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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION
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IN THE MATTER OF THE APPLICATION OF
TUCSON ELECTRIC POWER COMPANY FOR
APPROVAL OF ITS 2011-2012 ENERGY
EFFICIENCY IMPLEMENTATION PLAN.

DOCKET NO. E-01933A-11-0055

**NOTICE OF FILING UPDATED
INFORMATION IN SUPPORT
OF 2011-2012 ELECTRIC
ENERGY EFFICIENCY
IMPLEMENTATION PLAN**

Tucson Electric Power Company, through counsel undersigned, hereby files the attached Updated Information in Support of its 2011-2012 Electric Energy Efficiency Implementation Plan ("EE Plan") that was filed with the Arizona Corporation Commission on January 31, 2011. The updates to the EE Plan relate to the following topics:

- Residential Financing Program
- Budget
- Portfolio Savings
- Authorized Revenue Requirement True-Up
- DSM Adjustor

RESPECTFULLY SUBMITTED this 22nd day of August 2011.

Tucson Electric Power Company

By

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TUCSON ELECTRIC POWER

UPDATED INFORMATION IN SUPPORT OF 2011-2012 ELECTRIC ENERGY EFFICIENCY IMPLEMENTATION PLAN

DOCKET No. E-01933A-11-0055

AUGUST 22, 2011

Summary of Updated Information

Tucson Electric Power Co. (“TEP” or “Company”) has prepared this document in support of its proposed 2011-2012 Electric Energy Efficiency Implementation Plan (“EE Plan”) that was filed with the Arizona Corporation Commission (“Commission”) on January 31, 2011. The purpose of this document is to provide updated information that the Company believes is important in order for the Commission to complete its analysis prior to approving the EE Plan.¹

There are five primary updates contained herein as follows:

I. RESIDENTIAL FINANCING PROGRAM

At the request of the Commission, TEP continued its efforts to locate a local lender for the Residential Financing Program and recently selected Vantage West Credit Union as the lending partner. The change in lending partners resulted in significant budget reductions from those filed in the original EE Plan filed with the Commission. Changes to this program are included in the red-lined filing of Exhibit 1. The comparison below shows the anticipated spending for 2011-2012.

Program Year	Original EE Plan Budget	Updated Budget
2011	\$781,646	\$142,815
2012	\$792,262	\$442,645
Total	\$1,573,908	\$585,460

II. BUDGET

The delay in timing for approval of new programs and additional program measures and continuing economic forces have altered the estimated budgets resulting in an \$8 million reduction. TEP provides the following budget comparison for Commission review:

Program Year	Original EE Plan Budget	Updated Budget
2011	\$23,612,678	\$18,182,475
2012	\$27,486,097	\$24,739,193
Total	\$51,098,774	\$42,921,668

¹ When TEP filed its EE Plan on January 31, 2011, it anticipated Commission approval of the EE Plan in June 2011. The delay in the timing for approval has significantly altered anticipated participation in 2011 and has resulted in other changes as set forth herein. The changes set forth herein anticipate that the EE Plan will be approved by the Commission in time to be implemented on October 1, 2011. For the convenience of the Commission, TEP has provided (where appropriate) side-by-side comparisons of the original EE Plan to the updated information.

III. PORTFOLIO SAVINGS

The delay in timing has altered the estimated savings for 2011 and 2012 as shown below:

Program Year	Original EE Plan Savings (MWh)	Updated Savings (MWh)
2011	155,325	135,781
2012	180,603	175,365
Total	335,928	311,146

IV. AUTHORIZED REVENUE REQUIREMENT TRUE-UP (“ARRT”)

Due to the reduction in savings, the calculation for the ARRT has also been reduced, as shown below:

Program Year	Original EE Plan ARRT	Updated ARRT
2011	\$4,402,226	\$3,877,937
2012	\$13,848,041	\$12,890,440
Total	\$18,250,267	\$16,768,378

V. DSM ADJUSTOR

The DSM adjustor must be modified due to: (i) the decrease in program budgets and ARRT and (ii) the reduced timing for collection. TEP has provided a summary of information on the DSM adjustor request in the table below:

Program Years	Original DSM Surcharge (\$/kWh)	Updated DSM Surcharge (\$/kWh)
2011-2012	0.005675	0.006343

This updated information does not alter any other component in the original EE Plan document and TEP respectfully requests that the Commission approve its EE Plan, as supplemented herein, as expeditiously as possible.

I. Residential Financing Program

TEP has designed a proposed Energy Efficiency Residential Financing Pilot Program (“Pilot Program”) to provide customers with the funds needed to make cost-effective energy efficiency upgrades to their homes.

Initially, TEP planned to develop partnerships with Pennsylvania Treasury, as it appeared to be the only lending partner available to meet many requests that surfaced during the UNS Gas program development. After receiving requests from Commission Staff and local community members to continue investigation of alternative Arizona-based lenders for the TEP Program, and after resolving contract issues with the planned lending partner, suitable loan programs for all three companies were negotiated with Vantage West Credit Union. The loan programs for the three companies: (i) are nearly identical; (ii) are very similar to UNS Gas loan program approved by the Commission in Decision No. 72062 (01/06/2011); (iii) have improved functionality of loan loss reserve and interest rate buy-down accounts; and (iv) and have reduced costs.

Due to the later date now anticipated for Commission approval of the EE Plan, TEP has updated the estimated 2011 and 2012 budget to represent both the reduced costs associated with the Vantage West Credit Union partnership and the anticipated launch date for the Pilot Program. Updated budget details, a full Pilot Program description, and a red-line version of the original Financing Program are included in Exhibit 1.

II. Budget

As a result of the reduced costs associated with the re-design of the Pilot Program, and the delay in timing for approval of new programs and additional Pilot Program measures, TEP has reduced its 2011 EE Plan budget. TEP has also made some minor modifications to its participation estimates for 2012 due to continuing economic forces, resulting in some budget modifications for 2012. The combined result for 2011-2012 is an \$8 million reduction from the original EE Plan. The changes in budget by Pilot Program are shown in Exhibit 2.

III. Portfolio Savings

Due to the delay in timing and modifications in participation estimates as mentioned above, TEP has altered its estimated savings for 2011 and 2012. These modifications in savings estimates by Pilot Program are shown in Exhibit 3.

IV. ARRT

Due to the reduction in savings, the calculation for the ARRT has also been reduced. TEP is now requesting approval to collect approximately \$16.8 million in ARRT. Table IV-A below provides information on the ARRT by rate class.

Table IV-A ARRT by Rate Class

	Residential	Small General	Large General	Industrial	Other	Total
Original EE Plan	\$10,397,500	\$5,968,052	\$1,009,779	\$652,873	\$222,063	\$18,250,267
Updated Information	\$9,495,233	\$5,460,027	\$957,772	\$652,188	\$203,158	\$16,768,378

The ARRT, attached as Exhibit 4, shows the monthly and annual results of this calculation by rate class for calendar years 2011 and 2012².

V. DSM Adjustor

TEP seeks to update two components within its DSM Surcharge: (i) program cost recovery; and (ii) ARRT. TEP is not proposing any changes to the DSM Performance Incentive from the EE Plan. Specifically, TEP is requesting approval to collect \$43 million in DSM program costs for 2011-2012, a \$16 million pre-tax DSM performance incentive for 2011-2012, and \$17 million in ARRT for 2011-2012.

TEP requests that the 2011-2012 EE Plan and the updated 2011-2012 DSM Tariff as attached herein be approved in order to be implemented on October 1, 2011³.

TEP has included a revised tariff in Exhibit 5 that complies with A.A.C. R14-2-2406(A). Additionally, because of the delayed implantation date, TEP requests that the existing DSM adjustment mechanism be approved for implementation effective October 1, 2011 through December 31, 2012, in order to ensure just and reasonable rates.

Additional details and the elements of the Company's proposed Demand-Side Management Surcharge ("DSMS") for October 1, 2011 through December 31, 2012 can also be found in the attached Exhibit 5. At this time, it is anticipated that the DSMS required to implement the updated 2011-2012 EE Plan will be approximately \$0.006343 per kWh based on forecasted retail sales from October 1, 2011 through December 31, 2012.⁴ The average impact to a residential customer will be \$5.58 per month.

² These projections are based on TEP's best estimates of market penetration for each program. TEP will recover the ARRT through the DSM Surcharge and will be reset coincident with the effective date of applicable changes to the Company's rates or eliminate this incremental portion of the DSM Surcharge in conjunction with the approval of revenue decoupling in a manner that will not leave a gap or result in double recovery.

³ TEP assumed an October 1, 2011 effective date in calculations for the Demand Side Management Surcharge ("DSMS") but will file as a compliance item a revised DSMS using the actual effective date for the new surcharge following Commission approval.

⁴ TEP has assumed the DSMS of \$0.001249 will remain in effect through September 31, 2011.

EXHIBIT

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Program Description

Tucson Electric Power Co. (“TEP” or the “Company”) has designed a proposed Energy Efficiency Residential Financing Pilot Program (“Program”) to provide customers with the capital needed to make cost-effective energy efficiency upgrades to their homes. TEP believes that a two year pilot program will allow sufficient time for the Company to evaluate the Program, including participation, default rates, and overall value to customers. TEP’s proposed Program elements include:

- Loan commitment of \$2,000,000 per year for two years; this will provide approximately 424 loans per year based on an average \$4,722 loan amount;
- Loans available only on energy efficiency measures meeting the Commission-required cost-effectiveness test;
- Low interest rates provided by a combination of an interest rate buy-down and a 10% loan loss reserve account;
- Limited ratepayer exposure to default risk (10% of the loan commitment);
- Funding provided through an approved Demand-Side Management (“DSM”) surcharge charged to residential customers;
- Affordable residential financing for energy efficient measures;
- Convenient customer access to and repayment of the financing;
- Standard finance product offering for all eligible, approved borrowers;
- Leveraged financing;
- Accurate Truth-in-Lending notifications and billing to customers provided by an experienced third party lender; and
- Community involvement in forming and marketing the Program.

TEP proposes to increase DSM surcharge for residential customers by \$0.00018 per kWh to fund the Program during the two year pilot program. The average annual cost to each residential customer would be \$1.90.

It should be noted that UNS Gas, Inc. (“UNS Gas”) (an affiliate of TEP), requested a program nearly identical to the one requested herein for TEP. The UNS Gas program was approved in Arizona Corporation Commission (“Commission”) Decision No. 72062 (January 6, 2011). After receiving requests from Staff and local community members to investigate alternative Arizona-based lenders for the TEP and UNS Electric, Inc. (“UNS Electric”) programs and after experiencing contract issues with the prior lender for the UNS Gas program, suitable loan programs for all three companies were negotiated with a local credit union. The loan programs for the three companies are nearly identical, are very similar to loan program approved under Decision No. 72062, have improved functionality of loan loss reserve and interest rate buy-down accounts, and have reduced costs.

Program Objectives and Rationale

TEP believes that the Program’s financing options to help cover the costs of energy efficiency measures will improve customer participation in energy efficiency programs and expand the pool of customers that can afford to participate in those programs. Although other vendors offer financing for their own individual products, the Program’s comprehensive approach to home energy upgrades cuts across several potential products and includes efficiency measures not traditionally financed, such as air and duct sealing.

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

Prior to designing the Program, TEP developed key objectives for the Company's implementation of a financing program. The following three objectives stood out from the rest as fundamental in order for TEP to provide a financing option:

- The program design must eliminate the utility from any Truth-in-Lending Law regulation implications;
- The program must provide a reasonable amount of funds at a reasonable interest rate and with a low initial investment; and
- Energy efficiency measures that qualify for TEP financing must have met the Commission's cost-effectiveness test.

With these objectives, TEP hired Harcourt Brown Energy and Finance ("Harcourt Brown") to assist with the evaluation, negotiations, and design of the Program. TEP, selected a Third Party Financing model secured by a combination of a 10% loan loss reserve account and an interest rate buy-down, all funded from the DSM Surcharge, as the best program offering.

Target Market

The target market for this Program is any residential customer in TEP's service territory who owns their home. Financing is available for installation of approved and cost effective DSM energy efficiency measures.

Program Eligibility

Eligible properties include single-family (1 to 4 unit), owner-occupied homes.

Current Baseline Conditions

The primary program available for comparison is offered through Fannie Mae. Fannie Mae utilizes an unsecured loan program structured in a similar manner to TEP's. Fannie Mae's base interest rate is 14.99% compared to the 7.99% available through the TEP Program. The programs offered by Arizona Public Service Company ("APS") and Southwest Gas Corporation ("Southwest Gas") are expected to have base interest rates of 6.5% to 8.5%.

Products and Services

Harcourt Brown evaluated the following parameters before recommending the most beneficial program to TEP:

- sources of capital;
- interest rates;
- loan terms;
- loan types and amounts;
- risk management;
- program integration;
- ease of use;
- repayment billing; and
- equitable funding.

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

TEP, with guidance from Harcourt Brown and input from Commission Staff and community leaders, considered several financing models and completed discussions with numerous entities nationwide before determining the most beneficial financing model for customers. The model selected by TEP uses Vantage West Credit Union (“VW” or “Lender”), an Arizona-based company, as the third party lender. The loans will be leveraged by a 10% loss reserve account as well as an interest rate buy-down fee. All funding will be provided by a DSM Surcharge applied to residential customers of TEP.

The Program will offer energy efficiency loans to TEP customers who are seeking financing for the energy efficiency improvements to their homes. Loan proceeds can be used for energy efficiency measures that have been approved by the Commission.

The Program is designed to provide an equitable and comprehensive approach to the financing of energy efficiency improvements in existing homes. TEP is proposing \$2,000,000 in overall loan commitments to this Program for two consecutive years as a pilot program. TEP believes the size of this loan commitment is sufficient based on the number of customers in its service territory and the limited DSM energy efficiency measures available for customers at this time.

TEP evaluated the funding levels and cost to the customer, as shown in Table 1-1 below. TEP assumed an average loan size of \$4,722 and a maximum term of 10 years in these calculations. Actual amounts will vary by loan size and terms. The 2011 total loan amount, interest rate buy-down and loan loss reserve is significantly reduced due to the delay in program approval and the anticipated launch to customers in November 2011.

Table 1-1. Funding Levels and Cost to Customer

TEP - Supplemental 2011 Residential Financing Program - Year 1				
Total Loan Amount Available (ResRate 10 Only)	*Estimated # of Loans	DSM Funding for Reserve	**DSM Funding for Buy-Down	Program Budget (Year 1)
\$100,000	21	\$10,000	\$4,000	\$142,815

TEP - Impact of Residential Financing Program - Year 2				
Total Loan Amount Available (ResRate 10 Only)	*Estimated # of Loans	DSM Funding for Reserve	**DSM Funding for Buy-Down	Program Budget (Year 2)
\$2,000,000	424	\$200,000	\$79,995	\$442,645

* Assumes average loan size \$4,722 at max % buydown

** Assumes maximum 10 year term

Total 2-Year DSM Budget	
2011 Budget	\$142,815
2012 Budget	\$442,645
Total	\$585,460

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

Note: TEP proposes that the DSM Surcharge necessary to fund this program be collected only from residential customers, as the loan instruments described are restricted to residential customers.

Table 1-2. 2011-2012 Cost to Customer

TEP - 2011-2012 DSM Adjustor for Residential Financing Program (Residential Customers Recovery Only)					
2011-2012 Program Budget	Actual kWh 2009 Less Lifeline Residential	Adjustor Increase/ kWh	Customers EOY 2009 (Less Lifeline)	Average kWh per Customer	Average Annual Cost
\$585,460	3,726,945,671	\$0.00016	345,445	10,789	\$1.69

Program Funding and Terms

The proposed Program operates as follows:

1. VW will be the Lender that originates, services, and holds the Program loans until maturity. VW has committed to make loans according to basic underwriting terms, including approving borrowers with a Fair Isaac Corporation (“FICO”) credit score of 640 or higher. Borrowers may be granted up to 10 years repayment. For all approved loans, the interest rate will be 7.99%, fixed for the life of the loan. Interest rates will not vary due to loan size, term, or credit score and there will be no prepayment penalty.
2. Additional terms will be contractually delineated between VW and TEP.
3. TEP will set aside funds through a loan loss reserve account (10% of committed loan value) and an interest rate buy-down account (4% of committed loan value).
4. TEP’s role in this process will be to provide the loan loss reserve and interest rate buy-down accounts, to support lending. Funding will be collected through the DSM surcharge from TEP residential customers. TEP will not service or originate the loans.

Interest Rate Buy-down

The interest rate buy-down referenced above is necessary to offer a rate competitive with those rates offered in other utility financing programs in the State. The programs offered by APS and Southwest Gas have interest rates ranging from 6.5% to 8.5%. The loan interest rates will be bought down to 7.99%. The cost of the interest rate buy-down is dependent upon the FICO credit score of each customer. VW’s base rate is 11.99% (requiring a 4% buy-down) for customers with FICO scores of 640 to 679, and 9.99% (requiring a 2% buy-down) for scores of 680 and above. VW does not charge a premium to reduce the interest rates, so the cost of the reduction equals the percentage change by which the rate was reduced [*i.e.*, if the rate is bought down from 11.99% to 7.99% (a difference of 4%) the cost to the Program for the reduction is only 4%]. Table 1-3 illustrates the two potential scenarios regarding the interest rate buy-down cost on a per-loan basis. Additional details are shown in Table 1-2 above.

Table 1-3. Interest Rate Buy-Down Costs

Average Loan Size of \$4,722		
Buydown %	5-Year Term	10-Year Term
2%	\$94	\$94
4%	\$189	\$189
Adjusted Buy-Down per Dollar		
Buydown %	5-Year Term	10-Year Term
2%	\$0.020	\$0.020
4%	\$0.040	\$0.040

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

Loan Terms

TEP has worked with many lenders to develop the best loan terms for its customers. Optimal repayment terms, interest rates, fees, and application processes have been at the forefront of discussions. The terms must be negotiated and beneficial to both the lender and the customer, and meet various standards set forth by bank regulators. The loan terms available under the VW Program for the maximum term of 10 years and the maximum loan amount of \$15,000 is shown below:

Table 1-4. Loan Term, Rate and Payment

Financing Amount	Terms	Interest Rate	Monthly Payment
\$4,722	10 Yr.	7.99%	\$57.27

Financing Amount	Terms	Interest Rate	Monthly Payment on Each \$1.00
\$4,722	10 Yr.	7.99%	\$0.01213

As with other DSM Programs, low-income customers will be excluded from the DSM Surcharge.

Credit Underwriting

Limited credit standards will be used by the Lender in its underwriting process. Loan approval is granted based on FICO credit scores of 640 and above, debt-to-income ratios of 50% or less, and proof of income. These lower credit scores allow for greater participation for TEP residential customers than products offered by most other lenders.

Application and Approval Process

The application and approval process is designed to be simple, easily accessible and convenient to all, as shown below.

- Customers can call a 1-800 telephone number to apply and receive loan approval; or
- Applications can be filled out during the visit with the contractor; or
- Loan applications will be available on the VW website; and
- Loan pre-approvals will occur within 1 business day of making the application.

With the help of community-action groups as well as contractor marketing and TEP marketing, the Company believes that Program loan funds will be fully used each year. At this time, the only approved residential energy efficiency measures for the TEP territory is the high-efficiency air conditioner and heat pump exchange, duct sealing, air sealing, ceiling insulation and window film/shade screens. The anticipated participation discussed herein is based on the assumed participation in the Existing Homes Program approved by the Commission in Decision No. 72028 (December 10, 2010).

While loan sizes are likely to vary, TEP estimates that 800 customers will choose to participate in the Existing Homes Program. TEP further estimates that only a percentage of those participants will install each energy efficiency measure. Details of the TEP methodology to determine the average loan size are demonstrated in Table 1-5. With the \$2,000,000 loan commitment each year available through the Program, approximately 424 loans could be made in the service territory assuming an average loan size of \$4,722. If the average loan size is smaller than this estimate, the number of loans will increase proportionately.

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

Table 1-5. Determination of Average Loan Size

TEP ESTIMATE OF LOAN SIZE					
Participants	800				
Category	Annual kWh	%	Total Lost Therm	Estimated Cost of Measure	Total Financing Requirement
Duct Seal	1,030	0.6	494,400	\$ 935	\$ 448,800
Air Seal	415	0.4	132,800	\$ 370	\$ 118,400
Insul & Air Seal	1,075	0.3	258,000	\$1,165	\$ 279,600
Equipment & Ducts	1,300	0.4	416,000	\$7,700	\$2,464,000
Shade Screens	1,060	0.6	508,800	\$ 708	\$ 339,840
Attic Insulation Only	660	0.2	105,600	\$ 795	\$ 127,200
TOTALS			1,915,600		\$3,777,840
Average Loan Size per Customer					\$4,722

Delivery Strategy, Incentive Processing and Administration

The strategy for Program delivery and administration is as follows:

- Coordination between the Lender and TEP on all fund transfers will be managed in-house by a single TEP Program Manager;
- The Program Manager will also provide overall management, marketing oversight, planning and tracking of customer and contractor participation; and
- The Program Manager will coordinate all activities necessary to develop application forms and contractor training.

Key partnering relationships will include:

- Community interest groups;
- HVAC, insulation, and air sealing contractors trained in Program procedures; and
- The Arizona Energy Office, Pima Community College, or other industry experts to provide training, education and awareness.

The Program will use contractors initially recruited for the Existing Homes Program, encouraging them to promote TEP financing when working with customers. TEP will provide an orientation of the Program which will outline Program requirements and contractors responsibilities as well as discuss reporting and data collection procedures. Contractors interested in participating in the Program must attend the orientation.

Program Marketing and Communication Strategy

TEP will provide Program marketing and customer outreach and awareness through a range of strategies including:

- Promotions on the TEP website about the benefits of purchasing high-efficiency equipment and home performance measures;

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

- Promotion through contractors and through community interest groups;
- Providing information through TEP's customer care center;
- Developing marketing pieces including brochures and other collateral pieces to promote the benefits of qualifying equipment, air sealing and duct sealing, and the financing program available to fund those measures; and
- Training and seminars for participating trade allies and contractors.

The advertising campaign will communicate that high-efficiency systems and home performance measures will help reduce customer energy bills, provide equal or better comfort conditions, and are beneficial for the environment.

Program Implementation Schedule

TEP will continue working with VW on preparation of contracts, agreements, and other documents as we await Commission approval. TEP estimates the Program could commence within 30 to 60 days of receiving Commission approval.

Measurement, Evaluation and Research Plan

TEP will adopt an integrated data collection strategy designed to provide a quality data resource for Program tracking, management, and evaluation. This approach will entail the following primary activities:

- Database management: As part of Program operation, TEP will request the Lender to provide the necessary data elements to populate the tracking database and provide periodic reporting; and
- Data collection: TEP will establish systems to collect the data needed to support effective Program management, transfer of funds from TEP to the loan loss reserve accounts, reporting, and evaluation.

Quality Assurance and Control

Due to the risks inherent with this type of program, quality assurance and control will be a daily function of the Program Manager. In order to protect its customer's interests, TEP plans to collect loan information prior to and after each loan closing, as it believes the best time to correct a mistake or avoid fraud is prior to the loan being funded. The information collected will not be used by TEP to approve the credit-worthiness of a borrower, but will be reviewed to ensure that: 1) each loan falls within what has been approved by the Commission; 2) Commission-approved measures are the only items being financed by the loan; and 3) the loan proceeds are for work being performed by an approved contractor. Additionally, each signed Promissory Note and Disbursement Sheet along with a copy of the disbursement check will be collected to verify the loan was closed and funded as presented to TEP.

Additional steps to keep a tight control on the portfolio are the requirements of daily, weekly and monthly reporting. Daily reporting will include daily viewing access to the Loan Loss Reserve and Interest Rate Buy-down Accounts, and notification of any defaults and charge offs. Lender will also provide TEP a past-due report on a weekly basis. Monthly reporting will be more extensive, with a full portfolio report provided to TEP. The monthly portfolio report will include the information TEP will need for accurate reporting and control of the Program. A monthly reconciled statement for the Loan Loss Reserve Account will also be required.

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

Program Costs and Benefits

The budget is detailed in Table 1-6. . In order to have a sufficient budget to support the Program should more loans fall into the 640-679 FICO score category, the budget is calculated using the 4% interest rate buy-down.

Table 1-6. Two Year Pilot Program Budget

\$2,000,000 Loan Commitment per Year	*2011	2012	Total
Loan Loss Reserve Amount	\$10,000	\$200,000	\$210,000
DSM Funds for Interest Buy-Down	\$4,000	\$79,995	\$83,995
TEP Internal Administration	\$50,000	\$30,900	\$80,900
Measurement and Reporting	\$17,416	\$21,777	\$39,193
Marketing Materials	\$36,399	\$34,973	\$71,372
Joint Utility Coordination Transfers	\$0	\$50,000	\$50,000
Contractor Training Classes	\$25,000	\$25,000	\$50,000
Budget Total	\$142,815	\$442,645	\$585,460

* 2011 budget reduced due to delay in program approval and anticipated launch for Nov 2011.

Upon maturity of the first set of loans (maximum of 10 years into the Program), the amount collected through the DSM surcharge for the next year will be reduced. At that point, the loan loss reserve account associated with the loans from the first year will be returned to the Program. The amount returned will equal the initial amount funded into the loan loss reserve account, plus interest accrued on the account, less any loan losses sustained.

There is no direct benefit or savings from a residential financing program, but the total DSM Portfolio Cost for TEP will increase as a result of offering the Program. However the indirect benefit and savings is measured at the program level where individual energy efficiency measures are included. TEP believes the availability of financing for the Existing Homes Program will increase participation, and thus increase the resulting societal benefits and savings reported in the program.

To compare the estimated annual savings to the estimated annual payments on the average-sized loan TEP provided examples of the customer benefit and savings from two likely scenarios from participation in the Existing Homes Program. This information is included in Table 1-7. As set forth in Example 1 of Table 1-7, anticipated savings would be less than estimated loan payments. Example 2 however, demonstrates that with a lower loan size, the savings would be much closer to the annual loan payments. This example demonstrates how the Program could result in cost savings to some customers depending on loan size and term but that TEP cannot guarantee cost savings to all customers.

According to Commission Staff, societal cost tests are not applicable to a residential financing program.

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1

Table 1-7. Examples of Estimated Savings, Costs and Payments

Category	Annual kWh Savings	Estim Job Cost	Annual Customer Savings \$0.10/kWh
Duct Seal	1,030	\$935	\$103
Air Seal	415	\$370	\$42
Insul & Air Seal	1,075	\$1,165	\$108
Equipment & Ducts	1,300	\$7,700	\$130
Shade Screens	1,060	\$708	\$106
Attic Insulation Only	660	\$795	\$66

Example 1:

Customer Chooses Envelope AND Efficient Equipment	Annual kWh Savings	Estim Job Cost	Annual Customer Savings @\$0.10/kWh	Annual Pmt 10 Year
Equipment & Ducts	1,300	\$7,700	\$130	
Insulation & Air Sealing	1,075	\$1,165	\$108	
Totals	2375	\$8,865	\$238	

Example 2:

Customer Chooses Envelope AND Efficient Equipment	Annual kWh Savings	Estim Job Cost	Annual Customer Savings @\$0.10/kWh	Annual Pmt 10 Year
Duct Sealing Only	1,030	\$935	\$103	
Insulation & Air Sealing	1,075	\$1,165	\$108	
Totals	2,105	\$2,100	\$211	\$306

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VERSION

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

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Program Description

Tucson Electric Power Co. ("TEP" or the "Company") has designed a proposed Energy Efficiency Residential Financing Pilot Program ("Program") to provide customers with the capital needed to make cost-effective energy efficiency upgrades to their homes. TEP believes that a two year pilot program will allow sufficient time for the Company to evaluate the Program, including participation, default rates, and overall value to customers. TEP's proposed Program elements include:

- Loan commitment of \$2,000,000 per year for two years; this will provide approximately 424 loans per year based on an average \$4,722 loan amount;
- Loans available only on energy efficiency measures meeting the Commission-required cost-effectiveness test;
- Low interest rates provided by a combination of an interest rate buy-down and a 10% loan loss reserve account;
- Limited customer-ratepayer exposure to default risk (10% of the loan commitment);
- Funding provided through an approved Demand-Side Management ("DSM") surcharge charged to residential customers;
- Affordable residential financing for energy efficient measures;
- Convenient customer access to and repayment of the financing;
- Standard finance product offering for all eligible, approved borrowers;
- Leveraged financing;
- Accurate Truth-in-Lending notifications and billing to customers provided by an experienced third party lender; and
- Community involvement in forming and marketing the Program.

~~TEP requests Commission direction on the level of impact for residential customers. Depending on the Commission direction, TEP proposes to increase DSM surcharge for residential customers by \$0.00018 per kWh to fund the Program by one of three levels during the first year of the two year pilot program. The average annual cost to each residential customer would be \$1.90.~~

~~• \$2,000,000 in funding with no interest rate buy-down would require \$0.0001 per kWh to fund the Program. The average annual cost to each residential customer would be \$1.48;~~

~~• \$2,000,000 in funding with a 2% interest rate buy-down would require \$0.0002 per kWh to fund the Program. The average annual cost to each residential customer would be \$2.13;~~

~~• \$2,000,000 in funding with a 3% interest rate buy-down would require \$0.0002 per kWh to fund the Program. The average annual cost to each residential customer would be \$2.44.~~

~~It should be noted that Of note, UNS Gas, Inc. ("UNS Gas") (an related entity to affiliate of TEP), requested a program nearly identical to the one requested herein for TEP. The UNS Gas program was approved in Arizona Corporation Commission ("Commission") Decision No. 72062 (January 6, 2011). In that decision, the Commission opted for the 2% interest rate buy-down option. Based on that decision, TEP recommends the 2% buy-down option, yet provides throughout this application all three buy-down options for the Commission's consideration. After receiving requests from Staff and local community~~

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members to investigate alternative Arizona-based lenders for the TEP and UNS Electric, Inc. ("UNS Electric") programs and after experiencing contract issues with the prior lender for the UNS Gas program, suitable loan programs for all three companies were negotiated with a local credit union. The loan programs for the three companies are nearly identical, are very similar to loan program approved under Decision No. 72062, have improved functionality of loan loss reserve and interest rate buy-down accounts, and have reduced costs.

Program Objectives and Rationale

TEP believes that the Program's financing options to help cover the costs of energy efficiency measures will improve customer participation in energy efficiency programs and expand the pool of customers that can afford to participate in those programs. Although other vendors offer financing for their own individual products, the Program's comprehensive approach to home energy upgrades cuts across several potential products and includes efficiency measures not traditionally financed, such as air and duct sealing.

Prior to designing the Program, TEP developed key objectives for the Company's implementation of a financing program. The following three objectives stood out from the rest as fundamental in order for TEP to provide a financing option:

- The program design must eliminate the utility from any Truth-in-Lending Law regulation implications;
- The program must provide a reasonable amount of funds at a reasonable interest rate and with a low initial investment; and
- Energy efficiency measures that qualify for TEP financing must have met the Commission's cost-effectiveness test.

With these objectives, TEP hired Harcourt Brown Energy and Finance ("Harcourt Brown") to assist with the evaluation, negotiations, and design of the Program. TEP, with guidance from Harcourt Brown, selected a Third Party Financing model secured by a combination of a 10% loan loss reserve account and an interest rate buy-down, all funded from the DSM Surcharge, as the best program offering.

Target Market

The target market for this Program is any residential customer in TEP's service territory who owns their home. Financing is available for installation of approved and cost effective DSM energy efficiency measures.

Program Eligibility

Eligible properties include single-family (1 to 4 unit), owner-occupied homes.

Current Baseline Conditions

The primary program available for comparison is offered through Fannie Mae. Fannie Mae utilizes an unsecured loan program structured in a similar manner to TEP's. Fannie Mae's base interest rate is 14.99% compared to the 7.99% to 9.99% available through the TEP Program. The programs offered by Arizona Public Service Company ("APS") and Southwest Gas Corporation ("Southwest Gas") are expected to have base interest rates of 6.5% to 8.5%.

Products and Services

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Harcourt Brown evaluated the following parameters before recommending the most beneficial program to TEP:

- sources of capital;
- interest rates;
- loan terms;
- loan types and amounts;
- risk management;
- program integration;
- ease of use;
- repayment billing; and
- equitable funding.

TEP, with guidance from and Harcourt Brown and input from Commission Staff and community leaders, considered several financing models and completed discussions with numerous entities nationwide before determining the most beneficial financing model for customers. The model selected by TEP uses Vantage West Credit Union AFC First (“VWAFG” or “Lender”), an Arizona-based company, as the third party lender. Capital resources are provided by the Pennsylvania Treasury (“PA Treasury”) with the loans will be leveraged by a 10% loss reserve account as well as an interest rate buy-down fee. All funding will be provided by a DSM Surcharge applied to residential customers of TEP.

The Program will offer energy efficiency loans to TEP customers who are seeking financing for the energy efficiency improvements to their homes. Loan proceeds can be used for energy efficiency measures that have been approved by the Commission.

The Program is designed to provide an equitable and comprehensive approach to the financing of energy efficiency improvements in existing homes. TEP is proposing \$2,000,000 in overall loan commitments to this Program for two consecutive years as a pilot program. TEP believes the size of this loan commitment is sufficient based on the number of customers in its service territory and the limited DSM energy efficiency measures available for gas customers at this time. In order for this Program to be viable, TEP needs Commission approval of its currently pending Existing Homes and Residential Energy Assessment Programs.

TEP evaluated the customer impact funding levels and cost to the customer of three levels of funding, as shown in Table 1-1 below. TEP assumed an average loan size of \$4,722 and a maximum term of 120 years in these calculations. Actual amounts will vary by loan size and terms. The 2011 total loan amount, interest rate buy-down and loan loss reserve is significantly reduced due to the delay in program approval and the anticipated launch to customers in November 2011.

Table 1-1. Funding Levels and Cost to Customer

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TEP - Supplemental 2011 Residential Financing Program - Year 1				
Total Loan Amount Available (ResRate 10 Only)	*Estimated # of Loans	DSM Funding for Reserve	**DSM Funding for Buy-Down	Program Budget (Year 1)
\$100,000	21	\$10,000	\$4,000	\$142,815

TEP - Impact of Residential Financing Program - Year 2				
Total Loan Amount Available (ResRate 10 Only)	*Estimated # of Loans	DSM Funding for Reserve	**DSM Funding for Buy-Down	Program Budget (Year 2)
\$2,000,000	424	\$200,000	\$79,995	\$442,645

* Assumes average loan size \$4,722 at max % buydown

** Assumes maximum 10 year term

TEP - Impact of Residential Financing Program with Buy-Down Options (Res Only) - Year 1					
Total Loan Amount Available (ResRate 10 Only)	Estimated # of Loans	DSM Funding for Reserve (10%)	Buy-Down Percentage	**DSM Funding for Buy-Down	Total Program Budget (Year 1)
\$2,000,000	424	\$200,000	0%	\$-	\$509,604
\$2,000,000	424	\$200,000	2%	\$225,314	\$734,918
\$2,000,000	424	\$200,000	3%	\$332,889	\$842,493

TEP - Impact of Residential Financing Program with Buy-Down Options (Res Only) - Year 2					
Total Loan Amount Available (ResRate 10 Only)	Estimated # of Loans	DSM Funding for Reserve (10%)	Buy-Down Percentage	**DSM Funding for Buy-Down	Total Program Budget (Year 2)
\$2,000,000	424	\$200,000	0%	\$-	\$465,596
\$2,000,000	424	\$200,000	2%	\$225,314	\$690,910
\$2,000,000	424	\$200,000	3%	\$332,889	\$798,485

* Assumes average loan size \$4,722

** Assumes maximum 12-year term

*** Year 2 costs reduced due to lower cost for marketing materials and contractor training

Total 2-Year DSM Budget	
2011 Budget	\$142,815
2012 Budget	\$442,645
Total	\$585,460

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Total 2-Year DSM Budget	
No Buydown	\$ 975,201
-2% Buydown	\$1,485,829
-3% Buydown	\$1,640,978

Note: TEP proposes that the DSM Surcharge necessary to fund this program be collected only from residential customers, as the loan instruments described are restricted to residential customers.

Table 1-2. 2011-2012 Cost to Customer – Buy-Down Options

TEP - 2011-2012 DSM Adjustor for Residential Financing Program (Residential Customers Recovery Only)					
2011-2012 Program Budget	Actual kWh 2009 Less Lifeline Residential	Adjustor Increase/ kWh	Customers EOY 2009 (Less Lifeline)	Average kWh per Customer	Average Annual Cost
\$585,460	3,726,945,671	\$0.00016	345,445	10,789	\$1.69

TEP – Impact of Residential Financing Program with Buy-Down Options (Res Only)					
Total Program Budget	Actual kWh 2009	Surcharge Increase/ kWh	Total # of Customers EOY 2009 (Less Lifeline)	Average kWh per Customer	Average Annual Cost
\$509,604	3,726,945,671	\$ 0.0001	345,445	10,789	\$1.48
\$ 734,918	3,726,945,671	\$ 0.0002	345,445	10,789	\$ 2.13
\$ 842,493	3,726,945,671	\$ 0.0002	345,445	10,789	\$ 2.44

Program Funding and Terms

The proposed Program operates as follows:

1. VWAF will be the Lender that originates, and services, and holds the Program loans until maturity. VWAF has committed to make loans according to basic underwriting terms, including approving borrowers with a Fair Isaac Corporation (“FICO”) credit score of 640 or higher. Borrowers may be granted up to 120 years repayment. For all approved loans, the ~~though interest rate~~s are currently to be determined, TEP has secured a verbal commitment that rates will be between 7.99% and 9.99%, fixed for the life of the loan. Interest rates will not vary due to loan size, term, or credit score and there will be no prepayment penalty.
2. Additional terms will be contractually delineated between AFCVW and TEP. ~~Final rates and availability will be determined prior to Program commencement.~~
3. ~~PA Treasury will contract with AFC to purchase the Program loans from AFC. The interest rates, loan terms, underwriting criteria and other relevant characteristics of the loans that PA Treasury will purchase will be contractually delineated.~~
4. ~~3.~~ TEP will set aside funds through a loan loss reserve account (10% of committed loan value) and/or an interest rate buy-down account (4% of committed loan value). ~~The loss-reserve agreement will be negotiated with the PA Treasury.~~
5. ~~AFC’s loan capital will be replenished from the proceeds of TEP’s sale of Program loans to the PA Treasury, thereby enabling AFC to make new loans.~~

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6. ~~The PA Treasury will sell the Program loans to its investors. The proceeds from these sales will enable the PA Treasury to make additional loan purchases from AFC.~~
- 7.4. ~~TEP's role in this process will be to provide the loan loss reserve and interest rate buy-down accounts, to support lending, and potentially to buy-down interest rates. Funding will be collected through the DSM surcharge from TEP residential customers. TEP will not service or originate the loans.~~

Interest Rate Buy-down

The interest rate buy-down referenced above ~~above~~ is ~~may~~ be necessary to offer a rate competitive with those rates offered in other utility financing programs in the State. The programs offered by APS and Southwest Gas have interest rates ranging from 6.5% to 8.5%. ~~The loan interest rates will be bought down to 7.99%. Because the interest rate buy-down will result in an additional cost that will be covered through the DSM Surcharge, TEP seeks Commission guidance on the final product offering. As previously stated, TEP recommends the 2% buy-down option based on the Commission's decision in the UNS Gas Residential Energy Efficiency Financing Pilot Program Decision No. 72062 (January 6, 2011), yet provides the data for all three options for the Commission's consideration in this matter. The cost of the interest rate buy-down will depend on (1) the market interest rate, (2) the target interest rate, (3) the loan amounts, and (4) the loan term is dependent upon the FICO credit score of each customer. VW's base rate is 11.99% (requiring a 4% buy-down) for customers with FICO scores of 640 to 679, and 9.99% (requiring a 2% buy-down) for scores of 680 and above. VW does not charge a premium to reduce the interest rates, so the cost of the reduction equals the percentage change by which the rate was reduced [i.e., if the rate is bought down from 11.99% to 7.99% (a difference of 4%) the cost to the Program for the reduction is only 4%].~~ Table 1-3 illustrates the two potential scenarios regarding the interest rate buy-down cost on a per-loan basis. Additional details are shown in Table 1-2 above.

Table 1-3. Interest Rate Buy-Down Costs

Average Loan Size of \$4,722		
Buydown %	5-Year Term	10-Year Term
2%	\$94	\$94
4%	\$189	\$189
Adjusted Buy-Down per Dollar		
Buydown %	5-Year Term	10-Year Term
2%	\$0.020	\$0.020
4%	\$0.040	\$0.040

Average Loan Size of \$4,722		
Buydown %	7-Year Term	12-Year Term
0.02	322	532
0.03	479	786

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Loan Terms

TEP has worked with many lenders to develop the best loan terms for its customers. Optimal repayment terms, interest rates, fees, and application processes have been at the forefront of discussions. However, TEP cannot dictate to any lender the package of terms they must offer. The terms must be negotiated and beneficial to both the lender and the customer, and meet various standards set forth by bank regulators. The loan terms available under the VW Program for the maximum term of 10 years and the maximum loan amount of \$15,000 are as follows shown below:

Table 1-4. Loan Terms, Rates and Payment Range

Financing Amount	Terms	Interest Rate	Monthly Payment
\$4,722	10 Yr.	7.99%	\$57.27

Financing Amount	Terms	Interest Rate	Monthly Payment on Each \$1.00
\$4,722	10 Yr.	7.99%	\$0.01213

Financing Amount	Terms	Interest Rates	Payment Range on \$4,722.00 Av. Loan
\$1,000 - \$15,000 w/o Buydown	up to 144 Mos.	7.99% - 9.99%	\$51 - \$56
\$1,000 - \$15,000 w/2% Buydown	up to 144 Mos.	5.99% - 7.99%	\$46 - \$51
\$1,000 - \$15,000 w/3% Buydown	up to 144 Mos.	4.99% - 6.99%	\$41 - \$49

As demonstrated in Table 1-4, the payment amount based on the estimated average loan size does not fluctuate greatly between an interest rate of 4.99% and 9.99% (\$44 to \$56 per month). As the loan size increases to the maximum (\$15,000), the payment spread widens from \$139 per month to \$179 per month at these same rates. TEP is looking for guidance from the Commission to decide whether or not the benefit of the payment savings to these individual customers offsets the buy-down fee charged to all residential customers. As with other DSM Programs, low-income customers will be excluded from the DSM Surcharge.

Credit Underwriting

Limited credit standards will be used by the Lender in its underwriting process. Loan approval is granted based on FICO credit scores of 640 and above, debt-to-income ratios of 50% or less, and proof of income. These lower credit scores allow far greater participation for TEP residential customers than products offered by most other lenders.

Application and Approval Process

The application and approval process is designed to be simple, easily accessible and convenient to all, as shown below.

- Customers can call a 1-800 telephone number to apply and receive loan approval; or
- Applications can be filled out during the visit with the contractor; or
- Loan applications will be available on the VWTEP website; and

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- Loan pre-approvals will occur within 1 business day ~~20 minutes to 48 hours~~ of making the application.

With the help of community-action groups as well as contractor marketing and TEP marketing, the Company believes that Program loan funds will be fully used each year. At this time, the only approved residential energy efficiency measures for the TEP territory is the high-efficiency air conditioner and heat pump exchange, duct sealing, air sealing, ceiling insulation and window film/shade screens. The anticipated participation discussed herein is based on the assumed participation in the Existing Homes Program approved by the Commission in Decision No. 72028 (December 10, 2010).

While loan sizes are likely to vary, TEP estimates that 800 customers will choose to participate in the Existing Homes Program. TEP further estimates that only a percentage of those participants will install each energy efficiency measure. Details of the TEP methodology to determine the average loan size are demonstrated in Table 1-5. With the \$2,000,000 loan commitment each year available through the Program, approximately 424 loans could be made in the service territory assuming an average loan size of \$4,722. If the average loan size is smaller than this estimate, the number of loans will increase proportionately.

Table 1-5. Determination of Average Loan Size

TEP ESTIMATE OF LOAN SIZE					
Participants	800				
Category	Annual kWh	%	Total Lost Therm	Estimated Cost of Measure	Total Financing Requirement
Duct Seal	1,030	0.6	494,400	\$ 935	\$ 448,800
Air Seal	415	0.4	132,800	\$ 370	\$ 118,400
Insul & Air Seal	1,075	0.3	258,000	\$1,165	\$ 279,600
Equipment & Ducts	1,300	0.4	416,000	\$7,700	\$2,464,000
Shade Screens	1,060	0.6	508,800	\$ 708	\$ 339,840
Attic Insulation Only	660	0.2	105,600	\$ 795	\$ 127,200
TOTALS			1,915,600		\$3,777,840
Average Loan Size per Customer					\$4,722

Delivery Strategy, Incentive Processing and Administration

The strategy for Program delivery and administration is as follows:

- Coordination between the Lender and TEP on all fund transfers will be managed in-house by a single TEP Program Manager;
- The Program Manager will also provide overall management, marketing oversight, planning and tracking of customer and contractor participation; and
- The Program Manager will coordinate all activities necessary to develop application forms and contractor training.

Key partnering relationships will include:

- Community interest groups;
- HVAC, insulation, and air sealing contractors trained in Program procedures; and
- The Arizona Energy Office, Pima Community College, or other industry experts to provide training, education and awareness.

The Program will use contractors initially recruited for the Existing Homes Program, encouraging them to promote TEP financing when working with customers. TEP will provide an orientation of the Program which will outline Program requirements and contractors responsibilities as well as discuss reporting and data collection procedures. Contractors interested in participating in the Program must attend the orientation.

Program Marketing and Communication Strategy

TEP will provide Program marketing and customer outreach and awareness through a range of strategies including:

- Promotions on the TEP website about the benefits of purchasing high-efficiency equipment and home performance measures;
- Promotion through contractors and through community interest groups;
- Providing information through TEP's customer care center;
- Developing marketing pieces including brochures and other collateral pieces to promote the benefits of qualifying equipment, air sealing and duct sealing, and the financing program available to fund those measures; and
- Training and seminars for participating trade allies and contractors.

The advertising campaign will communicate that high-efficiency systems and home performance measures will help reduce customer energy bills, provide equal or better comfort conditions, and are beneficial for the environment.

Program Implementation Schedule

~~The PA Treasury has assured Harcourt Brown that funding for the Program is available. TEP will continue working with VWAFC and the PA Treasury on preparation of contracts, agreements, and other documents as we await Commission approval. TEP estimates the Program could commence within 30 to 60 days of receiving Commission approval.~~

Measurement, Evaluation and Research Plan

TEP will adopt an integrated data collection strategy designed to provide a quality data resource for Program tracking, management, and evaluation. This approach will entail the following primary activities:

- **Database management:** As part of Program operation, TEP will request the Lender to provide the necessary data elements to populate the tracking database and provide periodic reporting; and
- **Data collection:** TEP will establish systems to collect the data needed to support effective Program management, transfer of funds from TEP to the loan loss reserve accounts, reporting, and evaluation.

Quality Assurance and Control

Due to the risks inherent with this type of program, quality assurance and control will be a daily function of the Program Manager. In order to protect its customer's interests, TEP plans to collect loan information prior to and after each loan closing, as it believes the best time to correct a mistake or avoid fraud is prior to the loan being funded. The information collected will not be used by TEP to approve the credit-worthiness of a borrower, but will be reviewed to ensure that: 1) ~~ensure that~~ each loan falls within what has been approved by the Commission; 2) ~~that~~ Commission-approved measures are the only items being financed by the loan; and 3) ~~that~~ the loan proceeds are for work being performed by an approved contractor. Additionally, each signed Promissory Note and Disbursement Sheet along with a copy of the disbursement check will be collected to verify the loan was closed and funded as presented to TEP.

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Additional steps to keep a tight control on the portfolio are the requirements of daily, weekly and monthly reporting. Daily reporting will include daily viewing access to the Loan Loss Reserve and Interest Rate Buy-down Accounts, and notification of any defaults and charge offs. Lender will also provide TEP a past-due report on a weekly basis. Monthly reporting will be more extensive, with a full portfolio report provided to TEP. The monthly portfolio report will include the information TEP will need for accurate reporting and control of the Program. A monthly reconciled statement for the Loan Loss Reserve Account will also be required.

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Program Costs and Benefits

Three possible budgets are detailed in Table 1-6. Potential budgets depend on whether or not a buy-down approach is used. An estimate of lost revenue resulting from installation of energy efficiency measures installed as a result of the Program has been included as a component of the Annual Budget. In order to have a sufficient budget to support the Program should more loans fall into the 640-679 FICO score category, the budget is calculated using the 4% interest rate buy-down.

Table 1-6. Two Year Pilot Program Budget

\$2,000,000 Loan Commitment per Year	*2011	2012	Total
Loan Loss Reserve Amount	\$10,000	\$200,000	\$210,000
DSM Funds for Interest Buy-Down	\$4,000	\$79,995	\$83,995
TEP Internal Administration	\$50,000	\$30,900	\$80,900
Measurement and Reporting	\$17,416	\$21,777	\$39,193
Marketing Materials	\$36,399	\$34,973	\$71,372
Joint Utility Coordination Transfers	\$0	\$50,000	\$50,000
Contractor Training Classes	\$25,000	\$25,000	\$50,000
Budget Total	\$142,815	\$442,645	\$585,460

* 2011 budget reduced due to delay in program approval and anticipated launch for Nov 2011.

ALL CALCULATIONS ASSUME AVERAGE LOAN SIZE \$4,227 AND TERMS 12 YEARS			
Description at \$2,000,000 Loan Commitment - 0% Buy-Down	2011	2012	Total
Loan Loss Reserve Amount	\$ 200,000	\$200,000	\$400,000
DSM Funds for Interest Buy-Down	\$ 0	\$ 0	\$ 0
Loss-Default Recovery-Expected 2023 @ 3% of 2011-commitment	\$ 0	\$ 0	\$ 0
TEP Internal Administration 1/3-FTE Reporting	\$40,000	\$41,200	\$81,200
Marketing Materials	\$50,000	\$25,000	\$75,000
Joint Utility Coordination Transfers	\$50,000	\$50,000	\$100,000
Contractor Training Classes	\$25,000	\$10,000	\$35,000
TEP Loss-Revenue Recovery	\$60,847	\$60,847	\$121,695
Budget Total	\$435,847	\$397,347	\$833,195
Includes Estimated Lost Revenue for \$2,000,000 Residential Loans			

Description at \$2,000,000 Loan Commitment - 2% Buy-Down	2011	2012	Total
Loan Loss Reserve Amount	\$200,000	\$200,000	\$400,000
DSM Funds for Interest Buy-Down	\$225,314	\$225,314	\$450,628
Loss-Default Recovery-Expected 2023 @ 3% of 2011-commitment	\$-	\$-	\$-
TEP Internal Administration 1/3-FTE Reporting	\$40,000	\$41,200	\$81,200
Marketing Materials	\$50,000	\$ 25,000	\$75,000

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Joint Utility Coordination Transfers	\$50,000	\$50,000	\$100,000
Contractor Training Classes	\$25,000	\$10,000	\$35,000
TEP Loss Revenue Recovery	\$60,847	\$60,847	\$121,695
Budget Total	\$661,161	\$622,661	\$1,283,823
Includes Estimated Loss Revenue for \$2,000,000 Residential Loans			

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Description at \$2,000,000 Loan Commitment - 3% Buy-Down	2011	2012	Total
Loan Loss Reserve Amount	\$200,000	\$200,000	\$400,000
DSM Funds for Interest Buy-Down	\$332,889	\$332,889	\$665,777
Loss-Default-Recovery-Expected 2023 @ 3% of 2011 commitment	\$-	\$-	\$-
TEP Internal Administration 1/3 FTE Reporting	\$40,000	\$41,200	\$81,200
Marketing Materials	\$10,000	\$10,300	\$20,300
Joint-Utility Coordination Transfers	\$50,000	\$25,000	\$75,000
Contractor Training Classes	\$50,000	\$50,000	\$100,000
TEP Loss Revenue Recovery	\$25,000	\$10,000	\$35,000
TEP Loss Revenue Recovery	\$60,847	\$60,847	\$121,695
Budget Total	\$768,736	\$ 730,236	\$1,498,972
Includes Estimated Lost Revenue on \$2,000,000 Residential Loans			

Upon maturity of the first set of loans (maximum of 120 years into the Program), the amount collected through the DSM surcharge for the next year will be reduced. At that point, the loan loss reserve account associated with the loans from the first year will be returned to the Program. The amount returned will equal the initial amount funded into the loan loss reserve account, plus interest accrued on the account, less any loan losses sustained.

There is no direct benefit or savings from a residential financing program, but the total DSM Portfolio Cost for TEP will increase as a result of offering the Program. However the indirect benefit and savings is measured at the program level where individual energy efficiency measures are included. TEP believes the availability of financing for the Existing Homes Program will increase participation, and thus increase the resulting societal benefits and savings reported in the program.

To compare the estimated annual savings to the estimated annual payments on the average-sized loan for the three buy-down scenarios (no buy-down, 2% buy-down and 3% buy-down) TEP provided examples of the customer benefit and savings from two likely scenarios from participation in the Existing Homes Program. This information is included in Table 1-7. As set forth in Example 1 of Table 1-7, anticipated savings would be less than estimated loan payments using a 2% or 3% buy-down. However, Example 2 however, demonstrates that with a lower loan size, the savings would be greater than much closer to the annual loan payments. This example demonstrates how the Program could result in cost savings to some customers depending on loan size and term, but that TEP cannot guarantee cost savings to all customers.

According to Commission Staff, societal cost tests are not applicable to a residential financing program.

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Table 1-7. Examples of Estimated Savings, Costs and Payments

Category	Annual kWh Savings	Estim Job Cost	Annual Customer Savings \$0.10/kWh
Duct Seal	1,030	\$935	\$103
Air Seal	415	\$370	\$42
Insul & Air Seal	1,075	\$1,165	\$108
Equipment & Ducts	1,300	\$7,700	\$130
Shade Screens	1,060	\$708	\$106
Attic Insulation Only	660	\$795	\$66

Example 1:

Customer Chooses Envelope AND Efficient Equipment	Annual kWh Savings	Estim Job Cost	Annual Customer Savings @\$0.10/kWh	Annual Pmt 10 Year
Equipment & Ducts	1,300	\$7,700	\$130	
Insulation & Air Sealing	1,075	\$1,165	\$108	
Totals	2375	\$8,865	\$238	

Example 2:

Customer Chooses Envelope AND Efficient Equipment	Annual kWh Savings	Estim Job Cost	Annual Customer Savings @\$0.10/kWh	Annual Pmt 10 Year
Duct Sealing Only	1,030	\$935	\$103	
Insulation & Air Sealing	1,075	\$1,165	\$108	
Totals	2,105	\$2,100	\$211	\$306

Category	Annual kWh Savings	Annual Customer Savings \$0.10/kWh	Estimated Job Cost
Duct Seal	1030	\$103	\$935
Air Seal	415	\$42	\$370
Insul & Air Seal	1075	\$108	\$1,165
Equipment & Ducts	1300	\$130	\$7,700

TEP Residential Energy Efficiency Financing Pilot Program (Updated)

Exhibit 1 Appendix B

Shade Screens	4060	\$106	\$708
Attic Insulation Only	660	\$66	\$795
TOTALS			

Example 1:

Customer Chooses Envelope AND Efficient Equipment	Annual kWh Savings	Annual Customer Savings @ \$0.10/kWh	Estimated Job Cost	Annual Pmt 12 Year 0%	Annual Pmt 12 Year 2%	Annual Pmt 12 Year 4%
Equipment & Ducts	1,300	\$130	\$7,700	-	-	-
Insulation & Air Sealing	1,075	\$108	\$1,165	-	-	-
Totals	2,375	\$238	\$8,865	\$1,265	\$1,140	\$1,104

Example 2:

Customer Chooses Envelope AND Efficient Equipment	Annual kWh Savings	Annual Customer Savings @ \$0.10/kWh	Estimated Job Cost	Annual Pmt 12 Year 0%	Annual Pmt 12 Year 2%	Annual Pmt 12 Year 4%
Duct Sealing Only	4,030	\$403	\$935	-	-	-
Insulation & Air Sealing	1,075	\$108	\$1,165	-	-	-
Totals	2,105	\$211	\$2,100	\$159	\$272	\$264

EXHIBIT

“2”

Exhibit 2 -- Updated Budgets

Table 1: 2010 Expenditures and 2011-2012 Updated Proposed Budgets

DSM Support Programs	2010 Expenditures ²	2010 Approved Budgets	Original 2011 Budget	Original 2012 Budget	Original Combined 2011-2012 Budget	Revised 2011 Budget	Revised 2012 Budget	Revised Combined 2011-2012 Budget
Education and Outreach	\$559,783	\$510,880	\$383,917	\$384,724	\$768,641	\$383,917	\$384,724	\$768,641
Residential Energy Financing	NA	NA	\$781,646	\$792,262	\$1,573,908	\$142,815	\$442,645	\$585,460
Codes Support	NA	NA	\$49,335	\$75,490	\$124,825	\$49,335	\$75,490	\$124,825
Support Programs Subtotal	\$559,783	\$510,880	\$1,214,898	\$1,252,476	\$2,467,374	\$576,067	\$902,859	\$1,478,926
Behavioral Programs								
Home Energy Reports	NA	NA	\$400,706	\$673,790	\$1,074,496	\$400,706	\$673,790	\$1,074,496
Behavioral Comprehensive Program	NA	NA	\$819,289	\$1,420,279	\$2,239,568	\$494,341	\$1,420,279	\$1,914,620
Behavioral Subtotal	\$0	\$0	\$1,219,995	\$2,094,069	\$3,314,064	\$895,047	\$2,094,069	\$2,989,116
Residential Efficiency Programs								
Low-Income Weatherization	\$315,405	\$396,392	\$611,190	\$616,451	\$1,227,641	\$611,190	\$616,451	\$1,227,641
Appliance Recycling	NA	NA	\$856,725	\$859,533	\$1,716,258	\$41,574	\$859,533	\$901,107
Residential New Construction	\$1,985,352	\$3,663,824	\$2,445,125	\$2,720,048	\$5,165,773	\$1,908,036	\$1,766,846	\$3,674,882
Existing Home (was Efficient Home Cooling)	\$1,585,705	\$530,450	\$2,577,643	\$3,576,038	\$6,153,681	\$2,118,572	\$3,514,886	\$5,633,458
Shade Tree Program	\$160,887	\$180,000	\$319,155	\$325,582	\$644,737	\$319,155	\$325,582	\$644,737
Efficient Products (CFL)	\$1,751,541	\$1,535,444	\$1,926,611	\$2,431,495	\$4,358,106	\$2,096,550	\$2,431,495	\$4,528,045
Multi-Family Direct Install	NA	NA	NA	\$169,738	\$169,738	NA	\$169,738	\$169,738
Residential Subtotal	\$5,778,890	\$6,286,110	\$8,736,449	\$10,699,485	\$19,435,934	\$7,095,078	\$9,684,531	\$16,779,609
Non-Residential Efficiency Programs								
Bid For Efficiency	NA	NA	\$284,261	\$503,092	\$797,353	\$47,469	\$503,092	\$550,561
C&I Comprehensive Program	\$2,282,468	\$2,116,735	\$3,794,134	\$4,285,856	\$8,079,990	\$3,794,134	\$4,285,856	\$8,079,990
Small Business Direct Install	\$2,308,890	\$2,116,735	\$3,547,437	\$4,069,211	\$7,616,648	\$2,598,978	\$2,921,085	\$5,520,063
Commercial New Construction	\$153,655	\$848,720	\$402,469	\$406,319	\$808,788	\$402,469	\$406,319	\$808,788
CHP Joint Program (Pilot)	NA	NA	\$74,800	\$75,956	\$150,756	\$22,000	\$22,000	\$44,000
C&I Schools Program	NA	NA	NA	\$157,941	\$157,941	NA	\$157,941	\$157,941
Retro-Commissioning	NA	NA	NA	\$175,520	\$175,520	NA	\$175,520	\$175,520
Non-Residential Subtotal	\$4,745,013	\$5,082,190	\$8,113,101	\$9,673,895	\$17,786,996	\$6,865,050	\$8,471,813	\$15,336,863
Demand Response Programs								
Residential & Small Commercial DLC	\$915,626	\$1,090,950	\$785,150	\$184,816	\$969,966	\$785,150	\$184,816	\$969,966
C & I DLC	\$35,254	\$809,000	\$2,737,846	\$2,751,959	\$5,489,805	\$1,335,846	\$2,751,959	\$4,087,805
Demand Response Subtotal	\$950,880	\$1,899,950	\$3,522,996	\$2,936,775	\$6,459,771	\$2,120,996	\$2,936,775	\$5,057,771
Program Totals	\$12,034,566	\$13,779,130	\$22,807,439	\$26,656,700	\$49,464,139	\$17,552,238	\$24,090,047	\$41,642,285
Program Development, Analysis & Reporting Software ¹	\$677,114	NA	\$805,238	\$829,395	\$1,634,633	\$630,238	\$649,145	\$1,279,383
Baseline Study	\$260,864	\$274,000	NA	NA	NA	NA	NA	NA
Sub-total	\$937,978	\$274,000	\$805,238	\$829,395	\$1,634,633	\$630,238	\$649,145	\$1,279,383
Total	\$12,972,545	\$14,053,130	\$23,612,677	\$27,486,095	\$51,098,772	\$18,182,476	\$24,739,192	\$42,921,668

1. Expenses are necessary for compliance and reporting requirements of EEES.

2. Source: Semi-annual DSM filing 3-1-2011.

EXHIBIT

“3”

Exhibit 3 – Updated Portfolio Savings

Table 1: Updated Portfolio Savings

DSM Programs	Original 2011 Energy Savings (MWh)	Original 2012 Energy Savings (MWh)	Original 2-Year Energy Savings (MWh)	Updated 2011 Energy Savings (MWh)	Updated 2012 Energy Savings (MWh)	Updated 2-Year Energy Savings (MWh)
Residential						
Efficient Products (CFL)	50,948	48,173	99,122	74,077	60,888	134,965
Appliance Recycling	7,229	7,229	14,459	0	7,164	7,164
Residential New Construction	3,339	3,749	7,088	3,309	2,612	5,921
Existing Home Program/Audit Direct Install	2,562	3,608	6,371	1,734	3,774	5,508
Shade Tree Program	978	978	1,956	969	969	1,938
Low-Income Weatherization	215	215	431	213	213	427
Multi-Family Direct Install	0	1,193	1,193	0	1,182	1,182
Residential & Small Commercial DLC	0	0	0	0	0	0
Commercial						
C & I Comprehensive	26,568	32,631	59,199	26,329	32,337	58,666
C & I DLC	11,613	16,337	27,950	11,615	16,337	27,951
Small Business	19,579	24,414	43,993	14,060	16,421	30,481
Commercial New Construction	2,006	2,006	4,011	1,987	1,987	3,975
Bid for Efficiency	1,547	2,431	3,978	0	2,409	2,409
Retro-Commissioning	0	1,105	1,105	0	1,095	1,095
Schools	0	697	697	0	690	690
CHP Pilot	7,956	7,956	15,912	0	0	0
Behavioral Comprehensive						
Home Energy Reports	10,359	16,575	26,934	0	16,425	16,425
Behavioral Comprehensive	10,425	11,107	21,532	1,489	10,660	12,349
Support Programs						
Education & Outreach	0	0	0	0	0	0
Residential Financing	0	0	0	0	0	0
Codes Support	0	0	0	0	0	0
TOTAL	155,325	180,603	335,928	135,781	175,365	311,146

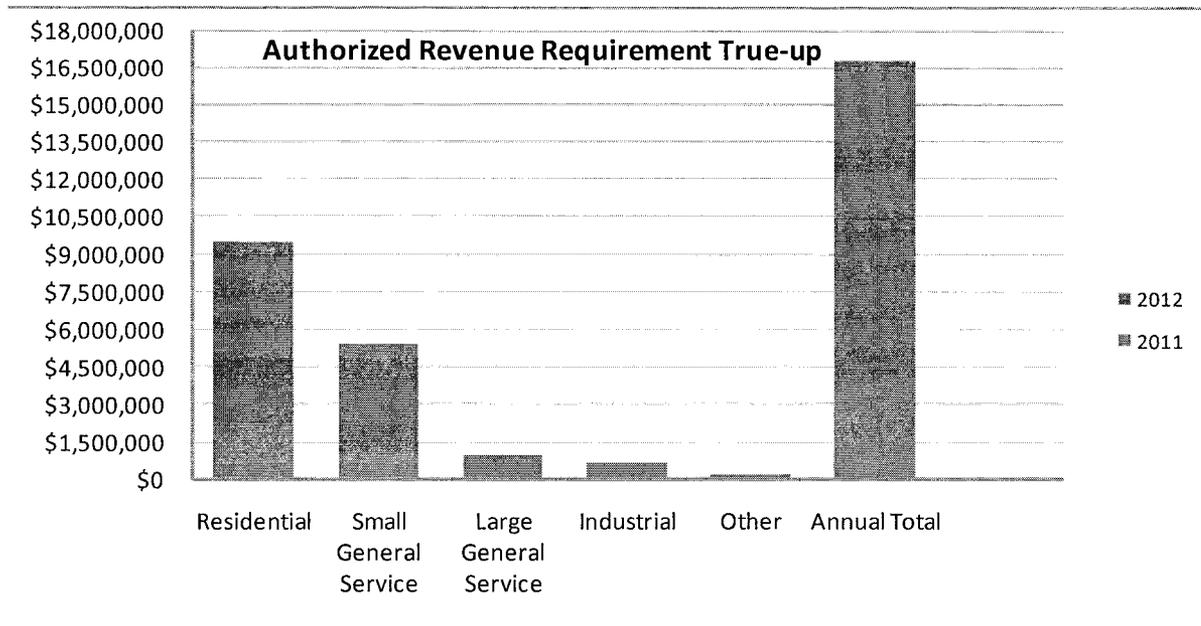
EXHIBIT

“4”

Exhibit 4 – Updated ARRT

TUCSON ELECTRIC POWER, INC. Authorized Revenue Requirement True-up

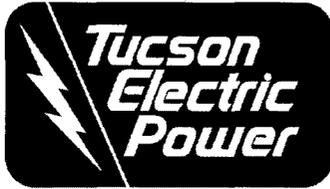
Month	Residential	Small General Service	Large General Service	Industrial	Other	Annual Total
1/1/2011	\$19,195	\$14,285	\$2,374	\$1,523	\$546	
2/1/2011	37,312	28,520	4,946	3,368	1,093	
3/1/2011	87,164	42,740	6,974	4,337	1,639	
4/1/2011	109,518	57,130	10,261	7,333	2,185	
5/1/2011	136,525	77,107	13,584	9,219	2,809	
6/1/2011	178,128	92,153	16,835	11,940	3,371	
7/1/2011	219,939	107,876	19,369	13,485	3,933	
8/1/2011	251,661	123,199	22,135	15,412	4,495	
9/1/2011	282,776	138,495	25,255	17,910	5,057	
10/1/2011	303,431	153,401	28,182	20,098	5,618	
11/1/2011	312,757	157,372	29,356	21,980	6,010	
12/1/2011	376,151	171,592	29,851	20,471	6,556	
Total	\$2,314,557	\$1,163,870	\$209,122	\$147,076	\$43,312	\$3,877,937
1/1/2012	\$430,306	\$194,908	\$31,675	\$19,619	\$7,454	
2/1/2012	427,743	198,068	33,535	22,084	7,588	
3/1/2012	425,237	270,907	43,259	25,953	10,389	
4/1/2012	428,992	300,308	52,598	36,387	11,487	
5/1/2012	458,717	377,224	64,902	42,577	13,743	
6/1/2012	537,437	395,691	70,522	48,400	14,475	
7/1/2012	634,244	441,614	77,380	52,117	16,100	
8/1/2012	678,724	474,443	83,192	56,031	17,310	
9/1/2012	741,868	436,356	77,620	53,271	15,932	
10/1/2012	724,926	458,810	82,215	56,746	16,804	
11/1/2012	750,486	400,317	72,733	52,783	15,287	
12/1/2012	941,996	347,511	59,019	39,144	13,277	
Total	\$7,180,676	\$4,296,157	\$748,650	\$505,111	\$159,846	\$12,890,440



EXHIBIT

“5”

CLEAN
VERSION



Tucson Electric Power Company

Original Sheet No.: 702
Superseding: _____

A UniSource Energy Company

Rider R-2 Demand Side Management Surcharge (DSMS)

APPLICABILITY

The Demand Side Management Surcharge ("DSMS") applies to all customers, except those customers who take service under the Residential Lifeline Discount or Residential Lifeline/Medical Life-Support Discount rates, in all territory served by the Company as mandated by the Arizona Corporation Commission, unless otherwise specified. Lifeline and Lifeline Medical customers are exempt from DSM Surcharges effective June 1, 2009.

RATE

The following DSM Surcharge will be effective October 1, 2011 through December 31, 2012. The DSMS shall be applied to all monthly net bills except lifeline customers at the following rate:

All kWhs @ \$0.006343 per kWh

REQUIREMENTS

The Arizona Corporation Commission will approve any changes to the surcharge to be billed to all applicable rates.

TAX CLAUSE

To the charges computed under the above rate, including any adjustments, shall be added the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of gross revenues of the Company and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder.

RULES AND REGULATIONS

The standard Rules and Regulations of the Company as on file from time to time with the Arizona Corporation Commission shall apply where not inconsistent with this rate.

Filed By: Kentton C. Grant
Title: Vice President of Finance and Rates
District: Entire Electric Service Area

Rate: R-2
Effective: October 1, 2011
Decision No.: Pending

REDLINED

VERSION



Tucson Electric Power Company

Original Sheet No.: 702
Superseding:

A UniSource Energy Company

Rider R-2
Demand Side Management Surcharge (DSMS)

APPLICABILITY

The Demand Side Management Surcharge ("DSMS") applies to all customers, except those customers who take service under the Residential Lifeline Discount or Residential Lifeline/Medical Life-Support Discount rates, in all territory served by the Company as mandated by the Arizona Corporation Commission, unless otherwise specified. Lifeline and Lifeline Medical customers are exempt from DSM Surcharges effective June 1, 2009.

RATE

The following DSM Surcharge will be effective October 1, 2011 through December 31, 2012. The DSMS shall be applied to all monthly net bills except lifeline customers at the following rate:

The DSMS shall be applied to all monthly net bills at the following rate:

All kWhs @ \$0.0063434249 per kWh

REQUIREMENTS

The TEP DSMS will be calculated and filed with the Arizona Corporation Commission (ACC) for approval on or before April 1st. The Arizona Corporation Commission will approve any changes to the surcharge to be billed to all applicable rates, for twelve (12) months beginning each June 1.

TAX CLAUSE

To the charges computed under the above rate, including any adjustments, shall be added the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of gross revenues of the Company and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder.

RULES AND REGULATIONS

The standard Rules and Regulations of the Company as on file from time to time with the Arizona Corporation Commission shall apply where not inconsistent with this rate.

Filed By: Kentton C. Grant
Title: Vice President of Finance and Rates
District: Entire Electric Service Area

Rate: R-2
Effective: June 1, 2010 October 1, 2011
Decision No.: Pending

BACKUP INFORMATION

Exhibit 5 – Updated DSMS Backup

Table 1: 2010 Expenditures and 2011-2012 Updated Proposed Budgets

DSM Support Programs	2010 Expenditures ²	2010 Approved Budgets	Original 2011 Budget	Original 2012 Budget	Original Combined 2011-2012 Budget	Revised 2011 Budget	Revised 2012 Budget	Revised Combined 2011-2012 Budget
Education and Outreach	\$559,783	\$510,880	\$383,917	\$384,724	\$768,641	\$383,917	\$384,724	\$768,641
Residential Energy Financing	NA	NA	\$781,846	\$792,262	\$1,573,908	\$142,815	\$442,645	\$585,460
Codes Support	NA	NA	\$49,335	\$75,490	\$124,825	\$49,335	\$75,490	\$124,825
Support Programs Subtotal	\$559,783	\$510,880	\$1,214,898	\$1,252,476	\$2,467,374	\$576,067	\$902,859	\$1,478,926
Behavioral Programs								
Home Energy Reports	NA	NA	\$400,706	\$673,790	\$1,074,496	\$400,706	\$673,790	\$1,074,496
Behavioral Comprehensive Program	NA	NA	\$819,289	\$1,420,279	\$2,239,568	\$494,341	\$1,420,279	\$1,914,620
Behavioral Subtotal	\$0	\$0	\$1,219,995	\$2,094,069	\$3,314,064	\$895,047	\$2,094,069	\$2,989,116
Residential Efficiency Programs								
Low-Income Weatherization	\$315,405	\$396,392	\$611,190	\$616,451	\$1,227,641	\$611,190	\$616,451	\$1,227,641
Appliance Recycling	NA	NA	\$856,725	\$859,533	\$1,716,258	\$41,574	\$859,533	\$901,107
Residential New Construction	\$1,965,352	\$3,663,824	\$2,445,125	\$2,720,648	\$5,165,773	\$1,908,036	\$1,766,846	\$3,674,882
Existing Home (was Efficient Home Cooling)	\$1,585,705	\$530,450	\$2,577,643	\$3,576,038	\$6,153,681	\$2,118,572	\$3,514,886	\$5,633,458
Shade Tree Program	\$160,887	\$160,000	\$319,155	\$325,582	\$644,737	\$319,155	\$325,582	\$644,737
Efficient Products (CFL)	\$1,751,541	\$1,535,444	\$1,926,611	\$2,431,495	\$4,358,106	\$2,096,550	\$2,431,495	\$4,528,045
Multi-Family Direct Install	NA	NA	NA	\$169,738	\$169,738	NA	\$169,738	\$169,738
Residential Subtotal	\$5,778,890	\$6,286,110	\$8,736,449	\$10,699,485	\$19,435,934	\$7,095,078	\$9,684,531	\$16,779,609
Non-Residential Efficiency Programs								
Bid For Efficiency	NA	NA	\$294,261	\$503,092	\$797,353	\$47,469	\$503,092	\$550,561
C&I Comprehensive Program	\$2,282,468	\$2,116,735	\$3,794,134	\$4,285,856	\$8,079,990	\$3,794,134	\$4,285,856	\$8,079,990
Small Business Direct Install	\$2,308,890	\$2,116,735	\$3,547,437	\$4,069,211	\$7,616,648	\$2,598,978	\$2,921,085	\$5,520,063
Commercial New Construction	\$153,655	\$948,720	\$402,469	\$406,319	\$808,788	\$402,469	\$406,319	\$808,788
CHP Joint Program (Pilot)	NA	NA	\$74,800	\$75,956	\$150,756	\$22,000	\$22,000	\$44,000
C&I Schools Program	NA	NA	NA	\$157,941	\$157,941	NA	\$157,941	\$157,941
Retro-Commissioning	NA	NA	NA	\$175,520	\$175,520	NA	\$175,520	\$175,520
Non-Residential Subtotal	\$4,745,013	\$5,082,190	\$8,113,101	\$9,673,895	\$17,786,996	\$6,865,050	\$8,471,813	\$15,336,863
Demand Response Programs								
Residential & Small Commercial DLC	\$915,626	\$1,090,950	\$785,150	\$184,816	\$969,966	\$785,150	\$184,816	\$969,966
C & I DLC	\$35,254	\$809,000	\$2,737,846	\$2,751,959	\$5,489,805	\$1,335,846	\$2,751,959	\$4,087,805
Demand Response Subtotal	\$950,880	\$1,899,950	\$3,522,996	\$2,936,775	\$6,459,771	\$2,120,996	\$2,936,775	\$5,087,771
Program Totals	\$12,034,566	\$13,779,130	\$22,807,439	\$26,656,700	\$49,464,139	\$17,552,238	\$24,090,047	\$41,642,285
Program Development, Analysis & Reporting Software ¹	\$677,114	NA	\$805,238	\$829,395	\$1,634,633	\$630,238	\$649,145	\$1,279,383
Baseline Study	\$260,864	\$274,000	NA	NA	NA	NA	NA	NA
Sub-total	\$937,978	\$274,000	\$805,238	\$829,395	\$1,634,633	\$630,238	\$649,145	\$1,279,383
Total	\$12,972,545	\$14,053,130	\$23,612,677	\$27,486,095	\$51,098,772	\$18,182,476	\$24,739,192	\$42,921,668

1. Expenses are necessary for compliance and reporting requirements of EES.

2. Source: Semi-annual DSM filing 3-1-2011.

Exhibit 5 – Updated DSMS Backup

Table 2: 2010 Performance Incentive Calculations¹

DSM Program	Program Cost	Societal Benefits	Societal Costs	Net Benefits
Residential				
Low-Income Weatherization ¹	\$ 315,405	\$ 397,094	\$ 397,094	\$ -
Guarantee Home Program	\$ 1,965,352	\$ 10,508,433	\$ 2,793,768	\$ 7,714,665
Shade Tree Program	\$ 160,887	\$ 1,024,021	\$ 210,832	\$ 813,189
ENERGY STAR® Lighting (CFL)	\$ 1,751,541	\$ 41,196,965	\$ 2,383,602	\$ 38,813,363
Efficient Home Cooling	\$ 1,585,705	\$ 2,482,347	\$ 5,341,594	\$ (2,859,247)
Total for Residential	\$ 5,778,890	\$ 55,608,861	\$ 11,126,890	\$ 44,481,971
Non-Residential				
Non-Residential Existing Facilities	\$ 2,282,468	\$ 27,437,801	\$ 5,036,507	\$ 22,401,294
Small Business	\$ 2,308,890	\$ 18,624,141	\$ 4,028,403	\$ 14,595,738
Efficient Commercial Building Design	\$ 153,655	\$ 246,743	\$ 171,369	\$ 75,374
Total for Non-Residential	\$ 4,745,012	\$ 46,308,685	\$ 9,236,278	\$ 37,072,407
Portfolio Totals				
Program Development, Analysis & Reporting Software	\$ 10,523,902	\$ 101,917,546	\$ 20,363,168	\$ 81,554,377
Baseline Study	\$ 677,114	-	\$ 677,114	\$ (677,114)
TOTAL	\$ 11,461,881	\$ 101,917,546	\$ 21,301,147	\$ 80,616,399
Performance Incentive Calculation:				
Total Spending ² / Total Net Benefits	\$ 11,146,476			\$ 80,616,399
10% of Spending / Net Benefits	\$ 1,114,648			\$ 8,061,640
Performance Incentive for 2010	\$ 1,114,648			

¹. Source: Semi-annual DSM filing supplement 6-15-2011.

Exhibit 5 – Updated DSMS Backup

Table 3: DSM Surcharge True-up

2008-2011 DSM Expenses vs. Surcharge ¹	2008	2009	2010	2011	Total
DSM Expenses	\$606,662	\$7,387,383	\$12,972,545	\$18,182,476	\$39,149,065
DSM Surcharge Collection (thru Sep 2011)	\$228,655	\$6,973,737	\$9,855,772	\$8,650,665	\$25,708,829
Annual Carry Over Balance	\$378,007	\$413,646	\$3,116,773	\$9,531,811	\$13,440,236
Carry Over Balance (Undercollection)					\$13,440,236

1. Expected DSM Expenses through Dec 2011 and expected Surcharge Collection through Sep 2011

Table 4: Adjustor Expenses by Category

Cost Category	2011	2012	Total
2012 Program Budget		\$24,739,192	\$24,739,192
Carry Over Balance through 2011			\$13,440,236
Performance Incentive (2010)	\$1,114,648	NA	\$1,114,648
Performance Incentive (2011 & 2012)	\$6,706,524	\$8,577,172	\$15,283,696
ARRT	\$3,877,937	\$12,890,440	\$16,768,377
Total			\$71,346,149

Table 5: DSMS Rate Calculation

TEP	DSM Budget	19Mo Forecast	Rate/kWh
Total Expense	\$38,179,428	11,247,734,158	\$0.003394
Performance Incentive	\$16,398,344	11,247,734,158	\$0.001458
ARRT	\$16,768,378	11,247,734,158	\$0.001491
	\$71,346,150		\$0.006343