1 – CFL SALES AND WATTAGE INFORMATION

CFL Sales by Retailer

Retailer	Jan	Feb	Mar	Apr	May	Jun	Total
99 Cents	4,864	4,293	5,100	5,315	6,072		25,644
Ace Hardware	2,964	3,612	4,881	8,083	6,084	5,101	30,725
Bed Bath & Beyond							0
Best Buy					17	68	85
Costco	49,059	100,934	95,377	39,110	33,615	22,198	340,293
Dollar Tree				440	922		1,362
Family Dollar		1,344	1,881	1,012	810	713	5,760
Fry's Foods				4,220	5,264	5,488	14,972
Goodwill				21,600			21,600
Home Depot	31,950	26,707	25,838	23,408	29,157	20,101	157,161
Sam's Club	9,150	9,549	7,416	5,946	4,043	7,231	43,335
Sun Lighting							0
Walmart	9,336	9,167	8,233	6,472	9,018	9,639	51,865
	107,323	155,606	148,726	115,606	95,002	70,539	692,802

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kWh Savings by Wattage

Units	Watts	Watts Replaced	Watts Saved	Life	Hours/Day	Meas Life	Unit kWh Annual	kWh Annual
123	9	40	31	8,000	2.75	8.0	31.1	3,830
2,668	9	40	31	8,000	2.75	8.0	31.1	83,076
25,690	9	40	31	10,000	2.75	10.0	31.1	799,935
1,404	10	40	30	8,000	2.75	8.0	30.1	42,307
552	10	40	30	8,000	2.75	8.0	30.1	16,634
5,496	10	40	30	8,000	2.84	7.7	31.1	171,101
4,515	10	40	30	10,000	2.75	10.0	30.1	136,050
435	11	40	29	8,000	2.75	8.0	29.1	12,671
215	11	45	34	8,000	2.75	8.0	34.2	7,342
1,059	11	40	29	10,000	2.75	10.0	29.1	30,848
12,493	13	60	47	8,000	2.75	8.0	47.2	589,770
38,238	13	60	47	8,000	2.75	8.0	47.2	1,805,178
279,711	13	60	47	10,000	2.75	10.0	47.2	13,204,877
15,220	13	60	47	12,000	2.75	11.9	47.2	718,521
1,510	14	50	36	8,000	2.75	8.0	36.2	54,602
5,058	14	60	46	8,000	2.75	8.0	46.2	233,700
6,566	14	65	51	8,000	2.75	8.0	51.2	336,350
101,922	14	60	46	10,000	2.75	10.0	46.2	4,709,204
176	15	60	45	8,000	2.75	8.0	45.2	7,955
3,288	15	60	45	8,000	2.75	8.0	45.2	148,618
1	15	65	50	8,000	2.75	8.0	50.2	50
1,273	15	65	50	8,000	2.75	8.0	50.2	63,931
1,235	15	60	45	10,000	2.75	10.0	45.2	55,822
24,901	15	65	50	10,000	2.75	10.0	50.2	1,250,578
1,130	15	75	60	10,000	2.75	10.0	60.3	68,101
3,158	16	65	49	8,000	2.75	8.0	49.2	155,427
109	18	75	57	12,000	2.75	11.9	57.3	6,241
10,709	19	75	56	10,000	2.75	10.0	56.2	602,371
4,361	20	75	55	8,000	2.75	8.0	55.2	240,915
2,234	20	75	55	8,000	2.75	8.0	55.2	123,415
4,592	20	75	55	10,000	2.75	10.0	55.2	253,680
1,904	23	100	77	8,000	2.75	8.0	77.3	147,259
150	23	90	67	10,000	2.75	10.0	67.3	10,095
102,940	23	100	77	10,000	2.75	10.0	77.3	7,961,585
7,828	23	120	97	10,000	2.75	10.0	97.4	762,682
182	23	100	77	12,000	2.75	11.9	77.3	14,076
56	26	90	64	8,000	2.75	8.0	64.3	3,600
6,302	26	100	74	8,000	2.75	8.0	74.3	468,409
9,524	26	100	74	8,000	2.75	8.0	74.3	707,900
504	26	90	64	10,000	2.75	10.0	64.3	32,399
182	26	95	69	10,000	2.75	10.0	69.3	12,614
2,768	27	120	93	10,000	2.75	10.0	93.4	258,567
11	33	150	117	10,000	2.75	10.0	117.5	1,293
409	42	150	108	10,000	2.75	10.0	108.5	44,368
692,802								36,357,946

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APPENDIX 2 – MARKETING MATERIALS

Guarantee Home Program:

- Van Wraps
 - Back – HR_PROOF_rear (JPG)
 - Driver – HR_PROOF_driver (JPG)
 - Front – PROOF_front (JPG)
 - Passenger – HR_PROOF_passenger (JPG)
- Print
 - Stripad (JPG)
- TV Theatre
 - Comfort_Zone_FINAL (WMV)
 - Guarantee Home 4 (WMV)

Education and Outreach Programs:

- Bill Inserts:
 - TEP Bright Family insert v2 (PDF)
 - TEP Phantom Energy insert v1 (PDF)
- TV:
 - Bright Tweets 30 TEP REV 1 (WMV)
 - Full Load 15 TEP (WMV)
 - Hand Held 15 TEP (WMV)
 - Meet_The_Bright_Family_TEP_finalcut (WMV)
 - Shut It Down 15 TEP (WMV)
 - Water Heater 15 TEP (WMV)
- Web:
 - marketing icon (GIF)
 - TEP Otto ebill banner (JPG)

Efficient Home Cooling Program:

- Bill Insert
 - EHCbillinsert (PDF)
- Print
 - TEP EHC ad SCVS v7FINAL (PDF)
- Radio
 - TEP AC Rebates Radio 15 (MP3)
- Web
 - TEP EHC ebill banner (JPG)