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April 27, 2015

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

Re: UG-\_\_\_\_ - related to Dockets UG-132147 and UG-080546 2014 Annual Report on NW Natural's Energy Efficiency (EE) Program

Dear Mr. King:

Northwest Natural Gas Company, dba NW Natural ("NW Natural" or the "Company") hereby submits an original and two copies of the 2014 Annual Report on the Company's Energy Efficiency program. This report is submitted in compliance with the Company's Energy Efficiency Plan ("EE Plan") which is by reference part of the "Company's" Tariff Schedule G, "Energy Efficiency Services and Programs — Residential and Commercial," and was filed and approve in Docket UG-132147.

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, Docket UG-080546 and the Company's Energy Efficiency Plan.

If you have any questions, please call me at (503) 721-2452.

Respectfully submitted,

Onita King

Tariffs and Regulatory Compliance

**Enclosures** 

# 2014 Annual Report NW Natural Washington

ENERGY TRUST OF OREGON APRIL 27, 2015



2014 Annual Report to the Washington Utilities and Transportation Commissi	ion April 27, 2015
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# I INTRODUCTION, BACKGROUND, OVERSIGHT AND GOALS

## A. Introduction

This report covers 2014, the fifth full year that Energy Trust of Oregon provided services and incentives to residential and commercial customers of NW Natural in Washington.

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

# B. Background

At the request of NW Natural and following 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 for NW Natural in Washington.

# C. Oversight

The Energy Efficiency Advisory Group, EEAG, was created, at the direction of the WUTC, to provide advice and oversight for NW Natural and 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 2014. This report presents Energy Trust's performance against those goals.

## II. ANNUAL REPORT HIGHLIGHTS

# A. Summary

- Gas efficiency measures installed in 2014 by NW Natural's Washington customers saved 253,988 annual therms of natural gas—including 152,676 annual therms in Existing Buildings, 45,200 annual therms in Existing Homes and 56,112 annual therms in New Homes.
- Total 2014 savings were approximately 115 percent of the 2014
   conservative goal of 220,868 therms and 98 percent of the 2014 stretch goal of
   259,845 therms, as detailed in NW Natural's 2014 Energy Efficiency Plan.
- In total, savings achieved in 2014 were 15 percent higher than 2013 savings, due to strong results across programs. Engagement with restaurants to promote energy-efficient foodservice equipment bolstered Existing Buildings savings. The Existing Homes program also contributed savings from promotions of furnaces and gas hearths. The rebounding construction market contributed to an increase in New Homes savings.
- The program spent less than budgeted, largely due to achieving lower-cost savings than expected in the Existing Buildings program.

# B. Washington Utilities and Transportation Commission performance metrics

The table below compares 2014 annual results to 2014 goals, as established in NW Natural's Energy Efficiency Plan for Washington (updated December 2013).

# 2014 results compared to goals

Metrics	Goal	2014 total	Q1 Results	Q2 Results	Q3 Results	Q4 Results
Therms Saved	220,868 - 259,845	253,988	34,786	31,534	36,600	151,069
Total Program Costs	\$1,298,699 – \$1,527,881	\$1,310,180	\$214,349	\$230,116	\$291,301	\$574,415
Average Levelized Cost Per Measure	Less than \$0.65	\$0.42	\$0.527	\$0.577	\$0.673	\$0.311
Dollars Spent Per Therm Saved	Less than \$6.50	\$5.16	\$6.16	\$7.30	\$7.96	\$3.80
Total Resource Cost and Utility Costs at Portfolio Level	Greater than 1.0	1.5 and 1.1	Reported annually	Reported annually	Reported annually	Reported annually

# 2014 Utility Cost and Total Resource Cost benefit cost ratios by program

Program	Utility Cost Test benefit cost ratio	Total Resource Cost Test Benefit cost ratio
Existing Buildings	1.5	1.5
Existing Homes	0.8	1.0
New Homes	0.9	1.8
Total NW Natural Washington portfolio	1.1	1.5

# 2014 Total Utility Cost and Total Resource Cost benefit cost ratios

	Utility Cost Test	Total Resource Cost Test
Program	benefit cost ratio	Benefit cost ratio
NW Natural Washington Portfolio	1.1	1.5
NW Natural Washington Low Income	0.7	0.5
Total	1.1	1.4

# C. Commercial sector highlights

# **Existing Buildings**

- Existing Buildings saved 152,676 annual therms, 2 percent over the stretch goal of 150,000 annual therms in 2014.
- In 2014, Existing Buildings saw strong savings from more than 1,000 efficient showerheads delivered to assisted living facilities, saving 15,000 annual therms and leading to larger custom projects with these facilities. Energy-saving showerheads are left with facility managers when performing energy-efficiency assessments, enabling the program to engage with facility owners to discuss other efficiency opportunities and potential future projects.
- A small number of custom studies contributed considerable savings in 2014, with approximately one-half of all Existing Buildings savings derived from custom projects.
   Nine custom projects completed in 2014, saving 72,607 annual therms of natural gas.
- Bonus incentives for boilers, insulation, custom projects and foodservice equipment supported savings at year-end. Foodservice equipment installed in restaurants provided substantial savings.
- Existing Buildings created an outreach team to target small- to medium-sized businesses in Washington, resulting in increased savings from these businesses.
- Existing Buildings coordinated with Clark Public Utilities to ensure customers, contractors and stakeholders were informed of all available energy-saving offerings.
- The program launched a marketing campaign promoting Existing Buildings as a
  technical resource for large and small businesses. The campaign promoted availability of
  support resources through various channels including walk-through audits, website
  content and Trade Ally Network expertise.
- The program developed new gas measures to be added in 2015 for multifamily customers and greenhouses.

# D. Residential sector highlights

• The residential sector saved 101,312 annual therms in 2014, 15 percent more than savings achieved in 2013.

#### **Existing Homes**

- Existing Homes saved 45,200 annual therms, 7 percent below the conservative goal of 48,607 annual therms in 2014.
- Successful promotions of heating systems, water heating systems and weatherization upgrades provided long-term energy savings for Washington customers.
- Spring and fall bonuses for gas fireplaces and furnaces bolstered installations in 2014, with 58 percent more gas fireplaces and 15 percent more gas furnaces installed in 2014 than in 2013. The fall gas fireplace bonus was extended through early 2015 and expanded to include higher-tier gas fireplaces with annual fuel utilization efficiency of 95 percent or more.
- The program instituted incentives for sales staff at Vancouver-area distributors to increase gas furnace sales.

- Instant incentives were paid directly to contractors for water heating and HVAC
  equipment, enabling customers to receive discounted equipment at time of purchase.
  This changed shifted the responsibility for submitting incentive applications from
  customers to trade allies, resulting in a higher rate of completed and qualifying
  applications, expediting incentive processing and reducing program delivery costs per
  unit.
- Existing Homes continued to provide instant rebates for energy-efficient showerheads and clothes washers purchased in stores, in collaboration with Clark Public Utilities and Simple Steps Smart Savings™. Instant rebates reduce upfront costs for customers and support a positive customer experience.
- Existing Homes provided energy- and water-saving products to families at Clark County food banks during the holiday season, in collaboration with Clark Public Utilities.
- Existing Homes developed an on-bill repayment financing offering to launch in January 2015, in collaboration with NW Natural and Craft3.

#### **New Homes**

- New Homes saved 56,112 annual therms, 7 percent more than the stretch goal of 52,660 annual therms in 2014.
- The program provided consultation and outreach to help builders incorporate new Washington State energy code requirements in building designs.
- To allow builders to receive incentives for energy-efficient new homes that do not receive ENERGY STAR® New Home Certification, New Homes designed an alternate method for builders to achieve incentives by building Earth Advantage®-certified homes.
- The program helped verifiers and builders transition from the prescriptive Builder
  Option Package, BOP, path for achieving ENERGY STAR New Home Certification to the
  new modeled performance path methodology for achieving ENERGY STAR New Home
  Certification. A total of 75 projects were submitted and received incentives using the new
  modeled performance path methodology, representing 30 percent of all New Homes
  projects.
- The program evaluated the potential for gas fireplace incentives to influence builders to install more efficient models in new homes. Final data will influence 2015 program strategies.

# E. Trade Ally Network highlights

- By year-end, 175 trade allies served Washington, including 74 based in Washington.
   Energy Trust enrolled 35 new trade allies serving Washington in 2014. Though the pool is smaller in 2014, the network is a stronger resource for customers as they can easily find more engaged and active trade allies.
- Networking events exclusively for Washington trade allies were held for Existing
  Buildings trade allies in April and for Existing Homes and Existing Buildings trade allies in
  November. Attendance and engagement at these networking events continued to grow in
  2014.

#### III. **ANNUAL RESULTS**

# A. Activity highlights—sites served

	Q1	Q2	Q3	Q4	Total
Existing Commercial					
School/college retrofits	4	2	2	7	15
Other commercial retrofits	4	8	7	31	50
Studies	4	1	2	1	8
Existing Homes					
Weatherization (insulation, air and duct sealing and windows)	19	32	35	66	152
Gas hearths	26	32	12	66	136
Gas furnaces	32	67	28	85	212
Water heaters	4	5	10	8	27
Home Energy Reviews	16	9	3	5	33
New Homes					
Builder Option Packages	37	38	23	154	252
Clothes washers	83	179	141	250	653

# B. Revenues

Source	Actual a	nnual revenue	Budget	ed annual revenue
NW Natural	\$	1,054,355	\$	1,291,102

# C. Expenditures

		Actual annual expenditures	В	Budgeted annual expenditures	Variance
Commercial programs	Existing Buildings	\$ 528,358	\$	660,829	\$ 132,471
Commercial programs	Subtotal	\$ 528,358	\$	660,829	\$ 132,471
	Existing Homes	\$ 387,297	\$	433,675	\$ 46,379
Residential programs	New Homes	\$ 350,865	\$	372,086	\$ 21,220
	Subtotal	\$ 738,162	\$	805,761	\$ 67,599
Administration		\$ 43,660	\$	61,491	\$ 17,831
Total		\$ 1,310,180	\$	1,528,082	\$ 217,901

# D. Incentives paid

		Actual annual	incentives
Commercial programs	Existing Buildings	\$	270,931
Commercial programs	Subtotal	\$	270,931
	Existing Homes	\$	145,593
Residential programs	New Homes	\$	195,089
	Subtotal	\$	340,682
Total		\$	611,613

Incentives paid account for just under 55 percent of year-to-date program expense, when total program expense is adjusted down by 15 percent to account for costs that a utility-delivered program would recover through rates.

# E. Savings

		Annual therms saved	Annual goal (conservative)	Percent achieved	\$/th	nerm	Levelized cost/therm
Commercial	Existing Buildings	152,676	127,500	120%	\$	3.58	31.1¢
programs	Subtotal	152,676	127,500	120%	\$	3.58	31.1 ¢
De eidentiel	Existing Homes	45,200	48,607	93%	\$	8.86	64.0 ¢
Residential programs	New Homes	56,112	44,761	125%	\$	6.47	52.6 ¢
p. 03. a.110	Subtotal	101,312	93,368	109%	\$	7.54	57.8¢
Total	•	253,988	220,868	115%	\$	5.16	42.4 ¢

# NW NATURAL APPENDIX 1: 2014 ENERGY EFFICIENCY MEASURE COUNTS AND SAVINGS

**Table 1: Residential sector measures** 

Category	Measure	Measures installed	Total therms saved
A in a coling	Air sealing	7	179
Air sealing	Blower Door tests	2	0
	Air sealing total	9	179
Home Energy Reviews	Home Energy Reviews total	33	0
	Ceiling insulation	23	1,856
Shell insulation	Floor insulation	13	617
	Wall insulation	15	783
	Duct insulation total	5	62
	Shell insulation total	56	3,317
	Boilers	1	44
Space heating	Custom thermostats	14	322
	Furnaces	212	15,730
	Gas fireplaces	136	13,872
	Space heating total	363	29,968
	Tank water heaters	22	667
Water heating	Showerheads	313	3,870
vvalor ricating	Showerwands	9	120
	Faucet aerators	549	2,610
	Water heating total	893	7,267
Windows	Windows total	120	4,427
	ENERGY STAR new homes	252	24,436
	Tankless water heaters	5	325
New Homes	Low-income Energy Saver Kits	82	1,205
	Showerheads sold at retail	3,199	27,579
	High-efficiency clothes washers	653	2,566
	New Homes total	4,191	56,112
Other	Other total	1	42
	Grand total	5,666	101,312

**Table 2: Commercial sector measures** 

Category	Measure	Measures installed	Total therms saved
Foodservice equipment	Gas fryers	57	32,433
1 oodservice equipment	Convection ovens	5	1,510
	Foodservice equipment total	62	33,943
Shell insulation	Ceiling insulation	2	5,850
	Shell insulation total	2	5,850
Space heating	Boilers	4	23,536
	Space heating total	4	23,536
Water heating	Conventional condensing tanks	2	906
	Showerheads	1,023	15,834
	Water heating total	1,025	16,740
Motors	Custom variable frequency drive	1	16,579
	Motors total	1	16,579
	Studies	8	ŀ
Custom	Custom building controls	5	38,235
	Misc. custom measures	9	17,793
	Custom total	22	56,028
	Grand total	1,116	152,676

## **NW NATURAL APPENDIX 2: CUSTOMER SATISFACTION**

In 2014, Energy Trust conducted short phone surveys of NW Natural customers in Washington to determine satisfaction with their participation in Energy Trust programs. Results from 100 residential customers and seven commercial customers indicate a generally high level of customer satisfaction.

Table 1: NW Natural Washington residential customer satisfaction 2014

Residential (n=100)	Dissatisfied	Neutral	Satisfied
Overall satisfaction	1%	10%	88%
Incentive application form	3%	8%	89%
Turnaround time to receive incentive	8%	12%	81%

Energy Trust interviewed seven commercial customers in 2014. Most respondents were satisfied with their overall program experience, incentive amount, ease of applying for the incentive and interaction with program representatives.

Table 2: NW Natural Washington commercial customer satisfaction 2014

Commercial (n=7)	Dissatisfied	Neutral	Satisfied
Overall satisfaction	-	2	5
Incentive amount	-	-	7
Ease of applying for incentive	1	2	4
Interaction with program representative	-	1	6
Performance of equipment or system installed <sup>1</sup>	-	-	6
Turnaround time to receive incentive	2	2	3

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<sup>&</sup>lt;sup>1</sup> Customer satisfaction ratings do not add to seven because one customer responded "not applicable"

# 2014 Annual Energy Efficiency Report NW Natural - Washington

WASHINGTON LOW INCOME ENERGY EFFICIENCY (WALIEE)

NW NATURAL APRIL 27, 2015

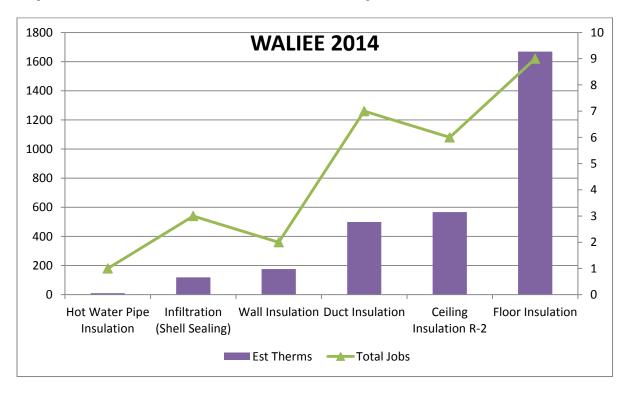
# Washington Low Income Energy Efficiency Program 2014 Program Results

NW Natural ("NW Natural or Company) partners with Clark County's Community Development Office and Skamania-Klickitat Community Action to administer its Washington Low Income Energy Efficiency (WALIEE) program. While offerings are available in Skamania and Klickitat counties, the agency that serves these counties rarely sees gas customers and did not provide services to any through WALIEE during 2014. Results below are specific to Clark County's Department of Community Services.

The WALIEE program reimburses 90% of all cost-effective measures up to \$3500 per home. The agencies are 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 WALIEE job could cost the program no more than \$4465.

### **Measure Analysis:**

For a breakout of how often individual weatherization and efficiency measures were completed and the savings associated with these measures in total refer to the figure below:



#### 2012-2014 Results:

Performance Metric	Goal -2014	Actual- 2014	Actual- 2013	Actual- 2012
Estimated homes served	20	10	20	8
Estimated Average Cost of per home	\$4465	\$4334	\$3984	\$3845
Total Estimated Program Cost	\$89,300	\$43,339	\$79,677	\$30,761
Estimated average therms saved per home	211	305 <sup>2</sup>	351	319
Total estimated therms saved	4220	3050	7026	2538
Estimated Cost per Therm	\$21	\$14	\$11	\$12

#### Discussion:

## Why are the 2014 actual homes served only 50% of 2013 actuals and of the 2014 goal?

Weatherization projects completed by Clark County ("County") are largely contingent on referrals from the energy assistance program; unfortunately during 2014, not many gas homes were referred to the County for weatherization. To ensure customers understand the WALIEE offer and to help overcome apprehension of the process, the County's weatherization coordinator is now piloting an effort as part of the intake process to specifically explain weatherization measures to applicants, as well as review the process and the benefits of weatherization. The Company is hopeful that this effort will yield greater referrals in 2015.

Why were there no furnace replacements included in the homes served in 2014? The WALIEE program first focuses on building shell measures, such as insulation, which helps reduce drafts in the home and improve the overall warmth of the home. Typically insulation is the most cost effective measure to investment in for these homes. In these situations, however, there may not be sufficient dollars to cover both the insulation and a furnace replacement, which is likely why the 2014 results did not include any furnace replacements. However, the County has recently partnered with Vancouver Housing Authority ("VHA"), the largest city in Clark County, to jointly improve the low income housing stock. VHA will contribute funds for furnace upgrades while WALIEE ensures proper weatherization.

Are there additional plans for increasing production in 2015? NW Natural has worked with the County to identify which Tier 1 schools (those with a high percentage of subsidized breakfasts and lunches) have the highest gas penetration. The County is using this data to target and prioritize those schools that will receive a visit from Planet Clark: the interactive, educational trailer. Students are empowered regarding their ability to conserve energy and are given materials to share with their parents regarding home weatherization. We are hopeful this targeted effort will yield more gas leads and completions for WALIEE.

NW Natural appreciates the diligent efforts and proactive spirit of those working at the County on behalf of our customers. We are optimistic their new partnership and approach to outreach will help expand the reach of the WALIEE program.

<sup>2</sup> An impact evaluation has not been conducted on these homes so the actual per therm savings has not been verified. 305 is based on modeling software estimates.

# 2014 Annual Energy Efficiency Report NW Natural - Washington

NW NATURAL TRANSACTIONAL AUDIT 2014 PROGRAM COSTS

NW NATURAL APRIL 27, 2015

# Washington Energy Efficiency Program 2014 Transactional Audit Results

With the Washington Utilities and Transportation Commission ("Commission") review and approval of NW Natural's request for amortization of 2013 energy efficiency program costs (Docket UG-143333), the Commission adopted the recommendation made by Commission Staff that NW Natural ("NW Natural" or "Company") conduct a transactional audit of program costs relating to the Energy Trust of Oregon's ("Energy Trust") administration of the Company's energy efficiency programs. NW Natural agreed to the following audit schedule:

- By April 1 of each year, NW Natural will select a random sample of prior year program cost transactions from the Energy Trust. The sample size will be based on the population of transactions. A summary of the audit process and the Company's findings or recommendations will be included in the April 25 Annual EE Report.
- By August 1 of each year, NW Natural will select a random sample of program cost transactions from the Energy Trust for the current year January through June 30 time period. The sample size will be based on the population of transactions. A summary of the audit process and the Company's findings or recommendations will be included in the August 25<sup>th</sup> second quarter EE Report.

## 2014 Program Cost Audit

NW Natural's Internal Audit Department (IA) has completed a review of the Energy Trust expenditures charged to the Washington program in 2014.

The assessment consisted of a review of the Energy Trust's allocation and territory reporting policies, chart of accounts, and Annual Report data relating to program effectiveness. IA Management and Staff visited the Energy Trust Offices and met with employees. Additionally, IA obtained the 2014 Financial Statements audited by Moss Adams noting an unqualified opinion, which included a limited review of the internal controls environment as it related to financial reporting.

Utilizing a statistical sampling model a representative sample of 51 (based on 85% confidence level and a 10% interval) transactions were selected for detail review.

For selected transactions IA verified balances were correctly captured within the proper period, transactions were appropriately classified and coded to NW Natural territories, allocations were completed per Energy Trust policy and were related to NW Natural specific programs and territories, incentive details were properly captured, and management and program expenses appeared appropriate. Lastly, IA verified that programs captured within the detail testing were included within the Energy Trust Annual report and reviewed for program effectiveness.

IA noted no issues as a result of the review. All expenditures reviewed appear to be appropriate.