

BEFORE THE
WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

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GENERAL RATE APPLICATION
OF
NORTHWEST NATURAL GAS COMPANY

MARCH 28, 2008

Direct Testimony of William R. Edmonds:
Conservation Program

CONSERVATION PROGRAM TESTIMONY

Table of Contents

	<u>Page</u>
I. Introduction and Summary	1
II. Benefits of a Conservation Program	1
III. Relationship Between Decoupling and Conservation	3
IV. Conservation Program Development	5
V. Conservation Program Administration	7
VI. Program Funding	14
VII. Qualifications	14

1 **I. Introduction and Summary**

2 **Q. Please state your name, business address and position with NW Natural.**

3 A. My name is William R. Edmonds. My address is 220 NW Second Avenue,
4 Portland, OR 97209. I am the Manager of Environmental Policy &
5 Sustainability at Northwest Natural Gas Company (NW Natural or the
6 Company). My responsibilities at NW Natural include environmental policy,
7 energy efficiency and internal sustainability efforts.

8 **Q. What is the purpose of your testimony?**

9 A. The purpose of my testimony is to describe the conservation program that NW
10 Natural would pursue for its residential and small commercial customers in its
11 Washington service territory in connection with the decoupling mechanism
12 proposed in this proceeding. The Company's proposed decoupling
13 mechanism is discussed in the direct testimony of Mr. C. Alex Miller. See,
14 *Exhibit No. ____ (CAM-1).*

15 **Q. Please summarize your testimony.**

16 A. My testimony will: (1) describe the benefits of offering a conservation program
17 to customers; (2) discuss the relationship between decoupling and the
18 promotion of energy conservation; and (3) discuss a proposal for the
19 development, administration, and funding of a conservation program in
20 Washington.

21 **II. Benefits of a Conservation Program**

22 **Q. What benefits do conservation programs offer customers?**

1 A. Conservation programs are increasingly important to gas utility customers
2 because customers bear the burden of escalating commodity gas costs.
3 Conservation programs provide customers with ways to reduce their utility bills
4 below what they otherwise would be able to do without these programs. A
5 conservation program will reduce the per customer demand for natural gas,
6 which will also contribute to the Company’s ability to meet the natural gas
7 demand of future customers. Finally, a conservation program will play a key
8 role in helping meet the greenhouse gas (GHG) reduction goal of the state of
9 Washington.

10 **Q. What conservation programs does NW Natural currently offer to its**
11 **Washington customers?**

12 A. NW Natural currently has a residential high efficiency furnace rebate program
13 (Schedule F “Residential High-Efficiency Furnace Program”) that offers a two-
14 hundred dollar (\$200.00) cash rebate to customers that convert from a
15 standard efficiency furnace to a new full condensing furnace with AFUE rates
16 of ninety-percent (90%) or better. *See, Exhibit ____ (WRE-2).*

17 **Q, What added benefit will Washington customers receive from a**
18 **conservation program?**

19 A. The Company’s Washington residential and commercial customers would
20 have more opportunities to reduce their energy use through programs offering
21 conservation and energy efficient equipment. An enhanced conservation
22 program would encompass the following relevant market sectors: (a) new

1 residential construction, (b) residential retrofit, (c) commercial new
2 construction, and (d) commercial retrofit. NW Natural does not propose to
3 include at this time the industrial customer class in the proposed conservation
4 program.

5 **III. Relationship Between Decoupling and Energy Conservation**

6 **Q. What is the role of decoupling in the successful implementation of a**
7 **Conservation program?**

8 A. As discussed in Mr. Miller's testimony, the Company has a disincentive to take
9 any action to encourage customers to reduce consumption through the
10 promotion of conservation and energy efficiency because the resulting
11 reduction in natural gas usage also reduces net revenues, and thus the ability
12 for the Company to recover its fixed costs. *See, Exhibit No. ____ (CAM-1,*
13 *page 11).* As such, decoupling is necessary to ensure that the Company has
14 an opportunity to recover its fixed costs in the face of the reductions in
15 customer usage that will occur as customers implement conservation
16 measures. *See, Exhibit No. ____ (CAM-1), page 9).* Therefore, the Company
17 considers adoption of an expanded conservation program to be contingent
18 upon the acceptance of the decoupling mechanism proposed in this
19 proceeding.

20 **Q. Does the Company have any support for its position that decoupling has**
21 **benefited customers?**

1 A. Yes. In early 2005, the Company contracted with Christensen Associates
2 Energy Consulting to evaluate the success of the Company's Oregon partial
3 decoupling mechanism (Schedule 190,"Partial Decoupling Mechanism"). See,
4 *Exhibit No. ____ (WRE-3)*. The findings reported by Christensen Associates in
5 a presentation made on April 18, 2005 confirmed that the Company's
6 decoupling mechanism effectively supports energy conservation and results in
7 improved adoption of energy efficiency measures. See, *Exhibit No. ____*
8 *(WRE-4)*. Specifically, the report found:

- 9 • A "Shift away from Category C and toward Category A" in the
10 Company's advertising and communications budgets.¹ Category C
11 messages related to promotions were reduced from 74% of the budget
12 in 2000 to only 17% of the budget in 2004. At the same time, expenses
13 rose in Category A, related to customer service and energy efficiency.²
- 14 • The Company's Oregon adoption rate for high efficiency furnaces
15 increased at a rate "more [than] twice as high as [those] in
16 Seattle/Tacoma, Eastern Washington, [or] Montana/Idaho."³
- 17 • Post decoupling, the Company experienced an "11.6 percentage point
18 reduction in Sales & Promotions budget."⁴

1 See, Exhibit No. ____ (WRE-4, page 35) NW Natural allocates its advertising budget to three categories, labeled A, B, and C, defined as follows:
Category A: Energy efficiency, conservation, and service information (including rate or account information).
Category B: Safety communication and advertising.
Category C: Promotional advertising and communications to non-customers, or image advertising.

2 See, Exhibit No. ____ (WRE-4, page 34)
3 See, Exhibit No. ____ (WRE-4, page 41)
4 See, Exhibit No. ____ (WRE-4, page 46)

1 In short, the partial decoupling mechanism allowed the Company to fully
2 embrace conservation and appliance efficiency efforts without concern for the
3 effect on its Oregon revenues.

4 **Q. What does the Company conclude based on its experience in Oregon?**

5 A. Based on its experience in Oregon, the Company's view is that decoupling
6 has enabled it to pursue a new business model, a model that fully embraces
7 energy conservation and places customer service above the sale of natural
8 gas as a commodity.

9 **IV. Conservation Program Development**

10 **Q. How would the Company develop an expanded conservation program to**
11 **serve its Washington customers?**

12 A. Because there is very little known about the specific potential for natural gas
13 conservation savings in the Company's Washington service territory, the
14 Company proposes to create an Advisory Group that would assist the
15 Company in conducting a study of energy conservation potential. That study
16 would then be used to develop targets and time frames for achieving cost-
17 effective therm savings.

18 **Q. What would be the function of the Advisory Group?**

19 A. The Advisory Group would:

- 20 • Project first year program participation: The Advisory group would
21 project first year program participation rates and therm savings for each

1 program. The projections will be based upon a resource assessment,
2 yet to be completed, that will help the Company identify the energy
3 characteristics of the housing stock in the Washington service territory,
4 and establish preliminary predictions on program penetration and
5 equipment adoption rates with some degree of confidence. The
6 Company would expect that these projections would be reviewed and
7 approved by the Commission both initially and at the end of the first
8 program year.

- 9 • Set Targets: Following one full year of field experience, the Advisory
10 Group would establish annual therm savings targets. These targets
11 would be reviewed and approved by the Commission.
- 12 • Annual Review of Targets: Each program year the Advisory Group
13 would review target achievements and associated program costs. The
14 Advisory Group would recommend any necessary revisions to the
15 targets based on this review.
- 16 • Monitor Effectiveness: The Company would monitor and report on
17 programmatic efforts, noting early penetration rates, preliminary cost
18 effectiveness and other indicators of effective program management.
19 Based on these indicators, the Advisory Group would recommend any
20 necessary modifications to the conservation program.
- 21 • Oversee Evaluation: The Advisory Group would review and approve an
22 evaluation plan and subsequent evaluations.

1 **Q. How would NW Natural establish therm savings targets for the**
2 **conservation program?**

3 A. In order to offer an effective conservation program, careful planning is
4 required to address the unique markets in NW Natural’s Washington service
5 territory. The Company knows, based on information from a variety of
6 sources, that its Washington service territory is characterized by:

- 7 • Recently constructed housing that meets the newer energy codes and
8 is comparatively economic to heat;
- 9 • New commercial buildings that are also newer and more efficient than
10 their Portland, Oregon counterparts; and
- 11 • Older homes that were weatherized by Clark County PUD prior to being
12 converted to natural gas heating.

13 Before the Company could establish effective and achievable energy
14 conservation targets for its Washington service territory, additional study will
15 be necessary to analyze both the market potential and the existing constraints
16 inherent in the area.

17 **VI. Conservation Program Administration**

18 **Q. How would the Company administer the conservation program?**

19 A. NW Natural’s Washington service territory is relatively small (approximately
20 65,000 customers, mostly residential) compared to its Oregon service territory,
21 but it is closely linked geographically to the Portland metropolitan area
22 (although the potential for energy conservation may be quite different). The

1 areas on either side of the Columbia River share overlapping media markets;
2 in addition, many contractors who install energy conservation measures work
3 in both Oregon and Washington. For these reasons, the most efficient way
4 for NW Natural to deliver energy conservation programs to Washington
5 customers is to contract with the non-profit Energy Trust of Oregon, Inc.
6 (Energy Trust). NW Natural currently contracts with Energy Trust to deliver
7 conservation programs to its Oregon customers. Because they are located
8 largely in the same media market, NW Natural's Washington customers now
9 hear messages about Energy Trust energy efficiency opportunities, but are
10 not eligible to avail themselves of these programs. The approach proposed by
11 the Company would extend similar services to NW Natural's Washington
12 customers.

13 **Q. Has the Company considered other program delivery options?**

14 A. Yes. A second option considered by the Company was to hire a third-party
15 program implementer to oversee the program. However, the Company has
16 come to the conclusion that it is not feasible to create a unique, adequately
17 staffed program to serve only 65,000 customers in Washington. From the
18 Company's perspective, contracting with Energy Trust is the only sensible
19 solution, given its established track record, full program staff and competitive
20 contractor-delivery model, established process for planning and evaluation,
21 marketing and outreach, accounting and information technology capabilities.

1 **Q. Please further explain the benefits of retaining Energy Trust to**
2 **administer the Company’s energy efficiency programs in Washington.**

3 A. The benefits include the following:

- 4 • Energy Trust offers complete turn-key energy conservation services,
5 including resource assessment, program planning, competitive
6 contractor selection and management, trade ally selection and
7 management, program marketing communications and advertising,
8 quality assurance and quality control, program evaluation and
9 information technology management.
- 10 • NW Natural has a positive and established working relationship with
11 Energy Trust. The Company is routinely engaged with Energy Trust,
12 resulting in efficient planning, decision-making and co-branding/co-
13 marketing of materials designed to attract participants and achieve
14 results. Additional time would be required to manage the program
15 through another administrator.
- 16 • Using a single program administrator in both Oregon and Washington
17 would provide useful benchmarking data that would be especially
18 valuable to program evaluation.
- 19 • Energy Trust is a non-profit organization concerned only with designing
20 and managing cost-effective conservation programs. Energy Trust has
21 a proven record of success in administering energy conservation
22 programs and, subject to considerations relating to its own decision-

1 making process, Energy Trust has expressed interest in serving NW
2 Natural's Washington residential and commercial markets.

3 **Q. Is Energy Trust currently authorized to administer energy conservation**
4 **program in the state of Washington?**

5 A. No. Energy Trust would require approval of its Board of Directors before it
6 would be able to administer programs in the State of Washington. Cascade
7 Natural Gas Corporation (Cascade) previously approached Energy Trust
8 about administering its conservation programs in Washington. As I
9 understand it, in the case of Cascade, the Energy Trust Board (Board) elected
10 not to serve as program administrator because of the level of effort that would
11 be required to add Cascade's Washington customers to Energy Trust
12 operations. Cascade serves 251,000 customers in 93 cities and towns
13 stretching from Oregon's eastern border to the northern shore of Washington.
14 The Board apparently concluded that because of the size and diversity of
15 Cascade's territory and the lack of infrastructure, Energy Trust could not
16 deliver programs to Cascade's Washington customers at that time. The
17 Board has not yet formally considered Energy Trust's availability to administer
18 NW Natural's programs in Washington. Informal discussions with Board
19 members and staff suggest that, given the comparatively small number of
20 customers and the close proximity of NW Natural's Washington service
21 territory to Energy Trust's, administering NW Natural's programs would be a
22 logical complement to its current services to NW Natural. In collaboration with

1 NW Natural, Energy Trust staff would first analyze the opportunity and then its
2 Board would formally decide whether Energy Trust should administer the
3 proposed Washington programs. Serving NW Natural’s Washington
4 customers is a unique opportunity in that NW Natural’s service territory
5 represents the only geographical location where a metropolitan area spans
6 the border between the states of Oregon and Washington.

7 **Q. Would the Company also incur additional costs to implement an
8 expanded conservation program in Washington?**

9 A. Yes. In addition to the direct expense of program implementation, the
10 Company would require one additional full-time equivalent (FTE) to administer
11 the Washington conservation program. Unlike in Oregon, where Energy Trust
12 takes responsibility for meeting efficiency conservation targets, the Company
13 would have the responsibility, working with the Advisory Group, to establish its
14 Washington energy conservation targets and to oversee Washington program
15 administration.

16 **Q. Does the Company propose a timeline for implementing a conservation
17 program?**

18 A. Yes. The Company proposes the following timeline for the development and
19 implementation of an energy conservation program in Washington:

20 1. The Company would convene the Advisory Group within sixty (60) days
21 of the Commission’s final order in this proceeding. The Company would

1 chair the Advisory Group and would draw its members from the
2 Commission staff, public interest organizations and Energy Trust.

3 2. NW Natural would contract with Energy Trust to prepare a broad Phase
4 One conservation study, to be completed before the Advisory Group's
5 first meeting. Using existing data, the study would consider such
6 matters as: (a) energy use characteristics of NW Natural's Washington
7 customer base; (b) potential Energy Trust programs and services that
8 could be adapted for Washington customers; (d) potential program
9 goals and delivery models; (e) tracking, reporting and evaluation
10 processes; and (f) general considerations, e.g., tax, regulatory and
11 stakeholder issues. As part of this first deliverable, Energy Trust also
12 would prepare a protocol for allocating costs to the Washington
13 program. The Allocation Protocol would be submitted to the Advisory
14 Committee for review and approval.

15 3. After completion of the Phase One study, NW Natural and Energy
16 Trust would develop a detailed scope of work and budget for a Phase
17 Two study, to be completed within five months of the Commission's
18 final order in this proceeding. The Phase Two study would: develop a
19 full implementation plan; identify new data requirements, customers
20 and submarkets, cost-effective measures, savings goals and targets,
21 marketing approaches, infrastructure/administrative requirements,
22 budgets, etc.

- 1 4. Promptly after completion of the Phase Two study: (a) NW Natural
2 would discuss the study with the Advisory Committee; (b) NW Natural
3 and Energy Trust would determine whether they agree to proceed with
4 Energy Trust administration of NW Natural programs in Washington;
5 and (c) the Company would file an energy efficiency plan with the
6 Commission. The energy efficiency plan would include projections for
7 first year program participation as recommended by the Advisory
8 Group.
- 9 5. A process evaluation would be performed after the first full program
10 year. An impact evaluation would be performed one year later, at
11 which time post treatment usage data would be available.
- 12 6. Within ninety (90) days from the establishment of first year savings
13 projections, the Company would develop annual therm saving targets
14 for recommendation to the Commission. The updated annual targets
15 would include an implementation budget.
- 16 7. At the end of each subsequent program year, the Company and
17 Energy Trust would prepare an annual report for review by the Advisory
18 Group and the Commission. These reports would include, at a
19 minimum, the actual energy conservation savings acquired, whether
20 the Company achieved its targets and the costs associated with
21 program implementation. The annual report would also establish therm
22 savings targets for the subsequent year.

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VI. Program Funding

Q. How would the conservation program be funded?

A. All program and administrative costs would be accounted for and recovered through a temporary technical adjustment mechanism in a deferral tracking, preferably at the time of the Company’s annual PGA filing, similar to the mechanism that is in effect today for the Schedule F furnace program.

Q. Do other Washington utilities have a similar funding mechanism?

A. Yes. It is the Company’s understanding that both Puget Sound Energy (“PSE”) and Avista Utilities (“Avista”) have similar mechanisms for the deferral and recovery of costs related to energy conservation programs.

VII. Qualifications

Q. Please describe your education and employment background.

A. I have worked for NW Natural since May 2006. From 1990 to 2006, I worked at PacifiCorp in various positions including the Director of Environmental Policy. Prior to PacifiCorp, I worked as an analyst at the California Public Utilities Commission and at ICF, Inc, an environmental consulting firm. I received my undergraduate degree in Political Science and Environmental Studies from Williams College and a Masters in Public Policy from the University of California at Berkeley. I have previously testified in regulatory proceedings.

Q. Does this conclude your direct testimony?

A. Yes.