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April 23, 2012

Dave Danner, Executive Director & Secretary
Washington Utilities and Transportation Commission
1300 S Evergreen Park Drive SW
Post Office Box 47250
Olympia, Washington 98504-7250

Re: UG-080546
2011 Annual Report on NW Natural's Energy Efficiency Program

Dear Mr. Danner:

Northwest Natural Gas Company, dba NW Natural ("NW Natural" or the "Company"), hereby submits an original and two copies of its 2011 Annual Report on the Company's Energy Efficiency program. This report is submitted in compliance with the Company's Energy Efficiency plan which is by reference part of the Company's Tariff Schedule G, "Energy Efficiency Services and Programs – Residential and Commercial."

The Company's Energy Efficiency program is monitored by the interested parties who have formed the Energy Efficiency Advisory Group (EEAG) in compliance with the stipulated agreement approved in Order 04 in the Company's last rate case, UG 080546.

If you have any questions, please call me at (503)226-4211, extension 3590.

Sincerely,

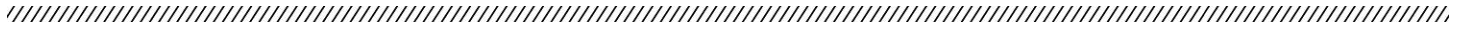
/s/ Jennifer Gross

Jennifer Gross

cc: EEAG

Enclosures

2011 Annual Report NW Natural Washington



ENERGY TRUST OF OREGON
APRIL 25, 2012



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I INTRODUCTION, BACKGROUND AND GOALS

A. Introduction

This report covers 2011, the second full year that Energy Trust provided services to customers of NW Natural in southwest Washington.

It addresses progress toward annual goals, information on revenues and expenditures, number of completed projects and incentives paid during the year and highlights of program activity.

B. Background

At the request of NW Natural and following the approval granted by the Washington Utilities and Transportation Commission, WUTC, Energy Trust began administering NW Natural's demand-side management programs in southwest Washington on October 1, 2009. The first year was viewed as a pilot. Satisfied with results from the pilot year, in 2011 the WUTC approved Energy Trust's continued administration of conservation programs in Washington.

C. Oversight

The Energy Efficiency Advisory Group, EEAG, was created to provide advice and oversight for NW Natural/Energy Trust energy-efficiency offerings in Washington. The advisory group is comprised of representatives from NW Natural, Energy Trust, WUTC, Washington Public Counsel, Northwest Industrial Gas Users and the Northwest Energy Coalition.

D. Goals

NW Natural, in collaboration with the EEAG, established performance metrics for the 2011 program year. This report presents Energy Trust's performance against those goals (see page 4).

II. ANNUAL REPORT HIGHLIGHTS

A. Summary

- **Gas efficiency measures installed in 2011** by NW Natural's Washington customers saved 204,372 annual therms of natural gas—including 63,931 annual therms in Existing Homes, 19,243 annual therms in New Homes and 121,198 annual therms in Existing Buildings.
- **Total 2011 savings exceeded the NW Natural Washington stretch goal** by 9 percent and exceeded the conservative goal by 28 percent.
- **All three programs met their 2011 stretch savings goals** while keeping total program spending, including incentives, delivery and administration, well within budget.
- **In 2011 an energy efficiency services group**, comprised of Clark County stakeholders, began meeting quarterly to identify opportunities for collaboration. The group includes representatives from Energy Trust, Clark Public Utilities, Clark County Energy Efficiency Services and Clark County Community Development's Weatherization program.

B. Washington Utilities and Transportation Commission Performance Metrics

The table below compares 2011 annual results to 2011 program goals, as established in NW Natural's Energy Efficiency Plan for Washington (updated December 6, 2010). Energy Trust exceeded each of the five metrics established for 2011.

2011 Results Compared to Goals

Metrics	Goal	2011 Total	Q1 Results	Q2 Results	Q3 Results	Q4 Results
Therms Saved	159,000 – 187,000	204,372	16,128	36,075	27,412	124,757
Total Program Cost	\$1,212,000 – \$1,380,616	\$1,069,376	\$191,619	\$210,186	\$260,003	\$407,567
Average Levelized Cost Per Measure	Not to Exceed \$0.65	\$0.358	\$0.785	\$0.404	\$0.416	\$0.225
Dollars Spent Per Therm Saved	Less Than \$7	\$5.23	\$11.88	\$5.83	\$6.21	\$3.27
Total Utility Cost at Portfolio Level	Greater than 1.0	2.6				
Total Resource Cost	Greater than 1.0	1.7				

2011 Utility Cost and Resource Cost by Program

Program	Utility Cost	Total Resource Cost
Existing Buildings	4.2	1.8
Existing Homes	1.7	1.8
New Homes	1.5	1.5
Overall	2.6	1.7

2011 Total Utility Cost and Resource Cost

Program	Utility Cost	Total Resource Cost
NWN-WA Portfolio	2.6	1.7
NWN-WA Low Income	1.5	1.2
Overall	2.6	1.7

C. Commercial sector highlights

- **Existing Buildings achieved savings of 121,198 annual therms** in 2011, exceeding the stretch goal of 105,000 annual therms by 15 percent.
- **Insulation accounted for 42 percent** of annual savings, followed by custom projects with 35 percent, boilers at 16 percent and radiant heat at 4 percent.
- **The custom offering launched January 1, 2011**, and generated savings of approximately 43,000 annual therms. Incentives supporting new custom studies were not required, as the program was able to acquire savings using existing studies in the market.
- **Certain prescriptive incentives were made available to new building projects** in 2011, including water heating, boiler, commercial laundry and foodservice equipment incentives. Only one new construction project took advantage of these incentives, but the program expects more will do so as the economy recovers and construction activity increases.
- **A thermal curtain incentive was added** as another measure available to commercial greenhouses (other measures include boilers, pipe insulation and radiant heaters).
- **K-12 schools were a major driver** of savings. The program actively acquired nine projects, which produced savings of 32,000 annual therms. The program expects to acquire numerous additional school projects in 2012.
- **Starting in Q4, a 10 percent custom bonus** was offered to projects completing by December 15. The bonus drove three projects toward 2011 completion, bringing in 29,000 annual therms in 2011 savings at an added incentive cost of \$2,900.
- **Only one foodservice project completed** in 2011, in part due to the sluggish economy impacting the food service industry and also to the abundance of high-quality used restaurant equipment available.
- **All commercial participants surveyed in 2011 were satisfied** or very satisfied with their experience with Energy Trust. The 12 program participants were contacted by telephone shortly after completing energy-efficiency upgrades and receiving an incentive check.

D. Residential sector highlights

- **Residential programs achieved total savings of 83,174 annual therms** in 2011, of which Existing Homes accounted for savings of 63,931 annual therms, while New Homes saved 19,243 annual therms. These results met the Existing Homes stretch goal of 63,654 annual therms and exceeded the New Homes stretch goal of 18,700 annual therms by 3 percent.

Existing Homes

- **The program delivered 1,757 Energy Saver Kits** in 2011, a greater-than-anticipated response from customers. Clark Public Utilities has expressed interest in purchasing the electric savings from compact fluorescent light bulbs included in the standardized Energy Saver Kits. The

program will directly communicate with Energy Saver Kit recipients in 2012 to drive deeper program participation.

- **With 162 units installed, gas furnaces accounted for 18 percent of program savings** in 2011, compared to 43 percent in the pilot year. The reduction correlates with a drop in market sales of all home heating equipment in 2011.
- **A total of 174 weatherization measures**—insulation, air sealing and duct sealing—were installed, along with 43 gas hearths and 29 efficient water heaters (most of which were tankless). Home Energy Reviews were provided to owners of 213 homes.
- **In Q4 the program engaged plumbers in a direct-install initiative** with low-flow showerheads and faucet aerators.
- **Advertisements in three Vancouver-area cinemas** promoting incentives and Energy Saver Kits ran for two months as part of a joint fall campaign with NW Natural. This innovative marketing strategy cost significantly less than traditional print advertising.
- **The program hired a full-time regional representative** in March 2011, who contacted 59 Washington-based contractors regarding participation as trade allies.
- **The program enrolled 16 Washington-based trade allies** in 2011.
- **86 percent of residential participants surveyed in 2011 were satisfied** or very satisfied with their experience with Energy Trust. The 65 program participants were contacted by telephone shortly after completing energy-efficiency upgrades and receiving an incentive check.

New Homes

- **A total of 210 ENERGY STAR® Builder Option Package new homes** received incentives in 2011, 60 more than stretch goal.
- **Market share for the year was approximately 33 percent**, despite the fact that approximately 30 percent fewer single-family home construction permits were issued in 2011 compared to 2010.
- **High-efficiency gas clothes washers** were included in an additional 107 new homes, an incentive made available in Q4 in collaboration with Clark Public Utilities.
- **Tankless water heaters failed to attract a single purchaser in 2011**, even though eligibility was extended to homeowners in addition to builders.

E. Trade Ally Network

- **Energy Trust's Trade Ally Network serving Washington** customers continued to grow in 2011.
- **By year end, 160 trade allies served Washington**, 28 more than had been enrolled at the end of 2010. Of these, 57 were based in Washington—17 more than at the end of 2010.
- **Breakfast meetings exclusively for Washington trade allies** serving Existing Buildings and Existing Homes were held in Vancouver in December. These events will continue in 2012—with each program offering an event in spring and again in early winter.

III. ANNUAL RESULTS

A. Activity highlights—sites served

	Q1	Q2	Q3	Q4	Total
Existing Commercial					
School/college retrofits	--	3	1	6	10
Other commercial retrofits	1	4	5	9	19
Studies	--	--	--	--	--
Existing Homes					
Weatherization (insulation, air- and duct-sealing)	29	32	17	49	127
Gas hearths	8	3	3	27	41
Gas furnaces	40	36	19	63	158
Water heaters	11	7	5	6	29
Home Energy Reviews	83	53	15	62	213
New Homes					
Builder Option Package (BOP)	40	33	88	49	210
Clothes washers				107	107

B. Revenues

Source	Actual Revenue YTD	Budgeted Revenue YTD
NW Natural	\$ 642,144	\$ 755,207

The variance reflects a timing difference within the 2011-2012 Energy Trust board-approved budget. The full revenue amount for 2011 was received from NW Natural, per the current funding contract.

C. Expenditures

		Actual Expenditures YTD	Budgeted Expenditures YTD	Variance
Commercial Programs	Existing Buildings	\$ 402,851	\$ 493,154	\$ 90,304
	Subtotal	\$ 402,851	\$ 493,154	\$ 90,304
Residential Programs	Existing Homes	\$ 423,480	\$ 517,068	\$ 93,588
	New Homes	\$ 212,356	\$ 191,288	\$ (21,068)
	Subtotal	\$ 635,836	\$ 708,356	\$ 72,519
Administration		\$ 30,689	\$ 42,127	\$ 11,438
TOTAL		\$ 1,069,376	\$ 1,243,637	\$ 174,261

The favorable spending variances in Existing Buildings and Existing Homes were driven largely by actual incentive payments coming in under budget and by a partial-year position vacancy. The New Homes program overspent its incentive budget because ENERGY STAR new homes exceeded goal by 60 homes.

D. Incentives paid

		Actual Incentives YTD
Commercial Programs	Existing Buildings	\$ 157,772
	Subtotal	\$ 157,772
Residential Programs	Existing Homes	\$ 172,757
	New Homes	\$ 129,240
	Subtotal	\$ 301,997
TOTAL		\$ 459,769

Incentives paid account for 51 percent of total year-to-date program expense. This percentage would have been higher if savings had been acquired at a higher cost per therm. Acquisition of savings was particularly cost effective on the commercial side. Total program expense is adjusted down by 15 percent to account for costs that a utility-delivered program would recover through rates.

E. Savings

		Therms Saved YTD	Annual Goal (Conservative)	% Achieved YTD	\$/Therm	Levelized Cost/Therm
Commercial Programs	Existing Buildings	121,198	89,250	136%	\$ 3.42	22.5 ¢
	Subtotal	121,198	89,250	136%	\$ 3.42	22.5 ¢
Residential Programs	Existing Homes	63,931	54,106	118%	\$ 6.82	54.1 ¢
	New Homes	19,243	15,895	121%	\$ 11.36	71.4 ¢
	Subtotal	83,174	70,001	119%	\$ 7.87	57.9 ¢
TOTAL		204,372	159,251	128%	\$ 5.23	35.8 ¢

Levelized cost is well below the \$0.65 per therm performance metric set by the WUTC. The program finished the year \$1.77 below the \$7 maximum cost per therm performance metric set by the WUTC.

APPENDIX 1: 2011 Energy Efficiency Measure Counts and Savings

Table 1: Residential Sector Measures

Category	Measure	Measures Installed	Total Therms Saved
AIR SEALING	Air sealing	22	1,046
	Blower door test	33	0
	Total Air Sealing	55	1,046
DUCT SEALING & INSULATION	Duct testing	56	0
	Duct sealing	48	2,162
	Duct insulation	7	334
	Prescriptive duct repair and sealing	25	1,125
	Total Duct Sealing & Insulation	136	3,621
SHELL INSULATION	Ceiling insulation	41	3,538
	Floor insulation	18	1,419
	Knee wall insulation	6	91
	Wall insulation	7	408
	Total Shell Insulation	72	5,455
WATER HEATING	Faucet aerator installed during Home Energy Review	139	1,474
	Shower wand installed during Home Energy Review	30	413
	Showerhead installed during Home Energy Review	138	2,703
	Water heater thermostat set back	39	284
	Tank water heater	3	48
	Tankless water heater	26	1,690
	Showerhead buydown	--	8,970
	Faucet aerator installed by plumber	10	157
	Showerhead installed by plumber	7	138
	Showerhead ordered online	217	2,186
		Total Water Heating	609
GAS FIREPLACES	Total Gas Fireplaces	43	4,205
SPACE HEATING	Total Furnaces	162	11,290
WINDOWS	Total Homes Replacing Windows	44	2,098
HOME ENERGY REVIEWS	Total Home Energy Reviews	213	0
ENERGY SAVER KITS	Total Energy Saver Kits	1,757	18,154
NEW HOMES	ENERGY STAR [®] new home Builder Option Package	210	18,900
	High efficiency clothes washers	107	343
	Total New Homes	317	19,243
	GRAND TOTAL	3,408	83,174

Table 2: Commercial Sector Measures

Category	Measure	Measures Installed	Total Therms Saved
SHELL INSULATION	Ceiling insulation	15	49,107
	Wall insulation	7	1,803
	Total Shell Insulation	22	50,910
WATER HEATING	Conventional Condensing Tank	2	302
	Tankless	1	217
	Total Water Heating	3	519
SPACE HEATING	Boiler	4	19,491
	Boiler pipe insulation	1	570
	Direct-fired radiant heaters (multiple heaters per space)	6	4,503
	Space Heating Total	11	24,564
STEAM TRAPS	Total Steam Traps	1	1,792
FOODSERVICE EQUIPMENT	Total Gas Convective Ovens	1	604
CUSTOM	Total Custom Measures	7	42,809
	GRAND TOTAL	45	121,198

APPENDIX 2: Customer Satisfaction

In 2011, Energy Trust continued short telephone surveys of NW Natural customers in Washington who had participated in Energy Trust programs. Energy Trust attempted to reach 70 residential and all commercial customers served in NW Natural's Washington service territory to determine degree of satisfaction with their engagement in Energy Trust programs. Results from 65 residential customers and 12 commercial customers indicate a generally high level of customer satisfaction for both groups.

Table 1: NW Natural Washington Residential Customer Satisfaction January 1-December 31, 2011

Sector	Dissatisfied	Neutral	Satisfied/very satisfied
Residential (n=65)			
Overall	6%	8%	86%
Incentive application	8%	4%	88%
Turnaround time to receive incentive	16%	13%	71%

Table 2: NW Natural Washington Commercial Customer Satisfaction January 1-December 31, 2011

Sector	Dissatisfied	Neutral	Satisfied/very satisfied
Commercial (n=12)			
Overall program experience	0%	0%	100%
Ease of applying for incentive	0%	0%	100%
Interaction with program representative	0%	0%	100%
Incentive amount	8%	0%	92%
Performance of equipment installed	0%	27%	73%

Washington Low Income Energy Efficiency Program 2011 Program Results

NWN partners with Clark County’s Housing Preservation Program and Skamania-Klickitat Community Action to administer its Washington Low Income Energy Efficiency (WA-LIEE) program. While offerings are available in Skamania and Klickitat counties, this agency rarely sees gas customers and did not provide services to any through WA-LIEE during 2011. Results below are specific to Clark County’s Department of Community Services.

The WA-LIEE program reimburses 90% of all cost-effective measures up to \$3500 per home. The agency is also allotted 15% of job costs (up to the cap) for administrative costs and an average of \$440 per home for Health, Safety, and Repair (HSR), which are not subject to cost effectiveness tests. A WA-LIEE job could cost the program no more than \$4465. During the 2011 Clark County completed the following measures as part of WA-LIEE:

WA-LIEE funded measures:

- 90% + High Efficiency Furnace
- Infiltration (Shell Sealing)
- Duct Insulation
- Floor Insulation
- Wall Insulation
- Duct Sealing
- Hot Water Pipe Insulation
- Ceiling Insulation

2011 Results:

Performance Metric	Goal	Achieved
Estimated homes served	20-40	11
Estimated Average Cost of Incentives per home	\$3,500	\$3763
Total Estimated Program Cost	\$89,300 to \$178,600	\$44,776
Estimated average therms saved per home	211	325 ¹
Total estimated therms saved	4220 to 8440	3575
Estimated Cost per Therm	\$21	\$13

¹ An impact evaluation has not been conducted on these homes so the actual per therm savings has not been verified. 325 is based on modeling software estimates.