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BEFORE THE ARIZONA CORPORATION COMMISSION

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2 KRISTIN K. MAYES
Chairman
3 GARY PIERCE
Commissioner
4 PAUL NEWMAN
Commissioner
5 SANDRA D. KENNEDY
Commissioner
6 BOB STUMP
Commissioner
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Arizona Corporation Commission
DOCKETED
JAN 6 2011

DOCKETED BY nr

8 IN THE MATTER OF UNS GAS, INC.'S
9 APPLICATION FOR APPROVAL OF ITS
10 RESIDENTIAL ENERGY ASSESSMENT
PROGRAM
11
12

DOCKET NO. G-04204A-07-0274
DECISION NO. 72056
ORDER

13 Open Meeting
14 December 14 and 15, 2010
Phoenix, Arizona

15 BY THE COMMISSION:

16 FINDINGS OF FACT

17 1. UNS Gas, Inc. ("UNS Gas" or "the Company") is engaged in providing natural gas
18 within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission
19 ("Commission").

20 2. On September 8, 2010, UNS Gas filed its Application for Approval of Proposed
21 Residential Energy Assessment Program ("REAP" or the "Program"). The REAP is designed to
22 work in conjunction with UNS Gas' proposed Existing Homes Program (Docket No. G-04204A-
23 07-0274). Staff considers this Program an element of UNS Gas' Existing Homes Program and has
24 reviewed this Program as a modification of the Existing Homes Program.

25 PROGRAM DESCRIPTION

26 3. The REAP, consistent with the Existing Homes Program, is being offered to single
27 family, residential customers residing in existing 1-4 family owner-occupied homes currently
28 serviced by UNS Gas.

1 4. The major components of the REAP include a home energy assessment; a general
2 appliance assessment; installation of a low flow showerhead, one kitchen sink faucet aerator and
3 two bathroom sink aerators; and education regarding behavioral changes, other UNS Gas
4 efficiency programs, rate options, and contact information to assist with questions after the
5 assessment.

6 5. A home energy assessment (also referred to as a home energy audit) is a
7 comprehensive home examination designed to assess how much energy the home is using and to
8 evaluate what measures can be taken to improve efficiency. The most common conditions found
9 are leaks in the heating, ventilation and air conditioning (HVAC) duct system; penetrations which
10 allow air exchange and connection between the attic and exterior of the home with the conditioned
11 space; insulation failures; and unsealed windows and doors.

12 6. Professional auditors use a variety of techniques and equipment to determine the
13 energy efficiency of a home. Thorough audits often use equipment such as blower doors, which
14 measure the extent of leaks in the building envelope, and Duct Blasters which test and document
15 the airtightness of forced air duct systems.

16 7. It is important to note that a home energy assessment, in and of itself, is not an
17 energy-saving measure. Additional measures must be implemented to correct existing conditions
18 within the home that are causing homeowners to waste energy and incur high gas bills.

19 8. According to UNS Gas, the current market rate for a home energy assessment is
20 approximately \$330 per home. Through the REAP, participating customers will only pay \$99 for
21 the assessment with UNS Gas paying the balance of the assessment cost.¹

22 9. Through the UNS Gas REAP, the energy assessment will be conducted and
23 explained by an implementation contractor that has experience and expertise in energy assessments
24 and energy efficiency measures. At the conclusion of the home assessment, the contractor will
25 provide a detailed report of recommended efficiency measures prioritized by cost effectiveness.
26 The report will also contain an estimate of the actual energy and dollar savings possible through

27
28 ¹ The assessment cost originally proposed in the application for this Program was \$450. Since the original application was filed, UNS Gas has narrowed its options for an implementation contractor for the Program and has provided Staff with more recent assessment costs.

1 the recommended upgrade measures. At this time, the recommended measures will be limited to
2 measures offered through the Existing Homes Program which include duct sealing, air sealing,
3 ceiling insulation, and furnace and water heater replacement.

4 10. In addition to providing and explaining the assessment report, the contractor will
5 install one low flow showerhead, one kitchen sink faucet aerator and two bathroom sink aerators.
6 The contractor will also educate the homeowner about applicable UNS Gas rebates and simple
7 behavioral modifications to increase efficiency.

8 11. Although the REAP is designed to be utilized with UNS Gas's Existing Homes
9 Program, participation in one program does not require participation in the other. As part of the
10 energy assessment, customers will be provided with rebate information and a list of Building
11 Performance Institute ("BPI") contractors available to complete the recommended measures
12 associated with the Existing Homes Program. Once a customer contacts an approved BPI-certified
13 contractor, a firm cost for recommended improvements will be given to the customer. The
14 contractor will then be able to access a secure website containing the details of the customer's
15 energy assessment. Upon completion of all work, the actual savings provided by each measure
16 will be known.

17 12. Where UNS Gas and UNS Electric have overlapping service territories, the
18 companies will jointly offer the program, requiring only one assessment.

19 **DELIVERY STRATEGY AND ADMINISTRATION**

20 13. UNS Gas will serve as the program administrator for the REAP, providing
21 marketing, planning, technical support, and evaluation. UNS Gas will use an implementation
22 contractor to conduct the energy assessments, to deliver and explain the resulting reports to the
23 homeowner, and to complete all remaining customer education and assistance, including
24 scheduling customer assessments, screening applicants, referring certified contractors, installation
25 of direct-install components, data storage, and reporting.

26 14. UNS Gas issued a request for proposals ("RFP") on August 5, 2010, to select an
27 implementation contractor capable of supplying trained energy auditors to conduct the on-site
28 ...

1 energy assessments. UNS Gas expects the contractor will use the Real Home Analyzer or second
2 version E-net Green software to conduct the audits.

3 15. Inquiring consumers will receive Program and contact information to schedule an
4 energy assessment. The implementation contractor will be responsible for determining eligibility.
5 After the assessment is conducted, the auditor will refer the customer to a UNS Gas approved and
6 BPI-certified contractor. The BPI contractor will be responsible for conducting combustion safety
7 testing, installation of recommended measures, and blower-door/duct testing at the completion of
8 the efficiency upgrades. They will also be responsible for updating the energy assessment records
9 with final test results and reporting.

10 MARKETING

11 16. The marketing and communications strategy for the REAP is consistent with the
12 broader Existing Homes Program which includes:

- 13 ● promotions on UNS Gas' website;
- 14 ● advertising in major newspapers and other print media in the service region;
- 15 ● brochures and other collateral pieces such as bill inserts;
- 16 ● high bill inquiries;
- 17 ● trade ally marketing efforts; and
- 18 ● contractor enrollment and training.

18 PROGRAM INCENTIVES

19 17. The incentive for this Program includes installation of one low flow shower head,
20 one kitchen faucet aerator and up to two bathroom faucet aerators. UNS Gas estimates that the
21 cost of an energy assessment is approximately \$330. UNS Gas intends for consumers to pay \$99
22 of the assessment cost and for the Company to pay the remaining amount of approximately \$230,
23 with both payments made directly to the implementation contractor. While UNS Gas proposed
24 this \$230 as an incentive, Staff considers the cost of the energy assessment to be part of Program
25 Delivery rather than an actual incentive to the customer or contractor because the assessment
26 facilitates not only the benefits of the low flow shower head, the faucet aerators and energy
27 efficiency education but also the potential benefits associated with the UNS Gas Existing Homes
28 Program. UNS Gas anticipates monthly invoicing on behalf of the contractor, and will provide

1 payment within 30 days of completion of the home assessment. Payment to the contractor is
2 contingent upon the contractor providing UNS Gas with all project documentation.

3 PROGRAM BUDGET

4 18. UNS Gas intends to include the REAP costs in its upcoming annual DSM charge
5 adjustment. Based on updated budget information provided by UNS Gas subsequent to the filing
6 of the application for approval of this Program, Staff estimates that the REAP will result in a
7 \$0.001537 per therm increase to the DSM charge, which would be an increase in the average
8 residential bill of \$0.81 per year (assuming average residential usage of 524 therms per year).

9 19. However, we believe the Budget should be as shown in Table 1.

10 **Table 1. 2011 Program Budget**

	Measure Cost	2011 Units	Total Budget
Low Flow Showerhead	\$42.45	500	\$21,225
Kitchen and Bathroom Faucet Aerators (3)	\$22.79	500	\$11,395
Energy Assessment	\$230	500	\$115,000
Total Financial Incentives			\$147,620
Program Delivery			\$13,000
Energy Audit Software Set-Up			\$19,139
Energy Assessment Licenses*	\$20	500	\$10,000
Total Program Delivery			\$42,139
Program Marketing			\$12,488
Program Administration			\$13,000
Measurement, Evaluation and Research			\$5,505
Total Program Costs - Incentive			\$147,620
Total Program Costs - Non-Incentive			\$73,132
Total Program Costs			\$220,752

21 * Estimated on a per unit basis.

23 PROGRAM PARTICIPATION

24 20. UNS Gas anticipates completing 500 energy assessments by the end of 2011. UNS
25 Gas also has a goal of having 40 percent of customers that take advantage of the energy
26 assessment program follow up with measures from the Existing Homes Program.

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ESTIMATED ENERGY SAVINGS**Table 2. 2011 Estimated Energy Savings per Home**

Measure	Gross Annual Savings (therms)
Low Flow Showerhead	31
Kitchen Aerator (1)	22
Bathroom Aerators (2)	24
Total Savings	77

COST-EFFECTIVENESS

21. 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.

22. Staff does not view the REAP as an energy-efficiency program, in and of itself but, rather, regards this Program as more of a delivery mechanism for the comprehensive, whole-house efficiency measures offered through the UNS Gas' Existing Homes Program. Although the low flow showerhead and aerators installed through the REAP, along with suggested behavioral modifications, will result in energy savings, the purpose of the home energy audit is to identify areas for energy savings and to recommend cost-effective efficiency upgrades, for which additional rebates are offered. Staff believes that the REAP is a critical element to the Existing Homes Program. Staff has evaluated the REAP as an addition to the Existing Homes Program. Staff has concluded that UNS Gas' Existing Homes Program, modified to include the REAP, would be cost-effective with an SCT benefit-cost ratio of 1.29.²

² This benefit-cost ratio includes total whole house benefits which incorporate both estimate electric and natural gas savings as discussed for the Existing Homes Program. If only natural gas savings from the Existing Homes Program were included, the Existing Homes Program, modified to include the REAP, would have an SCT benefit-cost ratio of 0.93.

1 **MONITORING AND EVALUATION**

2 23. UNS Gas' Measurement, Evaluation, and Research contractor, Navigant
3 Consulting, will be conducting Program measurement, verification, and quality assurance. UNS
4 Gas also anticipates mailing homeowner surveys to all Program participants who receive an energy
5 assessment.

6 **RECOMMENDATIONS**

7 24. Staff has recommended that the UNS Gas REAP be approved.

8 25. Staff has recommended that UNS Gas include, at a minimum, the following in its
9 DSM report: (i) the number of participants in this program; (ii) copies of marketing materials; (iii)
10 estimated cost savings to participants; (iv) gas and electric savings as determined by the
11 monitoring and evaluation process; (v) estimated environmental savings; (vi) the total amount of
12 the program budget spent during the previous year and since inception of the program; (vii) any
13 significant impacts on program cost-effectiveness; (viii) how many participants in this program
14 subsequently receive rebates from the Existing Homes Program; and (ix) descriptions of any
15 problems and proposed solutions including movements of funding from one program to another.

16 **CONCLUSIONS OF LAW**

17 1. UNS Gas, Inc. is an Arizona public service corporation within the meaning of
18 Article XV, Section 2, of the Arizona Constitution.

19 2. The Commission has jurisdiction over UNS Gas and over the subject matter of the
20 Application.

21 3. The Commission, having reviewed the application and Staff's Memorandum dated
22 December 2, 2010, concludes that it is in the public interest to approve the UNS Gas REAP as an
23 element of the Existing Homes Program, as discussed herein.

24 **ORDER**

25 IT IS THEREFORE ORDERED that UNS Gas, Inc.'s Existing Homes Program be and
26 hereby is approved, as discussed herein.

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1 IT IS FURTHER ORDERED that UNS Gas, Inc. shall make all reasonable efforts to
2 provide residential energy assessments to at least 500 customers within 12 months of initial
3 program implementation.

4 IT IS FURTHER ORDERED that UNS Gas Inc.'s DSM reports shall include, at a
5 minimum:

- 6 • the number of participants in this program;
- 7 • copies of marketing materials;
- 8 • estimated cost savings to participants;
- 9 • gas and electric savings as determined by the monitoring and evaluation
10 process;
- 11 • estimated environmental savings;
- 12 • the total amount of the program budget spent during the previous year and since
13 inception of the program;
- 14 • any significant impacts on program cost-effectiveness;

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- how many REAP participants subsequently receive rebates from the Existing Homes Program; and
- descriptions of any problems and proposed solutions including movements of funding from one program to another.

IT IS FURTHER ORDERED that this Order shall become effective immediately.

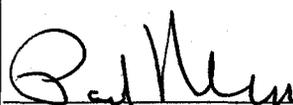
BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION



 CHAIRMAN



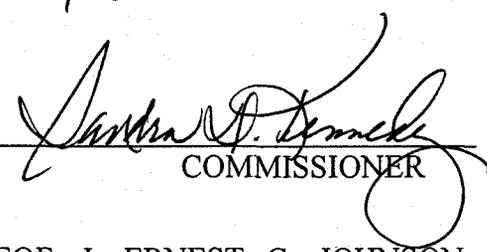
 COMMISSIONER



 COMMISSIONER



 COMMISSIONER



 COMMISSIONER

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 6th day of January, 2010.
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 ERNEST G. JOHNSON
 EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

SMO:LAF:BEK:lhmrRM

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