

ORIGINAL

OPEN MEETING



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MEMORANDUM
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Arizona Corporation Commission

DOCKETED

MAR 15 2011

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TO: THE COMMISSION

FROM: Utilities Division

ARIZONA CORPORATION COMMISSION
DOCKET CONTROL

DOCKETED BY [Signature]

DATE: March 15, 2011

RE: TUCSON ELECTRIC POWER COMPANY - APPLICATION FOR APPROVAL OF ITS RESIDENTIAL BILL COMPARISON PILOT PROGRAM (DOCKET NO. E-01933A-07-0401)

On July 12, 2010, the Arizona Corporation Commission ("Commission") issued Decision No. 71787 (Docket No. E-01933A-07-0401) which ordered Tucson Electric Power Company ("TEP" or "Company") to "develop a bill comparison pilot program that will allow its customers to compare their energy usage with that of other similarly situated customers".

On August 25, 2010, TEP filed its Application for Approval of its Residential Bill Comparison Pilot titled the Home Energy Report Pilot Program ("Program").

Program Description

The Program is designed to instigate behavioral changes in customers' energy consumption. The Program works by first making customers aware of their energy consumption and then allowing them to compare that usage to similarly situated homes.

The Program is designed to affect habitual behaviors like turning off the lights and adjusting the thermostat, purchasing behaviors such as buying efficient light bulbs and appliances, and participation levels in utility demand-side management ("DSM") programs by preparing reports that compare a customer's energy use to that of their neighbors.

The major objectives of this Program are to generate significant savings for DSM portfolio objectives, educate and empower customers to take advantage of other DSM programs, develop a positive utility image, promote efficient building operations, and lower consumers' energy bills.

Customer privacy is assured through the manner in which the Program is designed, and by the use of strict non-disclosure contract language, and data security. Individual customers will only have access to their specific data and generic accumulated data by which they can make a comparison. The implementation contractor ("IC") is required to enter into a strict non-disclosure agreement preventing it from using customer data for any purpose outside of the Program.

OPOWER has been selected by TEP as the IC for the Program. OPOWER uses a multi-channel approach, as described below, employing normative messaging, to engage and motivate customer action as detailed below.

Home Energy Report

A Home Energy Report leverages cutting-edge behavioral science within a variety of motivating visual modules:

- Energy Use Comparison of one household to a similar set of “neighborhood peers.” The module leverages a subtle psychological mechanism, such as smiley faces, to drive customers to action.
- Usage Analysis offers a more detailed look at household energy consumption, plus an actionable insight (e.g., “Your energy use is particularly high, compared to others, during hot summer days”). OPOWER’S patented software can also suggest the likely causes of high usage.
- Targeted Tips on the back of the Home Energy Report encourage immediate energy-saving behavior. Advice can be tailored to customer demographics and the household’s previous response, such as taking advantage of an EnergyStar refrigerator rebate.
- Promotional Offers for other utility programs can be shared with customers in their Home Energy Report. Such promotions in other jurisdictions have driven up program participation by more than 20%, at no additional marketing cost to the utility.

Reports will be provided to customers approximately six times per year.

OPOWER Efficiency Portal

OPOWER’s Energy Efficiency Portal provides an interactive medium that allows customers to explore their energy use in greater detail by giving them access to additional insight-oriented energy-use displays. Customers can browse OPOWER’s database of actionable efficiency tips and have the ability to provide feedback into the system, be it household-specific information or best-practice sharing.

OPOWER’s energy portal is tightly integrated with its home energy reports which encourage customers to access the portal. The information collected from online visitors enriches subsequent reports with user-generated content that’s relevant down to the neighborhood level.

The portal features a range of interactive modules designed to engage, educate, and motivate utility customers, including:

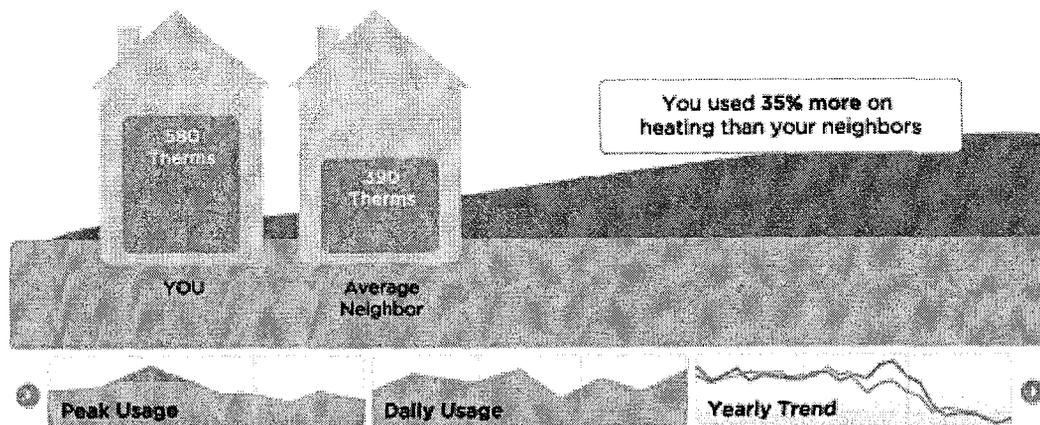
- Energy Efficiency Tips – Users can easily browse OPOWER’s database of energy-saving advice, pursue any of the tips, provide comments others can see, and report any actions they’ve already taken.

- Insight-Driven Data Displays – OPOWER’s interactive dashboards are designed to be intuitive and simple, leaving the underlying data to statistical engines running in the background, giving users only the most actionable information.
- 30-Second Home Audit – OPOWER offers a 30-second, “quick click” online audit which asks questions in modules (e.g., heating, cooling, appliances, etc.) that most customers can answer with ease.
- Best-Practice Sharing – OPOWER encourages users to “brag” about their energy-saving actions. The commentary of a few is shared for the benefit of all.
- Understanding The Bill – All energy-use data displays can be shown in dollars as well as in kWhs. The displays are a natural extension of a utility’s online bill presentation, helping customers understand the drivers behind their high bills and what they can do to lower them. Customers can also see what their most efficient neighbors are doing to keep their bills low.

Online Energy Insight Module

Figure 1, below, is an example of an OPOWER online insight module. Their patent-pending analytics engine extrapolates specific insights about household usage patterns, which are then communicated to the customer in a way that motivates customer action.

Figure 1: OPOWER Online Insight Module Example



Before OPOWER’s Home Energy Reporting program is deployed in a new region, households with statistically equivalent demographic profiles and past consumption patterns are randomly divided into two groups – the treatment group and the control group. Both groups are exposed to the same local weather, energy prices, and economic environment. The only statistically meaningful difference between the groups is that the treatment group receives Home Energy Reports while the control group does not. The first Home Energy Report will inform the customer that they’ve been chosen to participate in the pilot program and explain why TEP is beginning this Program.

Program Implementation

During the initial years of the Program, TEP will use a phased approach to program implementation, as described below.

- Phase 1: A limited version of the program will be designed and will include a treatment group and a control group, totaling 25,000 customers. Both groups will consist of residential customers that exhibit above-average energy consumption. These groups will likely include customers whose use is 15,000 kWh per year or greater. Average TEP residential customers use about 11,000 kWh per year.
- Phase 2: OPOWER will conduct an evaluation of first-year Program participants as well as the control group to assess the effectiveness of the Program. Program results will be analyzed with the Program design refined according to the findings of the evaluation.
- Phase 3: During the third phase, participation in the Program is planned to increase to a total of 40,000 customers in the second full year of implementation.
- Phase 4: An in-depth evaluation strategy is a required element of the Program; an independent measurement and evaluation component will be utilized to achieve such an evaluation.

The control group will be statistically equivalent to the treatment group. After an initial eligibility screening process, customers will be randomly assigned to either the treatment or control group. Customers that wish to opt-in to the program will receive Home Energy Reports but will not be part of either the control or treatment groups.

Program Delivery and Administration

OPOWER is expected to deliver a turn-key program and will have responsibility for all aspects of customer selection, report generation, Program evaluation, energy savings calculations, customer communications and reporting.

TEP will provide assistance on the design of the Home Energy Report products for appearance, readability, content, and marketing of other available energy efficiency programs. TEP will also provide OPOWER with the customer and usage history information necessary to generate the reports.

Marketing

Although Home Energy Report products will be delivered to the target market by OPOWER, TEP will jointly develop the marketing message contained in the Home Energy Reports. There is no direct marketing done by TEP for the Program; however, the Program will be included in the integrated marketing approach TEP has developed and uses for all DSM measures.

Program Budget

Table 1, below, represents the 2011 budget provided by OPOWER plus TEP's internal costs for 2011. TEP intends to include the costs of the Program in its upcoming annual DSM charge adjustment. Based on updated budget information provided by TEP subsequent to the filing of the application for approval of this Program, Staff estimates that the Program will result in a \$0.0000413 per kWh increase to the DSM charge, which would be an increase in the average residential bill of \$0.45 per year.

Table 1. Home Energy Reports Program Budget (2011)

Measure	Maximum Cost/ Customer	Units	Total
Home Energy Reports	\$9.90	25,000	\$247,500
Program Delivery			
-Utility Program Delivery			\$39,000
-Other Direct Costs (Office Expenses, Travel, Training, Software, License Fees, etc)			\$5,000
-One-time Set-up Fee			\$21,438
-On-going Set-up and Management			\$12,250
Subtotal Program Delivery			\$77,688
Internal Program Marketing			\$16,259
Utility Program Administration			\$26,000
Measurement, Evaluation, and Research			\$14,698
Program Total			\$382,145

Program Participation

TEP plans to have 25,000 customers participating in the program (ie, in the treatment group) during 2011, the first year of implementation, with participation increasing to 40,000 customers in the second year of implementation.

Customers who would like to opt-in to the program can contact TEP and will receive Home Energy Reports twice a year. These customers will not be included in the treatment or control groups for measurement purposes.

Customers designated to participate in the Program will be able to fully opt out of the Program (or switch from mailed paper reports to emailed reports) at any time by calling the TEP customer service number provided on the mailed Home Energy Reports and web portal.

Customers can also opt out of the Program directly through the Home Energy Reporting web portal or by sending an email to the TEP customer service center.

Estimated Energy Savings and Environmental Benefits

According to OPOWER, in every utility area where the Home Energy Reporting system has been implemented, it has consistently delivered between 1.5% and 3.5% in average energy savings across the targeted population, as demonstrated in Figure 2.

Figure 2. OPOWER Program Savings Over Time

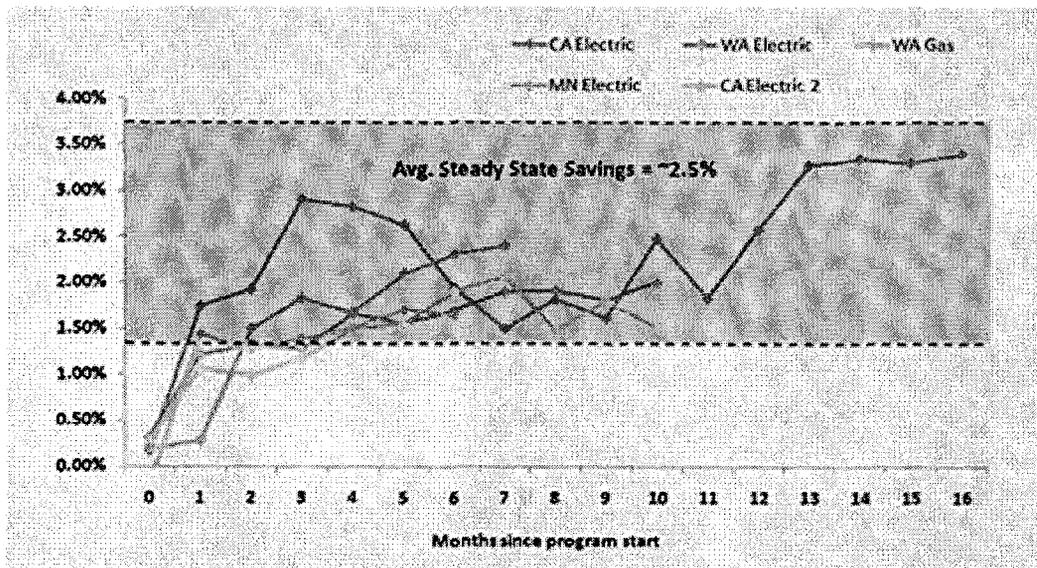


Table 2 illustrates the energy savings TEP anticipates from the Program. Given these anticipated savings on a household basis, the Program is anticipated to save 7,500 MWh in the first year of implementation.

Table 2. Individual Energy and Demand Savings

Base Annual Home Energy Consumption (kWh)	15,000
Number of Households Participating	25,000
Program Savings (% of Sales) ¹	2.0%
Demand Savings (kW)	0.034
Household Annual Energy Savings (kWh)	300

Table 3 displays the anticipated environmental benefits of the program. Because the “measure life” of behavioral measures is estimated to be one year, annual environmental benefits are the same as lifetime environmental benefits.

¹ The Sacramento Municipal Utility District began a pilot behavioral study with OPOWER in Spring 2008. Three separate evaluations of the program after the first year found 2.1% overall energy savings for program participants.

Table 3. Environmental Benefits

	Annual Metric Tons Reduced
CO ₂	9,103
NO _x	12
SO _x	11

Cost-Effectiveness

The Commission's 1991 Resource Planning Decision established the Societal Cost Test ("SCT") as the methodology to be used for determining the cost-effectiveness of a DSM program. Under the SCT, in order to be cost-effective, the ratio of benefits to costs must be greater than one. The societal costs for a DSM program include the cost of the measure and the cost of implementing the program, excluding rebates. The societal benefits of a DSM program include the avoided demand and energy costs as well as avoided environmental impacts, which are quantified, but do not have to be monetized.

Staff has evaluated the Program, as proposed, and has found it to be cost-effective with a SCT benefit-to-cost ratio of 1.47.

Monitoring and Evaluation

TEP will use an independent third-party measurement, evaluation and research contractor to evaluate the energy savings from the Program. Because behavior-based initiatives must provide a highly reliable evaluation protocol, TEP is proactively designing a protocol that will measure the impacts of the following:

- The Boomerang Effect, whereby low-energy users respond to the home energy reports by increasing their energy consumption.
- The Growth/Decay Effect, to determine whether time has a growing (energy savings increase) or a decaying (energy savings erode) effect on the Program.
- Treatment Persistence, to determine whether energy savings persist after termination of the treatment (i.e., after the home energy reports stop).
- The Rebound Effect, which will determine whether, after an extended period without treatment, a household may respond to renewed treatment with a savings surge.

A sampling strategy will be used to allow for evaluation of these aspects of the Home Energy Report Program.

Recommendations

Staff recommends that the Program be approved as a two-year pilot.

Staff recommends that a measurement and evaluation report on the results of the Program be filed in this docket within 90 days of the evaluation of Phase 1, with proposals regarding

THE COMMISSION

March 10, 2011

Page 8

continuation, termination, redesign or expansion. Such evaluation shall be filed no later than December 31, 2012.

Staff recommends that this measurement and evaluation report include actual data in order to verify the cost-effectiveness of the program. After reviewing the report, Staff shall file a recommendation as to whether the program should be continued or terminated, along with any proposed conditions.

Staff recommends that the pilot also be used to gather data on the Program's impact on customer participation in other TEP DSM programs, and that this data be evaluated and provided as part of the measurement and evaluation report TEP provides to the Commission.

Staff recommends that customer privacy be carefully protected and that customers have a simple and clearly communicated avenue for opting out of participation, should they choose to do so.



Steven M. Olea
Director
Utilities Division

SMO:LAF:sms\RM

ORIGINATOR: Laura A. Furrey

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BEFORE THE ARIZONA CORPORATION COMMISSION

- GARY PIERCE
Chairman
- BOB STUMP
Commissioner
- SANDRA D. KENNEDY
Commissioner
- PAUL NEWMAN
Commissioner
- BRENDA BURNS
Commissioner

IN THE MATTER OF TUCSON ELECTRIC
POWER COMPANY'S APPLICATION FOR
APPROVAL OF ITS RESIDENTIAL BILL
COMPARISON PILOT PROGRAM

DOCKET NO. E-01933A-07-0401
DECISION NO. _____
ORDER

Open Meeting
March 29 and 30, 2011
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Tucson Electric Power Company ("TEP" or "the Company") is certificated to provide electric service as a public service corporation in the State of Arizona.
2. On July 12, 2010, the Arizona Corporation Commission ("Commission") issued Decision No. 71787 (Docket No. E-01933A-07-0401) which ordered TEP to "develop a bill comparison pilot program that will allow its customers to compare their energy usage with that of other similarly situated customers".
3. On August 25, 2010, TEP filed its Application for Approval of its Residential Bill Comparison Pilot titled the Home Energy Report Pilot Program ("Program").
- ...
- ...
- ...

PROGRAM DESCRIPTION

4. The Program is designed to instigate behavioral changes in customers' energy consumption. The Program works by first making customers aware of their energy consumption and then allowing them to compare that usage to similarly situated homes.

5. The Program is designed to affect habitual behaviors like turning off the lights and adjusting the thermostat, purchasing behaviors such as buying efficient light bulbs and appliances, and participation levels in utility demand-side management ("DSM") programs by preparing reports that compare a customer's energy use to that of their neighbors.

6. The major objectives of this Program are to generate significant savings for DSM portfolio objectives, educate and empower customers to take advantage of other DSM programs, develop a positive utility image, promote efficient building operations, and lower consumers' energy bills.

7. Customer privacy is assured through the manner in which the Program is designed, and by the use of strict non-disclosure contract language, and data security. Individual customers will only have access to their specific data and generic accumulated data by which they can make a comparison. The implementation contractor ("IC") is required to enter into a strict non-disclosure agreement preventing it from using customer data for any purpose outside of the Program.

8. OPOWER has been selected by TEP as the IC for the Program. OPOWER uses a multi-channel approach, as described below, employing normative messaging, to engage and motivate customer action as detailed below.

Home Energy Report

9. A Home Energy Report leverages cutting-edge behavioral science within a variety of motivating visual modules:

- Energy Use Comparison of one household to a similar set of "neighborhood peers." The module leverages a subtle psychological mechanism, such as smiley faces, to drive customers to action.
- Usage Analysis offers a more detailed look at household energy consumption, plus an actionable insight (e.g., "Your energy use is particularly high, compared to

1 others, during hot summer days"). OPOWER'S patented software can also suggest
2 the likely causes of high usage.

- 3 • Targeted Tips on the back of the Home Energy Report encourage immediate
4 energy-saving behavior. Advice can be tailored to customer demographics and the
5 household's previous response, such as taking advantage of an EnergyStar
6 refrigerator rebate.
- 7 • Promotional Offers for other utility programs can be shared with customers in their
8 Home Energy Report. Such promotions in other jurisdictions have driven up
9 program participation by more than 20%, at no additional marketing cost to the
10 utility.

11 10. Reports will be provided to customers approximately six times per year.

12 ***OPOWER Efficiency Portal***

13 11. OPOWER's Energy Efficiency Portal provides an interactive medium that allows
14 customers to explore their energy use in greater detail by giving them access to additional insight-
15 oriented energy-use displays. Customers can browse OPOWER's database of actionable efficiency
16 tips and have the ability to provide feedback into the system, be it household-specific information
17 or best-practice sharing.

18 12. OPOWER's energy portal is tightly integrated with its home energy reports which
19 encourage customers to access the portal. The information collected from online visitors enriches
20 subsequent reports with user-generated content that's relevant down to the neighborhood level.

21 13. The portal features a range of interactive modules designed to engage, educate, and
22 motivate utility customers, including:

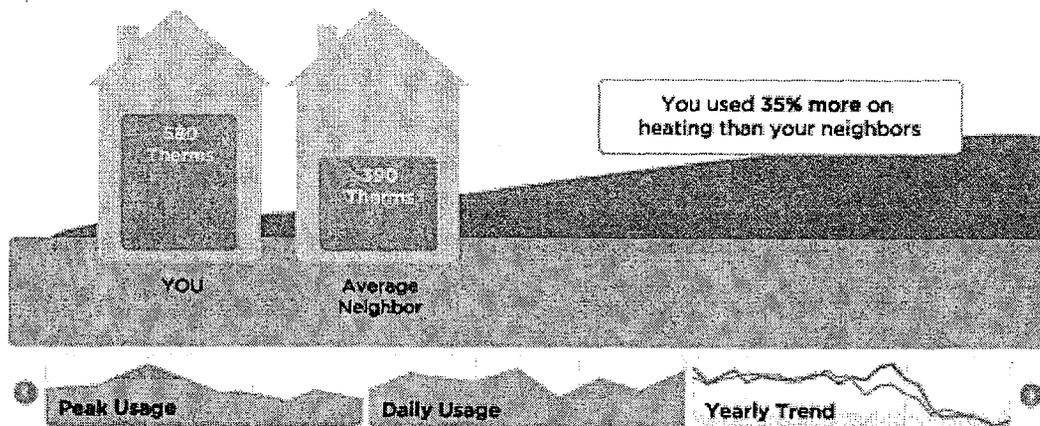
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25 any actions they've already taken.
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27 be intuitive and simple, leaving the underlying data to statistical engines running in
28 the background, giving users only the most actionable information.

- 1 • 30-Second Home Audit – OPOWER offers a 30-second, “quick click” online audit
2 which asks questions in modules (e.g., heating, cooling, appliances, etc.) that most
3 customers can answer with ease.
- 4 • Best-Practice Sharing – OPOWER encourages users to “brag” about their energy-
5 saving actions. The commentary of a few is shared for the benefit of all.
- 6 • Understanding The Bill – All energy-use data displays can be shown in dollars as
7 well as in kWhs. The displays are a natural extension of a utility’s online bill
8 presentation, helping customers understand the drivers behind their high bills and
9 what they can do to lower them. Customers can also see what their most efficient
10 neighbors are doing to keep their bills low.

11 *Online Energy Insight Module*

12 14. Figure 1, below, is an example of an OPOWER online insight module. Their patent-
13 pending analytics engine extrapolates specific insights about household usage patterns, which are
14 then communicated to the customer in a way that motivates customer action.

15 **Figure 1: OPOWER Online Insight Module Example**



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24 15. Before OPOWER’s Home Energy Reporting program is deployed in a new region,
25 households with statistically equivalent demographic profiles and past consumption patterns are
26 randomly divided into two groups – the treatment group and the control group. Both groups are
27 exposed to the same local weather, energy prices, and economic environment. The only
28 statistically meaningful difference between the groups is that the treatment group receives Home

1 Energy Reports while the control group does not. The first Home Energy Report will inform the
2 customer that they've been chosen to participate in the pilot program and explain why TEP is
3 beginning this Program.

4 **PROGRAM IMPLEMENTATION**

5 16. During the initial years of the Program, TEP will use a phased approach to program
6 implementation, as described below.

- 7 • Phase 1: A limited version of the program will be designed and will include a
8 treatment group and a control group, totaling 25,000 customers. Both groups will
9 consist of residential customers that exhibit above-average energy consumption.
10 These groups will likely include customers whose use is 15,000 kWh per year or
11 greater. Average TEP residential customers use about 11,000 kWh per year.
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13 well as the control group to assess the effectiveness of the Program. Program
14 results will be analyzed with the Program design refined according to the findings
15 of the evaluation.
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17 to a total of 40,000 customers in the second full year of implementation.
- 18 • Phase 4: An in-depth evaluation strategy is a required element of the Program; an
19 independent measurement and evaluation component will be utilized to achieve
20 such an evaluation.

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22 initial eligibility screening process, customers will be randomly assigned to either the treatment or
23 control group. Customers that wish to opt-in to the program will receive Home Energy Reports
24 but will not be part of either the control or treatment groups.

25 **PROGRAM DELIVERY AND ADMINISTRATION**

26 18. OPOWER is expected to deliver a turn-key program and will have responsibility for
27 all aspects of customer selection, report generation, Program evaluation, energy savings
28 calculations, customer communications and reporting.

1 19. TEP will provide assistance on the design of the Home Energy Report products for
 2 appearance, readability, content, and marketing of other available energy efficiency programs.
 3 TEP will also provide OPOWER with the customer and usage history information necessary to
 4 generate the reports.

5 MARKETING

6 20. Although Home Energy Report products will be delivered to the target market by
 7 OPOWER, TEP will jointly develop the marketing message contained in the Home Energy
 8 Reports. There is no direct marketing done by TEP for the Program; however, the Program will be
 9 included in the integrated marketing approach TEP has developed and uses for all DSM measures.

10 PROGRAM BUDGET

11 21. Table 1, below, represents the 2011 budget provided by OPOWER plus TEP's
 12 internal costs for 2011. TEP intends to include the costs of the Program in its upcoming annual
 13 DSM charge adjustment. Based on updated budget information provided by TEP subsequent to
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 15 result in a \$0.0000413 per kWh increase to the DSM charge, which would be an increase in the
 16 average residential bill of \$0.45 per year.

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28 Program Total			\$382,145

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2 **PROGRAM PARTICIPATION**

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4 treatment group) during 2011, the first year of implementation, with participation increasing to
5 40,000 customers in the second year of implementation.

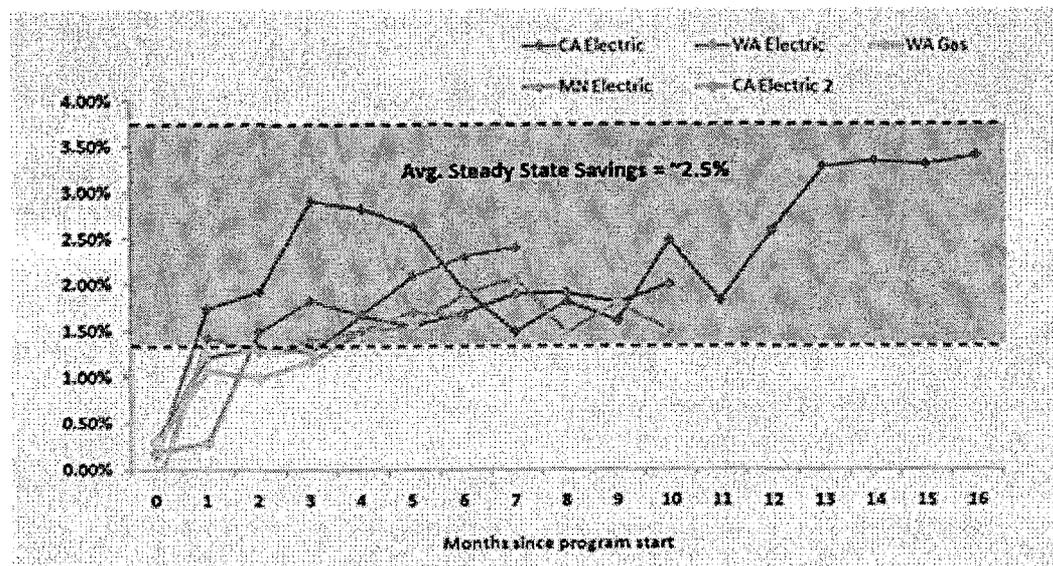
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8 or control groups for measurement purposes.

9 24. Customers designated to participate in the Program will be able to fully opt out of
10 the Program (or switch from mailed paper reports to emailed reports) at any time by calling the
11 TEP customer service number provided on the mailed Home Energy Reports and web portal.
12 Customers can also opt out of the Program directly through the Home Energy Reporting web
13 portal or by sending an email to the TEP customer service center.

14 **ESTIMATED ENERGY SAVINGS AND ENVIRONMENTAL BENEFITS**

15 25. According to OPOWER, in every utility area where the Home Energy Reporting
16 system has been implemented, it has consistently delivered between 1.5% and 3.5% in average
17 energy savings across the targeted population, as demonstrated in Figure 2.

18 **Figure 2. OPOWER Program Savings Over Time**



1 Table 2 illustrates the energy savings TEP anticipates from the Program. Given these anticipated
 2 savings on a household basis, the Program is anticipated to save 7,500 MWh in the first year of
 3 implementation.

4 **Table 2. Individual Energy and Demand Savings**

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9 Household Annual Energy Savings (kWh)	300

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 11 26. Table 3 displays the anticipated environmental benefits of the program. Because the
 12 “measure life” of behavioral measures is estimated to be one year, annual environmental benefits
 13 are the same as lifetime environmental benefits.

14 **Table 3. Environmental Benefits**

	Annual Metric Tons Reduced
15 CO ₂	9,103
16 NO _x	12
17 SO _x	11

18
 19 **COST-EFFECTIVENESS**

20 27. The Commission’s 1991 Resource Planning Decision established the Societal Cost
 21 Test (“SCT”) as the methodology to be used for determining the cost-effectiveness of a DSM
 22 program. Under the SCT, in order to be cost-effective, the ratio of benefits to costs must be
 23 greater than one. The societal costs for a DSM program include the cost of the measure and the
 24 cost of implementing the program, excluding rebates. The societal benefits of a DSM program
 25 include the avoided demand and energy costs as well as avoided environmental impacts, which are
 26 quantified, but do not have to be monetized.

27
 28 ¹ The Sacramento Municipal Utility District began a pilot behavioral study with OPOWER in Spring 2008. Three separate evaluations of the program after the first year found 2.1% overall energy savings for program participants.

1 28. Staff has evaluated the Program, as proposed, and has found it to be cost-effective
2 with a SCT benefit-to-cost ratio of 1.47.

3 **MONITORING AND EVALUATION**

4 29. TEP will use an independent third-party measurement, evaluation and research
5 contractor to evaluate the energy savings from the Program. Because behavior-based initiatives
6 must provide a highly reliable evaluation protocol, TEP is proactively designing a protocol that
7 will measure the impacts of the following:

- 8 • The Boomerang Effect, whereby low-energy users respond to the home energy
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11 savings increase) or a decaying (energy savings erode) effect on the Program.
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13 termination of the treatment (i.e., after the home energy reports stop).
- 14 • The Rebound Effect, which will determine whether, after an extended period
15 without treatment, a household may respond to renewed treatment with a savings
16 surge.

17 30. A sampling strategy will be used to allow for evaluation of these aspects of the
18 Home Energy Report Program.

19 **RECOMMENDATIONS**

20 31. Staff has recommended that the Program be approved as a two-year pilot.

21 32. Staff has recommended that a measurement and evaluation report on the results of
22 the Program be filed in this docket within 90 days of the evaluation of Phase 1, with proposals
23 regarding continuation, termination, redesign or expansion. Such evaluation shall be filed no later
24 than December 31, 2012.

25 33. Staff has recommended that the measurement and evaluation report include actual
26 data in order to verify the cost-effectiveness of the program. After reviewing the report, Staff shall
27 file a recommendation as to whether the program should be continued or terminated, along with
28 any proposed conditions.

1 IT IS FURTHER ORDERED that the pilot also be used to gather data on the Program's
 2 impact on customer participation in other Tucson Electric Power Company DSM programs, and
 3 that this data be evaluated and provided as part of the measurement and evaluation report Tucson
 4 Electric Power Company provides to the Commission.

5 IT IS FURTHER ORDERED that customer privacy be carefully protected and that
 6 customers have a simple and clearly communicated avenue for opting out of participation, should
 7 they choose to do so.

8 IT IS FURTHER ORDERED that this decision become effective immediately.

9

10 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

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CHAIRMAN

COMMISSIONER

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COMMISSIONER

COMMISSIONER

COMMISSIONER

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IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,
 Executive Director of the Arizona Corporation Commission,
 have hereunto, set my hand and caused the official seal of
 this Commission to be affixed at the Capitol, in the City of
 Phoenix, this _____ day of _____, 2011.

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 ERNEST G. JOHNSON
 EXECUTIVE DIRECTOR

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DISSENT: _____

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DISSENT: _____

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SMO:LAF:sms/RM

1 SERVICE LIST FOR: Tucson Electric Power Company
2 DOCKET NO. E-01933A-07-0401

3 Mr. Michael Patten
4 Roshka DeWulf & Patten, PLC
5 One Arizona Center
6 400 E. Van Buren St., Suite 800
7 Phoenix, Arizona 85004

8 Mr. Philip Dion
9 Ms. Melody Gilkey
10 UniSource Energy Corporation
11 One South Church Avenue, Suite 200
12 Tucson, Arizona 85701-1623

13 Mr. Steven M. Olea
14 Director, Utilities Division
15 Arizona Corporation Commission
16 1200 West Washington Street
17 Phoenix, Arizona 85007

18 Ms. Janice M. Alward
19 Chief Counsel, Legal Division
20 Arizona Corporation Commission
21 1200 West Washington Street
22 Phoenix, Arizona 85007

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