

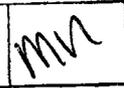


BEFORE THE ARIZONA CORPORATION COMMISSION

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MIKE GLEASON
Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
KRISTIN K. MAYES
Commissioner
GARY PIERCE
Commissioner

Arizona Corporation Commission
DOCKETED
JUL - 3 2008

DOCKETED BY 

IN THE MATTER OF THE APPLICATION)
OF TUCSON ELECTRIC POWER)
COMPANY'S REQUEST FOR APPROVAL)
OF ITS EDUCATION AND OUTREACH)
DEMAND-SIDE MANAGEMENT)
PROGRAM)

DOCKET NO. E-01933A-07-0401
DECISION NO. 70402
ORDER

Open Meeting
July 1 and 2, 2008
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Tucson Electric Power Company ("TEP") is engaged in providing electric power within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission.

2. On July 2, 2007, TEP filed an application for approval of its proposed Demand-Side Management ("DSM") Program Portfolio. On November 14, 2007, TEP filed a revised Portfolio Plan, modifying the delivery mechanism and the measurement/evaluation plans, for some programs.

3. The TEP DSM Portfolio consists of ten proposed programs, including the Education and Outreach ("EO") Program summarized below.

4. Program Description

Existing Programs. TEP's existing DSM portfolio includes separate residential and commercial programs designed to educate TEP customers on how to conserve energy and lower their energy bills through on-site and on-line energy audits. There is also a school program

1 designed to create awareness of energy and environmental issues, and to support conservation over
2 the long run.

3 5. Proposed Program. The proposed enhanced EO program would combine, and
4 increase spending for, the existing Residential, Academic and Commercial Education programs. It
5 would also eliminate on-site energy audits, increase general efficiency campaigns and include a
6 Time-of-Use ("TOU") Education component designed to educate customers about the benefits of
7 load shifting.¹ The proposed EO program would also be used to increase awareness of TEP's other
8 DSM programs.

9 6. Goals. The EO program includes four distinct education strategies:

10 7. Residential Education. The goal of residential education is to educate TEP's
11 residential consumers on how to conserve energy and lower their electric utility bills utilizing the
12 on-line Energy Advisor and an energy efficiency media campaign.

13 8. Academic Education. The goals of the academic education component are to
14 provide school children with an early understanding and appreciation for energy efficiency, and to
15 encourage students to take the information home.

16 9. The educational strategies include: (i) the Insulation Station, which provides
17 training to 4th grade teachers and a kit containing ready-to-assemble model houses and supplies to
18 conduct science and math activities on insulation and home energy efficiency (4th Grade); and (ii)
19 the Energy Patrol, an Arizona Energy Office-sponsored program which involves students who
20 monitor classrooms to ensure that lights, computers and water faucets are turned off when rooms
21 are vacated (K-12th Grades). Depending on the willingness of teachers to schedule additional
22 classroom time, the program may also include marketing the on-line Energy Advisor to teachers
23 for energy efficiency and related science and math activities.

24 10. Commercial Education. The goal of Commercial Education is to educate TEP's
25 small commercial customers on how to conserve energy and lower their electric utility bills
26 through the on-line Energy Advisor and an energy efficiency media campaign.

27 _____
28 ¹The Company has indicated that it does not anticipate having the infrastructure in place for the Direct Load Control program until the end of 2008.

1 11. Time-Of-Use ("TOU") Education. The goals of TOU education are to teach TEP's
2 residential and commercial customers about the benefits of TOU rates and to communicate
3 strategies that enable customers to maximize savings through load shifting.

4 12. *Eligibility*. Eligibility varies according to program component: (i) The Residential
5 Education component is designed for TEP's residential customers, both homeowners and
6 apartment renters; (ii) the Academic Education component focuses on school children in TEP's
7 service area; (iii) the Commercial Education component would target TEP's small commercial
8 customers²; and (iv) the TOU Education component would be directed at TEP's commercial and
9 residential customers.

10 13. *Incentives*. Incentives are not paid as a part of the EO program.

11 14. *Delivery Strategy*

12 The EO program would be administered in-house by TEP employees. TEP would provide
13 program administration, marketing, planning, and consumer education activities.

14 15. *Marketing*

15 TEP proposes to market the EO program using the following means:

16 16. *Residential and Commercial*:

- 17 • **Bill messages** would be used to provide information to current customers;
- 18 • **Tep.com** would display information to help Web users quickly find energy savings
19 information;
- 20 • **TEP customer care representatives** would be trained to answer customer questions;
- 21 • **Brochures** would be created to be mailed on demand, distributed through the call
22 center and tep.com, and distributed at public events such as school training,
23 presentations, and seminars;
- 24 • **Inserts** would be added to customer bills to educate them on ways to lower their
25 electric bill costs;
- 26 • **Email newsletter** articles featuring energy savings tips would be sent to all registered
26 tep.com users;

27 ² All TEP customers are eligible to participate in the EO program, but large commercial customers usually work with
28 TEP Account Managers or Customer Care representatives specializing in commercial energy efficiency and high bill solutions.

- 1 • **Metro traffic and other radio** advertising would be used to further communicate the
2 value of the programs;
- 3 • **Media relations** would be prepared to answer questions posed by the media; and
- 4 • **Personal outreach** would be done at events such as fairs, exhibits and science
5 competitions, to distribute information about energy conservation and renewable
6 energy

7 17. Academic Education:

8 TEP contacts elementary and high school teachers by mail and/or telephone to schedule
9 appearances. In addition, direct mail to all elementary schools outlines the programs offered and
10 provides opportunities for teachers to order classroom sets of grade-appropriate energy
11 conservation booklets and study guides for students.

12 18. Time-Of-Use Education:

13 TEP would notify current customers about TOU rates and provide ongoing information to
14 both new and current TEP customers interested in signing up for TOU through avenues such as: (i)
15 targeted mailings; (ii) bill messages; (iii) tep.com; (iv) TEP customer care representatives; (v)
16 brochures; (vi) inserts; (vii) email newsletter; (viii) metro traffic and other radio, print and Internet;
17 (ix) media relations; and (x) door tags.

18 19. It is Staff's position that ratepayer DSM dollars should not be used simply to
19 market a specific rate. Staff has recommended that any customer communications regarding TOU
20 should be designed to educate customers regarding the benefits of shifting peak load to off-peak
21 hours, and of reducing peak demand (kW). Such marketing and educational communications
22 should include information on what customers can do to manage their own energy consumption to
23 shift peak load or reduce peak demand.

24 20. Participation in Existing Education and Outreach Programs

25 Staff has concerns regarding participation rates for the Commercial on-line energy audit, as
26 reported in the TEP Semi-Annual DSM filing for the period ending December 31, 2007. The
27 Company reports a total of 474 commercial customers accessing its on-line Energy Advisor, with
28 ...

1 111 customers completing the on-line energy audit during 2007.³ Although completion rates are
2 higher for the TEP commercial on-line audit, than for the UNS Electric commercial on-line audit,
3 Staff believes that expenditures on this program component can not be justified without significant
4 improvement in participation rates.

5 21. In response to inquiries from Staff, the Company stated that it has not determined
6 the specific reason or reasons for low participation, but indicates that lack of awareness of the
7 Energy Advisor, the time required to complete the survey, and a customer's lack of technical
8 knowledge regarding a facility may all be contributing factors. TEP plans to increase awareness
9 through bill messages, bill inserts, radio advertising, and participation at public events. In addition
10 to increased advertising, the Company is investigating the possibility of using other software
11 vendors in the future.

12 22. If the EO program is approved, Staff has recommended that the Company perform
13 research and analysis in order to determine the reason or reasons for low participation. Any
14 software issues should be addressed within one year following approval, whether this would
15 require new software or revisions of existing software. (For example, if the length of the survey
16 is a disincentive to using the on-line energy audit, shorter individual audits on topics such as
17 Lighting, Heating and Cooling and Commercial Cooking could be developed.) Participation
18 should also be tracked to determine whether the proposed increase in marketing brings about
19 higher participation.

20 23. If the EO program is approved, Staff has recommended that the on-line audit
21 component be approved only on an interim basis, and that the Company request approval to
22 continue after one year. This filing should take place one year following implementation of an
23 updated energy audit program, if the Company significantly revises the program, or one year
24 following approval, if the Company chooses to keep the existing program in place, and rely on
25 more extensive marketing to improve participation rates.

26 ...

27 ³ During 2007 6,560 residential customers accessed the Residential on-line Energy Advisor, with 2,734 customers
28 completing the on-line audit. Staff believes that, while these participation numbers should be improved, the
Commercial on-line Energy Advisor has shown an unsatisfactory level of participation.

1 24. Monitoring and Evaluation

2 In response to a Staff request, TEP developed a Measurement and Evaluation Plan for the
3 Education and Outreach program. The Company is proposing to take the following steps for
4 evaluating the different components of the EO program:

5 25. Residential and Commercial Energy Efficiency Campaign

6 During monitoring and verification activities for incentive-based DSM programs, TEP
7 would ask participants whether they were made aware of the program, or influenced to participate,
8 by the energy efficiency campaign;

9 26. Check boxes would be added to incentive applications to allow customers to
10 indicate how they learned about the program in which they are participating; and

11 27. TEP customers would be surveyed in order to determine what actions they have
12 taken to improve their energy efficiency.

13 28. Residential and Commercial On-Line Audit Programs

14 Statistics would be collected regarding visitors to the on-line audit site, including how far
15 each customer proceeds with the audit and final recommendations page; and

16 29. Customers participating in the on-line audit would be contacted after three to six
17 months to determine whether the audit was helpful and what actions the customer took to improve
18 energy efficiency as a result.

19 30. Academic Education

20 Parents would be surveyed to determine whether their child's participation resulted in
21 discussions about energy use, and about whether they were influenced to take or plan any actions
22 to improve energy efficiency as a result of the EO program, or due to a TEP incentive-based
23 program; and

24 31. TEP would collect statistics concerning school, teacher and student participation
25 and gather comments to improve program delivery.

26 32. Residential and Commercial TOU Education

27 Customers would be surveyed to determine whether TOU education influenced them to
28 change their behavior or adopt new technologies.

1 33. Program Budget

2 The proposed budget for the EO program is set out in the tables below. The overall budget
3 for the EO program is based on the Company's estimate of the costs associated with putting
4 together an effective year-round campaign and takes into account the historic cost of media buys.
5 The Company has revised its proposed budget allocations to reflect a general TOU educational
6 campaign without mandatory TOU.⁴ Should TOU become mandatory, the Company has indicated
7 that it would require additional funding.

TEP Education and Outreach Proposed Budget⁵	
Residential and Commercial Education *	\$200,000
Residential and Commercial Education On-Line Audit (Software License)	\$101,000
Academic Education	\$70,000
Time-Of-Use Education	\$100,000
Evaluation	\$25,000
Total Residential & Commercial	\$496,000⁶

13 *\$75,000 is allocated to advertise the on-line audit to residential and small commercial customers.

	2008	2009**
Total Program Budget	\$496,000	\$496,000
Total Administrative and O&M Cost Allocation ⁷	\$55,000 ⁸	\$45,000
Total Marketing Allocation ⁹	\$265,000	\$275,000
Total Direct Implementation ¹⁰	\$151,000	\$151,000
Total EM&V Cost Allocation ¹¹	\$25,000	\$25,000

17 **The Company proposes to increase the program budget by 3% in ensuing years, to compensate for inflation

18 34. TEP has informed Staff that the Tucson Unified School District ("TUSD") has
19 passed a new energy policy that makes each principal responsible for energy reductions on his or
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22 ⁴The first year allocation was revised downward, from \$300,000 to \$100,000, while the second and ensuing years were also revised downward, from \$200,000 to \$100,000.

23 ⁵Summit Blue, consultant for TEP and UNS Electric, indicates that the proposed budget allocations for the TEP and UNS Electric DSM programs were based on a survey of budgets for 17 DSM programs, for different utilities, that began operation in California in 2005. These allocations have been revised to reflect changes in the TOU and Academic components.

24 ⁶The TEP semi-annual report listed a total of \$300,119 in spending during 2007 for the separate Commercial Education (\$53,232), Residential Education (\$220,422) and Academic Education (\$26,465) programs.

25 ⁷Includes labor for individuals working on program design, research, data collection, document preparation, copying, reporting and supervision.

26 ⁸Higher cost reflects initial start-up costs.

27 ⁹See Marketing section.

28 ¹⁰Includes labor for individuals working on actual design and development of EO materials, training programs, and hardware and materials necessary to produce materials.

¹¹See Monitoring and Evaluation section.

1 her own campus, with an expectation of a 5 percent reduction in each of the next three years. The
2 Company anticipates that this new policy will increase interest in the Academic Education
3 component of its EO program. In response, TEP has revised its original allocation for Academic
4 Education upward, from \$50,000 to \$70,000.

5 35. With the additional \$20,000 in funding, the Company proposes to contract with the
6 Environmental Education Exchange to take a team into schools with high energy bills for day-long
7 presentations on energy and conservation. After these presentations, the Energy Patrol would
8 move ahead with continuing education and reminders on conservation. TEP states that the
9 Environment Education Exchange is geared to work with 4th through 8th graders, and that it has
10 an ongoing relationship with local schools, arising from its water conservation and recycling
11 programs.

12 36. Staff has recommended that TEP be allowed to shift money between program
13 components in order to address changes in participation levels.

14 37. Cost-Benefit Analysis and Projected kWh and Environmental Savings

15 The EO program consists of education and marketing intended to inform TEP customers
16 about the benefits of energy conservation and to inform those customers on how to achieve energy
17 savings. Because the aim of this program is to change behavior, it is difficult to objectively assess
18 cost-effectiveness or measure actual energy or environmental savings. Staff's position is that
19 while standard cost-effectiveness analysis may not be appropriate for market transformation or
20 educational programs, such programs must still be evaluated to determine their effectiveness. As
21 discussed in the Monitoring and Evaluation section, TEP has proposed to put into place evaluation
22 measures, including surveys and the collection of participation statistics, in order to verify the
23 program's effects.

24 38. Improving Customer Access to Cost Information

25 The three major opportunities for energy conservation involve improving equipment,
26 enhancing the thermal envelope (with respect to buildings), and changing behavior. The OE
27 program is intended to increase participation in the Company's other DSM programs, but is also
28 intended to effect a broader market transformation, one that includes changes in customer

1 behavior. To promote that end, Staff has recommended that the Company work to improve its
2 customers' access to more specific information regarding the costs of energy for particular end
3 uses. A list of estimated monthly energy costs, by appliance, for TEP customers should be
4 available on the TEP website (in addition to any cost calculator) and should be included in other
5 program marketing, including bill stuffers.¹²

6 39. Staff also has recommended that information should be made available on the
7 website, and through other marketing and education, regarding how customers can reduce
8 "phantom loads"¹³, or power consumed by electronic appliances that are switched off or in standby
9 mode.

10 40. Reporting Requirements

11 If approved, Staff has recommended that the EO program be reported in the Company's
12 semi-annual DSM reports. At a minimum, reporting should include the following information: (i)
13 participation levels for each component of the EO program; (ii) the amount spent in each major
14 budget category during the previous reporting period and, in the end-of-year report, the amount
15 spent in each major budget category during the course of the calendar year; (iii) the results of the
16 monitoring and evaluation process for each program component; (iv) any issues that concern the
17 Company regarding the program, along with plans to address any problems; and (v) any major
18 changes planned regarding the program, including termination of the program itself or a
19 component of the program.

20 41. Staff has recommended that the TEP EO program be approved, with the
21 modifications included herein.

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26 ¹² As an example, the SRP site includes a chart, based on usage of 1,285 kWh per month, which estimates an energy
27 cost of \$19.84 for a 10-15 year old refrigerator, located outside, during summer months, while an in-house Energy Star
28 refrigerator is estimated to cost \$4.76 to run during the same period.

¹³ Also referred to as "parasitic" or "vampire" loads, these loads waste energy and can amount to approximately 5% of
a home's energy load.

1 42. Summary of Staff Recommendations

2 Staff has recommended that the Company perform research and analysis in order to
3 determine the reason or reasons for low participation with respect to its commercial on-line Energy
4 Advisor.

5 43. Staff has recommended that any customer communications regarding TOU should
6 be designed to educate customers regarding the benefits of shifting peak load to off-peak hours,
7 and of reducing peak demand (kW). Such marketing and educational communications should
8 include information on what customers can do to manage their own energy consumption to shift
9 peak load or reduce peak demand.

10 44. If the EO program is approved, Staff has recommended that the on-line audit
11 component be approved only on an interim basis and that the Company request approval to
12 continue one year following implementation of an updated energy audit program, if the Company
13 significantly revises the program, or one year following approval, if the Company chooses to keep
14 the existing program in place.

15 45. Staff has recommended that TEP be allowed to shift money between program
16 components in order to address changes in participation levels.

17 46. Staff has recommended that the Company work to improve its customers' access to
18 more specific information regarding the costs of energy for particular end uses, including a list of
19 estimated monthly energy costs, by appliance, both on the TEP website and as bill stuffers.

20 47. Staff also has recommended that information should be made available on the
21 website, and through other marketing and education, regarding how customers can reduce
22 "phantom loads", or power consumed by electronic appliances that are switched off or in standby
23 mode.

24 48. If approved, Staff has recommended that the EO program be reported in the
25 Company's semi-annual DSM reports. At a minimum, reporting should include the following
26 information: (i) participation levels for each component of the EO program; (ii) the amount spent
27 in each major budget category during the previous reporting period and, in the end-of-year report,
28 the amount spent in each major budget category during the course of the calendar year; (iii) the

1 results of the monitoring and evaluation process for each program component; (iv) any issues that
2 concern the Company regarding the program, along with plans to address any problems; and (v)
3 any major changes planned regarding the program, including termination of the program itself or a
4 component of the program.

5 49. Staff has recommended that the TEP EO program be approved, with the
6 modifications included herein.

7 CONCLUSIONS OF LAW

8 1. TEP is an Arizona public service corporation within the meaning of Article XV,
9 Section 2, of the Arizona Constitution.

10 2. The Commission has jurisdiction over TEP and over the subject matter of the
11 application.

12 3. The Commission, having reviewed the application and Staff's Memorandum dated
13 June 17, 2008, concludes that it is in the public interest to approve the TEP Education and
14 Outreach program.

15 ORDER

16 IT IS THEREFORE ORDERED that the Tucson Electric Power Company EO program be
17 approved, with the modifications included herein.

18 IT IS FURTHER ORDERED that Tucson Electric Power Company perform research and
19 analysis in order to determine the reason or reasons for low participation with respect to its
20 commercial on-line Energy Advisor.

21 IT IS FURTHER ORDERED that any customer communications regarding TOU should be
22 designed to educate customers regarding the benefits of shifting peak load to off-peak hours, and
23 of reducing peak demand (kW). Such marketing and educational communications should include
24 information on what customers can do to manage their own energy consumption to shift peak load
25 or reduce peak demand.

26 IT IS FURTHER ORDERED that the on-line audit component be approved only on an
27 interim basis, and that Tucson Electric Power Company request approval to continue one year
28 following implementation of an updated energy audit program, if the Company significantly

1 revises the program, or one year following approval, if the Company chooses to keep the existing
2 program in place.

3 IT IS FURTHER ORDERED that Tucson Electric Power Company be allowed to shift
4 money between program components in order to address changes in participation levels.

5 IT IS FURTHER ORDERED that Tucson Electric Power Company work to improve its
6 customers' access to more specific information regarding the costs of energy for particular end
7 uses, including a list of estimated monthly energy costs, by appliance, both on the TEP website
8 and as bill stuffers.

9 IT IS FURTHER ORDERED that information be made available on the website, and
10 through other marketing and education, regarding how customers can reduce "phantom loads", or
11 power consumed by electronic appliances that are switched off or in standby mode.

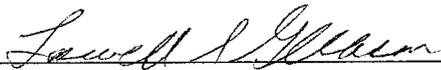
12 IT IS FURTHER ORDERED that the EO program be reported in the Company's semi-
13 annual DSM reports. At a minimum, reporting should include the following information: (i)
14 participation levels for each component of the EO program; (ii) the amount spent in each major
15 budget category during the previous reporting period and, in the end-of-year report, the amount
16 spent in each major budget category during the course of the calendar year; (iii) the results of the

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 4 component of the program.

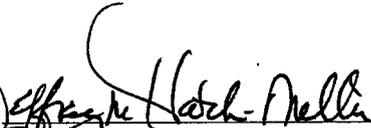
5 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

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

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 CHAIRMAN



 COMMISSIONER

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 COMMISSIONER



 COMMISSIONER



 COMMISSIONER

13 IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive
 14 Director of the Arizona Corporation Commission, have
 15 hereunto, set my hand and caused the official seal of this
 16 Commission to be affixed at the Capitol, in the City of
 Phoenix, this 3rd day of July, 2008.

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 BRIAN C. McNEIL
 EXECUTIVE DIRECTOR

21 DISSENT: _____

23 DISSENT: _____

24 EGJ:JMK:lhm\JFW

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

3 Mr. Michael W. Patten
4 Roshka, DeWulf & Patten
5 400 East Van Buren Street, Suite 800
6 Phoenix, Arizona 85004

Ms. Janice Alward
Chief Counsel
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

6 Ms. Michelle Livengood
7 Tucson Electric Power Company
8 Mail Stop UE201
9 One South Church Avenue
10 Post Office Box 711
11 Tucson Arizona 85702

10 Mr. Scott S. Wakefield
11 RUCO
12 1110 West Washington, Suite 220
13 Phoenix Arizona 85007

13 Mr. C. Webb Crockett
14 Fennemore Craig, PC
15 3003 North Central Avenue, Suite 2600
16 Phoenix Arizona 85012

16 Mr. Timothy M. Hogan
17 Arizona Center for Law in the Public Interest
18 202 East McDowell Road, Suite 153
19 Phoenix Arizona 85004

19 Mr. David Berry
20 Western Resources Advocates
21 Post Office Box 1064
22 Scottsdale Arizona 85252-1064

22 Mr. Jeff Schlegel
23 SWEEP Arizona
24 1137 West Samalayuca Drive
25 Tucson Arizona 85704

25 Mr. Ernest G. Johnson
26 Director, Utilities Division
27 Arizona Corporation Commission
28 1200 West Washington
Phoenix, Arizona 85007