Energy Trust Board of Directors

Strategic Planning Workshop on Renewable Energy and Board Meeting

July 31, 2013

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122nd Board Meeting

Wednesday, July 31, 2013
421 SW Oak Street, Suite 300
Portland, Oregon

Agenda

		Tab	Purpose
8:00am	**Strategic Planning Workshop on Renewables**	**1**	
11:30am	**Executive Session—**working lunch in Solar Conference Room *The board will meet in Executive Session pursuant to bylaws section 3.19.1 to discuss internal personnel matters.* ***The Executive Session is <u>not</u> open to the public.***		
12:45pm	**122nd Board Meeting—Call to Order** *(John Reynolds)*..... • Approve agenda	**2**	
12:50pm	**General Public Comment** *The president may defer specific public comment to the appropriate agenda topic.*		
12:55pm	**Consent Agenda** *The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.* • May 22 Strategic Utility Roundtable notes • May 22 Board meeting minutes	**2**	*Action*
1:00pm	**President's Report** *(John Reynolds)*		
1:15pm	**Briefing: Strategic Utility Roundtable Discussion** • Goals, Funding and Relationship to Utility Integrated Resource Plans .. *(Margie Harris & Steve Lacey)*	**3**	*Information*
2:15pm	**Energy Programs** ..... • Authorizing Custom Track Program Delivery Contractors for Production Efficiency Program—R673 *(Kim Crossman & JP Batmale)*	**4**	*Action*
2:35pm	**Committee Reports**		
	• Evaluation Committee *(Debbie Kitchin)*	**5**	*Information*
	• Finance and Compensation Committees *(Dan Enloe)*	**6**	*Information*
	o Line of Credit Renewal—R672.....	**6**	*Action*
	• Policy Committee *(Roger Hamilton)*	**7**	*Information*
	o Amending the Other Renewables Policy—R671	**7**	*Action*
3:20pm	**Break**		
3:35pm	**Staff Report**		
	• Briefing: Energy Trust Memberships *(Sue Fletcher)*	**9**	*Information*
	• Legislative update *(Debbie Menashe)*		
	• Public annual report *(Amber Cole & Hannah Hacker)*		
4:20pm	**Adjourn**		

- Agenda for the day

Tab 1 Strategic Planning Workshop: Renewable Energy

- Workshop Agenda
- Briefing: Renewable Energy Programs
- Panelist Biographies

Tab 2 Board Meeting

Consent Agenda

- May 22 Strategic Utility Roundtable notes
- May 22 Board meeting minutes

Tab 3 Briefing: Strategic Utility Roundtable Discussion

- Goals, Funding and Relationship to Utility Integrated Resource Plans

Tab 4 Energy Programs

- Authorize Custom Track Program Delivery Contractors—R673

Tab 5 Evaluation Committee

- June 28 meeting notes

Tab 6 Finance and Compensation Committees

- Line of Credit Renewal—R672
- Notes on April 2013 financial statements
- April financials and contract summary report
- Notes on May 2013 financial statements
- May financials and contract summary report
- Notes on June 2013 financial statements
- June financials and contract summary report
- Financial glossary

Tab 7 Policy Committee

- Amending the Other Renewables Policy—R671
- July 2 meeting notes

Tab 8 Advisory Council Notes

- May 1 RAC meeting notes
- June 19 RAC meeting notes
- May 1 CAC meeting notes
- June 19 CAC meeting notes

Tab 9 Staff Report

- Briefing: Energy Trust Memberships

Tab 10 Glossary of Acronyms and Terminology

The next meeting of the Energy Trust Board of Directors will be held Wednesday, September 25, 2013 at 12:15pm at Energy Trust of Oregon, 421 SW Oak Street, Suite 300, Portland

Board Strategic Planning Workshop on Renewable Energy

Wednesday, July 31, 2013, 8:00–11:30am
421 SW Oak Street, Suite 300
Portland, Oregon

Workshop Agenda

8:00am Welcome, review agenda, opening remarks: John Reynolds

8:05am Meeting structure
- Rick Applegate: stage-setting from strategic planning committee perspective
- Nick Viele: ground rules
- Margie introduction of Thad Roth

8:15am Thad Roth, Renewable Energy sector lead (30 minutes)

Q&A, discussion (60 minutes)

9:45am Break

10:00am Solar Panel (30 minutes)
- Dave McClelland introduction of third-party developer; commercial developer; and small developer/installer
- Questions:
  - How does your business work? How do you close a sale?
  - Where is your part of the solar market headed?
  - How do you work with Energy Trust? How is this relationship working?

Q&A, discussion (30 minutes)

11:00am Wrap-up
- Questions triggered by discussions over the morning
- Questions to explore in connection with 2015-2019 strategic plan

11:30am Adjourn

Briefing Paper
Renewable Energy Programs
July 31, 2013

Introduction

This paper reports on progress in carrying out the renewable energy strategy Energy Trust updated and established in 2010 and 2011. The paper is meant to inform discussion of whether this strategy remains appropriate and/or modifications should be considered in the 2015-2019 strategic plan. The paper is organized as follows:

For further background on the Renewable Energy Program, see the briefing paper provided to the Board at the 2012 Strategic Planning Retreat:
http://energytrust.org/library/meetings/board/120608_Board_Strategic_Planning_Workshop.pdf

As you read this paper, we urge you to bear in mind two issues:

- The Renewable Energy staff proposes to continue to pursue strategies that were established in 2010: to continue to fund a portfolio of technologies, focus significantly more resources on project development assistance, and utilize competitive processes to allocate limited incentive funds. *Does the Board continue to support these initiatives?*

- The legislature has directed the OPUC to compare the merits of alternative approaches to renewable resource development, including: requiring utilities to pay for energy from these projects via a "volumetric" or "feed-in" tariff; incentives such as the Energy Trust program; and State tax incentives. The OPUC will report to the legislature in the second half of 2014. The outcome of that analysis could have a significant impact on the role of Energy Trust in support of the net-metered solar market. The report could significantly impact the Energy Trust program, and may mark an appropriate point to revisit our renewable energy strategy.

1. Context

a. Renewable resource development and challenges

Oregon's large renewable resource potential and the challenges of developing it have both helped shape Energy Trust's renewable energy program.

Oregon's resource potential is analyzed in more detail in **Appendix 1.** This potential is uniquely broad: wind, solar, biopower, hydropower, geothermal, wave energy and others.

At the same time, energy from renewable projects tends to cost more than the cost of market energy. As a result, project financing depends to a large extent on state and federal subsidies and the availability of financing in shifting capital markets. Because markets, economic conditions and policies are so variable, renewable project development tends to be highly cyclical.

b. History of Energy Trust's Renewable Energy Program

The 1999 Oregon law that gave rise to Energy Trust (SB 1149) carved out a unique niche for Energy Trust to play in renewable resource development: to offset the cost of renewable resources that is above the market cost of electricity. The range of renewable energy programs across the country is described in **Appendix 2.** Energy Trust falls into the Public-Purpose part of this range (Appendix 1, section a).

The law allocated a fixed percentage of funds for renewable resources: 17 percent of the funds collected under SB 1149 are for renewable energy projects ($12-13 million per year). Unlike energy conservation funding, which can vary from year to year, this is a fixed percentage.

For its first five years, Energy Trust used renewable energy funds mostly for large utility-scale wind projects while gradually developing markets and programs for smaller scale projects in the five renewable energy technologies defined in our enabling legislation: solar, biopower, wind, geothermal and hydropower.

In 2007, Oregon passed the Renewable Energy Act (SB 838), which required utilities to include renewable energy in their portfolios, and limited the use of Energy Trust renewable energy funds to the construction and operation of projects of 20 megawatts and less (<20 MW). With this development, large, utility-scale wind projects shifted from Energy Trust's portfolio to the utilities.

Energy Trust's renewable program developed two approaches to provide incentives to eligible projects: 1) standard program incentives; and 2) custom incentives.

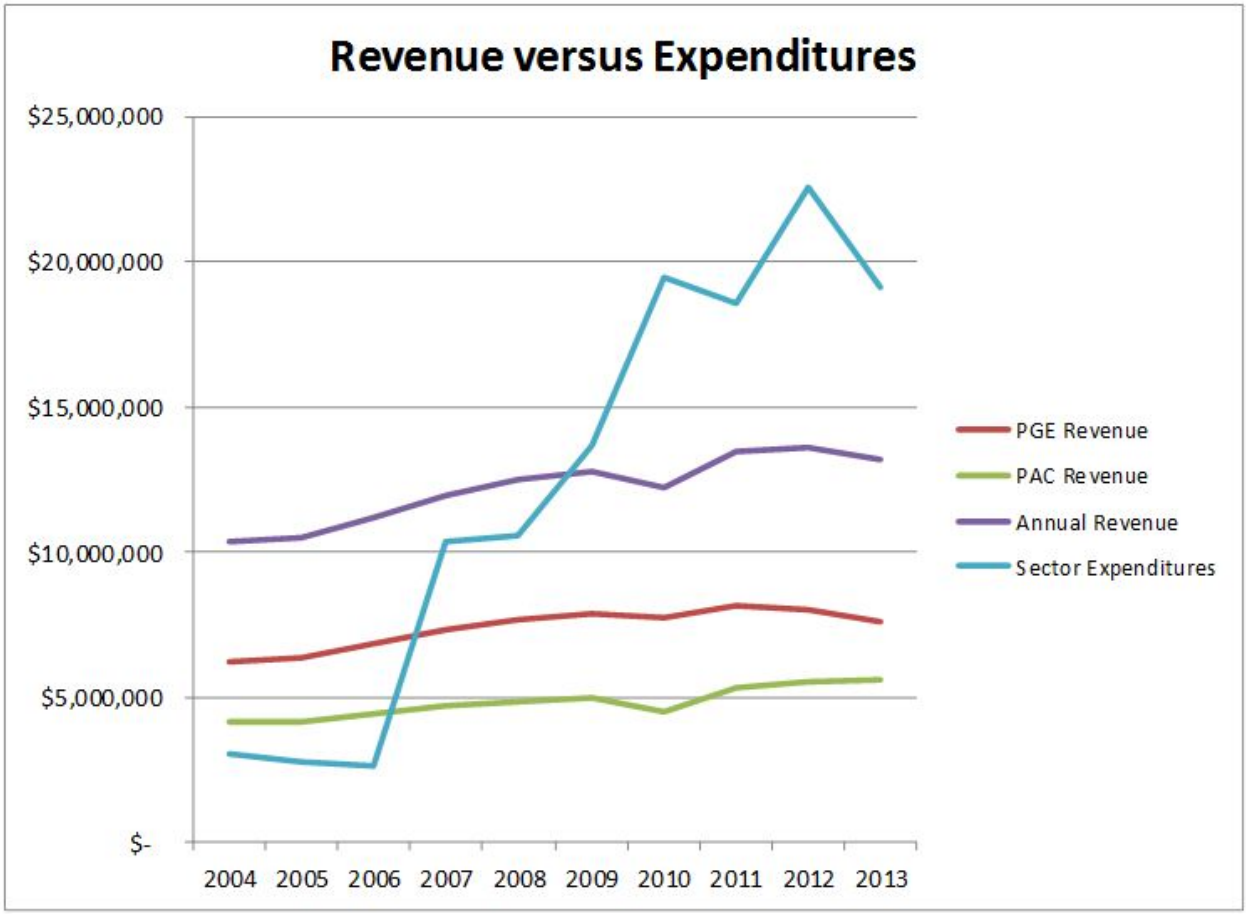
Because solar technology is relatively predictable, Energy Trust created standardized incentives for solar. The board approved the Solar Program (also called solar electric[1]) in April 2003. Incentives were paid based on installed wattage. Trade allies sell and install systems. Energy Trust sets installation standards, inspects installations and makes incentive payments to the customer or the trade ally.

[1] Oregon law defines renewable energy as a renewable resource that generates electricity. Because solar hot water projects do not generate electricity, they are treated as efficiency measured rather than as renewable resources.

The other technologies—biopower, hydropower, geothermal and wind—do not yet lend themselves to standardization. Energy Trust programs treat these as “custom” projects, meaning they require individual analysis to determine program eligibility, project viability, and project incentive. There are currently three board-recognized renewable programs, each with its own budget: Solar, Biopower, and Other Renewables (hydro, geothermal and wind).

Energy Trust renewable energy programs were built on the assumption that above-market costs of renewable energy projects would be partially offset by Oregon’s Business Energy Tax Credit (BETC), which before 2010 was among the nation’s most generous. However, in 2010 BETC changed fundamentally. In 2008, the BETC for renewable projects was 50% of capital cost, up to $10 million per project. By 2013, the program was renamed the Renewable Energy Development (RED) program, and it allowed grants of up to $250,000 per project, awarded on a competitive basis. This has led to Energy Trust investing significantly more dollars per project to make renewable projects viable.

At about the same time, Energy Trust programs are spending down a pool of uncommitted renewable energy funds that had accumulated during Energy Trust program development. From 2002-2008, annual renewable energy expenditures were less than annual revenue as the sector’s programs ramped up. Since 2009, expenditures have exceeded annual revenues. The chart below shows both annual expenditures and revenues by utility.



As the chart shows, annual expenditures since 2010 have been $18-22 million while annual revenues from PGE and Pacific Power ranged were $12-13.5 million. Based on our current forecast, we expect that our budgets will be reduced from $19.1 million in 2013 to $13.5-$14 million as early as 2014.

c. The Current Program

In late 2010, in light of these shifts in state support and Energy Trust's limited renewable funds, Energy Trust sought advice from the Renewable Energy Advisory Committee (RAC) on four alternatives to business-as-usual for custom programs: maximize generation, focus on early-stage assistance for custom technologies, limit support to a few technologies, support only onsite generation:

Priority Principle	Approach with limited funding	Portfolio impact
Business as usual	Continue to cover all with limited depth of coverage	Failing proposition – at least one principle needs to give, <3aMW
Scenario 1: Maximize Generation	Support projects with need for least incentive$/kWh	Eliminate support for high cost technologies
Scenario 2: Focus on early stage assistance across all technologies	Double/triple funding for early stage support	Less incentive $ available, need new tools to support construction
Scenario 3: Limit the number of technologies supported	Focus on a few technologies, deep service offerings	Pick "winner" technologies, ~2 vs 5, may vary by utility
Scenario 4: Onsite generation only	Only support project owners with direct PPC contribution	Excludes other types of distributed generation market - QFs

RAC and staff determined that scenario 2—focusing on early-stage support for custom projects—best played to Energy Trust capabilities and the needs of custom projects. The RAC also continued to support the standard solar program. This combination of early-stage-oriented custom program support and a standard solar program was expected to lead to better projects and to build stronger markets. To address declining funding and growing demand, we resolved to create new tools to expand construction including implementing a competitive process for customer project incentives.

The Sector Plan that emerged from these discussions has four themes:

- Support a portfolio of resources and technologies (solar, biomass, hydro, geothermal and wind)
  - Allows flexibility to respond to market opportunities
  - Allows the market to choose winning technologies
  - Supports a diversity of technical solutions and geography

  - Maximizes our effectiveness at meeting generation goals through portfolio management

- Design for funding plateau
  - Annual Energy Trust expenditures are expected to decline from a projected ~$20 million to ~$14 million per year
  - Implement competitive processes to allocate scarce resources
  - Expand support for project development assistance
  - Focus on projects of < 5 MW
  - Leverage projects with existing incentives

- Go further upstream in the project cycle to support project development
  - There is a need for project development assistance in this market
  - Energy Trust has substantial experience in providing development assistance
  - With the scale of funding we have available, we can impact this area across technologies

- Expand market opportunities
  - Expand opportunities to reduce balance of system costs for net-metered solar installations
  - Act as conduit between motivated investors and projects in our pipeline

This approach has been reviewed annually and reaffirmed by the RAC, and it underlies the development of the renewable energy sections of the annual Energy Trust budget and two-year action plan.

The approach evolved since 2010 in several ways:

Choice of Technologies: In accordance with SB 1149, our enabling legislation, we continue to support all renewable technologies. We also recognize that the prospects for each technology ebb and flow with changes in policy and market influences being unique to each resource. We provide incentives for technologies in up-markets (e.g., currently solar, net-metered biopower). For technologies in down markets, we mainly provide early-stage support for forward movement and activity when conditions improve.

The Renewable Energy sector also reviews new technologies to determine their potential in Oregon and whether Energy Trust should support them. Wave energy has significant potential in Oregon and is attracting national attention. In 2008, we commissioned a report on the state of the wave industry that detailed barriers to projects and possible roles for Energy Trust. Barriers included a lack of federal incentives, a lack of technology and project experience, stakeholder concerns, and skittish financial markets. We determined at the time that those barriers were best addressed by Oregon Wave Energy Trust (OWET) and the industry itself.

The technology was at too early a stage to warrant significant Energy Trust involvement. We maintain a relationship with the wave energy industry, having sponsored and attended annual conferences on wave power and monitored the progress of proposed projects. The executive director of OWET is a member of the RAC. We plan to update the wave energy report in early 2014 to see if there are other roles we might play. The results of that update could affect the 2015-2019 strategic plan.

Competitive Project Selection: When demand for funding for Pacific Power custom projects began to outpace Energy Trust funding, we instituted a competitive RFP process in the first quarter of 2012. Four projects applied for funding, two projects were selected, one is commercially operating, and the other project is expected to achieve commercial operation in 2013.

In the third quarter of 2012, additional funds were freed up because other projects were terminated, and we announced a second RFP process for Pacific Power projects. Due to uncertain federal incentives stemming from a key federal tax incentive about to sunset, only one project applied. That project did not meet our eligibility requirements but was added to our pipeline for refinement and future consideration.

We announced a third RFP process for Pacific Power projects in the first quarter of 2013, for $2.5 million in incentives. Five projects applied, requesting a total of $7.5 million. The final results of that process are not yet complete but one project was funded and we are in negotiations with a second project.

We have found the RFP process valuable. It is deliberate, transparent and repeatable. Projects must be further along the development process to compete for funding. For projects unable to demonstrate readiness to begin construction, the process allows Energy Trust to identify additional development needs and create a pipeline of projects that can be supported by our project development assistance program, described in more detail below. We also believe that regular RFP announcements will continue to provide a market signal to developers that funding is available for a range of technologies on a recurring basis.

We have not yet needed to allocate funds for custom projects delivering power to PGE. However, in the first quarter of 2013 we received four project applications that exceeded our PGE custom incentive budget. After reviewing the four applications, we determined that two projects did not qualify for incentive funding under our eligibility requirements. The remaining two projects are under review and we expect to make a final decision on those projects soon. While we expect to have adequate funds to cover both of these projects, we also expect to institute a competitive process for future PGE custom projects.

Expanded Development Assistance: Energy Trust has long provided development assistance in the form of feasibility studies, interconnection support, grant writing and other services to support potential projects. Assistance has been capped at $40,000 per project, with the project owner contributing at least 50% of the cost.

As the table below shows, since 2008 Energy Trust has provided a total of $1.8 million in project development assistance across four technologies:

Table 1. Energy Trust RE Development Assistance Funding

Technology	Biomass	Hydro	Geothermal	Wind	Totals
Incentives	$ 689,441	$ 670,082	$ 199,695	$ 233,430	$ 1,792,648
Total projects	37	51	8	11	107

This strategy has resulted in 19 completed projects and an additional 30 projects that were demonstrated to be feasible, helped project owners make decisions to terminate or continue

development, provided market intelligence where studies could be disseminated publicly, and helped developers secure additional project financing.

However, the $40,000 cap has tended to limit us to a single component in the development process. Often our assistance was used for a feedstock/resource assessment, a technology evaluation, or addressing interconnection issues. Once the study was complete, the project was on its own to find additional resources to move forward.

With renewable funding limited by statute and with other project funding such as state and federal tax credits, and with grants declining, we are seeking alternative ways to help projects move to commercial operation. We believe that expanded and targeted development assistance in amounts ranging from $50,000 to $150,000 per project would provide a solution for our funding constraints while addressing project needs in the market for an expanded pre-project development.

The OPUC has endorsed this program design and has included a performance measure to support expanded development assistance. In the second quarter of 2013 we announced an RFP for projects interested in development assistance. We received four proposals and are currently reviewing the submissions.

Our goal with this design change is to rebalance our focus from primarily providing project incentives at commercial operation to a greater role in the development process. While we expect to continue to play an active role in providing incentives to projects ready to secure financing for design and construction, we believe we can have a greater impact on the expansion of distributed generation in the state by helping improve the quality of projects looking to attract investment.

In summary, to provide support for a diverse portfolio of projects across different technologies, best serve project needs and address limited funding constraints, we have implemented a number of program design changes:

- Instituted a competitive process to allocate incentive funding for custom projects—we initiated this change in the first quarter of 2012 for Pacific Power projects and expect to extend this process to PGE projects beginning in 2014.
- Increased our emphasis on help upstream in the project cycle to support project development—an expanded development assistance program for custom projects in PGE and Pacific Power service territory was offered in the first quarter of 2013.
- Maintained an active standard solar program by providing a predictable, stable program offering—maintained active monitoring of the solar market, adjust incentives in a timely way, and focus on our role in reducing soft costs of solar installations.

d. Program Performance

Since 2003 Energy Trust has supported the development of over 5200 projects of 20 MW or less. These projects total almost 70 MW of capacity and 17.9 average megawatts (aMW) of energy.[2] The table below shows the breakdown of installations:

[2] One megawatt of capacity is the amount of energy a project can produce at any given moment; one average megawatt is the energy a project generates over the course of a year—because renewable energy projects do not necessarily operate continuously, an average megawatt is normally a fraction of a project's capacity.

Table 2. Project Installations 2003-2012

Technology	Installations	Capacity (MW)	Energy (aMW)	% of Generation
Standard Solar	5142	35.1	4.2	23
Custom Solar	15	17.7	3.1	17
Biomass	10	8.5	7.6	42
Hydro	10	7.4	2.8	16
Geothermal	1	0.3	0.1	0.5
Wind	39	0.7	0.1	0.5

From 2008 through 2012 we have averaged 3.1 aMW of new generation annually. The table below shows annual generation, by technology, for those years. The data shows the breakdown of new generation across technology and indicates the propensity for significant variation from year to year in new projects achieving commercial operation, particularly with biomass.

Table 3. Annual RE Sector Generation in aMW from projects <20MW 2008-2012

	Biomass	Other	Solar	Total
2008	2.69	0.10	0.41	3.20
2009	1.39	0.63	0.62	2.64
2010	0.00	2.34	0.95	3.29
2011	0.00	0.43	1.05	1.48
2012	1.32	0.44	3.29	5.05
Total	5.40	3.94	6.32	15.66

It is important to understand how various renewable energy technologies perform from an energy production standpoint, what their cost ranges are and what other benefits they can deliver. The table below describes the capacity factor, the incentive cost based on annual energy production and other benefits that are associated with different technologies.

Table 4 Technology Performance

Technology	Capacity Factor	$/aMW	Additional Benefits
Biomass	0.85	$250,000-$2,850,000	• Methane destruction • Nutrient recovery • Enhanced waste management • Thermal energy utilization
Geothermal	0.85	$300,000-$6,000,000	• Thermal energy utilization • Baseload resource • High capacity factor
Hydro	0.40	$650,000-$4,800,000	• In stream water recovery
Solar	0.12 – 0.20	$1,100,000-$6,000,000	• Local power provides reduced power delivery losses, increased reliability • Power delivered during summer peaks

Technology	Capacity Factor	$/aMW	Additional Benefits
Wind	0.20 – 0.30	$17-37,000,000	• Local power provides reduced power delivery losses, increased reliability • Support for an emerging industry

In 2012, Energy Trust programs brought 5.1 aMW to commercial operation. Almost 65% of this came from solar projects, both standard and custom. The remaining generation came from seven non-solar custom projects. Nearly all of these generation projects benefited from a range of federal assistance in the form of investment tax credits, recovery program funding, accelerated depreciation; state support such as business energy tax credits, Oregon's solar mandate, and biomass collector tax credits, and other funding sources including utility green power programs and carbon offset programs. Consistent with our strategic plan, we leveraged this wide range of funding sources. Below is a breakdown of activity for both the custom track and the standard solar track.

Custom Track: Seven small custom projects came on line in 2012: three irrigation hydro and four biomass projects (one dairy biogas project, two wastewater treatment plant biogas projects and a woody biomass gasification project). Four additional projects were delayed and are forecast to achieve commercial operation in 2013. We identified projects that had business energy tax credit certification or had other incentives. This was the first year in which demand for incentive funding exceeded Energy Trust incentive dollars available in Pacific Power service territory.

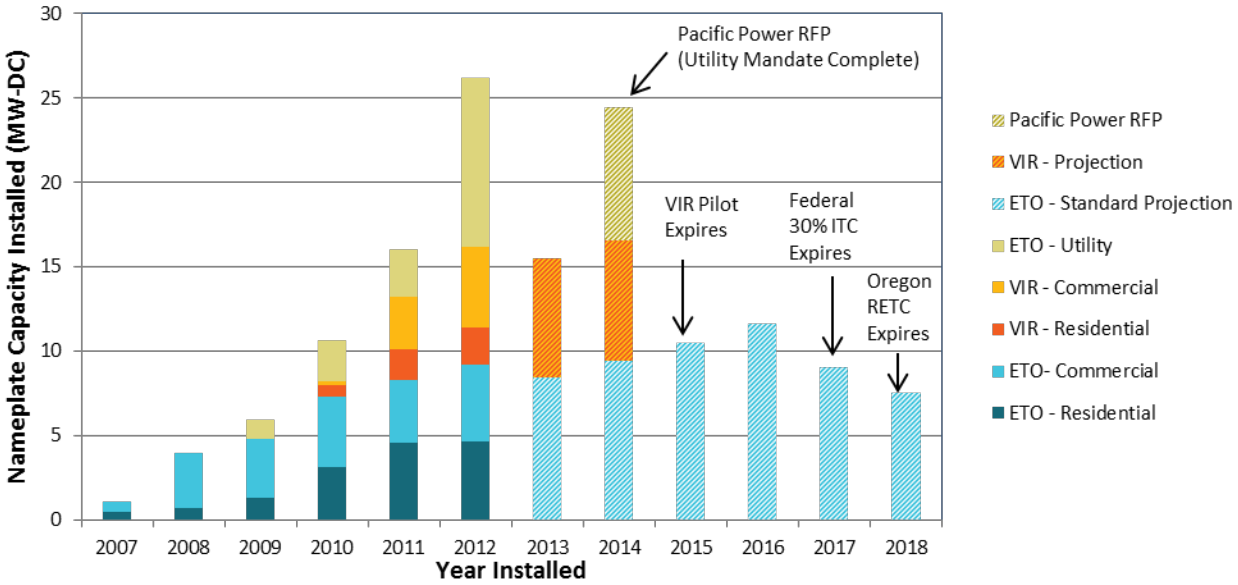
Standard Solar Program: Oregon's solar electric market has enjoyed a decade of sustained growth driven by robust incentives at the state and federal levels, falling equipment prices and a state mandate for utility investment in solar. 2012 was a record year for new solar capacity in Oregon: Energy Trust supported 19 MW of solar electric capacity and an additional 7 MW were installed outside of Energy Trust's programs through Oregon's volumetric incentive rate (VIR or feed-in tariff) pilot program. This brings Oregon's cumulative installed capacity to more than 65 MW.

2. Going Forward: Where the Programs are Headed

a. Solar Program:

Net-metered solar installations on homes and businesses are expected to plateau in 2013 and 2014, and new utility scale installations are anticipated to wrap up as the investor-owned utilities meet their solar mandate six years early. Beyond 2014, the future of the solar industry is quite uncertain, as many of the policies that have been driving solar adoption will begin to expire. As shown in Figure 1 below, over the next five years the VIR Pilot (feed-in-tariff), federal investment tax credit (ITC), and state residential energy tax credit (RETC) incentives are set to expire or be reduced.

Figure 1. Oregon Solar Electric Installations 2007-12, with Projections to 2018



During this transition period, Energy Trust's solar program can help stabilize the market. We intend to provide a backstop for the Oregon solar industry by maintaining continuous incentive offerings and supporting market transformation efforts to bring down costs.

Eventually, cost reductions will allow the solar market to sustain itself without incentives. In some parts of the country, abundant sunshine and expensive electricity will help solar become cost-effective without incentives within five years. By comparison, Oregon's relatively inexpensive power and average sunshine may delay this parity. To maximize the influence of our stable incentive funding during this volatile period, we propose to focus on the following solar strategy:

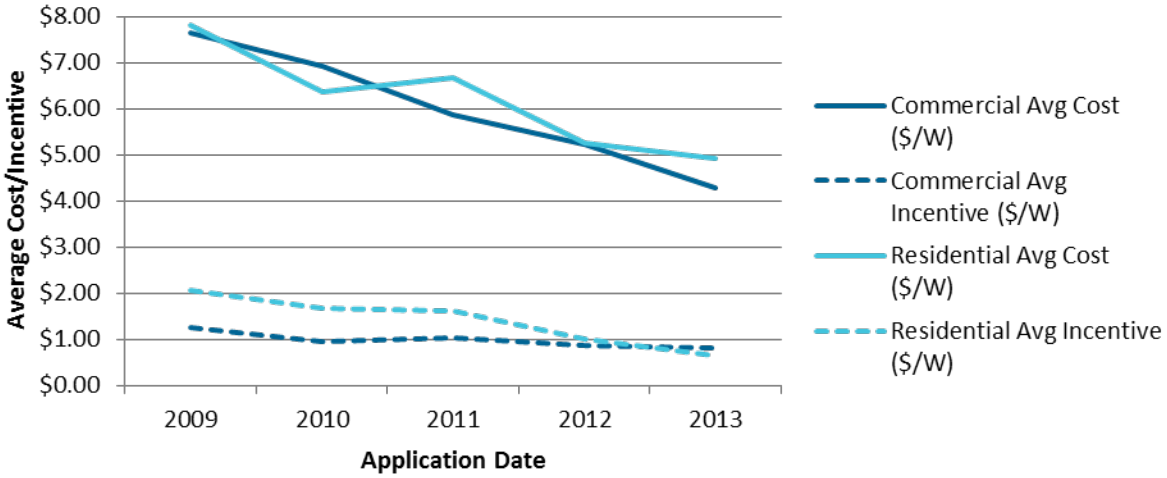
Target projects that qualify for the federal investment tax credit (ITC): State and federal tax credits are scheduled to expire or be reduced in the next five years. For example, the ITC for solar is scheduled to be reduced from 30% of capital costs to 10% after 2016. During this period, Energy Trust's solar incentives will go farther if we target projects that can take advantage of these credits while they're still available. Assuming these incentives expire or are reduced, we will need to start thinking about the best strategies to smooth this transition. In particular, we need to plan for the scheduled reduction of the federal investment tax credit at the end of 2016, which will drive heavy activity in 2016, and do what we can to cushion a major slowdown in 2017.

Maintain flexible buy-down incentives that strive to balance market conditions and available budget: The authority to change our incentive offerings on short notice has been a key advantage for Energy Trust's solar program, an advantage that is not shared by tax credits or VIR programs. By analyzing the market and making incentive adjustments, we have kept a continuous incentive offering for ten years while managing to fixed budgets.

Continue downward pressure on prices and incentives: Given a flat budget, any growth in the solar program will require that incentives continue to drop. Falling solar electric prices have allowed incentives to come down over the past four years. Figure 2, below, shows the trend of average prices and incentive rates per watt-DC. Since 2009 the 40-50% drop in system

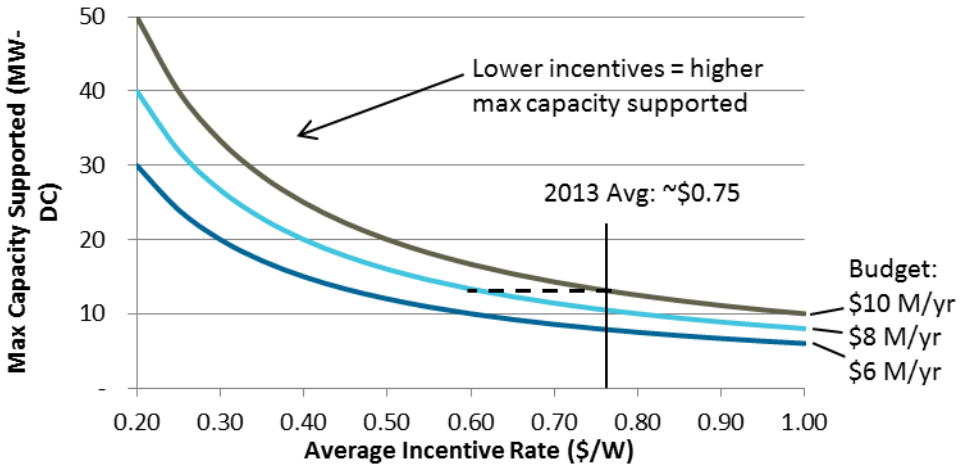
costs has allowed our incentives to come down 65% for residential customers and 50% for commercial customers, who also lost Oregon's 50% Business Energy Tax Credit.

Figure 2. Average costs/incentives of Energy Trust Solar projects



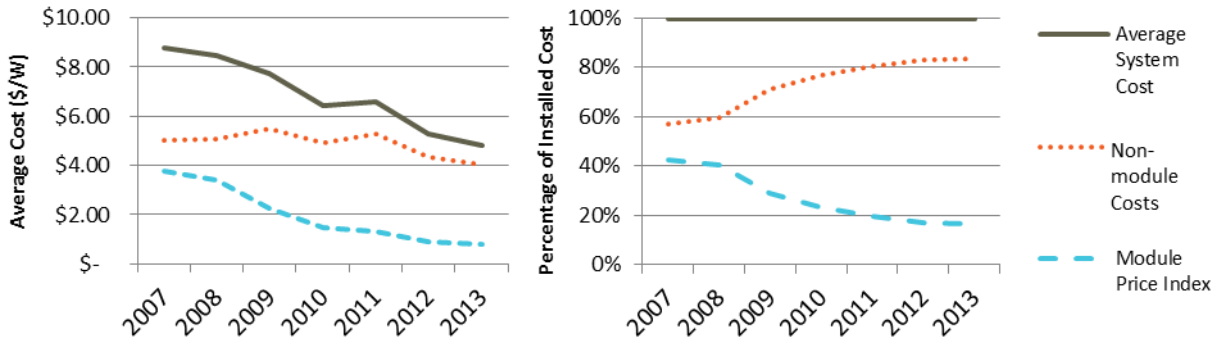
The solar program will have approximately $7 million to spend each year for the foreseeable future. The average incentive rates will determine how far those dollars go. For instance, reducing our average incentive by an additional $0.15/watt is like adding 25% to the budget in terms of the maximum capacity that can be supported (see dashed line in Figure 3).

Figure 3. Maximum capacity the solar program can support for a given budget and average incentive rate



Focus market development efforts on reducing soft costs: Solar electric cost reductions have been driven primarily by reductions in PV module prices. The inverter and racking hardware costs have also dropped. The non-equipment costs—often referred to as "soft" costs—have not kept pace or have gone up, as shown in Figure 4:

Figure 4. Solar cost trends 2007-13 showing breakout of module and non-module components



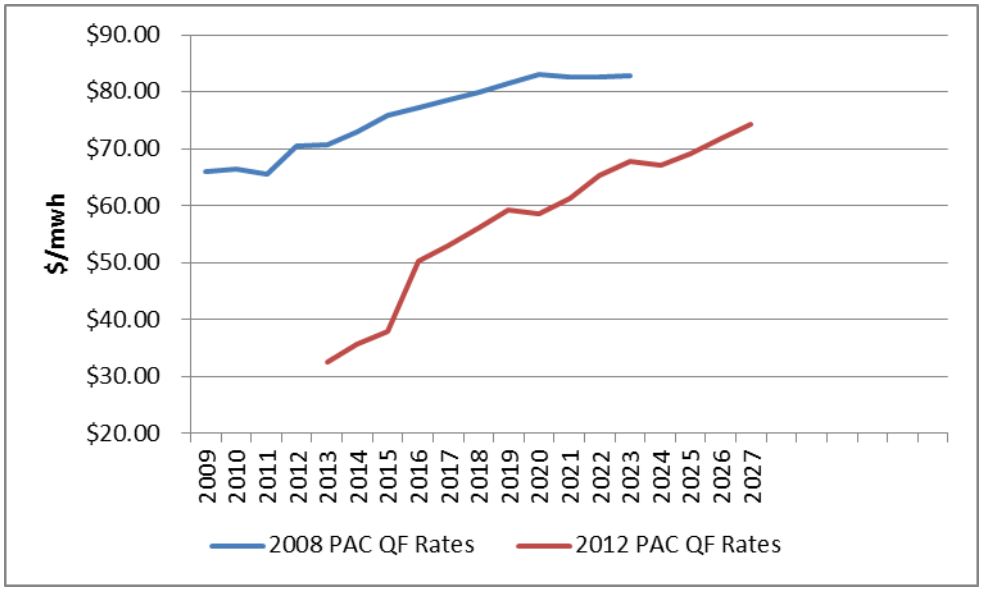
Energy Trust can impact some of these soft costs. We can help reduce permitting, inspection and incentive (PII) costs, estimated at $.24/W, including the cost to participate in our program. And, we can reduce customer acquisition costs, namely how a contractor finds a customer and closes a sale, estimated at $.69/W[3]. We also look for opportunities to streamline our process and reduce program compliance costs. Outside our program, we need to coordinate with other parties in the region to examine permitting requirements and look for solutions to better connect prospective customers with the right contractor.

b. Custom Programs

Declining and/or unpredictable federal incentives for renewable energy continue to challenge project developers. To take one of the most important examples, there have been dramatic declines in the rates at which utilities purchase generation from small generators. The Public Utility Regulatory Policies Act of 1978 (PURPA) requires utilities to buy power from small and mid-size projects called qualifying facilities (QFs). Utilities pay up to the cost they would have to pay for non-renewable resources, “avoided cost”, and under contract terms that are standardized.

Currently, avoided costs are driven by historically low natural gas prices. The chart below illustrates how avoided cost rates have changed over the last five years.

[3] These two costs ar attributed to Seel, Barbose & Wiser (2013). Why are Residential PV Prices in Germany so much Lower than the United States? Lawrence Berkley National Lab. Retrieved from: http://emp.lbl.gov/sites/all/files/german-us-pv-price-ppt.pdf



Low PURPA avoided costs have a significant effect on Energy Trust projects. For example, in 2009, Stahlbush Island Farms, a biogas plant at the food processor that Energy Trust supports, received $66/MWh for the energy they delivered to Pacific Power. In 2013 Farm Power Misty Meadows, a dairy biogas project will receive $32.50/MWh for power delivered. These reduced rates continue through the term of the power purchase agreements for these projects, which typically ranges from 15 to 20 years.

In addition to reduced PURPA avoided cost rates, the federal Production Tax Credit (PTC) for non-solar projects has lapsed on numerous occasions and extensions have been both last minute and short term. Currently, to qualify for the PTC a project must make a minimum investment of 5% or more prior to the end of 2013 with commercial operation no later than December 31, 2014. There is no certainty that the PTC will be reauthorized prior to the end of this year which significantly reduces the motivation in the market to develop new projects that would otherwise qualify for this tax benefit.

Energy Trust will be unable by itself to fill the revenue gaps left by low PURPA avoided costs and the lapse of the PTC.

Even in this challenging market there are opportunities. As mentioned, the cost of solar photovoltaic (PV) equipment has continued to decline, allowing reductions in Energy Trust standard incentive levels; new financing models have expanded the residential PV market; there is growing interest in energy production from waste stream recovery and therefore a growing market for tipping fee revenues; and Oregon's Governor has supported state incentives for certain distributed projects such as combined heat and power and woody biomass projects. To respond to these challenges and opportunities, through 2014 we plan to focus Energy Trust programs on:

- Projects that do not rely on avoided cost rates, i.e., net-metered projects such as biogas projects at wastewater treatment plants
- Projects that can monetize other project benefits such as the sale of carbon offsets, tipping fees for biogas projects and hydro projects that earn funding for restoring stream flows
- Publicly-owned projects that do not rely on federal tax incentives and have long term horizons for their business decisions

c. Allocating budgets across utility service territories and technologies

Project opportunities are not spread equally across both utility service territories. In general, Pacific Power territory presents significantly more opportunities to develop custom projects (biomass, hydro, geothermal) than PGE's service territory. PGE has a strong appetite for solar projects.

Because customer dollars from each utility must be spent on projects that benefit those service territories, we allocate our budget accordingly. The 2013 budget for PGE allocates 62% of funding for solar projects and 38% for custom projects, reflecting the realities of developing custom projects in PGE's service territory. In Pacific Power service territory, the 2013 solar program was allocated 33% of the budget with the remaining 67% targeting custom projects, reflecting more custom project opportunities.

In circumstances where demand for solar or custom projects does not align with budgeted expenditures, funds can be shifted to projects that are ready for funding. This will allow us to support a range of technologies and respond to market demand.

d. New OPUC Renewable Energy Performance Measures

The grant agreement between the OPUC and Energy Trust provides that the OPUC will establish quantitative measures that define the OPUC's minimum expectations for Energy Trust performance. Until the last few years, renewable energy performance measures were generation targets for given time periods. However, it has become increasingly clear that generation targets do not adequately reflect the role and value Energy Trust brings to renewable resource development.

Energy Trust and OPUC staff worked together to develop performance measures to better reflect our range of activities designed to meet our sector strategy. Energy Trust and the OPUC began by developing a funding priority for Energy Trust renewable energy investments:

1) Fund a project development assistance program that provides financial and technical support for projects during the development stage as well as targeted market research aimed at reducing barriers to development.

2) Fund above-market costs associated with net-metered standard program projects (solar and small wind) for both Portland General Electric and PacifiCorp that assures an active program in both service territories.

3) Fund above-market costs associated with non-solar custom projects, including net-metered, qualifying facilities (QF) under the Public Utility Regulatory Policy Act (PURPA), onsite generation, and other negotiated projects, as selected through an established and approved review process.

4) Fund above-market costs associated with innovative and custom solar projects, including state mandated projects such as those required to meet solar photovoltaic capacity standards, as funds are available.

OPUC staff and Energy Trust agreed upon the following four-part performance measure that aligns with these funding priorities. The italicized language is our assessment of the proposed performance measure:

1) Project and market development assistance
   - Report annual results including number of projects supported, milestones met, and documentation of results from market and technology perspectives.

     This proposed measure supports our goal of expanding project development assistance as a key component of building the renewable market while helping to manage our limited financial resources.

2) Standard net-metered program projects
   - Obtain at least 90% of the conservative installed generation goal. For 2013, Energy Trust's conservative goal for installed generation of standard net-metered program projects is 0.73 aMW, so the proposed performance measure is 90% of that, or 0.66 aMW.

     Developing an annual generation goal for standard projects (solar and wind) is consistent with Energy Trust participation in this market. We will aim to set goals that provide flexibility to manage budgets across technologies.

3) Non-solar custom projects
   - Set a three-year rolling average of project incentive dollars provided, divided by the total number of renewable energy certificates (RECs) delivered to Energy Trust over the term of the contracts not to exceed $40/allocated MWh.

     Adopting a funding cap for custom projects represents the biggest change to our current approach. The primary goal of this measure is to assure that individual project incentives reflect good business practices and are not open-ended. Energy Trust and OPUC staff agreed to revisit the $40/MWh cap annually to confirm it reflects the state of the market and available funding. While the OPUC will no longer require a generation target for custom projects, Energy Trust staff will continue to set generation targets for this project category during the budget process and include such targets as part of our quarterly and annual reporting.

4) Innovative and custom solar projects
   - Report sources of funding for projects and the criteria for selection.

     This performance measure recognizes our existing policy of funding custom solar projects only when all other activities have been fully supported. Specifically, funding is only available for this category of projects when funding demand has been met for project development assistance, the standard solar program, and non-solar custom project demand. Since the state's solar mandate is almost completed, it is likely that this measure may seldom be used.

Staff believes these OPUC performance measures support our overall strategy and priorities and will allow Energy Trust to help expand distributed renewable generation in Oregon.

3. Strategic Issues/Questions

- The Renewable Energy Sector proposes to continue to pursue the strategies established in the 2010-2014 Strategic Plan. Specifically, we propose to continue to fund a portfolio of technologies, focus significantly more resources on project development assistance, and utilize competitive processes to allocate limited incentive funds. *Does the Board continue to support these initiatives?*

- The legislature has directed the OPUC to compare the merits of the utility VIR/feed-in tariff with other incentives such as the Energy Trust program and State tax incentives, and to report to the legislature in the second half of 2014. The outcome of that analysis could have a significant impact on the role of Energy Trust in support of the net-metered solar market. Possible changes could include Energy Trust no longer providing incentives for solar in favor of a utility based offer, to an option where Energy Trust's role would expand with additional funding.

It is likely that the solution will require legislative action. Energy Trust's experience and knowledge of this market will likely make a significant contribution in supporting the state's solar goals.

APPENDIX 1: Oregon Renewable Resource Potential

Over the last ten years, numerous studies have estimated Oregon's potential for renewable projects of less than 20 megawatts (MW). Across all technologies we support, we estimate a potential 450-550 MW available for renewable energy projects. The potential varies by technology:

Solar: In theory, solar is virtually limitless. Every roof could be "solarized" with solar panels or roof tiles, countless windows could have sun shades, etc. While costs have come down significantly, the limiting factor is still relatively high cost. There are other limitations such as competing uses of flat, unshaded land. (The National Renewable Energy Laboratory estimated that net-metered rooftop installations in Oregon at 8,000 MW)[4].

Hydropower: Our studies suggest an opportunity for approximately 40 MW of hydropower on irrigation district canal systems; emerging low-flow technology could add another 20 MW. Hydropower in municipal water systems and ranches could provide another 10 MW. All of these in-conduit hydropower systems face tough barriers from environmental regulations, water utility planning cycles and funding.

Geothermal: There is a rich geothermal resource in southern and central parts of the state. Because drilling new wells is risky, new wells are the province of large-scale developers, and small-scale projects within Energy Trust's scope tend to involve existing wells. Recently, US DOE has invested more than $100 million in geothermal funding in Oregon, mostly for efforts to improve the industry's ability to identify and characterize resources. At this point we estimate 40 MW of identified potential in the Energy Trust size range.

Biogas: Interest continues to grow and Energy Trust is right in the middle of it. A recent study by Climate Trust and Energy Trust estimated 100 MW of new potential at dairies, wastewater treatment plants, and food processing facilities.

Biomass: Biomass has been part of the Oregon wood products industry for decades. However, over the past 10 years, the emphasis has been on keeping existing systems running. Biomass generation is challenged by competition for feedstock in a bad housing market, low energy prices, uncertain forest product markets, uncertain forest management practices, and high capital costs. ODOE, Business Oregon and Energy Trust have identified 200 MW potential and are attempting to grow this market. These efforts, along with the Governor's biomass initiative, create potential to turn this industry around as the housing market recovers.

Wind: We have not done a resource assessment, but estimate a potential of 10 MW of small wind, and an additional 30 MW of community-scale wind. Improved modeling and technology for characterizing wind resources will help focus our efforts. The Oregon wind resources is much bigger, but is mostly acquired through projects with more than 20 MW of generation, acquired directly by utilities.

[4] U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis
Anthony Lopez, Billy Roberts, Donna Heimiller, Nate Blair, and Gian Porro. NREL 2012 (page 12)

APPENDIX 2: How Energy Trust Programs Compare to Other Programs

While most states focus mainly on one or two technologies, with solar PV typically seeing the most effort, due to the range of natural resource opportunities in the state, Energy Trust is active in five resource areas. In addition, the range of development services we offer is much broader, going beyond project incentives.

Across the country there are three main approaches to funding and implementing small scale distributed renewable project development: a) public purpose or state funds collected and managed by a third party or state agency, b) utility-managed voluntary green power program funds, and c) utility acquisition via renewable policy compliance requirements. In Oregon, all three approaches are employed but not necessarily well coordinated.

Energy Trust falls into the first category by using public purpose funds to support the above-market cost for new small-scale renewables as does ODOE, by providing tax credits for projects as well as market support. PGE and PacifiCorp's voluntary green power programs currently meet customers' demands for green power mainly with REC market purchases. Both utilities also run competitive grant programs (Blue Sky for PacifiCorp and Clean Wind for PGE) with limited portions of their funds which can help to directly fund new projects. There have been several projects where both Energy Trust's project incentive and the utility green power grants have been used.

In the third category, both utilities are required under the federal legislation of PURPA to purchase energy output from qualifying facilities at their avoided cost. They are also required under state law to implement the solar variable incentive rate program (VIR). Many states have a requirement to employ solar or other small-scale renewable resources to acquire a percentage of the load requirement within the Renewable Energy Standard. Oregon has no such requirement but has a legislative goal that 8% of 2025 load be met with community energy resources.

a. Public-Purpose and State-Funded Programs

The Clean Energy States Alliance (CESA) is a nonprofit organization with 17 member states, including Energy Trust and ODOE for Oregon. CESA helps its members, the majority of which are public purpose fund administrators or state agencies, to implement clean energy programs and policies. By participating in CESA, Energy Trust has access to a network of resources and know-how and provides a sense of how we compare to other states.

The following table shows 2011 project results for member organizations, summarized by technology. It is an interesting snapshot against which we can compare our recent performance by percentages of total activity. Solar PV by far sees the most participation, funding and energy production. Hydro, landfill gas and wind are the next major funding and energy contributors.

Although Energy Trust sees year-to-year variation in projects types (other than solar PV), on average we see that both Energy Trust and many of our peers invest significantly in biopower and hydro projects. Wind represents a larger piece of investment elsewhere, but includes larger wind projects that are no longer within Energy Trust scope. There are no comparable efforts in other states in small-scale geothermal generation. Oregon landfill gas projects are cost-effective without our assistance.

Fuel cells powered with methane have yet to provide a solid business case in Oregon; biogas project developers opt for traditional engines that run with methane. Unlike Oregon, several

states include natural gas-powered fuel cells, which represent the bulk of the activity listed below.

Table 1: CESA Member Projects, Capacity, and Investments by Technology in 2011 vs. Energy Trust Mix of Technologies

	CESA Members 2011 Installations				ETO 2003-2012		
Technology	Number of Projects	Energy (MWh)	% Energy	Incentives ($M)	% # of Projects	% Capacity	% Energy
Biomass	64	37,209	3%	$10.8	0.2%	12%	43%
Fuel Cells	20	9,957	1%	$4.5	-	-	-
Geothermal	-	-	-	-	0.02%	0.4%	0.6%
Hydro	23	251,525	23%	$41.2	0.2%	11%	16%
Landfill Gas	14	161,714	15%	$31.7	-	-	-
Solar PV	31,311	497,950	45%	$354	99%	76%	40%
Wind	259	156,544	14%	$29.4	0.7%	1.0%	0.6%
TOTAL	**31,691**	**1,114,900**	**100%**	**$472**	**100%**	**100%**	**100%**

Because Oregon has such a broad mix of renewable resources, we are among the most diversified programs in our funding category. Most states focus mainly on solar photovoltaic for residential and commercial due to its wide applicability, scalability and standardization. Of 17 CESA members, six offer biomass support, four support hydro, and 16 support solar (Alaska is the exception).

What others are doing:

- Program types vary by member with a mix of competitive and first-qualified, first-served programs offering only project incentives. The majority of larger project programs have competitive incentives while keeping residential prescriptive offers as open as able.
- The Solarize model, pioneered in Portland is now a widespread program approach throughout the group.
- Financing programs for renewable projects are growing: Connecticut, Ohio, Pennsylvania, and Oregon's SELP
- Performance based incentives vs. project grant funding

b. Utility Voluntary Green Power Programs

In the past 10 years, utility voluntary green power programs have become widely required through their state energy policies. PGE and PacifiCorp have both consistently ranked high nationally in program participation. Utilities mainly meet the demands of their customers for green power by purchasing renewable energy certificates (RECs) from the market.

Some utility programs also acquire renewable energy on behalf of their funding customers by directly supporting local energy projects, similar to Energy Trust's approach. Puget Sound Energy (PSE) found that offering 5 year contracts for REC purchases plus their regular power purchase agreement rate for the project output has been very effective at driving dairy digester development. Since 2004 they have used voluntary green power funds to purchase RECS of small (<5MW) local resources with strong support from their funders (customers enrolled in the voluntary green power program).

Unlike Energy Trust, utility voluntary programs are limited by the type of support they can provide projects since their main objective is to meet program demands for green power via REC purchases. As a utility, PSE has found that the most useful added service they provide to projects is focused on the interconnection process and generally how to work through the regulated utility process. However they do not fund feasibility studies or other project development work we support.

Another example is Vermont where Green Mountain Energy offers customers the option to support Cow Power. Customer can choose to pay a higher energy rate so that farmers receive $40/REC (equivalent to $40/MWh) for the environmental benefits and the state set avoided cost rate for the generation. If no certificates are available in the regional market for $40/MWh or less, the payments go to a pool out of which feasibility studies and other market development is funded.

c. Utility Compliance with Policy Requirements

PURPA is a federal law, and it directs each state to establish the specifics of how utilities pay qualifying facility (project) owners for energy output. In Oregon, PGE, Pacific Power and Idaho Power are working with the OPUC and stakeholders to revisit many factors related to avoided cost rates. The hope is to make the process more transparent and to better meet needs and challenges of renewable resource integration for utilities and project owners.

Renewable Portfolio Standard (RPS) requirements also vary among states. Many states have created credit multipliers and "carve-outs", special requirements for acquisition of small scale distributed resources. In Oregon, solar RECs receive double credit toward the RPS and, although not a true carve out, state legislation mandated that 20 MW of large scale solar be installed by 2020. In Washington their credit multiplier extends beyond solar to any distributed renewable resource 5 MW or less that can receive double REC credit.

Sixteen states and the District of Columbia have adopted solar or broader distributed generation carve-outs or multipliers as part of their RPS policies. Of these, five states and D.C. allow solar water heating to count towards meeting the solar carve-out. Credit multipliers have not been as effective in stimulating solar deployment as a specific solar requirement. In fact, New Mexico and Maryland removed their initial solar multiplier provisions in favor of solar carve-outs.[5] North Carolina's distributed generation RPS carve-outs are unique to their local resources with requirements for 0.2% of load to be met with swine waste generation by 2018 and 900,000MWh of poultry waste generation by 2015 on top of their solar carve-out for 0.2% of load by 2018.

[5] Supporting Solar Power in Renewables Portfolio Standards: Experience from the United States, Ryan Wiser, Galen Barbose, and Ed Holt, Lawrence Berkeley National Laboratory, October 2010.

Solar Panelist Biographies

July 31, 2013

Paul Israel founded Sunlight Solar Energy, Inc. in 1988 in Sacramento, California. Paul, a native of New Hampshire, has a business degree from Temple University and has worked in the energy industry since 1987. Paul worked with American Solar Network, a Herndon, Virginia-based solar manufacturing company in 1989-90, and became an equity partner in 1991. He opened Sunlight Solar Energy in Redmond in 1997 and then moved the company to Bend in 2003. In 2004, Paul opened a second office in Milford, Connecticut as the Connecticut Clean Energy Fund (CCEF) was launching their solar incentive program, making Sunlight Solar one of the only CCEF-authorized solar contractors in the state at that time.

He co-founded the Central Oregon Green & Solar Home Tour as well as the Bend Bio-fuels Cooperative, both of which are still in existence and thriving today. Paul was also one of the first individuals to become a Licensed Renewable Energy Technician in the state of Oregon and currently sits on the board of directors for Oregon Solar Energy Industries Association. Additionally, Sunlight Solar was the third Trade Ally ever designated by Energy Trust of Oregon. In his 20+ years in the solar industry, he has overseen and managed over 4.5 megawatts (4,500 kW) of solar electric design and installation throughout the United States.

Meghan Nutting serves as the Director of Policy and Electricity markets for SolarCity Corp. where she works closely with company and industry leaders, nonprofits, and state and federal policymakers and regulators, to craft policies that provide a more stable, sustainable business environment for solar electricity generation.

Meghan has covered government and regulatory affairs issues for SolarCity since 2009. Prior to working at SolarCity, she was employed as a legislative director for a New York state Assemblymember and as a press secretary to U.S. Senator Olympia J. Snowe. Meghan has also held policy positions at the World Bank, the British Department of Environment, Food and Rural Affairs, and a number of environmental organizations. In these positions and in her current role, Meghan has worked on, advocated for, and impacted a number of energy and environment-related issues and policies. She earned her B.A. at Cornell University and her MPA from the Woodrow Wilson School of Public and International Affairs at Princeton University.

Meghan currently resides in Denver, Colorado and covers SolarCity's policy and regulatory affairs in Arizona, Colorado, Oregon, Texas, Utah and Washington.

Shannon Souza is the principal and founder of Sol Coast Consulting & Design—a full service sustainability contracting and design firm located on the Oregon coast. Raised in a small town on Puget Sound, she happily settled with her family in Coos Bay in 1993 where she is actively engaged in the education and music communities. Shannon has been involved in solar design and installations since 2004 and is a member of the National American Board of Certified Energy Practitioners and a LEED Accredited Professional. She holds a degree in Mechanical Engineering from Santa Clara University and has been in professional practice in Oregon specializing in energy, environmental engineering and water rights examination since 1999.

Strategic Utility Roundtable

May 22, 2013

Energy Trust board members present: Rick Applegate, Ken Canon, Mark Kendall, Jeff King, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Dave Slavensky

Energy Trust board members absent: Julie Brandis, Anne Donnelly, Dan Enloe, Roger Hamilton, Lisa Schwartz (ODOE ex officio)

Utility roundtable representatives present: Lauren Shapton (for Carol Dillin, Portland General Electric), Don Jones, Jr. (for Pat Egan, Pacific Power), Bill Edmonds (NW Natural), Jim Abrahamson (Cascade Natural Gas), Bob Jenks (Citizens' Utility Board of Oregon), John Carr (Industrial Customers of Northwest Utilities)

OPUC representatives present: John Savage (commissioner), Juliet Johnson (staff), Jason Eisdorfer (staff)

Energy Trust staff present: Margie Harris, Ana Morel, Hannah Hacker, Debbie Menashe, Amber Cole, Steve Lacey, Peter West, Sue Meyer Sample, Fred Gordon, Elaine Prause, John Volkman

Others attending: Kendall Youngblood (PECI), John Charles (Cascade Policy Institute), Kari Greer (Pacific Power), Jaime McGovern (CUB), Catriona McCracken (CUB)

Call to order

President John Reynolds called the meeting to order at 9:02 a.m.

Discussion

John Reynolds opened the roundtable asking for introductions around the table and described the purpose of the meeting, which is for Energy Trust, Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and the Oregon Public Utility Commission (OPUC) to agree upon a clearer approach for establishing annual Energy Trust savings targets and funding, aligned with the Integrated Resource Planning (IRP) process used by utilities and the OPUC. The input from the Citizens' Utility Board of Oregon (CUB) and the Industrial Customers of Northwest Utilities (ICNU) was welcome as they advocate for their respective customer bases.

Three main questions arose during the annual review of the Energy Trust budget and two-year action plan in December 2012, and are before the roundtable today:

1. How should Energy Trust describe its electric and natural gas efficiency goals and their relationship to long-term IRP targets?
2. How should the OPUC measure Energy Trust acquisition of efficiency savings to meet utility IRP targets?
3. What is the appropriate level of funding and reserves?

Energy Trust drafted several options to describe annual Energy Trust goals and IRP targets, negotiated funding levels, performance measurement and the appropriate level of reserve amounts and usage. The five options, listed in the roundtable packet as A through E, are to retain current practice, revert to pre-2010 practice, modestly lower the IRP target, establish an IRP range with a

variable program reserve or link annual targets to savings identified in utility IRP five-year action plans. The first four options were presented and discussed with the OPUC, PGE, Pacific Power, NW Natural, Cascade Natural Gas, CUB and ICNU. Written feedback was welcome; comments received from PGE and Pacific Power were shared with the board Policy Committee. From the outreach meetings, a general and tentative consensus was reached regarding Option D. Energy Trust's outreach meeting with the PUC led to a fifth option, Option E.

John described the questions for today are whether the right, five options have been captured, what additional clarification is needed and is there consensus regarding one option.

Margie Harris acknowledged the OPUC staff members Juliet Johnson, Jason Eisdorfer and Maury Galbraith, who were instrumental in helping Energy Trust frame the issues, plus all four utilities and their individual representatives, Bob Jenks and Jeff Bissonnette from CUB and John Carr from ICNU. She also thanked Energy Trust staff members Steve Lacey, who worked with her every step as options were drafted and presented out, John Volkman, Elaine Prause, Sue Meyer Sample on the reserves, Amber Cole on the presentation and Ana Morel on meeting coordination and communication. She thanked all parties for their involvement and willingness to participate.

Margie: When I was speaking with board member Ken Canon yesterday, he reminded me he had not been to a roundtable yet. To start, I'll give a bit of background on these meetings. The first roundtable was in 2009 and was in response to utility interest in having a representative serve on the board. Such a change would have moved the board from non-stakeholder to stakeholder, and in alternative, discussion centered on how to address the utility's need to be more engaged at the board level. Ultimately, the board elected to remain non-stakeholder and put in place a forum for members of the board, utilities and other stakeholders to meet and discuss important strategic matters.

The process for today is an open discussion. John Reynolds will facilitate. This is an open exchange of information and everyone is encouraged to share their views. We hope to work toward understanding and consensus. Today is not a vote or decision-making setting necessarily. We want to know where people stand. Today's topics are particularly complex and challenging. We want to work with you to understand the basics of how utilities work with the OPUC on existing processes for developing IRPs. Energy Trust is a small but important part of that overall process. Where does Energy Trust slot into that existing process that is led by and in accordance with rules set by the OPUC?

The other pieces for today beyond goal setting are funding levels and reserves. The first two are prioritized for today. If needed, the reserve discussion could be taken up at another time.

Today's purpose is to agree upon a simpler, clearer approach for establishing annual Energy Trust savings targets and funding levels that are aligned with the IRP process used by utilities and the OPUC. The budget process response comments received in December indicated clarity is needed around these topics.

This meeting will also serve as a forum to gain common understanding of how Energy Trust fits into a larger OPUC and utility IRP process.

Ken: For clarity, this first portion is only with energy efficiency, and when we talk about reserves we are talking about energy efficiency and renewable energy?
Margie: Yes, that is correct.

Margie gave a brief history on Energy Trust energy-efficiency goal setting. In the first five years of Energy Trust designing and delivering programs, from 2002-2007, Energy Trust conducted a market analysis to establish five-year Strategic Plan goals, two-year action plans and one-year budgets. All funding was derived from SB 1149, with Energy Trust receiving approximately 74 percent of the public purpose charge, and individual natural gas tariffs with NW Natural and Cascade Natural Gas. Staff looked at the Northwest Power and Conservation Council targets, used past evaluations and determined the maximum amount of savings for the funding Energy Trust received for each given year. Energy Trust was not yet directly involved in the OPUC process for designing 20-year forecasts on where the next increments of energy would come from. Then, as now, the first resource when using a least-cost planning approach is energy efficiency. Energy Trust established early on a 25 percent goal range, with conservative and stretch goals at either end. Sometimes, stretch was called best case and conservative was called high confidence.

In 2007, SB 838 was passed, and it provided for the option for the two investor-owned electric utilities, PGE and Pacific Power, to secure additional, cost-effective energy efficiency. This legislation changed the game for Energy Trust acquired electric efficiency. From then on, opportunities for additional electric efficiency funding were linked to the IRP process between utilities and the OPUC. Fred Gordon led the development of efficiency resource studies, and Energy Trust now updates and revisits current plans on a regular basis approximately every two years. From there the utilities take those targeted savings and incorporate them into their IRPs. That energy efficiency portion is what Energy Trust is accountable for in meeting contract obligations and OPUC metrics. Energy Trust stayed with conservative and stretch terminology and a 25 percent goal range. Since then, Energy Trust has met the targets, in aggregate, over the five-year period. Since the first annual Energy Trust funding process after 2007 and until 2010, Energy Trust stayed engaged with the energy-efficiency part of IRPs and linked it with the high end of the savings range. Energy Trust was exceeding goals and went from a 25 percent to a 15 percent range, and changed the linkage to IRP targets to the lower end of the range, the conservative goal. The change to the lower end of the range was so Energy Trust could “guarantee” it was delivering a minimum savings to utilities and the utilities could count on Energy Trust for doing so. If Energy Trust went above minimum savings, all the better albeit that was the expectation since funding was set to acquire the higher level savings.

Energy Trust also established a 5 percent program reserve for each utility at the suggestion of the OPUC’s Commissioner John Savage. Energy Trust combined that with its carryover funds with prior years. The program reserve is built into the funding process each year in case demand for a program outpaced funding or opportunities arose.

Starting in 2010, Energy Trust’s current approach is a savings goal range with conservative and stretch goals that are 15 percent in difference. The conservative is largely aligned with the IRP target, and the utilities fund to stretch goal so that Energy Trust can capture market opportunities and meet customer demand that might not be anticipated during funding negotiations.

Steve Lacey leads annual utility funding negotiations every year. The annual process starts in May as Energy Trust looks at IRP workshops and updating or revisiting the IRP if it is slated to be, which is

typically every two years. The planning cycle is then kicked off, and Energy Trust shares the upcoming year's plans and strategies with each utility in July and August. By September, Energy Trust is closing in on levels of funding that will be needed to reach IRP targets and what proposals might look like for utilities to go to the OPUC for tariff adjustments, with the Energy Trust piece of it highlighted. Tariff filings for the two electric utilities, which are represented in the cycle on slide six of the presentation, typically occur in October. The tariff is adjusted based on what is the resource potential that Energy Trust will acquire, and at what rate and cost. PGE typically files in November. Don Jones clarified Pacific Power filed this past April. Once the OPUC considers the filing and takes action, the tariffs take effect in varying times. January is typically the time when the PGE tariff takes effect. From there, Energy Trust knows its budget, what the savings targets are and begins implementing the action plan for the year.

Ken: Can you put this in context of the utility's two-year IRP cycle?
Margie: That is what we are working on together. We are conducting resource assessments and sharing with utilities. It varies with each utility, and we try to do no more than two individual utilities each year. And it's roughly every two years we revisit IRP targets.

Don: These are Energy Trust IRP workshops?
Steve: Annually we go through this process and not necessarily the IRP process. We use the previously IRP targets for discussions with utilities on what the funding should be.

Margie showed a slide of the IRP process looking out 22 years. On the left axis is aMW to save, and the bottom axis is timing from 2010 to 2032; the focus of the graph is years 2010-2014. The red line shows stretch goal agreed upon for the time period. The green line plots the first three years of actual activity compared to stretch goal. In this instance, Energy Trust is theoretically ahead of what is expected for IRP and coming in above the targets. The first years of any IRP are more accurate in projections. Staff can look out with greater precision at two years than 22 or 30 years, because they are more aware of what can be captured in that two-year period. This is why the IRP targets are updated every few years by Energy Trust. That said, Energy Trust is still predicting the future and cannot be completely accurate. Intervening factors can change actual results.

Don: For clarification, the blue area is the sum of Pacific Power and PGE IRP targets?
Steve: Yes.
Margie: Where you see the line go down, that is because we can't determine what's going to happen in those out years.
Steve: This is the current convention, so the IRP curve characterizes 15 percent below Energy Trust's stretch goal.

Margie reviewed again the issues for discussion, which are to clarify the terminology that defines Energy Trust goals because conservative and stretch doesn't serve others in a manner that is clear and simple; to strengthen the linkage between Energy Trust targets and how Energy Trust is held accountable to the OPUC; to agree on funding levels relative to IRP targets, which are currently to fund to the upper range so Energy Trust can respond to any unanticipated market conditions; and finally, to clarify program reserves, if they are used, how they relate to Energy Trust's interest reserve and whether any changes are desired.

Jim Abrahamson: An observation from an experience with the last IRP cycle is Energy Trust did the long-term resource assessment where we had a lot of capabilities to discuss with Energy Trust what the total 20-year period was going to look like. When we came to the first five years, we ran into issues where Energy Trust staff was doing lots of detailed work with consultants and program work and was coming to us with a clear five-year picture. So when we pulled together the IRP, most was Energy Trust's input. The first five years came from program managers and the last 15 years was more of a back and forth. Who's in the driver seat in the first five years, at least in our IRP?
Lauren: Is it five years or two years?
Steve: It's more of a two year look, and if we need to go beyond two years, we bring in the Planning Group. Beyond five years, we bring in consultants.
Jim: And the first two years is pretty set during the budget process but we were instructed to stay away from five years.
Ken: Instructed?
Jim: Advised by Energy Trust staff. Instructed is too strong of a word.

Margie described the process used to develop the five options in front of the roundtable. Energy Trust conducted outreach to stakeholders, including the OPUC, each utility, CUB and ICNU. The background paper only included options A through D. Staff learned through the process that they hadn't fully captured the OPUC's original intentions and Option E was added. Staff circled back with stakeholders on the additional option. Any and all options are on the table today, though Margie indicated the discussion will most likely center on Option D and Option E.

Jeff: Can you elaborate on the program reserve concept, how it's set and what determines when expenditures are made from it?
Margie: Yes, I have a lot of detail on it if we get to it later today. The program reserve is a backup and is 5 percent of the annual budget for each utility. We are able to draw from it if we saw activity was going to exceed the budget for the year and if no other sources of funding were available. The reserve gets trued up every year. There have been times when we've used the reserve. For example, in 2012, the board approved Existing Buildings to use it in Pacific Power territory because in May 2012 we thought we were running hot and might need to tap those reserves. In the end, we did not use them. Also there are two reserves to use if needed, the program reserve or the interest reserve.

Debbie: Underlying this is the concern that the one option without reserves may result in us saying in October that we don't have any money left in a program until next year. We've found in the past that stopping and starting really disrupts the program, in any sector, and when we did have a "run on funds" it took years for the message to get out that that's not the situation anymore. And the commitment is that reserves are there to keep us afloat if there is unexpected demand.
Margie: And it provides stability.

Rick: On the last bullet for process, would it be helpful if we asked if folks see any portions of options A, B and C should be carried forward?
Margie: Yes, let's do that after detailing options D and E first.

Margie gave a detailed description of Option D. In utility funding agreements, Energy Trust commits to a 15 percent range and the utilities fund to an IRP upper range, the "optimistic resource potential." Energy Trust's annual performance and levelized costs are judged against the IRP lower bound of the range. The current 5 percent program reserve is reassessed and negotiated annually. If any utility's

program reserve is used during the year, the fund is “trued up” during budget negotiations for the subsequent year.

Option E would link Energy Trust to an annual, single number identified in the utility IRP five-year action plan. The OPUC acknowledges the action plan when each utility submits their IRP. Utilities fund Energy Trust to achieve annual IRP targets, a single annual target, not a range. Accountability is measured by the OPUC at being no less than 85 percent of the annual target in any one year. Energy Trust results are delivered with the understanding that it might exceed the optimal resource potential in one year, and miss it the next year; any shortfall is made up within the five-year utility IRP action plan period. Utility program reserves are negotiated annually.

Margie displayed a comparison chart between options D and E. Largely, Option D is a savings range, utilities fund to the higher end of the range, Energy Trust’s annual minimum performance is based on the lower end of the IRP range and there is no link to the five-year utility IRP action plan. Option E is mainly a single target, Energy Trust is funded to the single target, Energy Trust’s annual minimum performance is based on savings being no less than 85 percent of the annual target, and Energy Trust is linked to the five-year utility IRP action plan and achievement of the full resource potential within that five-year period. Both options allow for collaboration and updating every two years with the utilities to determine the energy-efficiency portion of each IRP. Also, both options allow for program reserves to be reassessed and negotiated annually. The program reserve may not necessarily be 5 percent, and would vary by utility and by year.

Ken: When I look at these two, how functionally different are they?
John Savage: Roughly every two years, the regulated utilities are required to prepare long-term IRPs, to spell out when, where and what kind of resources they should develop to make sure they are meeting customer demands at best cost and lowest risk. They are very detailed and rigorous. The utilities must consider all resources, like conservation, generation, demand response peakers. This is where the rubber hits the road with their action plans. They come to the OPUC for a four- or five-year period with actions they need to take. Our decision is when we come in and either acknowledge or don’t acknowledge those actions. So what we say is, based on what we know today, this seems a smart or not a smart action plan. So when they come to us during a rate case, they say this was either an acknowledged or a not-acknowledged part of their action plan. We expect three things out of Energy Trust and the utilities, some of which is built into our rules. First, every plan is going to conduct a conservation resource assessment, usually updating it every two years. Second, to set aggressive, but achievable, targets to ensure you are achieving all cost-effective conservation in that period and will meet the IRP over a five-year period, which is between Energy Trust and the utility. You are sitting down and saying what is achievable. Third, to take targets and translate them into funding, either through SB 838 tariffs or bilateral negotiations with the gas utilities. What we are saying here is we want to see “X” in the action plans. We want to know what conservation you are targeting. Then we are saying our minimal acceptable level is 85 percent and you cannot go below that floor.

Alan: I look at Option E as the best of the five options but since there is no discrete five-year period in the IRP process how do you hold us accountable to the five-year plan?
John S: That is an issue. You’re going to have a better view in the two-year and I still want to see the out year estimates for years three, four and five. I expect you’ll have better, more refined estimates for the first two years. In the five-year period, there is a chance you’re going to need to update. You can have a five-year cumulative change and I acknowledge it. But what I like is you saying you’re adapting

to what's in the marketplace. Stuff happens. I want aggressive, achievable targets but I don't want targets where you are saying you'll get 100 percent.

Alan: I have been a critic that we are funded to the high and accountable to the low. This option feels better. I like the alignment of our goals with real life, where we are not assured of meeting our goals, and usually we exceed them anyway, so they are not "best case."
Lauren: That varies by utility. Energy Trust has exceeded stretch for PGE only once. Splitting by utility adds additional context.

Don: For Option E, let's test it with the mechanics we experience every year with Energy Trust and a combination with the IRP process. One assumes the acknowledgment by the OPUC of the action plan comes quickly after the IRP is filed. Assuming you have an acknowledged action plan, we are on the same page with Energy Trust on years one and two. Yet I'm perplexed on years three, four and five; we have a new resource plan and new IRP. For those years, are we using the numbers from the first IRP or are we using year one from the second IRP?
John S: For the utilities, you are proposing a four- to five-year action plan, so there should be years three, four and five, unless they are going to adjust.
Lauren: They always adjust.
Steve: Unless you reset at year three.

Don: If you hit 85 percent in the first two years, and then you have a new number for year three, how does the math work for year three when you have a new action plan and IRP? Are you judged against the original threshold? How do we do it and how do we do it consistently?
Lauren: PGE had that with Energy Trust a few years ago where Energy Trust goals and IRP diverged and we didn't realign them until the new IRP. So Energy Trust was coming to us saying they couldn't meet what's in the IRP, but we can meet something less than that, with this action plan.
John S: With Option E you could add in annual updates so you can adjust the numbers if needed. That's part of our rules, too.

Jim: I'm wrestling on this with mechanics, too. What happens when there's a change in year three, and we are redoing that information in five year targets coming from Energy Trust. So if Energy Trust met between 85 percent and 100 percent in year two, but then Energy Trust comes to us and says the targets need to go down, where does that leave us with a potential "underachievement" issue on the former IRP?
John S: You come in for whatever reason. You have a best guess for five years, and years one and two are the most defined. Then you come in slightly less than 100 percent. Are you asking whether you need to make up the savings shortfall in a future year if the IRP is updated?
Jim: Is it a more formal introduction of the five-year period and the ability of Energy Trust to make up?
John S: But you have a four- to five-year action plan and I need resources for those years. Give me your best shot at it. When you have a capital investment on the line, it's particularly important for us to know your plans for the out years.
Jim: But if we come in, and have an acknowledged IRP for years three and four, but come in with compelling evidence that something has changed. Seems that would change the original five-year.
John S: Yes.
Margie: I hear John Savage saying we look out four or five years and Energy Trust is part of that process, identifying and then capturing maximum achievable energy-efficiency savings. Plus we need

to be accountable somehow, which I support. Would it work if we worked in this planning period but are to be measured on a one-year basis?
John S: I expect you are sitting down, looking at one year targets, the control over the annual target is in your hands.
Margie: The question is when the second IRP comes in, when there's a new timeline, what to do to hold ourselves accountable with the first IRP.

Bob: Let's say Energy Trust hits 90 percent of target for the first two years, you're essentially at a 20 percent deficit. At the same time you're doing a new IRP, we had previously over-projected, so we lower the goal for the next five-year period, lowering funding for the next two years. They missed the original five-year goal but going forward, this is offset. Is that a fair assessment?
John S: We are measuring on a one-year target, the benchmark is a one-year target. I'm focused on reality, I don't want you to set a target assuming you will get to 100 percent.

Margie: Let me show you a chart of a theoretical example of what could happen.
John S: And every two years, this whole thing shifts.
Mark: 85 percent of the five-year goal shifts as well, so it's a moving 85 percent.
John S: 85 percent is on a one-year target, every year.
Jim: But you may have a new five-year target.
John S: That you need to adjust for.

Lauren: I'm confused. Let's play back PGE in the last five years, which we funded Energy Trust to stretch goal. Energy Trust achieved between conservative and stretch for four years, and exceeded stretch for one year but not enough to make up the deficit. What to do?
John S: The five-year concept isn't a mandate. For purposes of the action plan, I need more than two years of estimates. I need four to five years of annual targets and that should be "X." What we're saying here is I expect utilities and Energy Trust to sit down and determine aggressive and achievable levels. For purposes of funding I expect it to be defined for the first two years. I understand stuff happens and you may miss a target. Do you have to absolutely make it up? No. Because stuff changes. I expect you to do your best job to achieve all cost-effective conservation in an achievable time period.

Margie: The expectation is Energy Trust will still keep its foot on the accelerator.
John S: If you are at 90 percent do you have to make it up? No.

Steve: What's the consequence for Energy Trust and utilities both for not achieving?
Bob: It might be the bullet that says it's expected to link to the five-year. Maybe it's that Energy Trust is expected to achieve targets and we don't link to the five-year period.
Rick: Is this bullet really a good faith effort bullet? What are we trying to say? What are we saying beyond the expectation?
Steve: Over the five-year period, if we are consistently coming in at 85 percent or 90 percent, something is wrong and we need to be held to task.
Juliet: The utilities are instructed that if something significant changes in their IRP, they are expected to come to the OPUC, and we've not really applied this to conservation. The crux of the matter here is if it looks like you're not going to meet the targets, the OPUC needs to know that, so use the same update process to update the expectations between the official IRP filings.

Ken: I picked up the same thing. I was trying to recognize distinctions between resource types. We know with conservation we will do it every year. In the larger IRP construct, you need to recognize that.
Alan: I do think we need to report on a rolling average basis.
John S: Plus Energy Trust has a five-year strategic plan so you need to synch that up, too.

Ken: One question about Option E, when you have a target versus a range, a target is much easier for you to be set up for failure. This is just an observation.
John S: I understand the concept of risk and uncertainty, our IRPs address that all over the place, but when you come to an action plan, you have precise actions the OPUC is acknowledging or not. And I'm not sure how to address a range.
Bob: A range could be useful beyond five years, especially as knowledge changes, and so we don't over-project future levels. This is important as people look at carbon projections, etc. So I like the idea of a range for the years that are further out, and more precise targets in the short term.
John S: You could look at this in concept, saying let's set a target with 90 percent assurance or some high probability that's less than 100 percent.

Bill: What I'm hearing is there are IRPs that roll out every two years and there are two-year targets. And we hold that those are point estimates and we are held accountable. Plus, four- or five-year action plans are important. Also, Alan's idea is we report by utility on a four-year rolling average on whether we are hitting it or not, and consequences to follow, which aren't very well delineated here. Bob got there with a percent, so figuring out how to do that, I haven't heard yet. And looking further out, ranges are more useful as we have no idea what the efficiency frontier looks like. I'm supportive but still confused on how to determine this with a five-year rolling action plan plus two IRP updates. NW Natural has had IRPs that were quite different in their estimates.
John S: Looking through the IRP angle, the action plan has a conservation resource put into a five-year lump. We're treating this as a resource, putting it in the action plan and tying it to the action plan with specific targets.

Don: Pacific Power provided comment on Option D with suggestions to true up after year two, given any year you are over or under. So Pacific Power was half way between options E and D. It's cleaner on the IRP process and potential resource. You always assume in year three there would be a different number. It's a two-year basis, with set point estimates. If you don't hit the goal in year one, you overachieve in year two.
Lauren: That's where PGE was, too, but we had the issue of an IRP one year not being acknowledged. So PGE was working with an old IRP but Energy Trust was delivering at a different level.

Mark: It appears we collaborate with the utilities to develop an IRP every two years but the target is annual. I assume avoided cost and cost-effectiveness would impact the target on an annual basis?
John S: Yes, which is why the front work is the conservation potential estimate, which must be a part of all IRPs.
Mark: Yes, based on a range?
John S: Based on what I can get at what cost.
Don: They are point estimates based on levelized cost.
Jim: And it's distributed out by program or sector by Energy Trust.
Don: It's technology-specific with an administrative adder.

Margie: We could look again at pages four and five in the discussion paper to make sure options A, B and C don't have anything we want to add to. Anyone?
Mark: If we are looking at IRP annual targets as a goal and we've had in the past, stretch goals that are in some cases 15 percent above range of a five-year possible IRP, and Commissioner Savage says we should target a value. Yet if we achieve it every single year, we've probably set our target too low. Also, 85 percent of an IRP target where we may previously have gotten 15 percent above it, that's a 30 percent range of achievement. And in Option C, it says utilities fund Energy Trust to achieve optimistic stretch resource potential, and that's above the IRP target. So we let the range go?
John S: Plus I'm saying the target needs to be aggressive and achievable. I'm not using any of your terms like conservative or stretch.
Jim: But that number becomes the IRP target.
John S: Yes it's the number I expect to see in the IRP.
Jim: The only value that I see back in options A, B, and C is that A gives me the benchmark for what's the current practice. So, any evaluation we would have from D and E is moving away from that.

Margie: Bill has laid out the choices. Shall we go through them and see if we can get more clarity? And Don's questions on mechanics?

Ken: Do we have objective criteria on why we are doing this now? Are utilities, Energy Trust and the OPUC operating on the same criteria on what we are trying to solve?
Margie: We are here because there is confusion on existing terminology and this process has evolved so that it isn't as clear as it could be. The threads of it are the OPUC has an existing order on how utilities do IRP. Energy Trust is a slice of the overall integrated resource planning. Energy Trust provides the most cost-effective resource and we should be held accountable to that.

Ken: When I hear criteria to link to the five-year action plan, is that a criteria that is held at the same level as utilities and Energy Trust or do you see other criteria that is as important?
Margie: From Energy Trust's perspective, we have an annual process to update our targets. What causes us to stall is translating that process to a measure that is understandable, valuable and defensible. Plus things change and we want to adjust up or down as things change in a transparent manner. Energy Trust has not been linked to a utility's four- or five-year IRP action plan. I have no objection to being measured against a five-year action plan.
John S: Plus there's confusion on conservative and stretch and what they mean. So we are looking at resetting. And the condition for Energy Trust that they are part of the utility action plan. You are running utility programs. These are part of the resources.
Steve: And part of the confusion is that we artificially changed the definition of IRP; and now we are correcting that. There is still the outstanding issue of how do you gauge our performance?
Ken: And what we should focus on is to make sure as we try to adjust confusion that we aren't setting up new confusion.
John S: And one source of confusion is setting targets, which are for years one, two, three, four, five and 20. What I'm not saying is I'm holding you to year three now.

Jim: And there was some form of miscommunication in this overall process where we had the opportunity to sit with Margie and Steve and talk through options A-D. We then came up with our recommendation of Option D, but were then informed last week there's a fifth option, Option E.

Alan: My concern is the current practice of setting a number and funding to that number and utilities accountable for that number but Energy Trust is only accountable for 85 percent of that. Energy Trust should be held accountable to the same number the utilities are.
Don: Alan hit on one of the elements that contributed to this. Pacific Power would like to fund the same number Energy Trust has, and have that number in the IRP. Right now, there are lots of numbers and it's hard to track. Giving Energy Trust more years to achieve savings given market uncertainty and a two year look is a better way to do it and tied to IRP. This is an improvement.
Alan: In retrospect, looking at Option D, that is probably the simplest way to achieve that.
Juliet: To what Alan said, I think what we are talking about does that. By making the agreement for the target to be the IRP number, that's in essence what the OPUC will hold Energy Trust accountable to. We understand Energy Trust won't hit it every year. 85 percent is a floor, a warning sign.
Ken: That suggests the way we will deal with confusion between conservative and stretch is to go to an IRP target and minimum performance measure.

Margie showed her notes on the screen.

Lauren: what do you do if Energy Trust doesn't meet the number?
John S: You are working with Energy Trust to come up with best estimates.
Lauren: Energy Trust didn't hit stretch for PGE in the last five years except for one year.
Jim: If we don't meet the demand-side management target in any one year we are accountable, but what about for our agent here, which is Energy Trust, where's the accountability?
John S: As long as we are assuming you are running these programs as effectively as possible, stuff happens. The exercise of IRP is looking forward to the best mix of resources. But I expect you to continually make adjustments to programs as necessary.
Juliet: Is your concern you want more assurance the target will be met?
Lauren: We work with Energy Trust but when I see the fifth bullet point, what are we going to do if we get into a situation like PGE had.
John S: Let's get rid of the fifth bullet and replace it with "forecast by year of conservation you can achieve," and work with Energy Trust on the conservation supply curve, what's achievable, funding levels to achieve and bring that to the OPUC. And I want forecasts of what you can achieve in the fifth year, working with Energy Trust.
Bob: This is no different than PGE's five-year plan for output for Boardman. And if they miss, something else needs to make it up.
John S: Yes.
Jim: For the full forecast period or full IRP period?
John S: Where the rubber hits the road is the action plan, which has specific actions you are asking the OPUC to acknowledge over a four- or five-year period. This is the single most important part of your IRP. It helps us assess need for capital investment. I'm hearing some good things about ranges in the out years, but the five-year action plan has specific targets.

Margie: We could have a small group get together and come back. There are a lot of ideas here.
John S: If you want to deal with the issue of accountability of meeting IRP target, then you fund to 100 percent to ensure it will happen. I hear that is one of the issues currently calling confusion. If you're down one year and up another year, it will work out over time. You set a target, and you set a 100 percent target. My goal is to know we are striving over five years. You better not miss that 85 percent minimum performance measure.

John Carr: I'm pretty much with where John Savage is. Having some past history with IRPs, I like the idea of a five-year action plan becoming what's the responsibility of the utility and then Energy Trust. How we do this adjustment every two years, we can work it out, but bottom line is the action plan is what utilities and Energy Trust should be shooting for and that's the right approach. And the more we can keep the language the same, the better.

Ken: This is one of those topics that benefit from a small group. It would benefit from real life experience, once you have something, run it through five years of each utility and see how it works in those circumstances and what questions that might raise. Or conceive of a different future, one that throws a curve ball or two and see how robustly it works.
Debbie: And do it by utility because that's what IRP and planning is for. By utility matters a great deal because it's part of their action plan.
Steve: If we do that, we would have to change the OPUC performance metrics because the OPUC looks at Energy Trust on a portfolio basis.
Margie: Our quarterly and annual reports do include by utility and portfolio.

Mark: I don't want to miss the reliance on regular updates to conservation resource assessments and using them as the basis for aggressive target setting in both IRPs and Energy Trust linked objectives. That is fundamental.
John S: And OPUC rules say utilities can come to us on a one-year basis for IRP updates; so if something goes wacky, something can be acknowledged.

Jason Eisdorfer: We all have different goals at this table. The OPUC wants to see total efficiency resource in IRPs so we can compare to other options in the IRP. Utilities are concerned they are held to a floating, less-than-certain standard they may or may not meet and Energy Trust is doing it for them. Energy Trust is going to do the best it can to meet those levels but needs space because of annual fluctuations in the market. 15 percent is essentially a policy decision that beyond 15 percent fluctuations, something is wrong with Energy Trust. In that sense, that performance benchmark for the OPUC is a signal for trouble and there needs to be recourse. That is not the same thing as holding utilities to IRP target. Plus, IRP targets are hard to get exact so there needs to be some fluctuation in that number. A utility won't get hammered if they come in below. The concept is to build flexibility around an always imperfect number and the benchmark is something very different.

Bob: Energy Trust is a contractor of the OPUC and when you hire a contractor, there's some range so you can re-examine the relationship if something isn't working. Question is what's the range you want to hold the contractor to?

John S: Let's say it's a 50 aMW target for electric; 85 percent says you must achieve 42.5 aMW which is your benchmark Energy Trust. This is already in your real house.
Alan: But we are still measuring against 50 aMW and we will report that we are not achieving the 50.
Mark: And when we are lower than 42, Juliet calls.
Ken: This indicates need for thought and precision to make sure there is clarity on what's Energy Trust's performance. We need to separate the idea of a target from the idea of a minimum performance measure. They are two separate things.
John S: And the current, physical process will probably not be any different.

Margie: We can put words around why we are doing this and what we hope to achieve. Carefully word the bullets we drafted together today, and come back with a recommendation that's more precise.

Mark: Critical are elements going into updating the annual targets and making sure we are all on the same page on what are the attributes, what are the forecasts, cost-effectiveness, any changes in marketplace, uptake of certain segments of market and what's going to go into resetting a target.
Steve: I envision this is done during the budget approval process which has goals associated with dollars.
Mark: Right, and be clear about that.
Rick: It may help in the new write-up to clarify how those items address confusion and need for clarification that led us to this discussion.
Margie: Yes, I will link them.

John R: Let's take a short break so we can continue with the reserve discussion.

There was a break from 10:47 a.m. to 11:00 a.m.

Margie: We are changing topics but they are still related. When building a balanced budget at Energy Trust, there is a cycle of funding negotiations that Steve Lacey is engaged in each year. Through this, tariffs are filed and rate adjustments set. Energy Trust sets those targets before we are aware of what the budget will be. We are using the best information we have starting in the summer and leading into fall tariff filings. Also, we don't know the carryover balance for that current year until the first few months of the next year. Whatever we don't spend in the given year carries forward to next year. We do factor in a forecast for the next year's goals and funding needs. But we don't have closed books until February of the next year, well out of sequence with the tariff schedule. We have accounting practices that say we can't end any year with a negative balance, we must have a positive cash balance. Part of why we have program reserves is to ensure we don't overspend and have a deficit. Cash flow and revenue variances also led to a board approved contingency reserve, called an interest reserve, which exists for emergency purposes. The interest reserve is for the organization as a whole and is different than program reserves. The purpose of today's discussion is how to get to the right amount of funding to support achievement of aggressive energy-efficiency goals while not being too far over or too far under. We have all these inputs but the inputs don't align sequentially.

Bob: The interest reserve is interest on all money?
Margie: It's unattributed interest for the whole.

Margie: When we are forecasting where we will end up for the year, part of the challenge is 50 to 60 percent of program activity happens in Quarter 4 and one-third of incentives, or one-half of the budget, is invested in December. It really comes down to what customers decide and when they will complete projects. And they make that decision and we do our best job to predict.

Tools for program managers are looking at historical activity, savings and incentive curves. They also look at probabilities of completion of very large projects, which have major impacts on our budget. And where are those projects in the pipeline. They work with Program Management Contractors and Program Delivery Contractors to get that feedback and forecast from October through December. They also use construction timelines to see how long it takes to complete a certain type of project. We

also have a lever with marketing and outreach tactics to increase or decrease demand to a small extent.

Again, there are two types of reserve accounts. Innate to both of them is uncertainty that ultimately affects Energy Trust's revenue, like market conditions, weather, utility load and unforeseen emergencies. We need some working capital on hand at all times for the organization as a whole. Energy Trust's recommendation is to preserve the program reserve and interest reserve but change the latter to a "contingency reserve."

Program reserves have been set at 5 percent. It's proven over time that we don't need that much. Energy Trust proposes reducing that level to an amount negotiated with each utility based on actual carryover amounts, what the estimated opportunity for consumer demand is and what the pipeline is. The reserve goes up or down depending on the utility. We predict a 1-2 percent range. The program reserve is there in principal if needed for an unexpected event and to avoid signaling to the market that funding is no longer available. The latter situation happened in 2005 where we really heated up demand in Production Efficiency and it took years for us to recover. One of the principles associated with our funding is to have stability, to manage markets, to serve consumer demands and to capture as much energy efficiency as we can.

The program reserve is the first place we would go to meet unanticipated consumer demand or utility revenue shortfall. We would notify the board if and when program reserves are used.

Margie clarified the program reserves are only for efficiency and are part of a negotiated, annual cycle.

Ken: When in the cycle would you know, with closure coming in February, do you see that in March or April?
Margie: The best we can do is to project. The last forecast is in October for year-end; tariffs have already taken effect when the books close. We do use it to inform next year's reserve percentage.

Debbie: If it looks like you'll have higher carryover, then less reserve gets built in; but if you are running close to target, you might build more into the reserve.
Margie: With the goal of getting as close as we can.

Debbie: Another concern is rates; we don't want them going up one year and down another.
Alan: Have you ever considered changing the fiscal year?
Margie: Yes, as we try to align ourselves more to the tariff cycle, you just move the timeline, you don't solve it.

Margie: Staff recommends maintaining the interest reserve and renaming it the "contingency reserve". Most of the interest accrued here is from dedicated funds for projects not yet built, and this is more on renewable energy projects. Energy Trust has no other source of funding to capture additional renewable energy opportunities. This becomes our primary stopping place for renewable energy projects. Staff suggest at a minimum to have $5 million in the fund, only for emergencies. Any amount above that, and we have $2.9 million at the end of this year forecasted, is for unanticipated projects where program reserve is inadequate. This would be an extreme situation as we try to get more exact on program reserve amounts.

Alan: Is there a maximum?
Margie: We could set a cap.

Dave: What's the monthly replenishment rate?
Sue: About $20,000 to $25,000 per quarter depending on the balance and interest rates.
Bill: Interest rates are somewhere near zero. This would be a point if that percent goes to 10 and then you could have gas dollars accruing to fund renewable energy projects. This brings potential for a cross subsidy.

Margie: I'm not in favor of nor have we attempted to attribute by funding source, the money in the interest reserve. We have many sources of funding and it's always a moving target.

Jim: If underfunding, Energy Trust would dip into reserves to make up, and that would then be replenished down the road. So there might be money pulled out of a reserve but it will keep being restored. Cascade Natural Gas tapped into that reserve last year and we are accountable to Energy Trust to replenish that amount by year end, and we're not being charged interest.

Margie showed a table of estimated carryover year end for 2013. Energy Trust is not far off from where it wants to be but there is no formal approach to this.

John S: Is carryover equal to program reserves?
Sue: For efficiency only.
John S: I would like to see estimates of total carryover.
Sue: It is $24.9 million but that doesn't include renewables.
Margie: The interest reserve is $7.6 million; the only thing missing is renewables, which total $15.7 million and all but $1 million is dedicated funds.
Mark: So we have funds that roll forward, commitments and unallocated.
Margie: This table varies by year by utility for efficiency program reserves.
Steve: We are talking about a portfolio here; in the case of CNG, 5 percent reserve on $2.5 million budget is pretty insignificant.

Alan: The simplest thing is to address interest reserve and it should be a range.

Margie described the history of interest reserve usage and showed a chart. History of using these dollars has been for a variety of purposes.

Ken: What are the criteria if it's repaid?
Margie: There is no mechanism for renewables.
Steve: And there are annual negotiations with utilities. If we were to draw down for efficiency, we could replenish.

Bob: I understand carryover for renewables. How do you budget for carryover on efficiency and how does that relate to reserve?
Steve: We target carryover to be 5 percent.
Bob: So there's not an additional carryover part of your budget?
Margie: No.

Margie described the history of program reserve usage and showed a chart of the history of using those dollars. From a board approved policy, staff can move money for the program sectors, but must go to board if moving one program's dollars to another program sector. If renewables, staff uses the interest reserve; if for efficiency, the program reserve is used and if inadequate, interest reserves.

Debbie: Do you want a max of 5 percent in any given year?
Steve: 5 percent in some places doesn't give you very much, like in Cascade Natural Gas or a large industrial project.

Mark: When does this happen?
Don: We look at it every year.

Margie: Any thoughts on maintaining the program reserves on a negotiated annual basis?
Alan: It's laudable, but we are so far over 5 percent just getting it closer is better.
Margie: Yes, and we don't want money sitting.

Margie: When we project how much savings we hope to acquire and add a price tag and monitor by cost-effectiveness, and then we come in at higher savings but lower costs, we exacerbate this. We roll this forward then incorporate into the next year funding negotiations. So we'll all be protected when we squeeze program reserve down.

Don: Have you looked generally at how accurate utility revenue forecasts are?
Sue: There are variations every year, 5-8 percent on an annual basis.
Margie: If all else failed and we needed additional money, we have a $4 million line of credit.

Margie: Any objections to negotiating annual program reserves, not having it fixed at 5 percent and reducing it?

Bob: No.
Debbie: Fine.
Ken: Fine.

Ken: I assume you'll notify the OPUC and the utilities in addition to the board if program reserves are used?
Margie: Yes.
Steve: They will probably be approached before we go to the board.

Margie: Are there any objections to the interest reserve, as unattributed interest, being called a contingency reserve? We could set a cap, and go to the board if we need to access it. We would come to the board again with an action. The largest consideration is the need for this will probably be end of year and what to do if there is no board meeting. So we need to revisit the mechanics of using these reserves so they are workable and serve the purposes intended.

Jim and Alan reiterated the need for a cap.
Rick: What would the cap be?
Debbie: I would look at it as some percent of overall budget.

John Carr: I agree with Debbie. Both reserves are working capital and in combination, should be some percent of revenue needs and you want a range. I'd look at both together.
Bob: How about Energy Trust comes back with a proposal for a cap?

Margie: I appreciate everyone's candor and participation. We will solicit members for a small group to help us formulate what we talked about earlier. We will work with staff to complete reserve guidelines for a future board meeting.

Adjourn

The roundtable adjourned at 11:38 a.m.

Alan Meyer, Secretary

Board Meeting Minutes—120th Meeting

May 22, 2013

Board members present: Rick Applegate, Ken Canon, Dan Enloe *(by phone)*, Mark Kendall, Jeff King, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Dave Slavensky

Board members absent: Anne Donnelly, Roger Hamilton, Julie Brandis, Lisa Schwartz (ODOE special advisor), John Savage (OPUC *ex officio*)

Staff attending: Margie Harris, Ana Morel, Hannah Hacker, Debbie Menashe, Amber Cole, Steve Lacey, Peter West, Sue Meyer Sample, Fred Gordon, Jessica Rose, Scott Swearingen, Jed Jorgensen, Thad Roth, Chris Dearth, Jackie Cameron, Julianne Thacher, Betsy Kauffman, Dave Moldal, Elaine Prause, Sue Fletcher, Spencer Moersfelder, Phil Degens, Adam Bartini, Pete Gibson, Denise Olsen, Shelly Carlton, Alison Ebbot, Michelle Spampinato, Rachael Brown, Oliver Kesting, Susan Jowaiszas, Dan Rubado

Others attending: Kendall Youngblood (PECI), Juliet Johnson (OPUC), Jim Abrahamson (Cascade Natural Gas), Evan White (member of public), Jim Scheppke (member of public), Jim Fitzpatrick (Fluid), Steve Johnson (Central Oregon Irrigation District), Matthew Braun (Howard S. Wright), Mark Perepelitza (SERA), Renee Lovelane (Gerding Edlen)

Business Meeting

President John Reynolds called the meeting to order at 12:16 p.m.

General Public Comments

John Reynolds called for general public comment. Jim Scheppke and Evan White, both Salem residents, brought forth comments.

Jim and Evan approached the board to raise a concern. First, Jim described recent upgrades to his home, which Energy Trust incentives helped support. He installed a solar electric system and insulation improvements after receiving recommendations from his Home Energy Review. He said his Portland General Electric bill was only $14.63 last month, and mentioned his appreciation for all the help he received from Energy Trust.

Jim described their concern with Energy Trust being a premium member of the Salem Area Chamber of Commerce and distributed a handout he had accessed from the chamber's website. He stated that it is their position that Energy Trust's membership is inappropriate. Jim highlighted the handout's Message from the CEO statement, which he said speaks to the organization's political activity, and noted several mentions of political action in the handout. Jim mentioned one of the chamber's primary activities is advocacy including a citizen candidate academy, and it is very active politically in the City of Salem.

Jim: The chamber is as active as Republicans and Democrats and I'm sure Energy Trust doesn't align with them. Because we pay the public purpose charge, we don't feel good that even in a very small way we are contributing to an organization we don't agree with. I happen to be active in opposing construction of a third primary bridge in Salem, which the Salem Area Chamber of Commerce is actively supporting. They are working against my organization and when I see that [public purpose charge] fee on my bill, as small as it is, I have to bring to your attention the fact that we think it's inappropriate for them to receive Energy Trust support.

Evan mentioned that several weeks ago his home was inspected by trade ally Abacus Home & Building Energy Audits who recommended weatherization improvements. Evan has lived in Salem since 1972 when he was hired as the first economist of the Oregon Public Utility Commission. Evan listed his career positions since 1972, which includes a long regulatory background, and mentioned he retired in 1998. He added that when he ran for a vacant, nonpartisan position on the Salem City Council, his was the only contested race.

Evan: Two months after filing candidacy, I received an email from the Chamber of Commerce's Great Jobs Political Action Committee. Unknown to me, the public relations consultant was hired by my opponent. Both the consultant and the opponent are members of the chamber's executive leadership council. The president of the chamber endorsed my opponent. He received 51 percent of the vote while I received 40 percent. He also outspent me six-to-one and had access to resources at the chamber. I'm glad I ran but it is evident now I didn't have much of a chance. While I'm sure the chamber has good aspects, it does dominate local politics and that is not good for the community.

John R: Staff took a preliminary look into Energy Trust's memberships with all chambers and other business organizations. We will get back to you with more detail. Energy Trust memberships for chambers of commerce are determined on a case-by-case basis. The size of the chamber and the benefits, such as advertising discounts, is what determines the membership level. Energy Trust does not engage in any chamber activities that are political. Because of our level of contribution to this chamber, we will evaluate our practice.

Mark: Is it your concern not that we participate with chambers of commerce but at that premium level, because it moves the relationship beyond business networking?

Jim: That is the case. There are times when it makes sense for Energy Trust to be part of chambers of commerce. Today, we are only talking about Salem, but the Salem chamber has chosen to be the most powerful political entity in our city, in local politics, and we run into them all the time. For that reason, when we look at our utility bill and see we paid money to Energy Trust and Energy Trust is a premium member, that doesn't seem right to us.

Debbie: Thank you for bringing these concerns forward. There are also other business organizations we are members of, not for political reasons, but to develop connections with businesses that might participate in our programs. It makes sense to me to make available the information of what groups we are members of and for what reasons, while keeping clear we are not directly lobbying.

Alan: A review of all our memberships we belong to is in order.

Ken: And it's not just business organizations.

John: We have determined prior to this that ratepayer dollars may be used for such memberships by our utility partners. I know that the Eugene Water and Electric Board, which is a publicly owned utility, was told by its attorney in 1973 that it could not be a member of the Eugene Chamber of Commerce, so there's some precedence.

Margie: Mr. Scheppke is Oregon's former state librarian and in that capacity came to us with a great idea to put energy monitors in state libraries. It is a successful program offering to this day. Thank you for your perspective today. It's not often we get public comment, and sharing your viewpoint is important to us. We have already begun reviewing our guidelines on memberships and the list of what organizations we are members of, why and what we get from those memberships. We will share this with the board and would gladly let you know when that is ready.

Jim and Evan thanked the board members for their time.

Consent Agenda

The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.

MOTION: Approve consent agenda

Consent agenda includes:
1) April 3 board meeting minutes
2) Amend Fuel-switching Policy—R669

RESOLUTION 669
AMENDING BOARD POLICY ON FUEL SWITCHING

WHEREAS:

1. **The Fuel Switching policy provides generally that Energy Trust will not promote fuel-switching, but may provide fuel-neutral technical information on efficiency options. Incentives are not intended to encourage fuel-switching, but are allowed so long as any decision to switch fuels to install high efficiency equipment is based on customer choice.**
2. **In UM 1565, decided in March 2013, the Oregon Public Utility Commission determined, among other things, that Energy Trust policy should be amended to make clear that Energy Trust incentives are not intended to promote fuel switching.**
3. **Current policy language should more clearly express that fuel-switching is a customer choice and incentives are not intended to promote it.**

It is therefore RESOLVED:

1. **The Energy Trust board policy on Fuel Switching is amended as shown in the attachment.**

Moved by: Debbie Kitchin Seconded by: Alan Meyer

Vote: In favor: 10 Abstained: 0

Opposed: 0

President's Report

John Reynolds presented on the Bullitt Foundation's new six-story, 52,000-square-foot office building in Seattle. John reminded the board that buildings, both residential and commercial, consume about 48 percent of total U.S. energy. Transportation is 27 percent and industry is 25 percent. A widely used measure for building consumption is energy use intensity (EUI) which is kilowatt hours per year divided by the square foot floor areas. EUI measures heating, lighting, cooling, equipment, pumps, fans and water heating. To meet that load from renewable energy, one can make the renewable contribution equal to kWh per year, and then wind up with net zero energy consumption on site. In these days, net zero energy is a very ambitious goal.

John showed charts of a typical building's energy consumption compared to one with energy conservation measures. With conservation incorporated only through design by architects and engineers, building energy consumption is reduced by 38 percent. When conservation is incorporated

through design as well as occupant behavior measures, consumption is reduced 70 percent. At the Bullitt Center, the Bullitt Foundation is trying to reach only 16 kBTU/square foot per year. Lights are still a major portion of consumption. John showed a graph comparing the decrease in building energy consumption, and a separate graph of the decrease in the size of a solar electric system, comparing an average building meeting Seattle energy code to a Leadership in Energy and Environmental Design (LEED) building to the Bullitt Center.

John R: Something to think about as the efficiency of photovoltaics continues to grow is accounting for theoretical limits. As improvements in technology allow energy conservation to be even more dramatic, we really are approaching the place where even a six-story building may be able to reach net zero energy.

John then showed a map of solar resources by geography, noting that Germany is similar to the climate of Coos Bay.

Margie: I had an opportunity to tour the Bullitt building as a member of the Northwest Energy Efficiency Alliance (NEEA) board. Denis Hayes, the executive director of the Bullitt Foundation, conducted the tour. Some of the ways to achieve low energy use involve people monitoring and controlling their own lights, windows are operable depending on needs for ventilation and many more features.

Ken: It will be interesting to see what we will learn as more of these buildings are built.

Margie: The board can tour some of these cutting-edge local buildings, including the Port of Portland and the Edith-Green Wendell Wyatt Federal Building.

Energy Programs

Central Oregon Irrigation District Juniper Ridge Phase II Hydroelectric Project

Dave Slavensky introduced the resolution and Jed Jorgensen presented. The project falls under the Other Renewables program, which addresses wind, hydropower and geothermal projects. Jed introduced Steve Johnson, district manager at Central Oregon Irrigation District (COID).

Jed explained Energy Trust's focus for hydropower project development is to look for projects like this one. The COID phase 1 and 2 projects use water already in a manmade conveyance. This makes permitting easier because such projects tend to bring environmental benefits as opposed to environmental challenges. COID phase 2 is similar to the twelve other hydropower projects Energy Trust has funded. Energy Trust has provided $3.3 million in incentives to help complete twelve projects that generate 7.4 MW of capacity. In general, hydropower has provided a low-cost renewable resource for ratepayers at about $1.56 million per aMW.

Jed provided brief technical background on hydro projects, which combine the quantity of water with gravity acting on the water, known as flow and head, respectively. Those two factors are equal when calculating generation. Environmental benefits, derived from piping, eliminate seepage and evaporation. Because there is more water, there is less need for water diversion and the water can be kept in-stream to benefit fish.

The COID phase 2 project came out of a custom renewable project Request for Proposals in Pacific Power territory. Energy Trust has limited funding for renewable energy projects, which is why the sector utilizes a competitive process to allocate a portion of the funding. In this case, the RFP was for $2.5 million in incentives. The program received five applications requesting $7.5 million for projects up to 10 megawatts in capacity. Three applications did not meet the RFP criteria, the fourth project is still in discussion between the program and the project owner, and the fifth project is the COID phase 2 project before the board today.

Providing background on the COID phase one project, Jed described when Steve Johnson applied in 2006 for phase one, it was communicated up-front that the full development of the site would be in two phases. The penstock installation is the part that is phased, representing the bulk of project costs. COID knew it could not afford to install all the penstock at once. Phase one project estimates were approximately $22 million; however, costs eventually wound up at $25 million. Phase one was permitted and built to be a 5-MW facility. Because not all the penstock was installed in phase one, the system only operates as a 3.5-MW project, with generation of 13,435 MWh annually. Phase one reached commercial operation in 2010, and has operated as expected, achieving 98% of expected generation, which is very good especially as irrigation water flows vary from year to year. Phase one restored 20 cubic feet of water per second (CFS) to the Deschutes River, approximately 35 percent of summer stream flows. At the same time this project happened, the Swalley Irrigation District completed their hydro project, which we also supported, restoring approximately 10 CFS to the Deschutes. Combined, summertime stream flows were restored by almost 50.

Jed displayed a map of the project area. The North Canal Diversion Dam serves Swalley Irrigation District, COID and North Unit Irrigation District. From there COID has a main canal that runs northeast, and the phase one project components can be seen, including the forebay, 2.5 miles of penstock (pipe) and the powerhouse. The powerhouse has a 5-MW Francis turbine by a manufacturer established in the 1800s. A trash rack was installed to prevent debris from going into the penstock and causing turbine damage. Jed said the forebay regulates water flow going into the penstock.

Moving from phase one to phase two, the powerhouse and penstock will stay the same and the forebay will change. During phase two, COID would add 4,100 feet of additional penstock and build a new forebay, all estimated to cost $6.5 million. The project would commence in fall 2013 once the irrigation season has ended, construction would take place over the winter, and if the timeline proceeds as expected, the system will be back online in spring 2014 before the irrigation season begins. Another benefit to phase two includes the addition of 43 feet of head due to the added penstock. This greater head will increase generation by 3,700 MWh and 7.8 cubic feet of water per second will be restored to both the Deschutes and Crooked rivers. Phase two is slightly more complicated in terms of water benefits; two cubic feet of water per second will be restored to the Deschutes River and the remainder to the North Unit Irrigation District, which will then be able to stop pumping water out of the Crooked River. North Unit Irrigation District will also benefit from decreased pumping costs.

Jed clarified the canal is open from the forebay south to the Diversion Dam.

Mark: Once piped, is that publicly accessible green space?
Steve J: The irrigation district was created under federal legislation at the turn of the previous century, and it is actually a federal right of way. Outside of the federal right of away is privately owned land.

We have arrangements with the Bend Parks & Recreation department and the City of Redmond saying we would not object to any trails they may acquire.

Jed showed a map of the existing forebay location and where the new forebay will be installed. He clarified the powerhouse, turbine and penstock will all remain at their current locations. Reusing the trash rack was not feasible.

The staff process for the project included multiple levels of internal review, including a multidisciplinary team from across programs and an external review. Staff presented the project to the Renewable Energy Advisory Council (RAC) and it was reviewed briefly at the board Policy Committee. An external consultant was hired to perform due diligence, including analysis of risks, costs, revenues and financing. COID already has the site control to do this work and the design for the project is in place, their power purchase agreement is in place with Pacific Power, the project is fully permitted with the state and federal government, and their interconnection is in place with Pacific Power at the right level. Jed said the project really has become a construction project, relative to other projects, and this project is in a good spot.

For costs, the majority is for the penstock. COID has secured $500,000 from the Pelton Fund and $1.5 million from the Bureau of Reclamation WaterSmart program. COID applied to the Oregon Watershed Enhancement Board for $500,000 and the remaining $4 million is equity. COID may apply for a competitive Pacific Power Blue Sky grant. If they receive any of those funds, Energy Trust will share in some of the benefit as 50 percent of any funds received would then reduce the Energy Trust incentive by 50 percent. Though there was an Oregon Business Energy Tax Credit for phase one, phase two does not have such a tax benefit. Jed explained that when the Business Energy Tax Credit program was modified in 2011, staff completed an analysis of potential future projects. The analysis showed Energy Trust would need to provide two to three times the incentive amount than otherwise would be needed. The federal production tax credit and investment tax credit cannot apply to this municipal project as those tax benefits are available only to private project owners.

Jed walked through the above-market cost summary. The project term would be at 20 years with an 8 percent discount rate. Because a municipal entity is owner, staff looked to be consistent with how rates were set in the past and considered a range of rates reasonable for municipal projects. The hurdle rate staff heard ranged from 6 to 10 percent. This is the rate a project owner needs to move the project through for approval by the public and officials. In this case, staff is picking the middle of the road for the discount rate given the risk COID took to split the project into two phases and costs involved going forward. Importantly, this sets a floor on COID's return. The rate is not a guarantee; COID needs to keep costs the same to realize it, and what staff saw with the first project is costs went up. They also need to operate the project in a way that gets them to 8 percent.

Jeff: On operations and maintenance costs, where is it coming from since you essentially have the same equipment as before but less ditch to maintain?
Jed: That's not operations and maintenance for the total hydro project; it's just for the additional pipe. Every year, there is maintenance and inspection of the pipe. This operations and maintenance cost is for 20 years of operational expenses on the new pipe.

Jeff: Is this more expensive than maintaining an open ditch?
Jed: Yes.

Jeff: I thought it would be less.
Steve J: Maintenance on a normal canal would be removal of silt. We don't have that here.

Ken: There isn't any vegetation control?
Steve J: No, the water is cool enough that vegetation growth is very low.
Jeff: Do you have liability insurance?
Steve J: We are indemnified through state statute and carry liability insurance through Special Districts of Oregon.

Dan: On the discount rate, I did some research. As far back as 2009, I found us using an 8 percent discount rate on similar projects. The interest environment has changed greatly since then. In my opinion I would range it lower. A 1 percent decrease in discount rate would have a big effect on our incentive payment. Also, what has the irrigation district done to mitigate the significant risk of the loss of the dam during the timeframe of the project?
Jed: I think that's the Mirror Pond Dam you are referring to. In the case of this project, it's the Diversion Dam north of the Mirror Pond Dam. There are already operating agreements in place with the districts utilizing the water from that dam and fish mitigation with the state.
Dan: Is your picture in the presentation different than what I'm seeing?
Steve J: There are a series of dams that round through Bend. Diversion Dam is the farthest north or downstream dam in Bend. The Mirror Pond Dam you may be referring to is two dams upstream. COID, Swalley Irrigation District and North Unit Irrigation District are all invested in Diversion Dam. Also, three years ago, CH2M Hill evaluated the structure of the dam.

Ken: Who owns the dam?
Steve J: It's owned by COID by court decree from 1921. The physical title is held by a private party. COID owns sufficient dimension to divert the necessary water.

Jeff: Is this Federal Energy Regulatory Commission licensed?
Steve J: No, there is no power generation at Diversion Dam.

Anne: Where in this piping do you pull water out for customers and do you measure that?
Steve J: Yes, in the phase 2 stretch, there are two turn-outs similar to phase 1. There's a structure or a welded side pipe that goes into a box where there's a measuring device. We dissipate the pressure and the water flows smoothly over the measuring device, so we know exactly how much water we take out.

Jed completed the financial analysis. Above-market costs for the project are $1,281,821. Staff proposes an incentive of 100 percent of the above-market costs, paid in one lump sum once operations resume, post-construction. Energy Trust would take 100 percent of the renewable energy certificates (RECs); with 74,000 RECs, it comes to $17 per REC and $3 million per aMW. As compared to other hydro projects, this second phase falls very closely with other stand-alone projects Energy Trust has funded. When all phases are viewed together, this becomes the cheapest project Energy Trust has funded, other than the first phase alone. Together, costs will total of $2.28 million, and it will be $1.16 million per aMW and $8 per REC.

Ken: Is this a fully allocated system?

Steve J: It's fully appropriated. Oregon is advantaged by the Conserved Water Statute. You can protect that water with the priority date of the certificate.

Debbie: We're paying 100 percent of above-market costs. Do you anticipate that will be the approach in the future? Will it be project by project? Is this the first one without a Business Energy Tax Credit?
Jed: The percent of above-market cost is determined as we talk with the project owner and learn what they need to move forward with their project. COID is looking for as much funding as possible to reduce equity involvement. We have funded non-Business Energy Tax Credit projects, like the Three Sisters Irrigation District. Most are more expensive. This project has an older power purchase agreement with higher avoided cost rates than currently available. The current climate for renewables is challenging with low power prices and no Business Energy Tax Credit.

Alan: Thank you for presenting and for the contextual background.

Rick: This is a great project that meets Energy Trust objectives and benefits fish and wildlife. I hope to see more.
Anne: I reiterate that. It's something for Energy Trust to think about as water conservation and water management is a big deal.

Steve J: Thank you Energy Trust board and staff. Without Energy Trust, phase one and now phase two would not have happened.

RESOLUTION 667

APPROVING FUNDS FOR THE CENTRAL OREGON IRRIGATION DISTRICT JUNIPER RIDGE PHASE II GENERATION PROJECT

WHEREAS:

1. **The Central Oregon Irrigation District proposes to add 4,100 feet of penstock to increase the generation at its Juniper Ridge hydropower facility by 3,700 MWh annually, a 27% increase in generation.**
2. **Staff and an independent contractor reviewed the project design and costs and found them to be standard and reasonable for what is proposed.**
3. **The project's costs are $1.281 million above market over a 20 year period on a present value basis.**
4. **Staff proposes an incentive of $1,281,820 to be paid as a lump sum upon the project re-commencing operations.**
5. **At the proposed payment, the energy from this phase of the project would cost Energy Trust about $3.01 million per average megawatt (aMW). The cost of energy from both phases combined would be $1.16 million/aMW. Calculated either way, the cost is well below the range of the 2013 Other Renewables budget goal of $7.5 to $14.1 million/aMW**.

It is therefore RESOLVED, that the board of directors of Energy Trust of Oregon, Inc. authorizes:

1. **Payment of up to $1,281,820 to be paid to Central Oregon Irrigation District to offset the above-market costs of phase II of the Juniper Ridge hydroelectric plant;**
2. **Energy Trust to take ownership of 74,000 RECs produced by Central Oregon Irrigation District; and**
3. **The executive director to enter into a contract(s) consistent with this resolution.**

Moved by: Alan Meyer Seconded by: Rick Applegate

Vote: In favor: 10 Abstained: 0

Opposed: 0

Ken posed a general policy question on how does Energy Trust determine that the incentive paid was actually needed. The need to reduce equity, like in the COID phase 2 project, is a situation that every project may face. Does Energy Trust know when a project owner would go forward without an incentive, and if so, how would the program evaluate and test it? Ken clarified his question as a general question, one not directly linked to the COID phase 2 project. Anne mentioned the support and research Energy Trust provides is as beneficial as the incentive dollars.

Peter: I'll bring us back to the process that Jed outlined, which is there to help answer this question. First, there's Jed's analysis, then the consultant reviews, internal staff reviews and the project is brought forward to the RAC and board Policy Committee for another round of review. We use these steps to help us ask those questions. It might be worthwhile to do a workshop for the board on above-market cost methodology, including what the consultant's role is, which partly is to evaluate usual and customary costs so we have a benchmark.

Ken: Over time, good customers become aware of questions that will be asked and appropriate responses. I am pondering the question more than anything.
Peter: We ask the question ourselves, especially because we have a constrained budget for renewable energy projects and we need to build a renewable energy market in Oregon. In this case it's about exhausting all small hydropower resource potential.
Ken: And our obligation to ratepayers and the OPUC.
Alan: I have had the same concerns as Ken. At this point, I trust staff to look at all costs and benefits. Here, 8 percent seems reasonable. Whether they would do it or not becomes a moot point; either way it is still a good deal for us at that price.
Peter: I'm aware of only two projects, a landfill project and a wood products project, that went forward after we did not provide an incentive. These are projects that didn't make it to the board for consideration.

Margie: Jed, related to your comment that the incentive must now be about two to three times greater for projects because of the absence of the Business Energy Tax Credit, is that related to hydropower projects only or all renewable energy projects?
Jed: All custom renewable energy projects.
Margie: This will be a topic at our second board retreat on July 31: where to direct limited dollars.

Dan: Margie was right on, the environment is changing and essentially the state has decided, through Business Energy Tax Credit changes and what Energy Trust's renewable energy budget is, that this is how we will have to do things going forward.
Margie: Also, staff and the OPUC worked hard to develop new renewable energy performance measures to recognize all parts of what we deliver to these markets.

Lockheed Martin Existing Multifamily Contract Extension
Mark Kendall introduced the item, which is to extend the contract for Existing Multifamily technical services delivered currently by Lockheed Martin. The contract allows for three optional extensions. This is a proposal for a contract extension to deliver services for 2014 and 2015. The purpose for the contract extension is largely because Lockheed Martin has been effective and efficient in delivering the Existing Multifamily program, has been meeting goals, conducting outreach, referring customers to other Energy Trust programs, and is innovative in bringing new measures and broadening the "net". An advantage is Lockheed Martin is established in the multifamily market now and there is value to that. There are transactional costs to shifting contractors that are not often realized until the contract is transitioned to another company. The proposal is to continue the contract at approximately $2.6 million per year, delivering 19 million kWh and 136,000 annual therms of efficiency savings. Peter introduced Scott Swearingen, manager of the Existing Multifamily contract since 2010.

Scott: In 2010, the Existing Multifamily program was brought from the residential side of the ledger to the commercial side, recognizing this as a business strategy and approach. In mid-2010, we issued a competitive Request for Proposals, RFP, and out of that process, Lockheed Martin Services was selected to deliver on a five-year contract. Two years of the contract were guaranteed, with optional one-year and two-year extensions. The extension before you today is to bring the contract to term; after which, we will need to rebid the contract in 2015.

Scott explained the services and incentives provided through Existing Multifamily, a facet of the Existing Buildings program. One of the main reasons to extend the contract, beyond effective and efficient performance by Lockheed Martin, is avoiding transactional costs and the burden on Energy Trust support departments associated with launching and reviewing an RFP, and the potential transition if a new contractor is selected. Such transactional costs would be especially acute this year as another major contract, New Buildings, is also under rebid with New Homes and Products planned for 2014.

In 2012, Existing Multifamily integrated services for assisted living facilities and retirement communities. In 2013, Existing Multifamily began serving two- to four-unit properties, campus living such as dorms and the "Greek system" on college and university campuses. Extending Lockheed Martin's contract allows staff to complete long-term initiatives, like the MPower Oregon on-bill repayment and financing pilot and Memory Care lighting initiatives. Staff wants to keep these moving without the distraction a contract rebid would introduce. Lockheed Martin is also analyzing what current custom studies should actually entail to determine if costs can be lowered and to provide flexible services to meet customer budget and schedule needs. This approach would be rolled out in early 2014. Scott mentioned Lockheed Martin has made exceptional progress with cross-program referrals. More importantly, Lockheed Martin exceeded its annual contract savings goals, achieving 108% of stretch goal in electric and 120% of stretch goal in gas, which is also an increase over 2011 goals of 16% in electric and 56% in gas. The 2013 project pipeline is good; at the end of quarter one, Existing Multifamily is forecasted to reach conservative goal. Yet with activity already seen in quarter

two, it is projected to hit stretch goals for all utilities. Lockheed Martin is aware that just achieving goals is not enough, that exceptional performance means innovation on key issues like avoided costs, changes in the compact fluorescent light bulb market and other equipment and baseline changes. Lockheed Martin has consistently met deliverable deadlines. For these reasons, staff recommends extending the contract to December 31, 2015.

Alan: I see a proposed budget for 2014 but nothing for 2015. How will the 2015 budget be established?
Scott: Our budget cycle is on a two-year basis. This fall, we will budget for 2014 with broad estimates for 2015. We expect 2015 to be roughly in line with 2014.
Peter: You'll see this in October with the first round of the budget. In Existing Multifamily, we're largely looking at pilots and growing emphasis on capital investment.

Dave: We recently changed Program Management Contractors in Existing Homes and Existing Buildings. What are the lengths of those first contracts, and will they end up at the same time as this one completing in 2015?
Peter: Those are five-year contracts, structured as three years with two-year renewals. There is a staggering.

Ken: What's the decision process on how you determine contract extensions?
Peter: Scott detailed the criteria we use, and they prove out year after year to be the right criteria. We went with two year extensions to create more flexibility in the contracts. Right now we are on the path to flexibility. Our industrial Production Efficiency program has a Program Delivery Contract Request for Qualifications (RFQ) in the market that has us contemplating a three-year initial contract. This structure has to do with the specialized talent necessary to deliver the Production Efficiency programs.

The board had no other questions and voiced no objections; therefore, the Executive Director was authorized to sign the Existing Multifamily contract extension for Lockheed Martin.

Committee Reports

Evaluation Committee (Debbie Kitchin)
The last Evaluation Committee meeting was May 3. Most of the agenda was spent on the Production Efficiency process evaluation, the first evaluation since management of the program was brought in-house. Part of the process evaluation included interviewing program delivery representatives. It also looked at marketing, program delivery contractors, allied technical assistance contractors and industrial technical service providers. In general, few areas were identified for improvement. Like most programs reacting to draft evaluations, once improvement areas were identified, the Production Efficiency program began to implement them.

John R: For 72 percent of projects cancelled, the evaluation provided reasons for cancellation. Do we know why the remaining 16 percent did not proceed?

Phil: Project cancellations were largely due to business reasons or the project not working out. The specific reasons appear in our project tracking system allowing us to categorize cancellations in the future.

Ken: I wasn't able to find the four reports referenced in the notes on page two.
Phil: Sometimes the title used for the web listing isn't the same as in the report.
Fred: On the web, these reports are categorized as Market Evaluation.
Margie: We'll send the links out to the board.

Debbie said the Evaluation Committee also covered Sustainable Energy Systems for wastewater treatment plants and discussed whether the pilot is worth continuing. After the evaluation, it was determined to keep the offering. This segment of customers is small but they use a lot of energy.

Another study reviewed was the New Homes air sealing pilot. The study showed air sealing had dramatic impact on air changes per hour in a home. The pilot targeted builders not currently participating in the more advanced program. Largely, they were building to code, and if they added this one measure, they achieved significant energy savings. Though a few small issues were identified, it was determined to continue offering the air sealing measure. Also, a benefit of the study was that some builders who learned the air sealing techniques to use were then able to participate in the more advanced portion of the program.

The last study reviewed at the committee meeting was the heat pump baseline market update. Debbie mentioned all evaluations and studies are good resources for program, staff and the board to review.

John R: We've gotten quite a bit of flak for not offering incentives for high-efficiency gas furnaces while offering an incentive for high-efficiency heat pumps. I think we should bump up the requirement to 9.5 from 9.0 HSPF (Heating Seasonal Performance Factor).
Phil: Seattle is an island amidst a large number of other utilities who do offer incentives for heat pumps. The contractor pool overlaps a lot of those service areas and typically contractors do not change their practices across borders.
Debbie: Part of it is the surrounding area used in the study.
Fred: To directly address your question John, we're thinking about it. I'm not sure how much weight this study has, and we are working on a controls pilot. We have a strategy session next week to see what to do. And if cost-effective, and it may be, we might go up a tier next year.

Mark: Also at the Evaluation Committee, Production Efficiency and New Buildings staff were recognized for receiving national American Council for an Energy-Efficient Economy awards.

Compensation Committee (Dan Enloe)
The most recent Compensation Committee meeting was in late April and included review of the quarter one performance of the 401(k) plan. Dan indicated the results of the plan are good, and two funds are on "watch" status. One fund being closely watched may be eliminated depending on quarter two results. The committee will also look at potential changes to the 401(k) plan based on results from the employee survey. This review will be taken up again fully at the next committee meeting and options discussed on how to improve employee participation.

Dan said he also participated in the Executive Director performance review, and there was excellent performance by the Executive Director last year. He indicated his appreciation for participating in that review.

Related to Resolution 668, Compensation Committee charter amendments, the committee at the last meeting took a deep dive into the charter document and analyzed all sections of it for broadness, narrowness, alignment with transparency and disclosure goals and motivating employees to participate with their retirement. The board packet contains the updated charter. Under compensation goals of attracting, retaining and motivating employees, the committee will also look at total compensation packages and turnover rates, listen to employees via surveys, encourage employees to participate in retirement planning and provide transparency on these goals for the public. Any comments or feedback on what we've put together?

Debbie: I think this is a good overall document; the goals piece especially.
John: This is the first major committee charter overhaul I can remember.

Dave: What is the current turnover rate?
Sue: I can get you this, it is very small.
Margie: What we know from review of exit interviews is people leave here because they top out and are looking to grow skills elsewhere. Energy Trust is fairly flat and small. Employees often go to organizations we work with, some to the Power Council, utilities, those we contract with and others.

Alan: When is the next executive session to review Executive Director compensation?
Margie: July 31, 2013.

RESOLUTION 668
AMENDING COMPENSATION COMMITTEE CHARTER

WHEREAS:

1. **The environment in which Energy Trust operates has changed considerably since the Compensation Committee's charter was first adopted in 2006.**

2. **Upon review of the prior charter, the Committee believes its work would be facilitated with the establishment of the following goals for both compensation and benefits, primarily including Energy Trust's retirement plans, for which the Committee has fiduciary responsibility.**

It is therefore RESOLVED:

The Board approves the following revised Compensation Committee Charter.

Moved by: Dan Enloe		*Did not need to be seconded because this is a committee-advanced resolution.*
Vote:	In favor: 10	Abstained: 0
	Opposed: 0	

Finance Committee (Dan Enloe)
Staff completed Form 990 for the year, the federal tax return due each year, which details governance and transparency. Moss Adams, Energy Trust's financial auditor, helped staff prepare the form and the Finance Committee reviewed it. The form is available to the public on www.guidestar.org. Dan called out the Epicor line item, which is shown as an investment loss.

Ken: How did Moss Adams work out for this part of their responsibility?

Dan: They worked through this with Sue Meyer Sample and we found it to be well and professionally filled out.
Sue: They did a complete and thorough job.

Dan: When is this due?
Sue: It was due May 15, and we filed an extension because it is best practice to have the board review it.
Dan: If the board agrees, I suggest next Wednesday be the deadline for board members to formally submit any comments.
Sue: If we receive any comments around then, we can then submit the form by the end of May, well before the extended deadline of August 15.

Dan continued the committee report. The committee reviewed the monthly financials. Revenue is tracking with the budget. Expenditures are very low and picking up. Staff is now working with new Program Management Contractors for Existing Homes and Existing Buildings. Partly related is incentive payments tracking low, which is both in energy efficiency and renewable energy. Energy-efficiency spending is picking up and incentives were increased slightly for commercial solar electric to nudge demand. One renewable energy project was moved to next year. In IT, spending is not as fast as expected for phase two of the Integrated Solutions Implementation Project as staff focused on implementing utility data sharing tools and processes. Dan said programs are focused on delivering services and incentives to pick up spending.

Dave: As of April, have you seen an increase in processing of incentives?
Sue: Yes.

Margie: I'd like to highlight the briefing paper on Savings Within Reach. The offering supported 94 projects in 2010 and grew to complete 643 projects in 2012. Savings Within Reach is our moderate-income offering, where we are paying for highly cost-effective measures resulting in positive cash flow for homeowners. Loans associated with the offering will qualify for the state-mandated Energy Efficiency and Sustainability Technology Act program, known as EEAST.
Sue: One change to call out is when we brought this to you before, Clean Energy Works Oregon was involved and they were going to provide half of the loan-loss reserve. They are unable to do this anymore and Energy Trust is providing for loan-loss reserve, which ranges from $60,000 to $90,000.
Ken: I thought Craft3 was supposed to pick up the loan loss?
Sue: They do when it's greater than $90,000. Originally, Clean Energy Works Oregon was positioned first, Energy Trust second and Craft3 third.
Steve L: We are currently negotiating with the utilities for on-bill repayment, not through EEAST but as a voluntary on-bill. The utilities need to file a tariff with the OPUC stating this. We are also revising the relationship with Craft3 to reflect that Clean Energy Works Oregon is no longer involved.

Dave: Why did Clean Energy Works Oregon back out?
Steve L: Largely due to the American Recovery and Reinvestment Act (ARRA) funds they were going to leverage, which have a sunset date and also the timeline for the Savings Within Reach loan product, which is moving slowly.

Mark: How will costs be covered?
Steve L: It will be a transfer of funds from the consumer through utilities to Craft3.

Policy Committee

John R said much of what the most recent Policy Committee meeting covered has already been discussed at today's board meeting, including the COID phase two project and the Lockheed Martin contract extension. Plus, the committee decided not to make any changes to the public interest policy at its three-year review. The last item to report-out is the financing briefing paper.

Steve L: The briefing paper is our effort to consolidate various financing efforts and initiatives Energy Trust is involved with and identify potential future involvement. We have seen passage of EEAST legislation, the establishment of an on-bill repayment process and other states such as California and New York are following suit. Our relationship with Umpqua Bank went from co-developing a GreenStreet lending initiative to the bank now having expanded the loan product absent Energy Trust involvement. Umpqua Bank is now aligned with Energy Trust as a lending ally. It's time to frame a concerted approach for the organization and set a path for proceeding. Elaine Prause has led this effort.

Elaine: We started off with what lessons we learned so far after five years working in the financing realm. We've been across market segments and across organizations. First, we do not want to become a bank. We see financing as a tool that works for some customers. We do not see financing as a way to increase total savings. We're not talking about expanding savings potential but reaching that potential sooner than otherwise without financing. And we see opportunities that remain, and want to stay engaged.

The financing briefing paper starts with objectives. Where does financing make sense for us? First, projects that would not otherwise have happened without financing. Second, projects where some participants could go deeper; the caveat being the savings still need to be cost-effective and we're still working that out. And third is when financing enhances the customer experience.

Elaine continued her review of the financing briefing paper. The paper examined future Energy Trust financing options. In the end, this is about providing customer access to program opportunities. In three years, there might be a variety of ways for participants to get financing, and in five years, the options may narrow. The paper walks through the objectives and vision.

Staff thought through tools, individual tactics and markets. One tool is on-bill repayment. The strengths are the low default rates making this attractive to other lenders as a low-risk way to get into energy efficiency and small-scale renewable energy financing. It is also easy for participants to use, and is a nice framework for getting money to participants in a seamless way. The downside is a lack of experience and the short duration of time this has been available. There is limited experience in these types of projects, and mainly just one lender involved so far. Staff sees opportunity in helping the market increase volume.

Another tool is third-party off-bill financing, which has always been available. Staff sees opportunity in creating a lending ally network, which really started with Umpqua Bank and the joint GreenStreet Lending product between them and Energy Trust dating back to 2008. The downside is third-party financing is limited right now and it's tougher to provide for traditional lenders. A third tool is custom, bringing all of the other ideas back into one category. One example is Multnomah County. The county

is putting together a Property Assessed Clean Energy, PACE, financing program where the loan is paid back on property taxes. This would be the first offering of such a product in Oregon.

Mark: How is that treated with federal income taxes?
Elaine: I'm not sure.
Debbie: Property taxes are deductible but I'm not sure about payments on it.
Elaine: It is working in some other parts of the nation but volume is low, maybe 160 projects total.
Debbie: At a conference, someone asked what does the mortgage lender think about PACE.
Steve L: An opinion by Fannie Mae a few years ago put PACE options on hold for a couple of years. But they came back and reissued their opinion and efforts are starting to pick up.

Elaine: Custom also includes when others come to us with innovative ideas. We need to set rules of engagement in this area to reduce the amount of staff time devoted to assessing these ideas. We found opportunity in listing guidelines for moving forward. Examples include Energy Trust not being the primary lender or designer, the need to reduce market confusion, and the opportunity to expand participation yet not compete with other ways to participate.

Elaine said staff developed an action plan and directed the board to page 10 of the briefing paper. The action plan identifies Energy Trust continuing to provide support to prove out on-bill repayment, grow the lender ally network while minimizing customization, remaining open to collaborative inquiries while first completing a market analysis of commercial prospects so staff is informed prior to those approaching Energy Trust.

Elaine: The paper is brought here for your information and feedback on reasonableness.

Dave: What is the length of off-bill loans?
Elaine: It varies; some are secured or unsecured products, residential at about 15 to 20 years, and commercial at about seven to eight years.

Debbie: On the commercial side, there are people who do equipment financing on shorter timeframes. They may not be focused on efficiency though. Would you look to partner?
Steve L: We are trying to build the lender ally network, especially in rural areas. One piece of this is to get our name out in those regions by a well-known business. We are also looking into lender allies to see if the incentive can buy down the incentive rate.
Elaine: It's also about training lenders to be familiar with our projects and training contractors to be aware of lending options available.
Margie: Nothing in these options prohibits us from pairing the efficiency side with the remodeling side. And there is a version of this through Clean Energy Works Oregon.

Dave: When do you start considering when a segment is not being successful in paying back loans? Is that part of our role?
Steve L: That's a good question. We're not proposing to be the bank but in certain instances, like Savings Within Reach, we are putting money in.

Mark: That's one thing I'd like to see in the paper. What exactly is Energy Trust's role? What are the bounds with regards to our tolerance for cost, investment and rate of return?

Elaine: We propose to take small steps, to continue what we are doing today, and the Savings Within Reach on-bill option will be a great test as to our tolerance on loan-loss. We also want to increase volume in on-bill.
Margie: This is an early, conceptual paper. You are raising good questions on implementation, on what the costs and benefits are and what are the risks. This paper is more directional in nature.
Steve L: If I understand, your question is about planning, assessing costs and benefits. That's why we have Elaine in a leading role because it is viewed as a planning function.

Rick talked about the Board Strategic Planning Workshop. It's now one day, June 7. An additional half day has been added on July 31 in the morning prior to the next regular board meeting to talk about renewable energy. For June 7, Steve Nadel from the American Council for an Energy-Efficient Economy (ACEEE) will open the day. The focus of the day is energy efficiency and a briefing paper will be available from staff in the next few days. Also on the agenda is large customer electric efficiency and discussing what happens as demand starts to outrun funding for those customers. The agenda then moves to emerging technologies and Jeff Harris from the Northwest Energy Efficiency Alliance will speak. The board will also discuss implications the low cost of natural gas is having on cost-effectiveness. The agenda allows for informal board interaction. Toward the end of the day, there is opportunity for board reflection on Energy Trust's role and for also discussing Energy Trust's next five-year strategic plan.

The board took a break at 2:54 p.m. and resumed at 3:12 p.m.

Dan Enloe left the meeting at 3:12 p.m.

Staff Report

Executive Director Staff Report to the Board

Margie began her presentation with a recently completed project by Elkay Wood Products in Independence, Oregon. Elkay was able to improve its process for wood cabinet finishing that led to reduced energy consumption as well as an improved product quality—a win-win for the customer. The customer will save more than 340,000 kWh annually and will see a payback in less than one year.

Margie reviewed Energy Trust's total annual results since 2002, including 478 average megawatts generated and saved and 28.2 million annual therms saved. Energy Trust has served more than 500,000 sites and has helped participants save over $1.3 billion on their energy bills. Overall, benefits to ratepayers total $1.58 billion from deferred utility investments. An independent study from ECONorthwest shows Energy Trust activities adding $2.7 billion to Oregon's economy, including $793 million in wages, $175 million in small business income and 2,200 jobs lasting a decade. ECONorthwest analyzed this impact in 2012 as an independent third party, and staff based this year's impact results from that 2012 survey.

The Trade Ally Network has continued to grow and more importantly, includes greater diversity. The network has grown from zero in 2002 to more than 2,700 as of the end of 2012. The network includes contractors, engineers, architects, realtors and more. Many are small businesses with 10 or fewer workers. Energy Trust continues to diversify businesses with which it works and has attracted 145 minority, women and emerging small business certified trade allies. Also, four lender allies are currently signed up with Energy Trust. Though not a specific piece of Energy Trust's mission, carbon

reductions resulting from energy reduction total 8.4 million tons, equal to removing 1.5 million cars from the road for a year.

Dave: We could add water savings to the suite of results, too.

Margie described Energy Trust's first quarter results. There is a lag time in expenditures and savings for the quarter, part of it due to transitions to new Program Management Contractors (PMCs) learning Energy Trust system and processes, such as data entry and completed project verification. Energy Trust upheld internal auditing standards until the PMCs came up-to-speed. Programs will make up for the lag and get back on track. Margie pointed out staff did not compromise how the work gets done, and worked with the PMCs to address the issue. New procedures are now in place. Another reason spending is down is because of the economy and the hardships facing renewable energy projects. With low power costs and a lack of the Business Energy Tax Credit (BETC), the commercial solar market was especially hard hit. The Solar program adjusted incentive levels and project caps for commercial solar to stimulate activity.

Ken: You said it's hard to make a case because avoided costs are so low, but as a business or consumer I look at my rate on the bill and that hasn't changed.
Margie: You still have who's going to invest in and develop those projects, what are those costs, what's the return on those costs plus what we are off-setting—all these other variables apply to making a project viable and attracting investors and developers. When BETC has been there for so long and then drops away, there is a lag time with people adjusting to the new normal.

Margie continued her report. There was significant activity in other program offerings and she pointed the board to the comprehensive highlights in the Quarter 1 report. She called out a few highlights for the board. Staff is working with the Oregon Department of Energy on Cool Schools and attracting more schools to participate. To date, 35 schools and 11 districts are being engaged and audits will be complete in 2014. With the multifamily MPower pilot, the first phase of the pilot will focus on streamlining the energy audit process and developing a pipeline of projects where building energy bills are paid by property owners. For New Buildings, packaged incentives identified by market segment are making it easier to participate. The program also had 115 projects enroll in Quarter 1, a very positive pipeline. The market indicators in the board packet are showing permits for new housing and building spiking after a very long hiatus. For Production Efficiency, the program is tracking well against historical savings for all utilities, and is also cracking the high-tech sector. Industrial Strategic Energy Management has its highest enrollment to date and the third, largest cohort for Refrigerator Operator Coaching kicked off.

In residential, Existing Homes will catch up in Quarter 2 by entering 400 Clean Energy Works Oregon projects into Energy Trust systems. The first net zero EPS, an energy performance score developed by Energy Trust, was provided for an existing home in January to a residence served by PGE and NW Natural. Also, the New Homes program provided 270 new homes with EPS ratings; the program is on track to reach its 1,100 home goal. New Homes also completed 14 solar-ready incentives in the quarter. Existing Homes developed a Custom Home Energy Report, where the program is benefitting from utilizing actual energy savings from measures and an ability to characterize this to customers in their homes. The Massachusetts Institute of Technology pilot is looking at what type of follow-up is effective with customers after they receive Home Energy Reviews. These are behavioral insights staff is working on with MIT. Preliminary results will be available in the fall.

For renewables, poor market conditions are impacting many projects. The residential solar market remains very positive and as mentioned, the program is working on stimulating a stagnant commercial solar market. Hopefully the increase in incentive rates will result in a project uptick. The Biopower program saw the Farm Power biogas project in Tillamook County come online. The renewable energy sector launched and closed two RFPs, one each in PGE and Pacific Power territories.

Customer service highlights include gradual shifts in the number of people calling into the contact center as more people rely on the website or are directly calling program hot lines. In response, Energy Trust is decreasing the number of customer service representatives at call centers. Rachael Brown, customer and trade ally experience manager, has trained all 40 new PMC representatives on customer experience. There was an increase in complaints in Quarter 1 to six complaints, which is largely due to the PMC transition. The Planning group is going through an internal review of the PMC transition to determine ways we may change the process in the future. Overall, customer surveys show high satisfaction, and there is a new OPUC performance measure category added on customer satisfaction with program representatives.

Dave: Did many of the PMC employees move to the new contractors?
Margie: Some, I don't know exactly how many. Energy Trust stays out of that process.

Final noteworthy Quarter 1 activity includes launching a mobile version of the website, which was spearheaded by Sloan Schang. Staff has also been working very closely on utility data sharing, which required customer notification and that customers be offered a "do not contact" option for direct Energy Trust marketing. As of the end of the first quarter, approximately 1/100th of a percent of total customers had elected not to be contacted by Energy Trust for marketing purposes. The actual transfer of data started May 1.

Two programs received ACEEE awards. Production Efficiency was one of three in the country and New Buildings one of two in the county. Both received Exemplary Program awards. Programs continue to emphasize reaching all areas of the service territory. Susan Badger-Jones and Peter West recently completed two meetings in Ontario and Pendleton with regional representatives from Pacific Power and Cascade Natural Gas. A third meeting also completed in Bend in April.

Margie concluded with describing a recent commercial customer outreach event at the Oregon Museum of Science and Industry. Energy Trust worked with OMSI to audit its 20-year-old HVAC system. From the audit, OMSI installed three chillers, improved controls on the energy management system and installed LED exhibit lighting. Savings will reach 12 million kWh annually and OMSI is already seeing better lighting, temperature control and reduced maintenance.

Mark: Interestingly, when OMSI was built it was built above code for that time. This goes to show that opportunities always abound.

Feature Presentation: Vestas North American Headquarters Building

Renee Loveland, sustainability manager with Gerding Edlen, presented on the Vestas North American Headquarters Building. The project was very energy efficient and noteworthy for Gerding Edlen as a firm. Along with Vestas, Gerding Edlen is the only other tenant in the building. Gerding Edlen does a lot of work with local investors, completing projects on a one-by-one basis and also has a green investment fund that allows the firm to do work in other parts of the country, especially modern high rise and urban infill development. There are about 135 staff members in Portland. The company was founded in 1996.

Renee showed photos of the existing building, located at 13th and Everett, prior to renovation. Gerding Edlen has a strong presence in the area with the Brewery Blocks, Deschutes Brewery and Casey Condominiums. The building was acquired in 2006 and the original plan was to move in with a few other real estate firms. However, with the recession, Gerding Edlen was not able to proceed as planned. The design has a lot of similarities with the Weiden+Kennedy building. It's 180,000 square feet, the ground floor is occupied by Vestas and Gerding Edlen, floors three through five are Vestas and the second floor is a parking garage. Renee detailed the project financials, total renovation cost of $66 million, and said the historic tax credits were very valuable. The building is the full block and listed on the National Historic Registry.

The project used two general contractors and two design firms. As a whole, it is Leadership in Energy and Environmental Design Platinum certified. Renee talked about the challenges and opportunities in terms of the historic components, including the need to position the solar array nearly flat, a less than optimal siting, to stay within visibility requirements.

Renee described the building's efficiency features, which brought a 68 percent reduction in energy use. The building has an energy monitoring system in place, which tracks by load type. Gerding Edlen will compare actual energy consumption to the modeled consumption after one full year. Energy savings will be more than $200,000 a year and Gerding Edlen will verify the savings. Features include an interior atrium, lighting controls, occupancy sensors, high-efficiency envelope, energy recovery on the ventilation air system, 125-kW solar electric system, low-flow water fixtures and a rainwater harvesting system.

Renee walked through the incentives received and the project economics. She showed how the premium is not as much if you are integrating elements purposefully and plan ahead of time. The payback will be 7.5 years.

Margie: Is there anything you would do differently and any feedback for us on our role beyond the incentives?
Renee: I wasn't on point in terms of interacting with Energy Trust. As always, your program is great, and I tout it to everyone I talk to. I work with utility programs nationwide and Energy Trust is the best, hands down.

Mark: What strategic market intelligence can you share with us about the opportunity that your firm sees in urban infill retrofit?
Renee: We are strategic in the markets we look at because we look for markets where there is job growth. Gerding Edlen is very focused on place-making. One of the great lessons learned is extending our knowledge in public-private partnerships.

Feature Presentation: The Edith Green Wendell Wyatt Federal Building

Mark Perepelitza, sustainability resources manager of SERA, and Matthew Braun, project manager of Howard S. Wright, presented on the Edith Green Wendell Wyatt Federal Building. Matt initiated the discussion. The building is Portland's newest, most energy efficient high rise. The 18-story building is 512,400 square feet. It is complete and will be dedicated on May 30. The public is invited and there are tours, including self-guided tours. This building was originally built in 1974. It needed work to upgrade to Government Services Administration standards. This was an integrated project delivery.

In 2008, the Energy Independence and Security Act mandated energy improvement projects in government buildings. Through ARRA, this project was identified as shovel-ready and received funding. Extensive requirements were needed to bring the building to 2013 standard safety requirements. The project was on a tight schedule and included a tremendous amount of work. SERA and Howard S Wright were brought in to partner with GSA. The owner is GSA, the architecture and engineering team was led by SERA Architects, and the construction team was led by Howard S Wright. Matt walked through updates to building systems, including seismic upgrades, new mechanical system, new telecommunications, new fire and smoke control system and a new plumbing system with low-flow water features. The work environment includes an optically advanced electric lighting system, optimized daylighting, improved indoor air quality and accessibility. LEED Gold was required and the building is applying for LEED Platinum. It also achieved a 97 on ENERGY STAR. Matt walked through SERA's decision flow chart for energy conservation measures. The existing Energy Use Intensity (EUI) was 77-83, and the national average is 94. The renovation targeted an EUI of 34-36. Matt showed a summary of the energy conservation measures, the main measure being radiant heating and cooling.

Mark: The performance of the building is very integrated with the envelope and mechanical systems.

Matt detailed the envelope study, including the effect surrounding buildings have on heat gain and the solar array siting. Matt described that the more glass area, the better daylighting but also increased solar heat gain and heat loss. Ultimately, this led to specific windows and a window shading strategy.

Matt: Radiant technologies are being used more in Oregon.

Ken Canon left the meeting at 4:13 p.m.

Matt clarified that without a traditional VAV (variable air volume) heating and cooling system, specific features were needed to provide good indoor air quality.

Matt described the high-performance lighting design, plus the process of going through design and application. For the east façade, they started with science on the daylighting to shading needs and from there designed a façade with innovative reed technology.

Mark described the five array, solar electric system. With Portland's grid, there is an issue where energy generated by the system can't be fed back into the "area network" grid system.

Anne Root left at 4:21 p.m.

Mark ended with post-occupancy studies and documentation in three categories, resource use and generation, occupant satisfaction and interior environmental quality measurements.

Matt: It's worth noting that government funds didn't go to post-occupancy costs. The Energy Trust incentives will be reinvested in this, therefore, directly supporting ongoing green, energy sector jobs in Portland.

Dave: What's the exterior window maintenance like?
Matt: We've cleaned the windows twice already and it can be done in a standard manner. There are also catwalks that are used for maintaining the reeds on the east side.

Legislative Update
In the interest of time, the update will be emailed to the board.

Adjourn

The meeting adjourned at 4:28 p.m.

***Next meetings*:**
The next meeting of the Energy Trust Board of Directors will be the Annual Strategic Planning Workshop held Friday, June 7, 2013, 8:00 a.m. to 5:00 p.m. at Reed College in Vollum Lounge, 3203 SE Woodstock Blvd, Portland, Oregon.

The Strategic Planning Workshop will continue on the morning of Wednesday, July 31, 2013, at 8:00 a.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

The next regular meeting of the Energy Trust Board of Directors will then be held Wednesday, July 31, 2013, at 12:45 p.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

_____
Alan Meyer, Secretary

Briefing Paper

Strategic Utility Roundtable Discussion
Energy Trust Goals, Funding and Relationship to Utility Integrated Resource Plans

July 31, 2013

Summary

At the May 22nd Energy Trust board strategic utility roundtable, attendees discussed new options to link utility Integrated Resource Plan (IRP) targets and corresponding Energy Trust savings goals, related OPUC performance measures for Energy Trust and Energy Trust reserve accounts. These topics were discussed at length by Roundtable participants and resulted in a better understanding of their complexity. General consensus was reached in a number of areas, summarized under the background section below. It was agreed that a representative small group of roundtable participants would convene to address the following two outstanding issues:

1. How best to assess Energy Trust annual performance given agreement to link accomplishments to multi-year utility IRP action plans and,
2. Further discuss Energy Trust reserve accounts, including the appropriate level of an interest (contingency) reserve for the organization as a whole and the concept of negotiated program reserves for each individual utility.

The small group was tasked with developing recommendations for consideration at the July 31, 2013 Energy Trust board meeting. This memorandum provides background and recommendations for consideration. The upcoming discussion may result in further discussion and/or lead to OPUC follow-up discussions with interested parties. The board of directors may also take future action, particularly related to reserve accounts and to goal setting.

Background

At the May 22nd strategic utility roundtable meeting, staff presented options for consideration to address three fundamental questions:

1. How should Energy Trust describe its annual electric and gas efficiency goals and their relationship to long-term utility Integrated Resource Plan energy efficiency targets?
2. How should the OPUC measure Energy Trust acquisition of efficiency savings to meet utility IRP targets?
3. What is the appropriate level of Energy Trust funding and reserves?

There was general consensus on these points during the Roundtable meeting:

- Preserve the existing utility process used to develop utility Integrated Resource Plans for consideration and acknowledgement by the OPUC
- Use the most current adjusted utility IRP targets available through regular updates specific to each utility to establish a single Energy Trust annual energy efficiency goal for each utility
- The Energy Trust energy efficiency goal will be equal to the energy efficiency resources selected in the IRP (“IRP target”) for each utility
- Utilities will file tariffs for OPUC consideration to collect funding necessary for Energy Trust to acquire the annual IRP energy efficiency targets.

- The OPUC will hold Energy Trust accountable for acquiring a minimum of 85% of the individual utility's annual IRP target
- Parties understand and expect that Energy Trust results will vary, and may exceed annual goals in some years and may fall short of annual goals in other years.
- Energy Trust will link its results to multi-year utility IRP action plans with the expectation that achievements will be reasonably close to the utility multi-year action plan targets.
- Energy Trust will summarize individual and combined utility goal achievements within the annual report to the OPUC
    - Energy Trust will annotate those factors that contributed to goal achievement
    - In the event that goals are not met in a given year or over a multi-year period, Energy Trust will identify reasons why and actions taken to remedy the situation
    - OPUC will review Energy Trust trend performance and circumstances leading to multi-year results

The discussion of the two existing Energy Trust reserve accounts—interest and program—resulted in acknowledgement that more than sufficient funding was being set aside under current practices. Parties agreed that reserves were necessary and could be reduced. This topic was referred to the smaller working group for further analysis and development of recommendations.

Small Working Group Outcomes and Recommendations

A small working group consisting of OPUC staff, representatives of all the four funding utilities and Energy Trust staff met on June 12th to further discuss 1) the relationship between energy efficiency savings targets identified in utility IRPs, Energy Trust goals, and OPUC performance measures and 2) provide further clarification on reserve accounts. Working group participants included: Jason Eisdorfer and Juliet Johnson, OPUC; Don Jones, Jr., Pacific Power; Brian Kuehne, PGE; Jim Abrahamson, Cascade Natural Gas; Bill Edmonds, NW Natural; Steve Lacey and Margie Harris, Energy Trust. Agreement was reached, resulting in the following recommendations:

1. *IRP EE targets, ETO goals, and OPUC performance measure recommendations:*

a. EE targets within Integrated Resource Plans will continue to be developed in accordance with the existing established process used by utilities and the OPUC adopted IRP guidelines (Order No. 07-047). This work is not intended to modify existing utility IRP requirements.
b. During the regular cycle to update utility IRPs, Energy Trust will utilize the most current analysis of conservation resources and deployment schedules to provide individual utilities the full range of energy efficiency resources projected to be achievable by cost over the planning period. Individual utility IRPs will select or account for economic energy efficiency resources to establish annual IRP targets based on established cost-effectiveness criteria. This single number will be the basis for setting the annual energy savings goal to be achieved by Energy Trust on behalf of each utility.
c. The current terminology describing a range from "conservative" to "stretch" savings goals will no longer be used.
d. Utilities will file tariff adjustments as necessary with the OPUC to fund Energy Trust to achieve annual IRP targeted ETO energy efficiency goals.
e. As mentioned above, Energy Trust's OPUC annual minimum performance measure will be based on savings acquired being no less than 85% of the individual utility's annual Energy Trust goal. In addition, Energy Trust staff has suggested to the OPUC that the performance

measure for the levelized cost to the utility system could be set at 15% above the IRP EE annual cost target. This proposal aligns both performance measures with the same 15% bandwidth. These performance measures will be measured both for each specific utility and portfolio-wide.

f. The working group explored options for a specific quantifiable performance measure to address energy savings achievement over the duration of utility multi-year action plans and was not able to identify one that could be easily and transparently administered. This is due primarily to the fact that regular IRP updates can change the IRP targets and reset the multi-year IRP action plans, thereby regularly changing the baseline for multi-year comparison and measurement. However, the group agreed and recommends that in the event Energy Trust delivers energy efficiency savings below the minimum 85% or 115% above the maximum levelized cost performance measure established by the OPUC in any given year, an explanation must be provided. OPUC staff and Commissioners would determine the course of action that could include an investigation of the circumstances for the underperformance and would determine if a notice of concern should be issued. The OPUC will also consider establishing further guidance though a public process.

2. Energy Trust reserve account recommendations:

a. Maintain an organization contingency reserve, currently named the interest reserve. This reserve will be renamed "contingency reserve." The current reserve balance is approximately $7.5 million. Staff recommends a not-to-exceed cap of $8 million for the total contingency reserve. Funds in this account will continue to be unattributed to any specific utility.
    - Energy Trust staff proposes dedicating $5 million of the contingency reserve account to maintain or restore operations during or after an emergency such as a fire or earthquake. The board authorizes staff to use such funds for emergency purposes only and to inform the board of such actions.
    - If approved by board action, staff may tap the remaining balance, currently at $2.5 million, to address other organizational needs such as:
        - Revenue shortfalls derived from weather or other conditions. Repayment may be specified and required.
        - Renewable energy projects for which other funds are insufficient or unavailable. Repayment may be specified and required.
        - Support for energy efficiency projects in the event that utility specific program reserves are otherwise insufficient or unavailable. Repayment may be specified and required.
    - Staff also recommends a review of the contingency reserve at an annual or biennial roundtable meeting to assess the adequacy of the fund balance. This is suggested to occur in late spring, after fourth quarter results identifying revenue and carryover amounts are available and before the annual funding cycle begins in July.

b. Individual utility energy efficiency program reserves will be established as part of the annual funding cycle negotiations initiated each summer between Energy Trust and utilities. Consideration will be given to the amount of reserves needed based on such factors as:
    - Projected carryover funds expected to be available in the subsequent year
    - Changes in market conditions impacting savings acquisition
    - Future energy savings opportunities not anticipated in the current IRP cycle

c. The amount of energy efficiency program reserves will be tailored to each utility depending upon their individual needs and circumstances. The current practice of creating a 5% utility energy efficiency program reserve has at times resulted in over-collection of revenues and will be discontinued.

Next Steps

Energy Trust understands that individual utilities are in different phases of their IRP action plan updates and filing processes and that the adoption of this new convention may alter the energy efficiency resource identified in such filings and corresponding working papers. During this transition period at utility or OPUC request, Energy Trust will provide utilities revised efficiency IRP figures to accommodate this new nomenclature convention for the 2014 Energy Trust budget and savings goals and years looking forward.

This document will be distributed to the roundtable parties in advance of the Energy Trust board meeting on July 31, 2013. At 1:15 on July 31st, Energy Trust staff will present background and recommendations for board and stakeholder discussion at this meeting. Any outcomes of the meeting requiring board action will be addressed at the September 25, 2013 Energy Trust board meeting.

Authorizing Custom Track Program Delivery Contractors for the Production Efficiency Program

July 31, 2013

Summary

Approve the basic terms of four multi-year agreements to provide Custom Track program delivery services for Energy Trust's Production Efficiency program, and authorize the executive director to execute and amend the contracts to conform to annual board-approved budgets and corresponding action plans.

Background

- Energy Trust's Production Efficiency program is designed and managed in-house. Staff utilizes multiple program delivery contractors (PDCs) to perform outreach and delivery functions for the Custom Track of the program.
- Custom Track PDCs play a critical role in connecting the Production Efficiency Program to customers through: technical advice, program liaison, and customer engagement and outreach.
- Energy Trust's four current program delivery contracts with Custom Track PDCs will expire December 31, 2013.
- In April 2013, Energy Trust staff issued a request for qualifications for Custom Track PDCs. The selection process is further explained in Appendix 1.
- Energy Trust received 13 notices of intent to respond; 12 responses were submitted.
- A review team comprised of Energy Trust staff and an external reviewer from Bonneville Power Administration reviewed the12 submissions.
- The review team selected the following firms to provide Custom Track PDC services:
    - Portland General Electric Company – CTS (Customer Technical Services)
    - RHT Enterprises Inc. D/B/A RHT Energy Solutions
    - Energy 350, Inc.
    - Nexant, Inc.

Discussion

- Staff proposes that each Custom Track PDC contract be for an initial three-year term, January 1, 2014 through December 31, 2016, with an option to renew for up to two additional one-year time periods.
- Final contract amounts have not yet been determined, pending decisions about PDC service territories. Final PDC territory decisions and anticipated 2014 contract amounts and goals will be presented during the November 2013 board meeting as part of initial 2014-2015 budget presentations. We anticipate that each of the Custom Track PDC contracts will exceed $500,000, and therefore require board approval.
- The estimated first-year combined 2014 budget for all four PDC contracts, from the Board approved 2013/2014 budget, is $6.4 million dollars, with associated energy

savings goals of more than 100,000,000 kWh and 800,000 therms, at a levelized cost of $0.025 per kWh and $ 0.29 per Therm. Final delivery costs and savings goals for 2014 for each of the Custom Track PDC contracts will be developed as part of the budget process for 2014/2015.

- After the board adopts the 2014 annual budget and action plan in December 2013, PDC contract amounts and goals will be negotiated with each PDC. As with other program delivery contracts, actual contract amounts for each year will be negotiated annually, consistent with each year's board-adopted annual budget. Contracts and contract amendments conforming to these budgets would be signed without further board action.
- The contracts will refer to expected program incentive costs, but will not include these costs in PDC contract payments. Incentive costs are part of the program's cost, and they are paid by Energy Trust to program participants. Program incentive amounts will also be provided and reviewed as part of the annual budgeting process and ensuing contract amendments.

Recommendation

Authorize the executive director to negotiate and sign contracts with each of the selected firms identified above for Custom Track program delivery services by adopting resolution 673.

RESOLUTION 673

Authorize Custom Track Program Delivery Contractors for the Production Efficiency Program

WHEREAS:

1. **Energy Trust contracts with Custom Track program delivery contractors for Production Efficiency terminate December 31, 2013.**
2. **With assistance from an outside party, staff has conducted a fair and open procurement process to select four program delivery contractors to deliver the Custom Track for the next 3-5 years.**
3. **The following firms were selected and contract terms are being negotiated:**

   Portland General Electric Company-CTS; R.H.T Enterprises, Inc. D/B/A RHT Energy Solutions; Energy 350, Inc.; Nexant, Inc.
4. **In total, staff has estimated a total first–year (2014) budget for these four contracts of approximately $6.4 million, including possible performance compensation.**
5. **Based on current assumptions, staff projects the following total program savings and fully-loaded costs in 2014:**

	Electric	Gas
Savings	103.7 million kWh	824,000 Therms
$/Unit Savings	$0.189/kWh	$2.73/Therm
Levelized Cost	$0.025/kWh	$.292/Therm

It is therefore RESOLVED:

1. **Subject to determination of final contract amounts based on the board-approved 2014 budget, the executive director is authorized to enter into a contract with each of the following firms to deliver the Production Efficiency Custom Track from January 1, 2014, through December 31, 2016:**

   Portland General Electric Company-CTS; R.H. T. Enterprises Inc. D/B/A RHT Energy Solutions; Energy 350, Inc.; Nexant, Inc.
2. **First-year contract costs and savings goals included in the contracts shall be consistent with the board-approved 2014 budget. Thereafter, the contracts may be amended annually consistent with the board's annual budget decisions.**
3. **The final contracts may include a provision allowing staff to offer up to two one-year extensions if the program delivery contractor meets certain established performance criteria.**
4. **Before extending any of these contracts beyond December 31, 2016, staff will report to the board on the program delivery contractor's**

progress and staff's recommendation for any additional extension time periods. If the board does not object to extension, contract terms would remain as approved in the most recent action plans, budgets and contract at the time of extension, and the executive director is authorized to sign any such contract extensions.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed: [list name(s) and, if requested, reason for "no" vote]

APPENDIX I

Energy Trust of Oregon followed a comprehensive competitive Request-for-Qualifications (RFQ) process.

The RFQ was issued on April 19 2013, with response due by May 22, 2013. 13 organizations submitted intent to respond forms for the RFQ; 12 responses were submitted. The process was led by an RFQ review team consisting of 5 Energy Trust representatives, and one member from Bonneville Power Administration. The review team evaluated on seven overall factors:

1. Overall responsiveness of submitted application

2. Energy Efficiency Program Expertise

3. Account Management and Sales & Business Development Expertise

4. Engineering and Technical Support

5. Project Facilitation and Pipeline Management Experience

6. Key Personnel, Organization Structure and Rates

7. Sample Project Staffing Plan

Based on this review, the review committee selected 5 firms for interviews.

The interviews were conducted during the week of June 17th. The interview panel comprised of Production Efficiency Program staff, staff from planning and Energy Trust management. After the interviews 4 firms were selected to be Custom Track Program Delivery Contractors for the Production Efficiency program.

Distinguishing Characteristics of Selected Respondents

- Portland General Electric Company-CTS:
    - Consistent track record of excellent performance and customer service
    - Diverse and well-qualified engineering and support staff
    - Strong leadership with a singular commitment to serving needs of Energy Trust and its customers
    - Cost-effective structure for high-quality staff
- RHT Enterprises Inc. D/B/A RHT Energy Solutions:
    - Accomplished staff with a proven record of meeting and/or exceeding goals, collaboration across the Program, and strong ties to companies and Southern Oregon region in general.
    - Cost-effective structure for high-quality staff and dynamic leadership

- Energy 350, Inc.
    - Currently an Allied Technical Assistance Contractor (ATAC) for the PE Program with outstanding track record,
    - Proposed staff and management are very knowledgeable in manufacturing technologies and processes.
    - Demonstrated understanding of the PE program's offerings and how to leverage them with customers.
    - Cost-effective structure for high-quality staff
- Nexant, Inc.
    - Expanding team of engineers have great experience with Program and customers, especially over the past two years.
    - National company strongly committed to growing in the Pacific Northwest
    - Strong track record of improving energy savings year-over-year as a PDC.
    - Exhibited strong understanding of how to leverage Program offerings to move customers to take action.

Evaluation Committee Meeting

June 28, 2013, 10:00 am-1:00 pm

Attendees

Evaluation Committee Members
Debbie Kitchin, Board Member – Committee Chair
Mark Kendall, Board Member
Dave Slavensky, Board Member (phone)
Ken Keating, Expert Outside Reviewer
Tom Eckman, Expert Outside Reviewer

Energy Trust Staff
Steve Lacey, Director of Operations
Peter West, Energy Programs Director
Fred Gordon, Director of Planning and Evaluation
Phil Degens, Evaluation Manager
Sarah Castor, Evaluation Sr. Project Manager
Dan Rubado, Evaluation Project Manager
Erika Kociolek, Evaluation Project Manager
Elaine Prause, Sr. Manager of Planning
Ted Light, Planning Sr. Project Manager
Adam Shick, Planning Project Manager
Andy Hudson, Planning Project Manager
Jackie Goss, Planning Engineer
Paul Sklar, Planning Engineer
Matt Braman, Homes Sr. Program Manager
Sue Fletcher, Communications and Customer Service Sr. Manager
Oliver Kesting, Business Sector Lead
Susan Jowaiszas, Sr. Marketing Manager, Commercial and Industrial

1. Fast Feedback 2012 Results

Presented by Erika Kociolek

Fast Feedback began as a pilot in 2009 to collect feedback from program participants in a timely manner. It includes general questions about satisfaction with Energy Trust and program representatives, the influence of Energy Trust on investment decisions, and program-specific questions. This includes pet questions for specific measures that are of interest to programs. For example, the Products program was interested in the number of refrigerators and freezers in homes for participants that recently purchased a refrigerator, and this question is in Fast Feedback. Fast Feedback surveys were done by Gilmore Research Group from Q2 2011 through 2012. Now, we are transitioning this project to a new survey contractor.

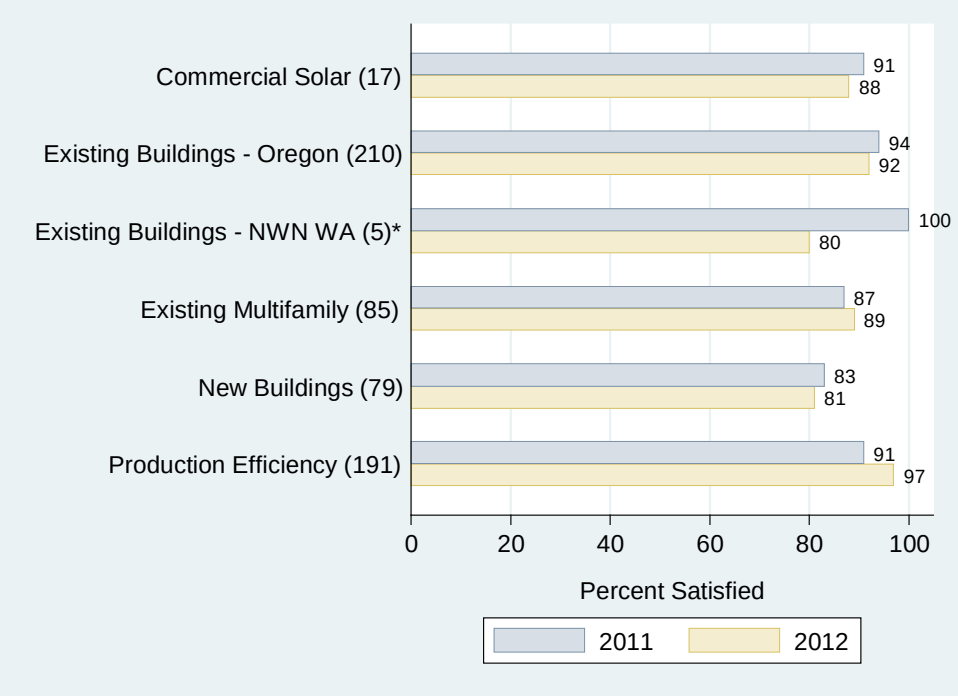
There are several ways in which Energy Trust uses Fast Feedback data:

- Verbatim comments are sent to program staff on a monthly basis,
- A quarterly summary of results is distributed internally,
- Annual results are made public, and are posted on Energy Trust's website,
- Fast Feedback data are used for OPUC performance metrics, and,
- Free-ridership rates are used to true up savings and inform program decision-making.

The OPUC requires Energy Trust to achieve greater than 85% overall satisfaction for both residential and non-residential, and greater than 85% satisfaction with program representative for non-residential customers. Residential customers do not necessarily interact with program representatives so they are not asked this question. Instead, certain residential customers are asked about their satisfaction with their contractor, and satisfaction with the knowledge and courtesy of their Energy Advisor.

In 2012, we surveyed 587 non-residential customers and 2,750 residential customers. We strive to get enough surveys to achieve 90% confidence and 10% precision, but were not able to reach that standard for a few programs and measures due low project volume.

Non-Residential Results: Overall satisfaction has been high and fairly consistent over the past two years (see graph below). Slight variations over time are to be expected due to random variation; these numbers look pretty consistent. There appears to be a large change for Existing Buildings - NWN Washington, but those numbers are based on very small samples (only 5 respondents in 2012), so the estimates are more variable.



Debbie asked if the OPUC performance metrics are at the program level or overall. Sarah responded that we combine residential and non-residential responses about overall satisfaction into one unweighted number.

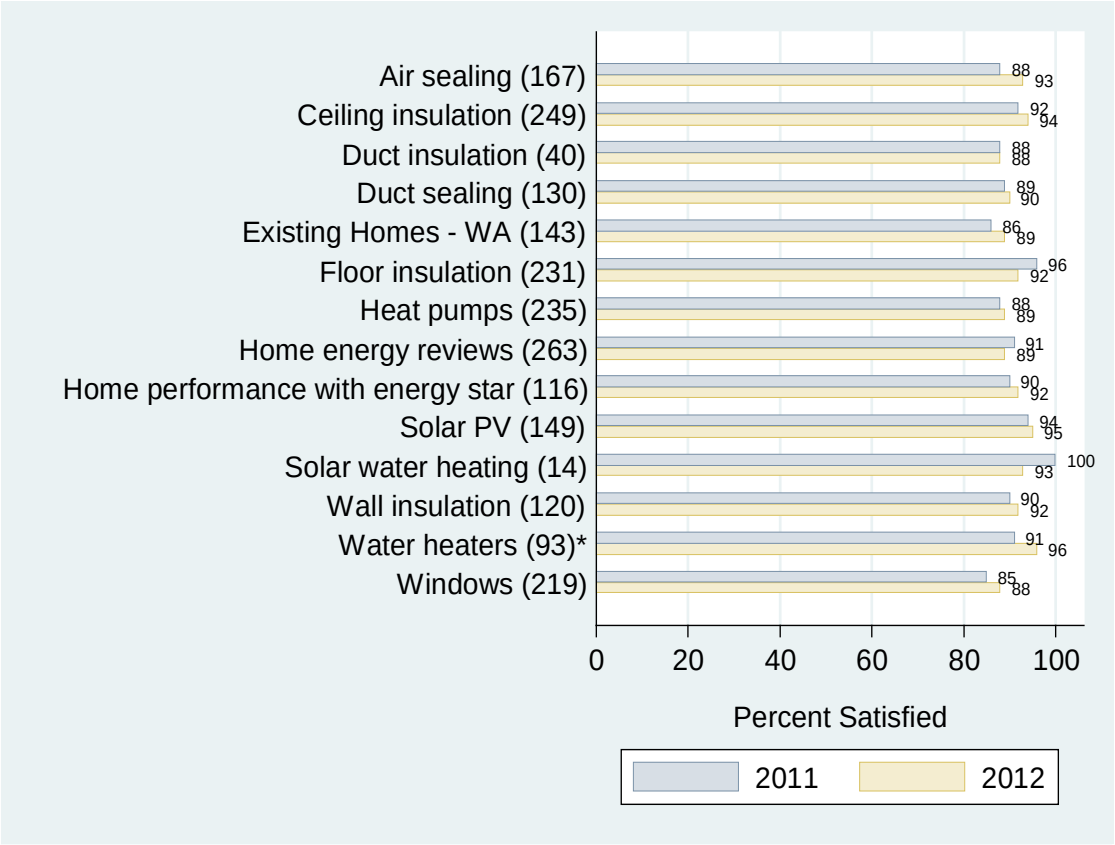
We saw a decline in free-ridership from 2011 to 2012 in the Existing Buildings and Multifamily programs (30% in 2011 compared to 16% in 2012 for Existing Buildings, and 27% in 2011 compared to 17% in 2012 for Multifamily). For non-residential, free ridership is weighted by project savings. Phil noted that free-ridership has large impacts on reportable savings for these programs. Mark asked how much of this is the data and how much is the method of inquiry. Phil responded that the questions have not changed over this time period. However, the Business Energy Tax Credit did change during this period and this may account for the change in free-

ridership for Existing Buildings and Multifamily. Debbie commented that Energy Trust is moving through the efficiency market transformation curve, so it may be that people who participated early on were more likely to be free riders than those who participated recently. Fred said that the free-ridership numbers are an important point of research for our programs. It can be upsetting to program managers when they see volatile free-ridership numbers, but that's what we have. We don't put a ton of money into this research; these are rough estimates. Phil noted that we use a three-year moving average to reduce the volatility of free-ridership estimates when creating program goals and planning.

In summary, non-residential satisfaction was high overall and in line with 2011 results. We saw a decrease in free-ridership rates for Existing Buildings and Multifamily. There will be several changes to non-residential Fast Feedback surveys in 2013. The biggest change is we will not be surveying New Buildings participants in 2013. It is difficult to get in touch with the right person because there are a lot of people involved over the course of a project. Satisfaction has varied over time based on who we have been able to get on the phone. From now on, process evaluations will be used to capture satisfaction and free-ridership for New Buildings. Mark asked if process evaluation numbers can be used in reporting satisfaction and free-ridership to the OPUC. Sarah responded yes, and clarified that we are just reporting satisfaction numbers to the OPUC, not free-ridership. We have elected not to use free-ridership rates for the New Buildings program in the future because it is a market transformation program. Phil commented that we would prefer to do interviews after each stage of participation for New Buildings rather than at the end of the project so customers have better recall about their participation with us.

Erika noted that we are adding new questions about other sources of funding and technical services for Production Efficiency participants, and will ask multifamily participants about the influence of walk-through surveys (these are brief energy assessments of multifamily properties, during which instant savings measures, such as CFLs, aerators, and showerheads, are installed).

Residential Results: There are a variety of residential measure groups included in Fast Feedback. The asterisk in the graph below indicates that the sample of water heaters is slightly different in 2011 and 2012; in 2012 we only surveyed customers that installed gas water heaters and the 2011 sample included gas and electric. There were few changes in satisfaction from 2011 to 2012. Satisfaction for solar water heating looks slightly different in 2012 versus 2011, but it is a fairly small sample. The percentage of Existing Homes participants that said they were satisfied overall is fairly high across the board. Results for the three measures from the Products program tell the same story: high satisfaction that has not changed much over time.



For weatherization measures, we saw a slight increase in free-ridership, but this was not a large difference. Free-ridership was pretty much in line with numbers from 2011.

Ken said there is now a large weatherization sales force that is not related to the program and there are many contractors influencing this market and having an effect on these types of projects. Because the entire market has been influenced by Energy Trust, our influence is invisible to the people doing the projects. Tom commented that duct sealing and air sealing wouldn't even be in the market if it wasn't for Energy Trust programs. Sarah noted that free-ridership rate looks high for water heaters (46% in 2012), but this rate will not be applied to savings; we are certain the 0.67 gas water heaters wouldn't be in the market at all without Energy Trust.

Erika said that in summary, free ridership was stable or slightly higher for most residential measures, and overall satisfaction was high and consistent with 2011 results for all measures.

Mark asked what efficiency tier the free rider rates are assigned to when looking at products. [Note: Energy Trust does not apply free-ridership rates to different tiers of products. One average rate is applied to all products in a measure category.] Fred added to this, asking if the consumer ever even sees an efficiency choice. Did they know there even was a choice? Energy Trust is not supporting them in buying the equipment, we are supporting them to buy the better tier of equipment. Phil said these are the challenges of crafting a simple, short survey and trying to dig into these topics. For non-residential customers that tell us they would have done the project in the absence of Energy Trust incentives, we ask if they would have been able to cover the entire cost of the project. If they say they would not have been able to provide the funds,

then they are not free riders. Fred asked if there is a better way to answer the free rider question. He added that this survey methodology is a crude tool and the results wobble. He also said that we're trying to justify Energy Trust's impact on single units because looking at the effects on the entire efficiency market is too difficult to determine. The circumstantial evidence that Energy Trust has shifted the market is big, but it is hard to demonstrate empirically. People may not know we had an influence because we changed the business model.

Ken said that shelf surveys are done around the country, and provide insight into free riders. The evaluation firm Research into Action looked at refrigerator programs in California and came back with a result that was resisted by the program staff. They found that incentives for expensive refrigerators did not make a difference. However, they noted that incentives were not high enough for the low-end efficient products, where incentives could make a big difference. For high-end products, the incentive didn't matter much. This insight showed that you could make a difference if you changed how incentives were paid out. The program would have made a much bigger impact on the lower end of the product scale.

Ken commented that Federal data says US homes have moved from 1.2 to 1.3 refrigerators per home. Tom said that we saw the same thing in the Residential Building Stock Assessment and that there has been no reduction in the saturation of second fridges in the market. Maybe refrigerator recycling programs are keeping this average lower than it would have been otherwise. Hopefully people at least have more efficient second refrigerators than they used to. Debbie commented that larger houses allow people to have more refrigerators.

Erika noted there are several changes to residential Fast Feedback surveys in 2013. Air and duct sealing will no longer be included in Fast Feedback because they are not part of standard program offerings. We may interview respondents that participated in Home Performance and had those services, but we are not asking specifically about those measures. Customers that had gas fireplaces installed will now be surveyed through Fast Feedback, and we added questions about the influence of the appearance of the fireplace and the efficiency of the unit. We will also be adding ductless heat pumps to the heat pump sample. We did not do this previously because NEEA was surveying these customers for their ductless heat pump pilot, but the pilot has ended. We do not yet have a sufficient number of projects to survey heat pump water heater customers. Paul commented that he would expect different responses from ductless heat pump customers and heat pump customers. Sarah clarified that they are being sampled as one group, and right now the questions are the same for heat pump and ductless heat pump customers, but the responses can be separated out in reporting.

Erika noted that we are adding questions for Home Energy Review customers about the influence of the review on their decision to make Energy Trust qualified improvements. We also want to know (for customers that had work done by a contractor) if the contractor completed the incentive paperwork for them. Finally, the Products program is allowing customers to donate their incentive for fridge recycling to the Oregon Food Bank. The program is interested in what motivated these customers to donate their incentive. We are not sure what kinds of responses we will get from this question, but are interested in the results. Mark suggested that we ask the opposite question of Home Energy Review customers: how influential was the Home Energy Review on decisions to make non-Energy Trust qualified improvements. Debbie said that this spillover effect has shown up in some of the data. Mark added that maybe customers traded granite counter tops for more efficient stuff. Sarah responded that we do ask what types of non-Energy Trust funded efficiency measures Home Energy Review customers did, just not if we influenced those decisions.

Erika noted that in 2012, we achieved 90% overall satisfaction and 94% satisfaction with program representatives, which exceeds the thresholds required by the OPUC. Overall, satisfaction and free-ridership are in line with 2011 results, although free-ridership decreased for Existing Buildings and Multifamily in 2012. This year, we will produce a mid-year report and an annual report in lieu of quarterly reports. Finally, we are still in the process of transitioning to a new survey contractor for 2013. Mark asked why we decided to switch contractors. Erika responded that the prior contractor is no longer in business, so we had an opportunity to make a change.

Dave commented that in the 2012 report, the number of people that paid for their improvement with cash out of savings was high, and wondered if we talk to them about financing. Fred noted that we are talking to vendors to get them to talk to their customers about financing. Sarah clarified the question about how customers paid for their system is only asked of solar participants.

Phil said that lots of Energy Trust staff like Fast Feedback. It provides feedback on questions that staff have, and we don't have to think about it very much because the surveys are ongoing. Sometimes there are additional questions that are not a good fit for Fast Feedback; we do additional surveys to ask such questions. For example, we will be fielding several small surveys in the coming months: one focuses on how customers financed their projects, another will ask customers that received instant savings measures through Home Energy Reviews or the trade ally direct install program about what measures were installed to fulfill a quality assurance need, and a third survey will investigate the reasons a gas customer purchased a heat pump.

2. 2013 Lighting Shelf Space Survey

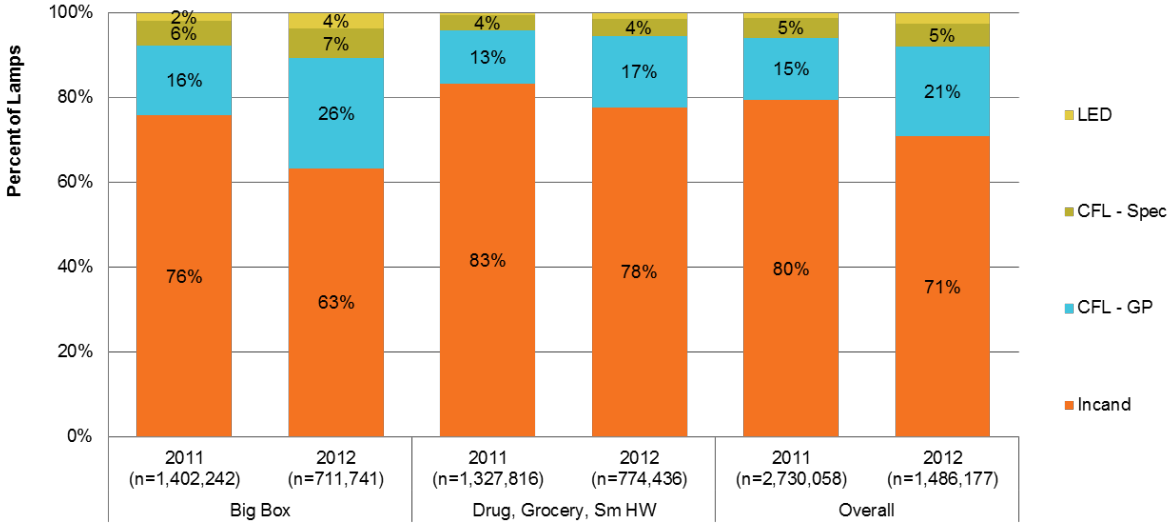
Presented by Phil Degens

DNV KEMA has done the shelf space survey for a long time. NEEA rolls the project out every year, so we asked them to sample additional stores in Oregon and provided additional funds to the project. The study period was from December 2012 through January 2013. The goals of the study were to look at the Oregon general lighting market and assess availability, diversity, pricing, and changes due to the Energy Independence and Security Act (EISA). We also wanted to gain market intelligence on specialty lighting, LEDs, and 4-foot fluorescent tubes. The reason for adding questions about 4-foot fluorescent tubes was that Phil looked at the Residential Building Stock Assessment (RBSA) lighting data and saw that there were a lot of linear fluorescents in homes. Therefore, it seemed like a good opportunity to look at what kind of 4-foot fluorescents were available in the retail market.

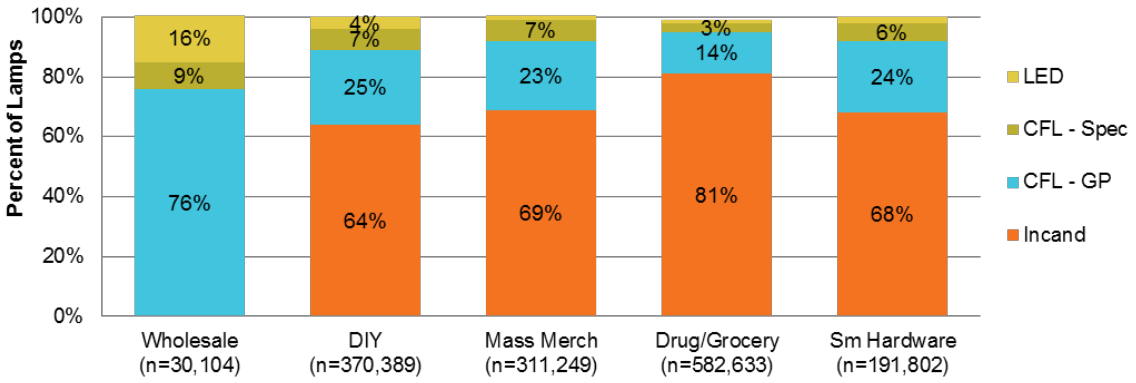
There are still a lot of lighting savings left out there because EISA won't change everything and many technologies out in the market are not EISA compliant or are not covered by EISA. The RBSA shows that households had an average of 5 CFLs in storage that will eventually be installed. Tom commented that a recent Puget Sound Energy survey showed 35% of bulbs in storage are CFLs.

The shelf space survey was conducted in 40 stores in several different categories. Percent of stores carrying lamps by technology shows that CFLs and incandescents can be found in virtually all stores and that LEDs are rapidly becoming more common and showing up everywhere. We probably won't have to ask about this much longer because they will all be 100%.

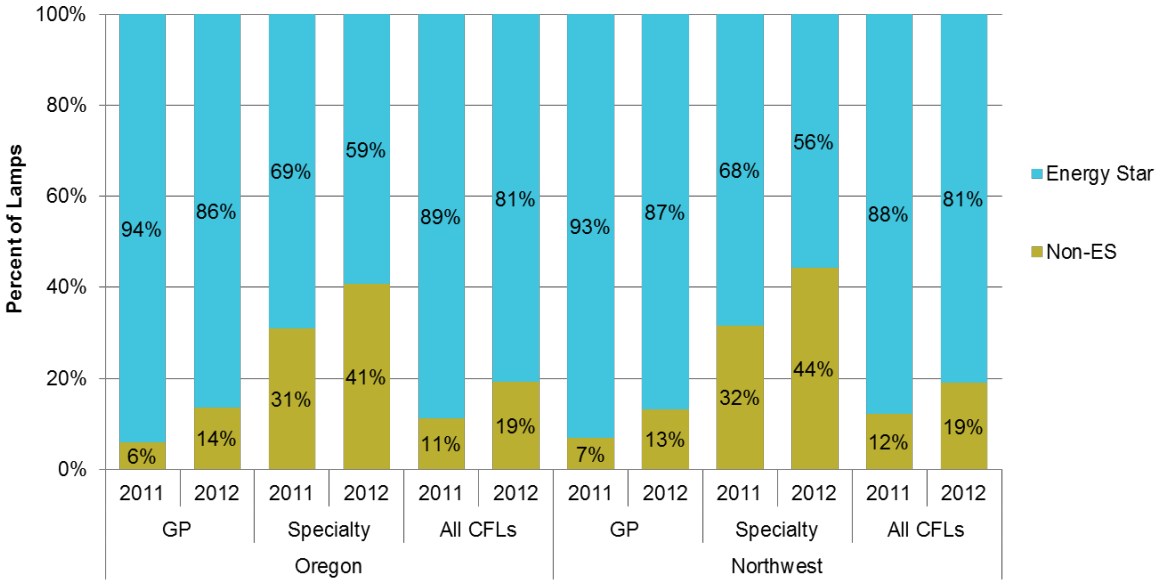
When looking at percentage of lamp technologies stocked by store category, we saw that across the board there were fewer incandescents in 2012 compared to 2011. We also see that the CFL market has grown while LEDs still make up only a small fraction of total lamps stocked. Incandescents include the new EISA compliant halogens along with non-compliant bulbs.



Wholesale stores are not selling incandescents, consistent with 2011 results. Across other store types, there are fewer incandescents and more CFLs. Energy Trust is trying to figure out the new baseline for efficient lighting products, so this informaton is very important. Incandescent lamps have not been driven out of the market by EISA although there was a large impact.

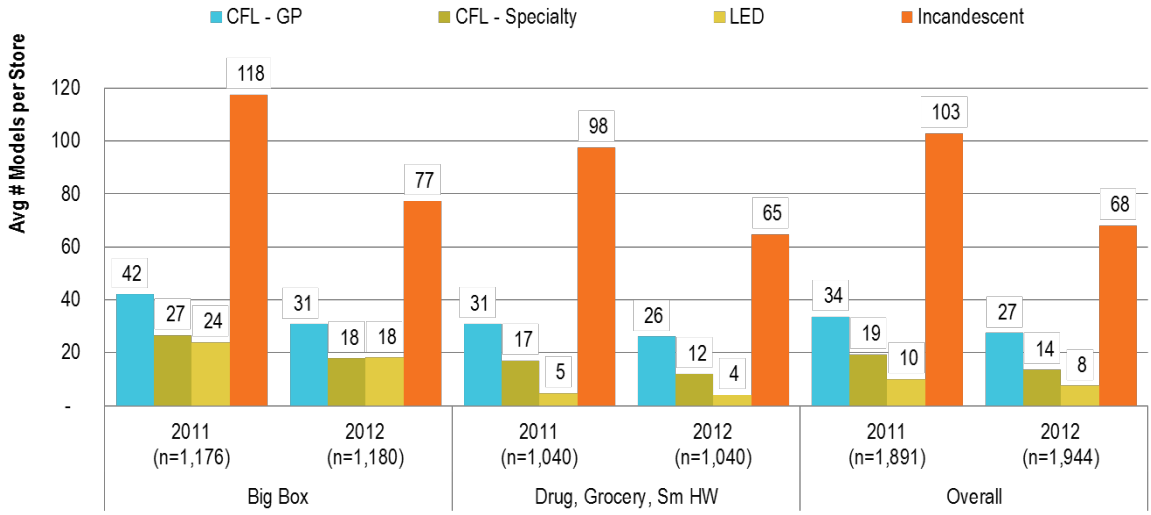


Also of interest: the percentage of CFLs stocked that are Energy Star-qualified has decreased relative to 2011.



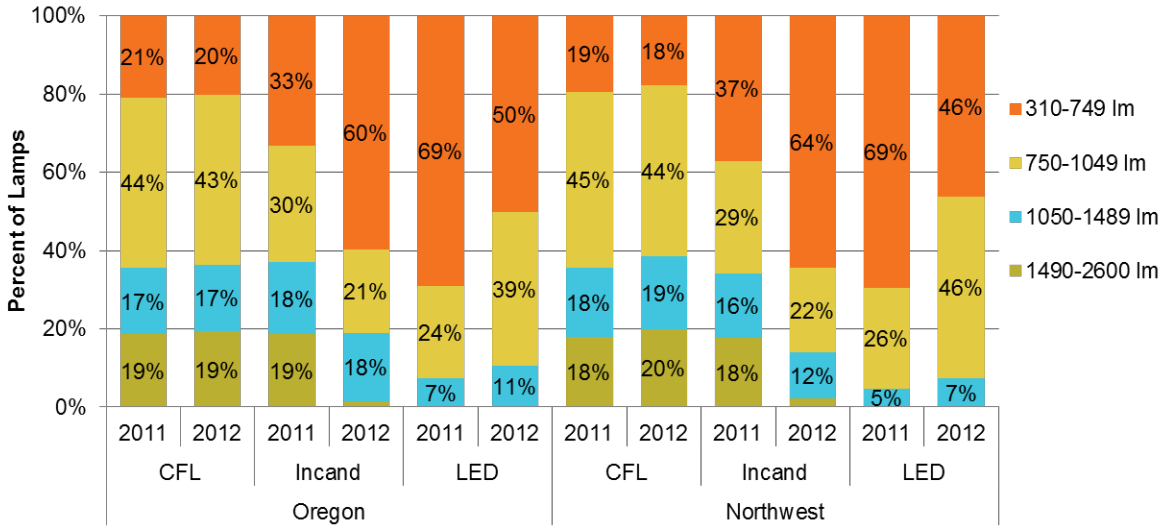
Among the high brightness category (1490-2600 lumens) of medium screw base incandescent A-lamps equivalent to older 100 watt incandescent bulbs, the majority (72%) of lamps now meet the EISA standard in the high brightness category (1490-2600 lumens), which took effect over a year ago. Almost none of the incandescents in lower light level categories are EISA compliant, but those standards are either just kicking in or have not taken effect yet. The percent of compliant incandescent bulbs stocked varied by store category, probably due to differences in turnover rates. This means that EISA is having an impact and that EISA compliant halogen lamps are taking up a lot of the slack.

The shelf space survey documents the “Great Bulb Die-Off of 2012”: that is, overall lamp stocking is going down. There is less overall lighting inventory and the number of lamp models available on store shelves decreased sharply across store categories and lighting technologies. It may be that retailers are doing this to decrease customer confusion about products. LEDs are increasing in the A-lamp category.



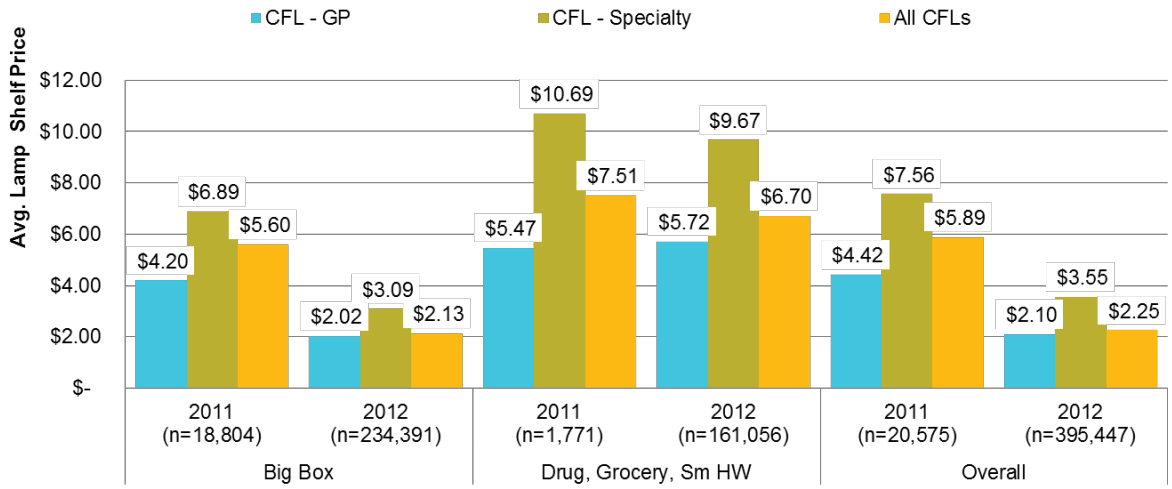
Matt commented that lamp stocking was getting so confusing and there were so many lighting products to choose from that retailers are now reducing the quantity of bulbs and types displayed.

For incandescents, the 100 watt and greater lamps are disappearing as a result of EISA. We looked at lamps by lumen categories here because we are not going to look at watts in the future; watts are not a good indicator of brightness anymore. LEDs are moving more to the higher lumen categories and incandescents are out of the high lumen category. CFLs are holding steady across all lumen categories.



Tom asked if there were any halogens in the 1500+ lumen category. This level is hard for them to achieve and meet EISA. Phil responded that these numbers show halogen and other incandescents mixed together, but DNV KEMA has that information.

CFL lamp prices reported here are the observed shelf prices by store category. For CFLs, the price reduction was large from 2011 to 2012. These are sales-weighted average prices.



The study looked specifically at the availability of four-foot fluorescent tubes. Roughly half of stores have them with an almost even presence of T12s and T8s. In Oregon, there were five T12 and three T8 models available per store on average. We also asked DNV KEMA to go a little deeper on this because it is not as simple as T8 versus T12, but we don't have that information yet.

Phil presented a slide showing the total number of lamps across all stores with their average price for globes, reflectors, medium screw base A-lamps, candelabras, and MR16s by lumen category and lamp technology. We looked at areas of opportunity where more efficient models have not made in-roads or need to be improved. A few findings were:

- There were no CFL or LED choices for high lumen, medium screw base lamps
- No CFL or LED globes for mid to high lumen output lamps
- No LED candelabra lamps in the medium-low level lumen output
- LED prices are still very high across the board
- No competition for Halogen MR16s in midlevel lumen output

Nearly three-quarters of stores displayed promotional materials related to lamps. Materials focused on CFLs with most using signage positioned in the lighting aisle. Two-thirds of stores had CFL displays. Many fewer stores had materials regarding efficient incandescent or LED lamps.

Findings: The percentage of stores stocking LED lamps increased. Incandescent lamps declined by almost half in the high lumen category. LED lamps doubled their share of lamp stock in wholesale stores. LEDs still only make up a fraction of the total lamp stock, and they are far outweighed by CFLs and incandescents. Four-foot linear fluorescent lamp stock was roughly split between T12s and T8s. Finally, the Energy Star share of total CFLs declined from 2011 to 2012.

The average number of models decreased, particularly among incandescents, which dropped by 30-40 models per store. Oregon and Northwest stores stock about five T12 and three T8 models per store. LEDs are moving into higher lumen categories. Higher watt incandescents are being removed from store shelves. CFL prices paid are still higher in Oregon than the Northwest as a whole. Sales data from NEEA and Fluid Market Strategies (which collects lighting sales data for NEEA) were used to calculate sales prices for CFLs. CFL sales are flat across the Northwest.

Ken commented that there are more SKU data available these days. In California, they had two contractors buying data from two different firms and got almost the same coverage of retailers for product prices. These kinds of data used to cost almost one million dollars a year but now are more widely available for much lower cost. Phil said that he received a study from D&R International yesterday on the national lighting market including sales but that it didn't break out Oregon separately. Ken responded that it may be cheaper than we think to get that type of data for Oregon. It is available for every store except for maybe Costco and Lowe's. Phil said that Energy Trust has contracted with D&R to get distributor data on HVAC systems. It was very inexpensive and we are sharing the costs with Bonneville Power Administration. If they deliver, and we get all the data, it will be cheap, in which case we may be able to do the same with lighting sales.

LED lamps are increasing their presence in higher lumen categories. Prices are still high, but there has been improvement. Soon, they will be at a level where we can offer incentives for them.

Fred said that halogens are taking a large chunk of the market for bulbs that meet new Federal standards. It may be that there is a broader opportunity for LED and better fluorescents to push halogens out of this market. Energy Trust is going to use this data to plan what to do next in this market. Halogens are at least a part of the new baseline.

Tom said that the Simple Steps program has bought down LED globes in Costco and they are flying off the shelves. Matt asked how halogens are going to survive in the post-EISA era. Ken said that waiting a year to do something is too long in the current market. In California, the EISA standards are already having an effect.

Phil said that we still need to do more research on linear fluorescents in stores. The limited incentives for general purpose CFLs and LEDs do not appear to have had a negative consequence on the availability of these products, compared with the rest of the Northwest. They are still selling them here even without large incentives from Energy Trust. Matt commented that Energy Trust may be a free rider on the Northwest market, since all the other utilities are supporting these lighting technologies. Ken said that availability is one thing and sales are another.

Fred responded that maybe we should weight the whole study towards big box stores because the products don't move in smaller stores. People go to the big box stores to get the good stuff. Ken commented that for big box stores, shelf space is a good indicator of sales, but in smaller stores, maybe not. Tom said that we should discuss with the big box retailers how they allocate that shelf space. It may be based on the markup or based on sales or some combination. We might have to do some weighting to get an association between shelf space and sales.

Fred said that eventually we will have sales data and won't have to use this as a proxy for sales. But for now it is the best we have and we have to use it. Ken recommended the firm IDI for data on lamp sales.

Tom added that there are some parts of the market that we can't touch with CFLs. Clear incandescent lamps can't be replaced by LEDs or CFLs and get omnidirectional light.

3. Commercial and Industrial Market Research

Presented by Susan Jowaiszas

Over the past 18 months, Susan Jowaiszas, marketing manager for commercial and industrial, has been working on market research. This started out as a marketing project; the idea was to see if we could apply segmentation to the commercial and industrial sectors, similar to what was done in the residential sector. We did this research for four programs; a nice surprise was that we got a lot of market research as well as great program intelligence that is being used for program design. Today, we will talk about marketing findings for the most part. This information was presented at eSource, a utility marketing conference, and also at a recent Conservation Advisory Council meeting.

Susan noted that we love our customers – we imagine doing great things together, and sometimes we are disappointed when they don't do what we hope they will. We wanted to dig

into three questions: How do customers make decisions? How can we segment our markets? What are the barriers to action?

The conventional wisdom is that customers don't invest in energy efficiency because:

- they do not have money to invest,
- they don't know what to do,
- they can't implement energy efficiency projects,
- they are not sure where to start,
- they are not sure the actions they take will save energy,
- a project does not have an acceptable payback or return that fits with their criteria, and/or,
- there is no clear decision-making path.

Over the past 18 months, we performed four qualitative studies. The industrial format was 37 deep-dive interviews with decision-makers. We created a list that included people we worked with a lot, people we worked with very little, and people we wanted to work with. We sent out a letter asking them to participate in this study, and requested 20 minutes of their time. We were surprised at how eager respondents were to talk with us. 37 interviews were completed; the shortest interview was 20 minutes and the longest was over an hour. For New Buildings, we did 31 interviews and for Multifamily we did 25. Existing Buildings followed a slightly different methodology. It was a three-part project, including 2 focus groups and a set of executive interviews. One focus group involved companies that are regionally or locally owned, and the other included companies that are nationally owned. We hypothesized that these companies had different decision-making strategies and different barriers to action. We also conducted 12 executive-style interviews, and an online survey of past participants (screening out folks that we talked to for other evaluations). We got a 50% response rate, and held a drawing for an iPad as an incentive for taking the survey.

Susan noted that she will share the top marketing findings from each study:

- Industrial Findings – We found that money and payback matter. Companies work with simple payback, and they had a range for acceptable payback. If something doesn't fit into that range, they either have more explaining to do, or it doesn't happen. Customers put a high value on the technical services provided by Energy Trust. They recognize that they do not necessarily have that skillset in their staff (we heard stories of staff researching new equipment during their time off) and are eager to have our help. We learned that staff members only propose projects that they feel are likely to get approved. Debbie noted that is a surprising finding. That's where the decision happens – it is edited at a lower level. Ken added that it is self-censoring. Debbie responded that these folks have incentives to keep their job; they want to be reliable and credible in their firm. Mark added that this group is highly risk-averse. Susan said customers had great faith in the savings estimates provided in the technical studies. The "conventional wisdom" barrier about no faith in savings is not an issue as long as they have a technical study. We wanted to know about how environmental issues intersect with their decision-making. We found that customers do link energy savings to environmental benefit, but this is a contributing factor, not a deciding factor.

- Existing Buildings Findings – The main takeaway from this research is about our audience. 71% of the people we work with are men; 76% are over 45, 35% are over 55, and 11% over 65. As a marketer this was extremely informative. There is a lot of

discussion in marketing about social media; we learned we don't need to worry about a Twitter strategy for this particular audience. This information also tells us there will be an enormous loss of people in this field when they reach retirement age; it is both an opportunity and a challenge. Debbie added that this has been identified as an issue elsewhere too. There have not been as many job opportunities for younger people coming up through the ranks because companies have increased the span of control for facilities managers and engineers due to information systems. They can manage more, and budgets are so constrained these managers can't have an assistant to mentor. This is a big issue in the facilities management arena. Susan said we heard from customers that it is all about the money. They also raised the idea that businesses are signing shorter leases, which is a barrier to reaching customers in leased spaces. Energy projects are perceived as more complicated than other things they do. We asked about green teams; fewer than a third said they had green teams, so there is a long way to go in terms of employee engagement. Fred noted that simple measures are going away due to codes. The program and measures will be more complicated in future than what we are doing now, which we heard is already complicated for them. That is something to think about in the future.

- New Buildings Findings – Architects and engineers are the entry point into New Buildings projects. This research validated that it is a good entry point, but these folks are not the ultimate decision-maker(s). We see architects and engineers advocate for energy efficiency and Energy Trust participation in a project, but they tend to bring that in at a later date than we would like. Their primary view of Energy Trust is to provide incentives, which signals an opportunity for education. Architects pitch incentives to clients to a point; if they decide there is no budget or the customer is resistant, they will back off so as to not endanger the relationship. Dave asked if we do anything at permit counters in terms of educational signage. Susan responded that we do outreach with folks in the engineering and architectural community. Dave clarified that he was thinking about smaller buildings, where you may have people not involved in the same associations that larger firms participate in. This could be an opportunity to intervene in the process and educate those that may not be as familiar with Energy Trust. Fred responded that we have looked at that in the past, but the task of working out the placement of marketing materials with a few hundred local, independent jurisdictions is complex and difficult. Susan said we learned that engineers think they are doing all the work, while architects think they are carrying the load. Paperwork is a barrier although program outreach managers are there to help with that. Respondents recognized that outreach managers were helpful in interviews. Some respondents appreciated the need for documentation and our policy of not providing incentives willy-nilly. Ken noted that the developer gets the money; the architect gets a plaque instead of the money, and they can use that in their own marketing of the firm. Susan said one of the huge barriers for customers is lack of certainty about what the incentive is going to be. There may not be an incentive depending on how things end up. We are trying to address this with bundled incentives to make the incentives more certain, especially for small commercial. Fred commented that if a bundle of measures passes the cost-effectiveness test, then customers get a certain incentive level, which will make the process faster. We cannot include some simple measures in New Buildings because the code level is very energy efficient.

- Multifamily Findings – This was the most recent study completed. It is a really complex market; just coming up with the discussion guide was difficult and nuanced. This study may be of the biggest interest because the results fly against everything recently

published about this market. A big study by the American Council for an Energy Efficient Economy, which came out right before ours, made two big assertions: (1) that tenants look for energy efficient properties when they are renting, and (2) that property managers can use energy efficiency as a marketing opportunity. Our study said that both of these were not very important. In order to do this study, we created a sample from across the state that represented all categories of multifamily properties and management structures. Management structure was far more enlightening about how decisions were made than the size of properties. If you had a lot of small properties operated by a property management company, then you were more like a company that managed a large portfolio of large properties. The size of property had nothing to do with it. Small multifamily is now integrated into the larger multifamily program. For affordable housing properties, available cash flow is more important than return on investment (ROI), because these properties have a long financial horizon. For market rate properties, they operate more like other businesses and need ROI to be good. We found that they need input by a certain point in the year for budgeting purposes: capital project ideas come in during a window, budgeting is done and then projects are implemented the following year.

Summary of Findings: Customers value cash incentives – they like that the incentives help improve ROI and they like the assistance because they may not know where to start. More than one respondent said "we've done everything," but they had only done a lighting project.

Customer Motivations: One and a half to three years is the sweet spot for payback. We asked industrial customers about financing. Only 4% said it was a barrier. We heard from industrial customers that they don't borrow money for operating expenses. Fred noted that we think of efficiency as capital projects but customers still don't. It is an alien concept to the market; they do not design their capital side to do efficiency. Susan responded that customers do not see these projects as capital projects; they do borrow for other capital improvements, but not operations.

We conducted a dozen interviews with executive-level staff (the supervisors of the people with whom we typically work). They said saving energy is important, and is becoming more important in business, but being energy efficient and doing energy efficiency projects is more of a want than a must – there are other things that are more urgent. They have a small amount of time to think about energy. They like incentives and know about them, and look for incentives when projects are being presented. Environmental concerns are a nice outcome; they are a factor, but not a dealmaker.

We also heard that customers like projects to be easy, solid, and visible. Customers see our technical studies as being credible; they help them make the case for the project. Customers also like projects people can see, such as lighting. Other projects are harder to see, and it takes more talking to get people on board. Fred commented that this plays against where we are going, which is more controls, management-based conservation, and design-based measures. Susan noted that she has written many press releases and talked to hundreds of customers. They always say "this project was great, but what's really cool is [insert non-energy benefit]." She likened this to being like Dennis the Menace. In the comic, he is always 5, then one day he turns 6, and the next day he is 5 again. Non-energy benefits do not seem to factor into decision-making – they are great after the fact. Fewer than half of respondents thought that energy efficiency helped them improve customer service, attract more customers, helped add jobs, or expand hours of operation. It is all about the money.

Can we segment by sector? We went into these studies with a healthy skepticism about the assumption that vertical market sectors were the way to segment. Yes, two firms may have similar equipment, measures, technology, operating hours, but do they make decisions in the same way? The results do not suggest that; we did come up with a few alternative ways to slice up markets:

- Service-oriented industries (i.e. hotels) share priorities of comfort, image, and sustainability.
- Energy use and size of company are important. Those that use more energy care more about it.
- Leased versus owned continues to be a challenge.

Other segmentation factors included education level (highly educated staff were more eager and interested in learning about energy efficiency). The financial health of the company was identified as a segmentation factor, as was location (Portland Metro area versus rural).
We found that culture is the biggest factor on decision-making. How can we influence culture of companies? In the short-term, the question is, "how can we identify companies that have cultures that will adopt energy-efficient behaviors?" We see in strategic energy management (SEM) those companies already have the makings of that culture; we can help build it, and help them be successful. Debbie said we are providing a tool that makes it easy to adopt and implement. Fred added that we are branding good energy culture and peer marketing. Oliver noted that we are looking for people have that culture already. Susan said we have started getting permission to list companies on marketing and recruitment pieces, and have had companies review the materials, see other companies on there, and say "sign me up." Fred added that we are trying to engineer a norm, and it seems to be working. It is now competitive to get into SEM for industrial. Debbie commented that it seems there is a crowded marketplace between Energy Star, Kilowatt Crackdown, etc. Do these help, or are they confusing? Oliver responded that it is confusing, and that SEM is distinct from those programs.

Susan noted that we will use this information to tune up our messages about benefits, emphasizing what is in it for them. We tested messaging about "energy efficiency creates a competitive edge for business" and "customers will be impressed with your concern for the environment." These were not popular among respondents. The most compelling message was "Energy Trust pays you to save energy." Mark suggested providing an invoice for Energy Trust services (noting the amount paid by Energy Trust) so folks start paying attention to the benefit they are getting from Energy Trust.

Some of our current marketing ideas include the creation of informational online resources. We initially assumed that commercial and industrial participants did not use the web much, but we heard from respondents that they were researching measures and savings from home and using the Energy Trust website. We want the web to do more for us, especially as we reach out to smaller customers. The new Industrial webpages will be launching soon.

We are showcasing customer success using new case studies – the goal is to make it look easy and provide assistance. We also work to keep in touch with customers; we have a high return rate for commercial and industrial customers. We created a booklet of incentives for Existing Buildings that has proved popular; we will be expanding that to other programs. We also published the Champion email newsletter, which reaches 2,500 industrial recipients and has an open rate of 40%. We are scoping a separate newsletter for the commercial market and the multifamily group. We're creating two new advertising concepts – one gets at the idea of waste and the other touches on the ongoing benefit of energy efficiency.

What We Know Now: It is still all about the money. Customers want and value our help. We need to provide tools to help customers get to “yes” and grow a community of energy champions.

Ken asked if these are customers we have already worked with, or customers that have not worked with Energy Trust. Susan responded that most of them have worked with us. Sarah noted that most businesses in Oregon are aware of Energy Trust. Fred said there is a difference between wanting help and having time to accept that assistance. Phil noted that we researched many of the largest utility customers in Oregon, and only 3 of the very large customers (above 1 aMW) have not participated. Ken said there are more non-participants in commercial. Fred noted that we are working on demographic research. We know there are a large number of office and retail locations. If we added this up, there may be thousands more we have not yet reached. We want to look at the characteristics (size, ownership, building vintage) of people that have not yet been in our door. Phil added that we plan to conduct more of this research in the future; perhaps every 2-3 years we will do a qualitative survey and weave it into our other ongoing evaluation activities.

Wrap-Up & Next Steps

August or September would work for the next evaluation committee meeting. Erika will send out a Doodle poll to determine a date that works for everyone. Potential agenda topics include the Production Efficiency impact evaluation, Existing Buildings impact evaluation, New Buildings impact evaluation, and the commercial strategic energy management (SEM) evaluation.

Board Decision
Renew Energy Trust Line of Credit

July 31, 2013

Summary

The purpose of this resolution is to authorize Energy Trust to renew its $4 million line of credit with Umpqua Bank.

Background

- The Energy Trust board first approved a $4 million line of credit in March 2002. The line of credit helps bridge timing gaps between revenue receipt and expense payment and provides for temporary emergency funding where needed for a specific utility. The limit was reduced to $1 million. In December 2005, the line was restored to $4 million.
- In 2010, Energy Trust moved the majority of its accounts to Umpqua Bank as its bank of record. The Line of Credit was re-established at Umpqua Bank at the same time.
- Conditioned upon the board's approval by resolution, the Umpqua Bank has authorized a commitment for a line of credit in the amount of $4 million at an interest rate of prime minus 0.50 basis points. The cost to obtain this credit facility is $5,000 per year, whether or not we actually use it.

Discussion

- The line of credit continues to be a useful resource to manage differences in timing of revenues and expenses and to manage emergency funding situations.
- Staff believes it is prudent to continue the line of credit for the foreseeable future.
- Based on Energy Trust's current financial policies, the Executive Director and the CFO would draw on the line of credit only after consultation with the Finance Committee.

Recommendation

Staff recommends that the Board of Directors approve renewal of the $4 million line of credit at the Umpqua Bank to be effective through September 5, 2014, or revocation by the board, by adopting resolution 672, below.

RESOLUTION 672

AUTHORIZE RENEWAL OF $4 MILLION LINE OF CREDIT AT UMPQUA BANK

WHEREAS:

1. **Energy Trust wishes to renew its $4 million line of credit at Umpqua Bank to bridge timing issues of revenue receipt and program expense, if the need arises.**
2. **Umpqua Bank has authorized a commitment for a line of credit in the amount of $4 million at an interest rate of prime minus .50 basis points conditioned upon the board's approval by resolution.**
3. **A fee of $5,000 is charged by Umpqua Bank for this service.**

It is therefore RESOLVED:

1. **That this corporation, Energy Trust of Oregon, may:**
    a. **Borrow up to $4 million from a revolving unsecured line of credit offered by the Umpqua Bank at an interest rate of prime minus 0.50%.**
    b. **Repay the line of credit with monthly interest payments and principal due at maturity, within one year from the date of the agreement.**
2. **Any two (2) of the following officers of this corporation:**

    a. **President**
    b. **Vice President**
    c. **Treasurer**
    d. **Executive Director**
    e. **Chief Financial Officer**

    are hereby authorized and directed, in the name of this corporation to execute and deliver to Bank and Bank is requested to accept the credit agreements, other instruments, agreements and documents which evidence the obligations of this corporation under the credit facilities obtained or to be obtained pursuant to this resolution.

3. **The Bank is authorized to act upon the foregoing resolution until written notice of revocation is received by the Bank, and the authority hereby granted shall apply with equal force and effect to the successors in the office of the authorized officers.**

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed: [list name(s) and, if requested, reason for "no" vote]

Notes on April 2013 Financial Statements

May 28, 2013

Revenue

April revenues of $14.9 million were only slightly below the $15.1 million budget. Revenue for all utilities is exceeding budgeted amounts year to date with the exception of Cascade. Cascade is well below budgeted amounts. Steve Lacey met with representatives from Cascade and from the Oregon Public Utility Commission; there is a proposal under consideration that would have a filing in place by the fall to mitigate the imbalance.

	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	31,265,173	30,609,293	655,880	2%
PAC	19,001,940	18,095,866	906,074	5%
NWN	14,361,903	13,941,080	420,823	3%
CNG	1,146,257	1,829,158	(682,901)	-37%
Total	65,775,273	64,475,397	1,299,876	2%

Expenses –

The Efficiency programs have spent a total of $10 million less than budgeted year to date (YTD) (25%) which is somewhat better than at the end of the Q1 (27% below budget). Renewables remain $1.7 million below budget. This is 49% below budget vs. 57% below budget at the end of the 1Q.

Year to date incentive spending for the Efficiency programs at this time last year was almost $14 million which was 14% less than the budgeted amount. This year the Efficiency programs have spent $10 million which is 41% less than the $17 million 2013 budget. (See tables below.) We are processing more projects and spending more, continuing to approach budgeted incentives (and savings).

Year to date incentives in the renewables program are $1.3 million under budget. Solar incentives remain significantly lower in the commercial sector due to weak market conditions. The solar program is monitoring demand, and has recently adjusted incentive rates. Offerings are also adjusted: the residential sector is now targeting swimming pool owners and will approach them soon. The Biopower program budgeted to pay a $500,000 incentive on a large project in Q1; that payment is now scheduled for Q3. This figure is the entire YTD variance for the Biopower program.

Management and General costs are $521,000 below budget. Outsourced Services ($182,000 below budget) and a share of IT ($181,000 below budget) are the largest components. The outsourced services budget included an accounting system upgrade, grant writing services, and a business model assessment; none of these items has yet been initiated.

Information Technology's allocated budget contains some large projects that haven't yet started, including significant CRM enhancements and other ISIP phase 2 projects, resulting in IT costs running below budget by $1 million so far to date.

The Call Center expenses are over budget by $72,000. This year, we added a second call center, with the newer one experiencing some startup issues. The program manager responsible for the new call center is aware of the cost overruns, and is investigating solutions.

Total Incentives
Year-to-Date 2013

	Actual	Budget	Variance	Var %
Existing Buildings	1,592,378	3,856,021	2,263,643	59%
New Buildings	2,273,096	2,989,911	716,815	24%
Production Efficiency	2,902,099	3,622,700	720,601	20%
Existing Homes	1,185,302	2,693,530	1,508,228	56%
New Homes & Products	2,055,430	3,879,646	1,824,216	47%
WA Programs - Combined	54,361	143,273	88,912	62%
Solar	877,206	1,556,541	679,335	44%
Open Soliciation	99,026	102,852	3,826	4%
Biopower	110,415	610,415	500,000	82%
Total Incentives	11,149,313	19,454,887	8,305,573	43%
EE Only	**10,062,666**	**17,185,081**	**7,122,415**	**41%**

Total Incentives
Year-to-Date (Prior Year)

	Actual	Budget	Variance	Var %
Existing Buildings	4,513,904	4,008,894	(505,010)	-13%
New Buildings	1,248,628	2,490,115	1,241,487	50%
Production Efficiency	2,451,563	1,634,875	(816,688)	-50%
Existing Homes	2,374,869	3,309,070	934,201	28%
New Homes & Products	3,164,945	4,490,493	1,325,548	30%
WA Programs - Combined	83,687	164,794	81,107	49%
Solar	5,859,726	1,342,097	(4,517,629)	-337%
Open Soliciation	91,664	58,345	(33,319)	-57%
Biopower	216,100	441,334	225,234	51%
Total Incentives	20,005,086	17,940,013	(2,065,073)	-12%
EE Only	**13,837,596**	**16,098,241**	**2,260,645**	**14%**

Energy Trust of Oregon, Inc
BALANCE SHEET
April 30, 2013
(Unaudited)

	APR 2013	MAR 2013	DEC 2012	Change from Prior Month	Change from Beg. of Year
Current Assets					
Cash & Cash Equivalents	84,404,348	77,208,200	64,005,605	7,196,148	20,398,743
Restricted Cash (Escrow Funds)	252,683	381,118	462,692	(128,435)	(210,008)
Receivables	8,066	4,243	123,795	3,823	(115,729)
Prepaid Expenses	903,613	856,736	265,829	46,876	637,783
Advances to Vendors	1,716,087	2,127,038	2,109,014	(410,951)	(392,927)
Total Current Assets	**87,284,796**	**80,577,335**	**66,966,935**	**6,707,462**	**20,317,862**
Fixed Assets					
Computer Hardware and Software	1,353,958	1,353,958	1,347,388	0	6,570
Leasehold Improvements	313,333	313,333	287,385	0	25,948
Office Equipment and Furniture	600,662	600,662	600,662	0	0
Total Fixed Assets	**2,267,953**	**2,267,953**	**2,235,435**	0	32,518
Less Depreciation	(1,293,360)	(1,265,950)	(1,183,098)	(27,410)	(110,262)
Net Fixed Assets	**974,593**	**1,002,003**	**1,052,337**	**(27,410)**	**(77,744)**
Other Assets					
Rental Deposit	64,461	64,461	64,461	0	0
Deferred Compensation Asset	429,348	424,234	409,369	5,113	19,979
Total Other Assets	**493,809**	**488,696**	**473,830**	**5,113**	**19,979**
Total Assets	**88,753,198**	**82,068,034**	**68,493,102**	**6,685,165**	**20,260,097**
Current Liabilities					
Accounts Payable and Accruals	7,203,396	6,502,727	21,430,138	700,669	(14,226,742)
Deposits Held for Others	6,555	6,555	49,433	0	(42,877)
Salaries, Taxes, & Benefits Payable	649,494	632,624	585,703	16,870	63,791
Total Current Liabilities	**7,859,445**	**7,141,907**	**22,065,273**	**717,539**	**(14,205,828)**
Long Term Liabilities					
Deferred Rent	338,538	334,712	323,237	3,825	15,301
Deferred Compensation Payable	429,348	424,234	409,369	5,113	19,979
Other Long-Term Liabilities	13,934	13,864	13,674	70	260
Total Long-Term Liabilities	**781,819**	**772,810**	**746,279**	**9,009**	**35,540**
Total Liabilities	**8,641,264**	**7,914,717**	**22,811,553**	**726,547**	**(14,170,288)**
Net Assets					
Temporarily Restricted Net Assets	252,683	381,118	462,692	(128,435)	(210,008)
Unrestricted Net Assets	79,859,251	73,772,199	45,218,858	6,087,053	34,640,393
Total Net Assets	**80,111,934**	**74,153,317**	**45,681,549**	**5,958,617**	**34,430,385**
Total Liabilities and Net Assets	**88,753,198**	**82,068,034**	**68,493,102**	**6,685,165**	**20,260,097**

BS-Acct-YTD-001

Energy Trust of Oregon
Cash Flow Statement-Indirect Method
Monthly 2013

	January	February	March	April	Year to Date
Operating Activities:					
Revenue less Expenses	$ 10,219,705	10,927,972	7,324,090	5,958,617	$ 34,430,384
Non-cash items:					
Depreciation	27,270	27,452	28,129	27,410	$ 110,261
Unrealized Gain/Loss on Investments				-	
Loss on disposal of assets					$ -
Receivables	53,256	66,082	35	(5,470)	$ 113,903
Interest Receivable	546	129	(496)	1,647	$ 1,826
Advances to Vendors	705,543	733,344	(1,456,911)	410,950	$ 392,926
Prepaid expenses and other costs	(559,565)	51,323	(82,665)	(46,877)	$ (637,784)
Accounts payable	(14,214,238)	1,481,611	(2,237,661)	700,669	$ (14,269,619)
Payroll and related accruals	16,657	39,359	5,770	21,984	$ 83,770
Deferred rent and other	(271)	(1,101)	(1,829)	(1,217)	$ (4,418)
Cash rec'd from / (used in) Operating Activities	(3,751,097)	13,326,171	3,578,462	7,067,713	$ 20,221,249
Investing Activities:					
(Acquisition)/Disposal of Capital Assets	-	(6,570)	(25,948)	-	$ (32,518)
Cash rec'd from / (used in) Investing Activities	-	(6,570)	(25,948)	-	$ (32,518)
Cash at beginning of Period	64,468,299	60,717,202	74,036,802	77,589,318	64,468,299
Increase/(Decrease) in Cash	(3,751,097)	13,319,602	3,552,516	7,067,713	20,188,733
Cash at end of period	$ 60,717,202	$ 74,036,802	$ 77,589,318	$ 84,657,031	$ 84,657,031

Energy Trust of Oregon
Cash Flow Projection
January 2013 - December 2014

	Actual				2013 Budget							
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	15,975,013	18,276,561	16,633,304	14,890,395	13,200,000	11,600,000	11,500,000	11,000,000	11,100,000	12,700,000	12,200,000	16,100,000
From other sources	53,256	66,082	35	(4,540)								
Investment Income	7,847	6,746	7,212	9,354	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Total cash in	16,036,116	18,349,389	16,640,551	14,895,213	13,211,000	11,611,000	11,511,000	11,011,000	11,111,000	12,711,000	12,211,000	16,111,000
Cash Out:	19,787,213	5,029,788	13,088,038	7,827,499	11,300,000	14,600,000	13,500,000	13,600,000	16,900,000	14,700,000	15,100,000	24,100,000
Net cash flow for the month	(3,751,097)	13,319,601	3,552,516	7,067,717	1,911,000	(2,989,000)	(1,989,000)	(2,589,000)	(5,789,000)	(1,989,000)	(2,889,000)	(7,989,000)
Beginning Balance: Cash & MM	64,468,297	60,717,200	74,036,802	77,589,318	84,657,031	86,568,035	83,579,035	81,590,035	79,001,035	73,212,035	71,223,035	68,334,035
Ending cash & MM	60,717,200	74,036,802	77,589,318	84,657,031	86,568,035	83,579,035	81,590,035	79,001,035	73,212,035	71,223,035	68,334,035	60,345,035
Dedicated funds Adjustment	(10,600,000)	(10,600,000)	(7,900,000)	(8,100,000)	(8,400,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)
Committed Funds Adjustment	(37,200,000)	(40,000,000)	(33,900,000)	(46,300,000)	(45,800,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)
Cash Reserve	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**6,717,200**	**17,236,802**	**29,589,318**	**24,057,035**	**26,168,035**	**22,679,035**	**20,690,035**	**18,101,035**	**12,312,035**	**10,323,035**	**7,434,035**	**-**

Escrow Cash Balance

Beginning Balance	462,692	381,052	381,090	381,118	252,683	77,948	77,956	77,964	77,972	77,980	77,988	77,996
Net Escrow (Payments)/Funding	(81,682)		-	(128,457)	(174,743)							
Interest Paid on Escrow Balances	42	38	28	22	8	8	8	8	8	8	8	0
Ending Escrow Balance1	381,052	381,090	381,118	252,683	77,948	77,956	77,964	77,972	77,980	77,988	77,996	77,997

1Included in "Ending cash & MM" above

Dedicated funds adjustment: reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements
Committed funds adjustment: reduction in available cash for commitments to Efficiency program projects with signed agreements
Cash reserve: reduction in available cash to cover cashflow variability and winter revenue risk
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon
Cash Flow Projection
January 2013 - December 2014

	2014 Board Approved Projection											
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	16,000,000	17,100,000	17,500,000	15,500,000	13,900,000	12,200,000	12,300,000	11,600,000	11,800,000	13,900,000	13,000,000	17,300,000
From other sources												
Investment Income	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total cash in	16,010,000	17,110,000	17,510,000	15,510,000	13,910,000	12,210,000	12,310,000	11,610,000	11,810,000	13,910,000	13,010,000	17,310,000
Cash Out:	25,100,000	8,900,000	11,900,000	11,200,000	11,200,000	15,500,000	14,500,000	12,600,000	16,000,000	14,200,000	14,900,000	23,800,000
Net cash flow for the month	(9,090,000)	8,210,000	5,610,000	4,310,000	2,710,000	(3,290,000)	(2,190,000)	(990,000)	(4,190,000)	(290,000)	(1,890,000)	(6,490,000)
Beginning Balance: Cash & MM	60,345,035	51,255,035	59,465,035	65,075,035	69,385,035	72,095,035	68,805,035	66,615,035	65,625,035	61,435,035	61,145,035	59,255,035
Ending cash & MM	51,255,035	59,465,035	65,075,035	69,385,035	72,095,035	68,805,035	66,615,035	65,625,035	61,435,035	61,145,035	59,255,035	52,765,035
Dedicated funds Adjustment	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)
Committed Funds Adjustment	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)
Cash Reserve	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**-**	**-**	**4,175,035**	**8,485,035**	**11,195,035**	**7,905,035**	**5,715,035**	**4,725,035**	**535,035**	**245,035**	**-**	**-**
Escrow Cash Balance												
Beginning Balance	77,997	78,013	78,029	26	26	26	26	26	26	26	26	26
Net Escrow (Payments)/Funding			(78,003)									
Interest Paid on Escrow Balances	16	16	-	-	-	-	-	-	-	-	-	0
Ending Escrow Balance1	78,013	78,029	26	26	26	26	26	26	26	26	26	26

1Included in "Ending cash & MM" above

Dedicated funds adjustment: reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements
Committed funds adjustment: reduction in available cash for commitments to Efficiency program projects with signed agreements
Cash reserve: reduction in available cash to cover cashflow variability and winter revenue risk
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon, Inc
INCOME STATEMENT - ACTUAL AND YTD COMPARISON
For the Four Months Ending April 30, 2013
(Unaudited)

	April			YTD		
	Actual	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**
REVENUES						
Public Purpose Funds-PGE	2,896,556	3,032,088	(135,532)	12,880,217	13,016,581	(136,364)
Public Purpose Funds-PacifiCorp	2,159,200	2,005,165	154,035	9,487,069	8,895,160	591,909
Public Purpose Funds-NW Natural	2,695,545	2,897,950	(202,405)	13,140,406	13,295,529	(155,123)
Public Purpose Funds-Cascade	191,076	396,653	(205,577)	1,146,257	1,829,158	(682,901)
Total Public Purpose Funds	**7,942,376**	**8,331,856**	**(389,479)**	**36,653,949**	**37,036,427**	**(382,478)**
Incremental Funds - PGE	4,173,563	4,732,244	(558,681)	18,384,956	17,592,712	792,243
Incremental Funds - PacifiCorp	2,198,510	2,038,571	159,939	9,514,871	9,200,706	314,165
NW Natural - Industrial DSM	575,946	0	575,946	575,946	0	575,946
NW Natural - Washington	0	0	0	645,551	645,551	0
Contributions	930	0	930	930	0	930
Revenue from Investments	7,615	10,000	(2,385)	29,244	40,000	(10,756)
Gain or Loss on Investments	97	0	97	97	0	97
TOTAL REVENUE	**14,899,037**	**15,112,670**	**(213,633)**	**65,805,543**	**64,515,397**	**1,290,147**
EXPENSES						
Program Subcontracts	3,705,048	3,907,207	202,159	14,422,113	15,226,592	804,479
Incentives	3,831,503	5,354,545	1,523,042	11,149,315	19,454,887	8,305,573
Salaries and Related Expenses	793,684	897,290	103,606	3,176,619	3,573,490	396,871
Professional Services	367,828	894,140	526,312	1,707,416	3,782,917	2,075,501
Supplies	3,573	10,354	6,780	10,935	41,415	30,480
Telephone	4,077	4,453	376	16,694	18,062	1,368
Postage and Shipping Expenses	1,335	833	(502)	3,377	3,333	(43)
Occupancy Expenses	55,823	58,434	2,610	220,394	233,734	13,340
Noncapitalized Equip. & Depr.	53,403	32,181	(21,222)	205,983	334,088	128,104
Call Center	66,480	44,917	(21,563)	251,899	179,667	(72,232)
Printing and Publications	5,790	17,112	11,322	54,627	68,450	13,823
Travel	11,078	13,849	2,771	38,232	65,945	27,713
Conference, Training & Mtng Exp	13,684	31,174	17,490	43,274	138,422	95,148
Interest Expense and Bank Fees	77	625	548	443	2,500	2,057
Insurance	7,800	9,167	1,367	31,200	36,667	5,467
Miscellaneous Expenses	180	225	45	180	900	720
Dues, Licenses and Fees	19,055	10,134	(8,921)	42,458	48,599	6,141
TOTAL EXPENSES	**8,940,419**	**11,286,638**	**2,346,219**	**31,375,158**	**43,209,667**	**11,834,508**
TOTAL REVENUE LESS EXPENSES	**5,958,617**	**3,826,032**	**2,132,586**	**34,430,385**	**21,305,730**	**13,124,655**

IS-Acct-YTD-001

Energy Trust of Oregon, Inc
Statement of Functional Expenses
For the Four Months Ending April 30, 2013

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Total Budget	Variance
Program Expenses									
Incentives/ Program Management & Deliver	24,439,386	1,132,042	25,571,428			0	25,571,428	34,681,479	9,110,051
Payroll and Related Expenses	921,547	281,371	1,202,918	618,279	289,009	907,288	2,110,206	2,226,577	116,371
Outsourced Services	1,154,959	147,872	1,302,831	50,941	231,097	282,038	1,584,869	2,897,373	1,312,504
Planning and Evaluation	583,310	26,337	609,647			0	609,647	956,109	346,462
Customer Service Management	394,017	6,403	400,420			0	400,420	353,360	(47,060)
Trade Allies Network	116,546	5,275	121,821			0	121,821	152,764	30,943
Total Program Expenses	**27,609,765**	**1,599,299**	**29,209,064**	**669,221**	**520,106**	**1,189,327**	**30,398,391**	**41,267,662**	10,869,271
Program Support Costs									
Supplies	3,267	824	4,091	3,271	774	4,045	8,136	26,148	18,012
Postage and Shipping Expenses	1,594	250	1,844	492	229	721	2,565	2,618	53
Telephone	875	412	1,287	358	182	540	1,827	2,038	211
Printing and Publications	49,269	3,029	52,298	152	1,215	1,367	53,665	65,859	12,194
Occupancy Expenses	68,895	21,116	90,011	41,479	19,277	60,756	150,767	149,600	(1,167)
Insurance	9,804	3,005	12,809	5,903	2,743	8,646	21,455	23,549	2,094
Equipment	12,153	4,412	16,565	1,775	825	2,600	19,165	7,976	(11,189)
Travel	14,223	4,298	18,521	5,156	1,348	6,504	25,025	47,578	22,553
Meetings, Trainings & Conferences	10,458	2,399	12,857	7,083	1,942	9,025	21,882	93,222	71,340
Interest Expense and Bank Fees		100	100	343		343	443	2,500	2,057
Depreciation & Amortization	17,094	6,012	23,106	10,292	4,783	15,075	38,181	34,309	(3,872)
Dues, Licenses and Fees	20,840	7,839	28,679	(2,296)	1,531	(765)	27,914	20,944	(6,970)
Miscellaneous Expenses	180		180			0	180	602	422
IT Services	427,794	50,358	478,152	85,319	42,094	127,413	605,565	1,465,066	859,501
Total Program Support Costs	**636,445**	**104,054**	**740,499**	**159,327**	**76,941**	**236,268**	**976,767**	**1,942,009**	**965,242**
TOTAL EXPENSES	**28,246,210**	**1,703,353**	**29,949,563**	**828,548**	**597,047**	**1,425,595**	**31,375,158**	**43,209,667**	**11,834,508**
OPUC measure vs. 9%	**3.29%**								

Exp-Acct-YTD-002

Energy Trust of Oregon, Inc
Year to Date by Program/Service Territory - joint costs allocated at program level
For the Four Months Ending April 30, 2013
(Unaudited)

	ENERGY EFFICIENCY											RENEWABLE ENERGY				TOTAL		
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	Clark PUD WA	NWN WA	Total WA	ETO Total	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change
REVENUES																		
Public Purpose Funding	$9,957,299	$7,369,726	$17,327,025		$13,140,406	$1,146,257	$31,613,688				$31,613,688	$2,922,918	$2,117,343	$5,040,261		$36,653,949	$37,036,427	$382,478
Incremental Funding	$18,384,956	$9,514,871	$27,899,827	$575,946			$28,475,773		$645,551	$645,551	$29,121,324					$29,121,324	$27,438,970	($1,682,354)
Contributions															930	930		(930)
Revenue from Investments															29,244	29,244	40,000	10,756
Gain or Loss on Investments															97	97		(97)
TOTAL PROGRAM REVENUE	**28,342,255**	**16,884,597**	**45,226,852**	**575,946**	**13,140,406**	**1,146,257**	**60,089,461**		**645,551**	**645,551**	**60,735,012**	**2,922,918**	**2,117,343**	**5,040,261**	**30,271**	**65,805,544**	**64,515,397**	**(1,290,147)**
EXPENSES																		
Program Management (Note 3)	839,540	592,959	1,432,499	28,213	430,116	26,009	1,916,837	496	78,662	79,158	1,995,995	106,027	175,344	281,371	**0**	2,277,366	2,003,868	(273,498)
Program Delivery	6,007,473	4,296,291	10,303,764	125,922	1,655,424	102,099	12,187,209	647	79,496	80,143	12,267,352	20,415	24,979	45,394	**0**	12,312,746	13,357,074	1,044,328
Incentives	5,955,143	2,404,546	8,359,689	280,574	1,268,310	99,734	10,008,307	0	54,361	54,361	10,062,668	641,882	444,767	1,086,649	**0**	11,149,317	19,454,887	8,305,570
Program Eval & Planning Svcs.	582,065	336,849	918,914	21,044	165,868	10,272	1,116,098	87	9,362	9,449	1,125,547	10,483	15,854	26,337	**0**	1,151,884	1,857,466	705,582
Program Marketing/Outreach	641,808	451,516	1,093,324	5,829	359,713	20,000	1,478,866	0	9,078	9,078	1,487,944	20,534	11,189	31,723	**0**	1,519,667	1,721,236	201,569
Program Quality Assurance	10,267	10,461	20,728	0	11,995	560	33,283	0	0	0	33,283	725	0	725	**0**	34,008	85,000	50,992
Outsourced Services	54,506	41,717	96,223	778	28,028	1,380	126,409	0	0	0	126,409	58,514	56,909	115,423	**0**	241,832	856,286	614,454
Trade Allies & Cust. Svc. Mgmt.	118,660	90,026	208,686	765	85,440	4,803	299,694	64	8,455	8,519	308,213	7,424	4,213	11,637	**0**	319,850	373,123	53,273
IT Services	188,818	126,578	315,396	3,134	92,424	5,116	416,070	85	11,639	11,724	427,794	21,706	28,651	50,357	**0**	478,151	1,156,993	678,842
Other Program Expenses	154,538	119,538	274,076	3,419	109,170	5,603	392,267	131	18,604	18,735	411,002	25,578	28,160	53,738	**0**	464,740	397,228	(67,512)
TOTAL PROGRAM EXPENSES	**14,552,817**	**8,470,481**	**23,023,298**	**469,678**	**4,206,488**	**275,576**	**27,975,040**	**1,511**	**269,656**	**271,167**	**28,246,207**	**913,287**	**790,067**	**1,703,354**	**0**	**29,949,561**	**41,263,161**	**11,313,600**
ADMINISTRATIVE COSTS																		
Management & General (Notes 1 & 2)	402,600	234,334	636,933	12,993	116,371	7,624	773,922	42	7,460	7,502	781,424	24,289	22,834	47,123	**0**	828,548	1,192,370	363,823
Communications & Customer Svc (Notes 1 & 2)	290,112	168,860	458,972	9,363	83,857	5,494	557,686	30	5,376	5,406	563,092	17,503	16,454	33,957	**0**	597,047	754,133	157,084
Total Administrative Costs	**692,712**	**403,194**	**1,095,906**	**22,357**	**200,228**	**13,117**	**1,331,608**	**72**	**12,836**	**12,908**	**1,344,516**	**41,792**	**39,288**	**81,080**	**0**	**1,425,595**	**1,946,503**	**520,907**
TOTAL PROG & ADMIN EXPENSES	**15,245,529**	**8,873,675**	**24,119,203**	**492,035**	**4,406,716**	**288,694**	**29,306,648**	**1,583**	**282,492**	**284,075**	**29,590,725**	**955,079**	**829,356**	**1,784,435**	**0**	**31,375,158**	**43,209,664**	**11,834,506**
TOTAL REVENUE LESS EXPENSES	**13,096,726**	**8,010,922**	**21,107,649**	**83,911**	**8,733,690**	**857,563**	**30,782,813**	**(1,583)**	**363,059**	**361,476**	**31,144,287**	**1,967,839**	**1,287,987**	**3,255,826**	**30,271**	**34,430,385**	**21,305,733**	**(13,124,653)**
Cumulative Carryover at 12/31/12 (Note 4)	12,168,475	3,036,549	15,205,024	1,099,798	3,013,149	(392,281)	18,925,690	50,734	353,174	403,908	19,329,598	8,211,384	7,461,615	15,672,999	10,678,953	45,681,550	37,070,557	(8,610,993)
Interest attributed	1,740,000	1,160,000	2,900,000		5,000,000	392,281	8,292,281				8,292,281	585,000	2,235,000	2,820,000	(11,112,281)		7,900,000	7,900,000
Interest re-attributed	(1,740,000)	(1,160,000)	(2,900,000)		(5,000,000)		(7,900,000)				(7,900,000)				7,900,000		(7,900,000)	(7,900,000)
TOTAL NET ASSETS CUMULATIVE	**25,265,201**	**11,047,471**	**36,312,673**	**1,183,709**	**11,746,839**	**857,563**	**50,100,784**	**49,151**	**716,233**	**765,384**	**50,866,166**	**10,764,223**	**10,984,602**	**21,748,825**	**7,496,943**	**80,111,934**	**58,376,290**	**(21,735,646)**

Note 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.
Note 2) Administrative costs are allocated for management reporting only. GAAP for Not for Profit organizations does not allow allocation of administrative costs to program expenses.
Note 3) Program Management costs include both outsourced and internal staff.
Note 4) Cumulative carryover at 12/31/2012 reflects audited results.

Energy Trust of Oregon, Inc
Program Expense by Service Territory
For the Four Months Ending April 30, 2013
(Unaudited)

	PGE	Pacific Power	Subtotal Elec	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	Clark PUD WA	NWN WA	Total WA	ETO Total	YTD Budget	Variance
Energy Efficiency														
Commercial														
Existing Buildings	2,696,205	2,380,974	5,077,179	18,069	1,085,373	31,972	1,135,414	6,212,593	1,583	83,611	85,194	6,297,787	9,375,552	3,077,765
New Buildings	3,156,611	736,191	3,892,802	666	154,474	34,965	190,105	4,082,907			0	4,082,907	5,419,964	1,337,057
NEEA	503,292	379,678	882,970				**0**	882,970			0	882,970	945,125	62,155
Total Commercial	**6,356,108**	**3,496,843**	**9,852,951**	**18,735**	**1,239,847**	**66,937**	**1,325,519**	**11,178,470**	**1,583**	**83,611**	**85,194**	**11,263,664**	**15,740,641**	**4,476,977**
Industrial														
Production Efficiency	4,113,669	1,794,486	5,908,155	473,298	145,570	30,837	649,705	6,557,860			**0**	6,557,860	7,477,539	919,679
NEEA	262,523	198,044	460,567				**0**	460,567			**0**	460,567	473,506	12,939
Total Industrial	**4,376,192**	**1,992,530**	**6,368,722**	**473,298**	**145,570**	**30,837**	**649,705**	**7,018,427**			**0**	**7,018,427**	**7,951,045**	**932,618**
Residential														
Existing Homes	1,597,578	1,627,842	3,225,420		1,866,087	87,172	1,953,259	5,178,679		125,310	125,310	5,303,989	7,521,324	2,217,335
New Homes/Products	2,111,672	1,149,951	3,261,623		1,155,215	103,746	1,258,961	4,520,584		73,569	73,569	4,594,153	7,213,733	2,619,580
NEEA	803,980	606,512	1,410,492				**0**	1,410,492			**0**	1,410,492	1,290,959	(119,533)
Total Residential	**4,513,230**	**3,384,305**	**7,897,535**		**3,021,302**	**190,918**	**3,212,220**	**11,109,755**		**198,879**	**198,879**	**11,308,634**	**16,026,016**	**4,717,382**
Energy Efficiency Program Cos	**15,245,530**	**8,873,678**	**24,119,208**	**492,033**	**4,406,719**	**288,692**	**5,187,444**	**29,306,652**	**1,583**	**282,490**	**284,073**	**29,590,725**	**39,717,702**	**10,126,977**
Renewables														
Biopower	16,954	191,230	208,184				**0**	208,184			**0**	208,184	782,953	574,769
Solar Electric (Photovoltaic)	821,056	435,651	1,256,707				**0**	1,256,707			**0**	1,256,707	2,288,968	1,032,261
Other Renewable	117,069	202,475	319,544					319,544				319,544	396,154	76,610
Renewables Program Costs	**955,079**	**829,356**	**1,784,435**				**0**	**1,784,435**			**0**	**1,784,435**	**3,468,075**	**1,683,640**
Cost Grand Total	**16,200,609**	**9,703,034**	**25,903,643**	**492,033**	**4,406,719**	**288,692**	**5,187,444**	**31,091,087**	**1,583**	**282,490**	**284,073**	**31,375,158**	**43,185,777**	**11,810,617**

PUC-Proj-ST-07-C

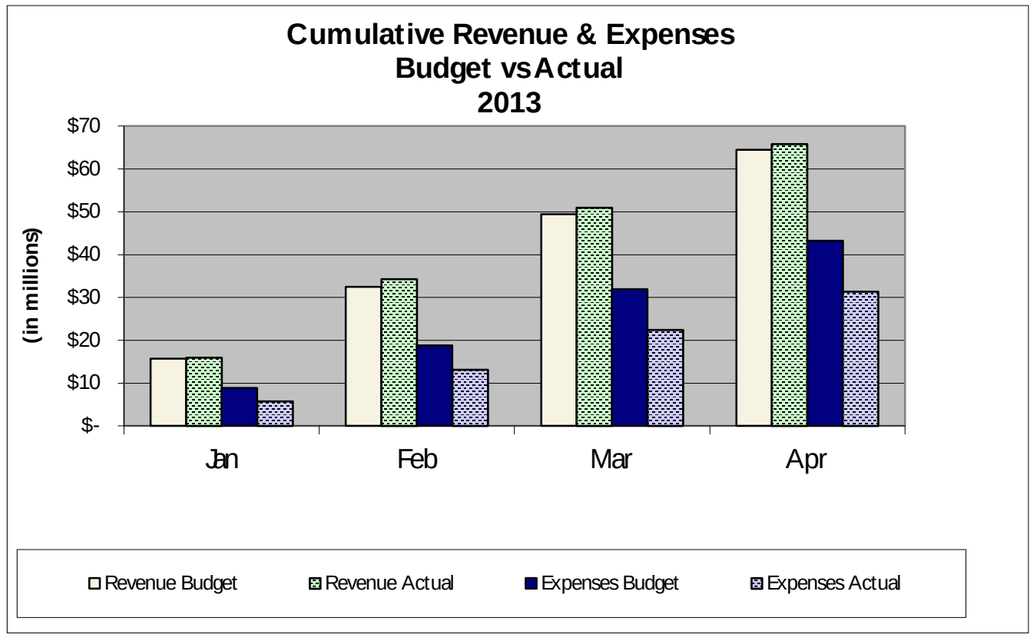
Energy Trust of Oregon, Inc.
ADMINISTRATIVE EXPENSES
For the Month and Year to Date Ended April 30, 2013
(Unaudited)

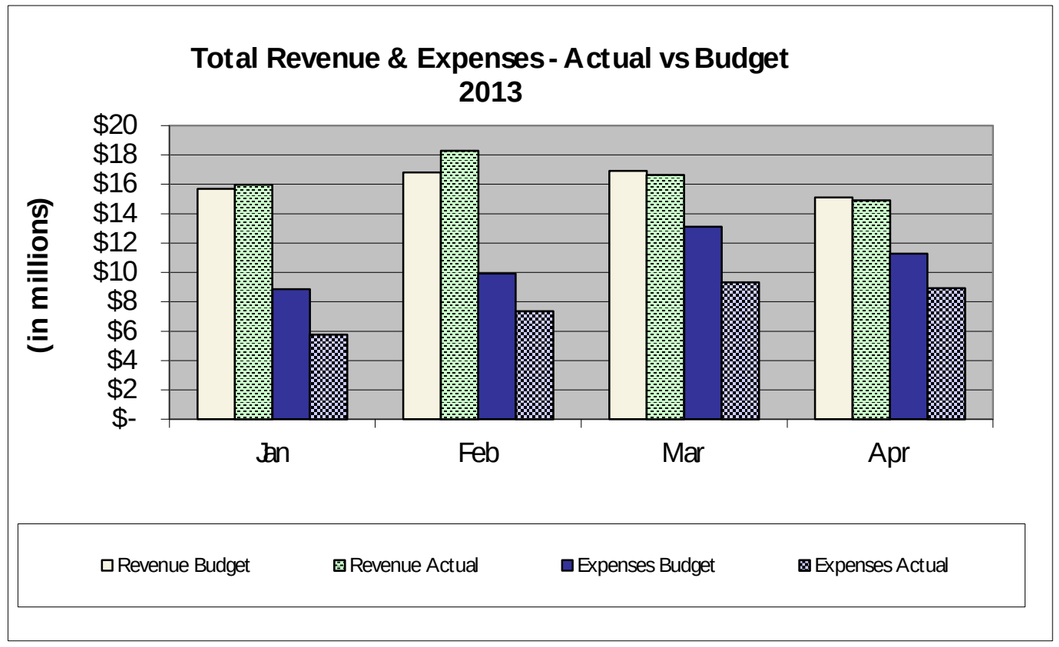
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	MONTHLY	QUARTERLY	QUARTER	YTD			MONTHLY	QUARTERLY	QUARTER	YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
EXPENSES												
Outsourced Services	$8,023	$124,546	$116,523	$48,060	$151,061	$103,001	$25,300	$232,500	$207,200	$231,097	$310,000	$78,903
Legal Services	2,722	22,500	19,779	2,882	30,000	27,119						
Salaries and Related Expenses	155,231	512,450	357,219	618,279	657,335	39,056	76,645	208,331	131,686	289,009	277,321	(11,688)
Supplies		1,575	1,575	1,662	2,100	438		250	250	26	333	308
Telephone		350	350		467	467				15		(15)
Postage and Shipping Expenses								1,000	1,000		1,333	1,333
Noncapitalized Equipment								250	250		333	333
Printing and Publications		150	150	10	200	190	520	13,750	13,230	1,149	18,333	17,184
Travel	1,745	11,833	10,089	5,156	15,778	10,622	728	1,750	1,022	1,348	2,333	986
Conference, Training & Mtngs	3,181	46,147	42,966	7,083	59,755	52,672	932	7,125	6,193	1,942	9,500	7,559
Interest Expense and Bank Fees	77	1,875	1,798	343	2,500	2,157						
Miscellaneous Expenses		50	50		67	67						
Dues, Licenses and Fees	(3,579)	3,120	6,700	(2,296)	1,600	3,896	110	500	390	1,531	667	(864)
Shared Allocation (Note 1)	15,298	48,964	33,666	62,050	65,232	3,182	8,387	24,156	15,769	28,837	32,182	3,345
IT Service Allocation (Note 2)	19,044	100,196	81,152	85,319	206,276	120,957	9,396	49,447	40,051	42,094	101,797	59,702
TOTAL EXPENSES	**201,740**	**873,757**	**672,016**	**828,548**	**1,192,371**	**363,823**	**122,018**	**539,059**	**417,041**	**597,047**	**754,133**	**157,085**

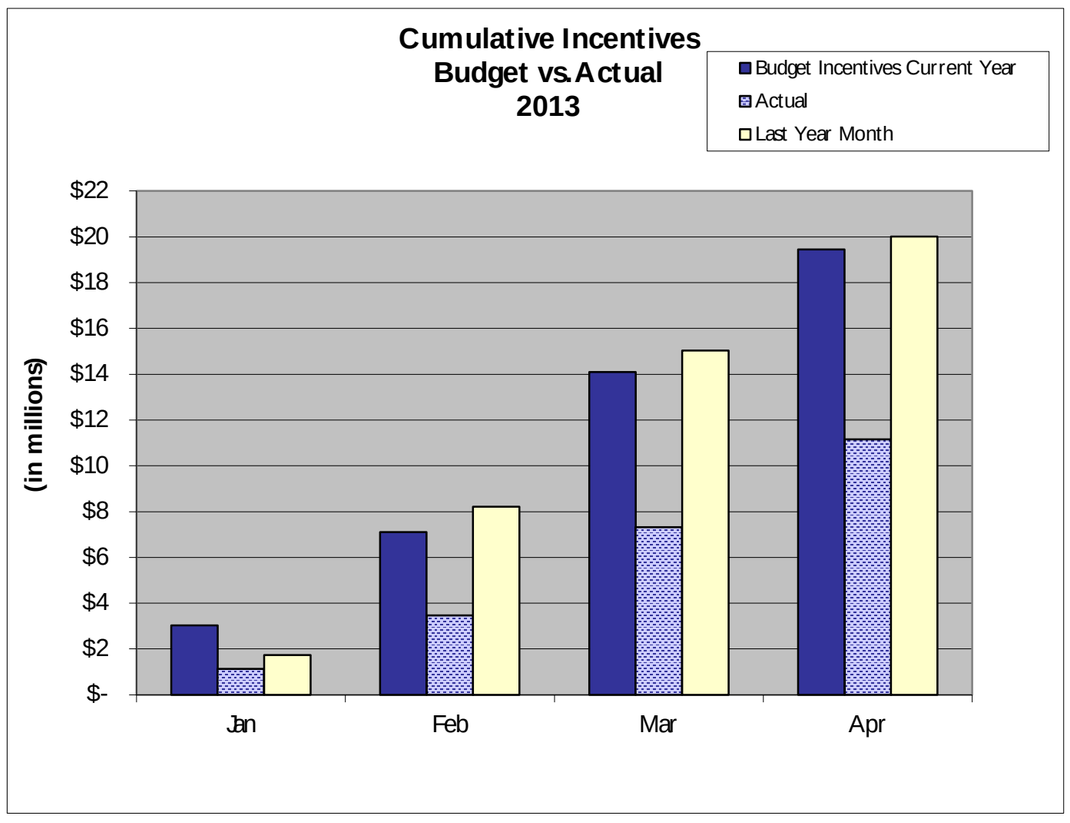
Note 1) Represents allocation of Shared (General Office Management) Costs
Note 2) Represents allocation of Shared IT Costs

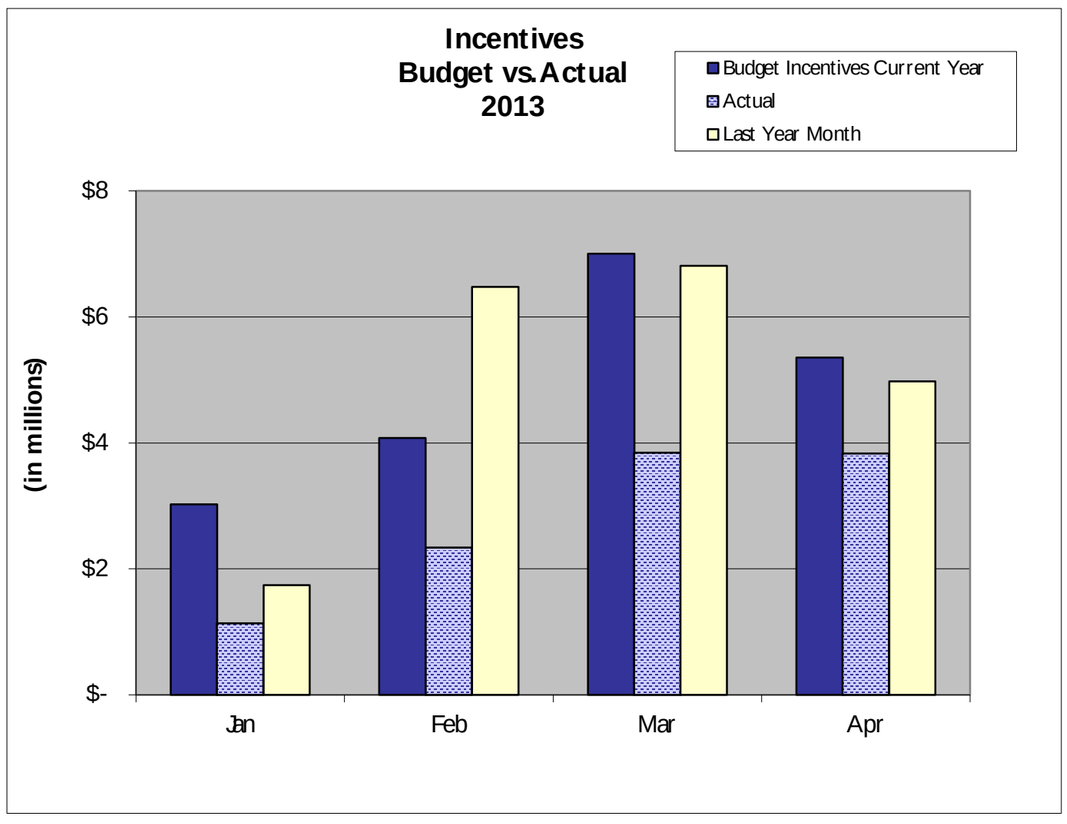
Exp-Prog-YTD-001

Administrative Expenses 1st Month of Quarter


Cumulative Revenue & Expenses
Budget vs Actual
2013
(in millions)
$70
$60
$50
$40
$30
$20
$10
$-
Jan
Feb
Mar
Apr
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2013
(in millions)
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2013
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$22
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr


Incentives
Budget vs. Actual
2013
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr

R00407

For contracts with costs through: 5/1/2013

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 5/17/2013

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**7,578,321**	**2,730,358**	**4,847,963**		
Communications & Outreach							
		Communications & Outreach Total:	**2,753,460**	**1,425,571**	**1,327,889**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	23,599,357	15,539,323	1/1/10	7/1/15
ICF Resources, LLC	PMC BE 2013	Fairfax	7,731,351	2,305,939	5,425,412	1/1/13	12/31/13
Fluid Market Strategies LLC	2013 HES PMC	Portland	7,338,775	2,218,245	5,120,530	1/1/13	12/31/13
Portland Energy Conservation, Inc.	PMC NHP 2013	Portland	6,315,684	1,716,704	4,598,980	1/1/13	12/31/13
Portland Energy Conservation, Inc.	2013 NBE PMC	Portland	4,736,060	1,190,812	3,545,248	1/1/13	12/31/13
Intel Corporation	Intel D1X Megaproject	Hillsboro	4,000,000	2,540,546	1,459,454	11/15/12	12/31/14
Lockheed Martin Services, Inc.	2013 MF PMC	Cherry Hill	2,673,341	821,606	1,851,735	1/1/13	12/31/13
OPOWER, Inc.	OPOWER Agreement	Arlington	2,092,200	2,009,920	82,280	3/2/10	2/28/14
Oregon State University	CHP Project - OSU	Corvallis	2,024,263	1,920,000	104,263	12/20/10	1/31/16
Portland General Electric	PDC - PE 2013		1,871,000	536,468	1,334,532	1/1/13	12/31/13
Cascade Energy, Inc.	PDC - PE 2013	Walla Walla	1,725,055	662,527	1,062,528	1/1/13	12/31/13
RHT Energy Solutions	PDC - PE 2013	Medford	1,278,651	421,791	856,860	1/1/13	12/31/13
Cascade Energy, Inc.	PDC - PE 2013 Small Industrial	Walla Walla	1,147,500	406,711	740,789	1/1/13	12/31/13
Evergreen Consulting Group, LLC	PE Lighting PDC 2013	Tigard	1,071,000	359,024	711,976	1/1/13	12/31/13
Northwest Power & Conservation Council	Annual Work Plan		874,652	550,195	324,457	3/20/12	12/31/14
NEXANT, INC.	PDC - PE 2013	San Francisco	825,818	215,714	610,104	1/1/13	12/31/13
Navigant Consulting Inc	PE Program Impact Evaluation	Boulder	548,000	542,720	5,280	12/15/11	6/30/13
Ecova Inc	Plug Load Solutions Funding	Spokane	499,950	61,533	438,417	1/1/13	12/31/13
Evoworx Inc.	EnergySavvy Online Audit Tool	Seattle	472,500	266,134	206,366	1/1/12	12/31/13
Clean Energy Works Oregon Inc	Clean Energy Works	Portland	448,500	300,000	148,500	1/1/10	6/30/13
OPOWER, Inc.	OPower Personal Energy Reports	Arlington	425,850	155,760	270,090	8/1/13	7/31/15
Lockheed Martin Services, Inc.	PMC BE Transition - 2013	Cherry Hill	400,000	315,476	84,524	1/1/13	3/15/13
SBW Consulting, Inc.	BE Program Impact Evaluation	Bellevue	400,000	336,190	63,810	1/15/12	6/30/13
The Cadmus Group Inc.	NB Impact Eval 2010-2011	Watertown	295,000	211,392	83,608	1/13/12	12/31/13
Conservation Services Group, Inc.	2013 HES PMC Final Transition	Boston	273,000	219,624	53,376	1/1/13	3/31/13
Fluid Market Strategies LLC	2013 HES WA PMC	Portland	265,000	98,671	166,329	1/1/13	12/31/13
Research Into Action, Inc.	EB Evaluation	Portland	210,000	210,000	0	1/1/12	4/30/13
ICF Resources, LLC	NWN WA BE 2013	Fairfax	191,538	28,283	163,255	1/1/13	12/31/13
Research Into Action, Inc.	PE Evaluation	Portland	170,000	123,831	46,169	2/1/12	5/30/13
D&R International LTD	Market Lift Program	Silver Spring	150,000	0	150,000	1/1/13	9/30/13
ICF Resources, LLC	CHP Performance	Fairfax	116,320	77,920	38,400	8/5/09	6/30/13
ICF Resources, LLC	NWN DSM Initiative 2013	Fairfax	110,000	4,477	105,523	1/1/13	12/31/13
J. Hruska Global	Quality Assurance Services	Columbia City	100,000	33,283	66,718	1/1/13	12/31/14
PWP, Inc.	NBE Process Evaluation	Gaithersburg	100,000	69,113	30,887	1/6/12	12/31/13
Skumatz Economic Research Associates Inc	Existing Homes Study	Superior	100,000	86,179	13,821	7/15/11	5/1/13

*The city indicated is the contractor's mailing address, not necessarily the location where work was performed.

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Vitesse LLC	Vitesse Data Center	Menlo Park	100,000	0	100,000	10/18/12	10/30/13
Energy Efficiency Funding Group Inc	Training Classes/Workshops	San Francisco	75,000	67,590	7,410	6/1/11	5/31/13
Pollinate Inc	Web Application Development	Portland	67,000	66,444	556	1/1/12	3/31/13
Glumac Inc	Data Center Analysis	Portland	64,525	51,424	13,101	6/7/12	4/30/13
Home Performance Contractors Guild of Oregon	Existing Homes Program Support	Portland	60,000	60,000	0	1/1/12	12/31/12
Portland Energy Conservation, Inc.	EE Consultant Services	Portland	54,170	50,758	3,412	6/1/11	12/31/13
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	50,000	33,969	16,031	7/1/11	12/31/13
PWP, Inc.	Comm SEM Initiative Evaluation	Gaithersburg	45,000	22,566	22,435	7/1/12	6/30/14
KEMA Incorporated	Shelf Space Survey	Oakland	42,750	21,375	21,375	12/1/12	9/30/13
Fluid Market Strategies LLC	New Homes QA Assurance	Portland	42,250	27,130	15,120	3/1/12	12/31/12
Portland General Electric	Utility Data Payment - OPOWER	Portland	40,000	19,928	20,072	8/1/10	2/28/14
Pollinate Inc	Energy Savings Estimate	Portland	39,250	36,870	2,380	11/1/12	4/1/13
NW Natural	Info Transfer & Reimbursement	Portland	35,000	21,263	13,737	7/12/10	2/28/14
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	12,294	22,706	4/1/12	12/31/13
WegoWise Inc	Wegowise Benchmarking License	Boston	35,000	20,000	15,000	5/14/12	5/14/14
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	34,000	5,007	28,994	9/1/12	8/30/14
Navigant Consulting Inc	Sustainable Energy Syst Pilot	Boulder	30,000	18,811	11,189	2/15/11	6/30/13
Stellar Processes, Inc.	BE Measure Evaluation	Portland	25,000	18,875	6,125	10/24/12	10/24/14
Triple Point Energy Inc.	SEM Workshops	Portland	24,240	0	24,240	4/29/13	1/15/14
Triple Point Energy Inc.	Breakfast Workshops	Portland	23,585	21,700	1,885	4/12/12	1/15/13
Hitachi Consulting Corporation	SOW #16 PMC Transition Eval	Dallas	20,280	0	20,280	4/22/13	4/29/13
Michael Blasnick & Associated	Billing Analysis Process	Boston	20,000	3,938	16,063	1/1/10	12/31/13
Northwest Food Processors Association	NW Industrial EE Summit 2013	Portland	17,500	17,500	0	12/10/12	12/31/13
Lane Community College, NEEI Science Division	2013 Scholarship Grant	Eugene	16,600	0	16,600	1/1/13	12/31/13
Consortium for Energy Efficiency	Membership Dues - 2013		15,551	15,551	0	1/1/13	12/31/13
Oregon Department of Energy	Oregon Leaders Project	Salem	15,000	15,000	0	9/19/11	1/31/14
Portland State University Foundation	Green Modular Classroom Proj	Portland	10,500	5,500	5,000	6/13/12	7/31/14
Conservation Services Group, Inc.	Technical Equipment	Boston	9,205	9,205	0	3/13/13	4/13/13
Consumer Opinion Services Inc	Customer Engagement Survey	Seattle	8,200	0	8,200	3/15/13	9/30/13
American Council for and Energy Efficient Economy	Utility Behavior Landscape		7,500	7,500	0	2/1/13	10/31/13
American Council for and Energy Efficient Economy	Case Studies		7,500	7,500	0	2/1/13	10/31/13
American Council for and Energy Efficient Economy	Opportunities for Scaling Up		7,500	7,500	0	2/1/13	10/31/13
Future Energy Conference	Future Energy Conference 2012	Portland	6,500	6,500	0	12/10/12	12/31/13
Hood River County School District	Energy Model Recalibration	Hood River	6,000	0	6,000	12/5/12	3/31/13
	Energy Efficiency Programs Total:		**91,209,294**	**45,287,839**	**45,921,455**		

Joint Programs

*The city indicated is the contractor's mailing address, not necessarily the location where work was performed.

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
D&R International LTD	Better Data Better Design	Silver Spring	133,500	0	133,500	4/30/13	4/30/14
Abt SRBI Inc.	Fast Feedback Survey	New York	65,000	2,414	62,586	3/1/13	2/28/14
ICF Resources, LLC	Planning Consultant Services	Fairfax	64,700	63,840	860	6/16/11	5/31/13
Portland State University	Technology Forecasting		57,674	34,458	23,216	11/7/11	12/31/13
Issues & Answers Network Inc	Residential Awareness 2013	Virginia Beach	30,000	0	30,000	4/15/13	12/31/13
Navigant Consulting Inc	P&E Consultant Services	Boulder	22,040	22,040	0	6/30/11	7/1/13
Glumac Inc	Planning Technical Analysis	Portland	15,000	15,000	0	10/17/12	10/17/14
CoStar Realty Information Inc	Property Data	Baltimore	12,668	11,123	1,545	6/1/11	1/31/14
American Council for and Energy Efficient Economy	ACEEE Sponsorship - 2013		10,000	10,000	0	1/1/13	12/31/13
KRH Consulting	Work Load Mangement	Portland	10,000	0	10,000	4/23/13	10/1/13
		Joint Programs Total:	**420,582**	**158,875**	**261,707**		
Renewable Energy Program							
Outback Solar LLC	Outback Solar	Portland	5,000,000	4,950,000	50,000	5/9/12	5/9/37
Sunway 3, LLC	Prologis PV installation		3,405,000	3,396,044	8,956	9/30/08	9/30/28
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	0	2,000,000	10/18/12	10/18/32
Rough & Ready Lumber Company	Biopower Funding Agreement	Cave Junction	1,685,088	1,684,787	301	7/21/06	7/21/26
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	750	1,549,250	9/11/12	9/11/32
Alder Solar LLC	Habilitation Center PV	Portland	1,236,750	1,224,244	12,506	1/18/08	12/31/28
Central Oregon Irrigation District	Juniper Ridge Hydroelectric	Redmond	1,000,000	1,000,000	0	10/31/08	6/30/31
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	0	1,000,000	10/25/12	10/25/27
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	0	1,000,000	4/25/12	4/25/32
RES - Ag FGO LLC	Biogas Manure Digester Project	Washington	883,320	331,245	552,075	10/27/10	10/27/25
Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Corvallis	827,000	551,334	275,666	6/24/09	6/24/29
RBS Asset Finance Inc	Black Cap Solar PV Funding	Chicago	600,000	600,000	0	10/1/12	10/1/37
Tioga Solar VI, LLC	Photovoltaic Project Agreement	San Mateo	570,760	497,399	73,361	2/1/09	2/1/30
C Drop Hydro LLC	C Drop Project - Klamath Irrig	Idaho Falls	490,000	490,000	0	11/1/11	11/1/31
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	487,000	487,000	0	3/2/10	3/2/30
City of Medford	750kW Combined Heat & Power	Medford	450,000	225,000	225,000	10/20/11	10/20/31
City of Pendleton	Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/12	4/20/32
K2A Properties, LLC	Doerfler Wind Farm Project	Aumsville	230,000	156,486	73,514	5/20/10	5/20/30
Farmers Irrigation District	Low Line Canal Pressurization	Hood River	150,000	95,000	55,000	9/26/12	11/30/32
Farmers Irrigation District	Indian Creek Corridor Project	Hood River	100,000	100,000	0	1/5/10	1/4/29
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	7,380	92,620	10/1/11	10/1/13
Stoller Vineyards, Inc.	Stoller Vineyards PV	Dayton	79,815	77,390	2,425	12/1/05	12/1/26
Wallowa Resources Community Solutions Inc	Integrated Biomass Energy Camp	Enterprise	70,000	70,000	0	2/1/12	1/31/27
City of Portland Water Bureau	Vernon Hydro	Portland	65,000	65,000	0	11/15/10	11/15/30
Bloomberg LP	Insight Services	San Francisco	45,600	50,383	-4,783	4/1/11	1/1/14

*The city indicated is the contractor's mailing address, not necessarily the location where work was performed.

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
University of Oregon	UO SMRL Contribution - 2013	Eugene	45,000	45,000	0	3/9/13	3/9/14
MC Energy LLC	Small Wind Incentive	Spokane	43,250	43,250	0	9/21/10	9/21/25
Clean Energy States Alliance	CESA Year 10 (2013)		39,543	39,543	0	7/1/12	6/30/13
Wind Products Inc	Wind Consultant	Brooklyn	37,500	17,500	20,000	2/6/12	12/31/13
Harold Hartman dba Lynhart Farms	17.5 kW PV project	Malin	32,500	31,386	1,114	5/25/07	5/25/27
Northwest SEED	Grant Agreement	Seattle	30,000	30,000	0	10/3/11	12/31/13
SPS of Oregon Inc	Spaur Microhydro	Wallowa	25,000	25,000	0	7/23/10	7/23/30
Robert Migliori	42kW wind energy system	Newberg	24,125	8,561	15,564	4/11/07	1/31/24
Solar Oregon	Outreach Services	Portland	24,000	6,000	18,000	1/1/13	12/31/13
Wind Products Inc	Web Portal Tool	Brooklyn	24,000	25,000	-1,000	6/25/12	9/20/13
Farmers Conservation Alliance	FID Small Hydro Analysis	Hood River	20,000	0	20,000	11/1/12	6/30/13
Solar Oregon	Energy Education Sponsor 2013	Portland	16,000	16,000	0	1/1/13	12/31/13
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/05	10/1/20
Corbett Water District	Corbett Water District Hydro	Corbett	12,000	0	12,000	4/16/12	6/30/32
Clean Energy States Alliance	CESA ITAC		10,000	10,000	0	1/1/13	12/31/13
American Wind Group LLC	Anemometer Incentive Funding	Oasis	4,031	4,031	0	7/22/11	2/15/14
Blue Tree Strategies Inc	RE Consulting Services	Portland	3,600	3,555	45	6/14/11	5/31/13
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
	Renewable Energy Program Total:		**23,882,032**	**16,526,523**	**7,355,509**		
	Grand Totals:		**125,843,689**	**66,129,165**	**59,714,524**		

*The city indicated is the contractor's mailing address, not necessarily the location where work was performed.

Notes on May 2013 Financial Statements

June 26, 2013

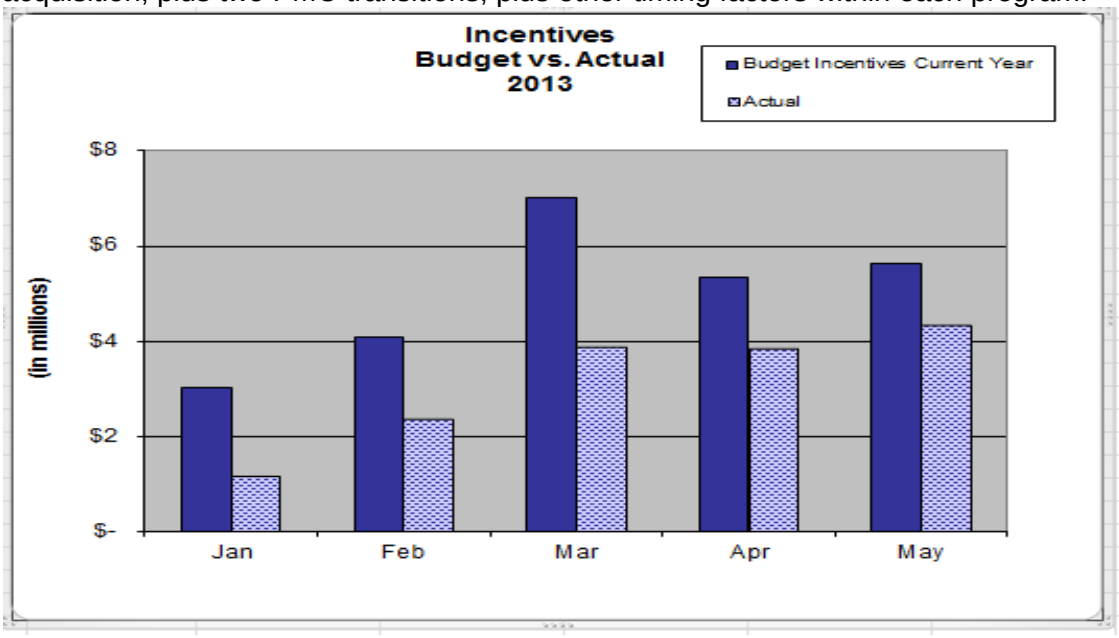
Revenue & Cash

Revenues are fairly close to budgeted amounts. The revenue shortfall in Cascade's service territory has been addressed in discussions between Steve Lacey and Cascade staff; the deficit will be ameliorated prior to year end. In May we recorded a $5 million investment through Umpqua in CD's issued by various banks. We will hold these CD's until maturity (generally 3-12 months) and hope to earn slightly more interest than our current Umpqua CDAR's return. We will probably end up investing $5-$10 million with Umpqua in this way. We will also transfer an additional $10 million between banks in June to obtain a higher CDARs return.

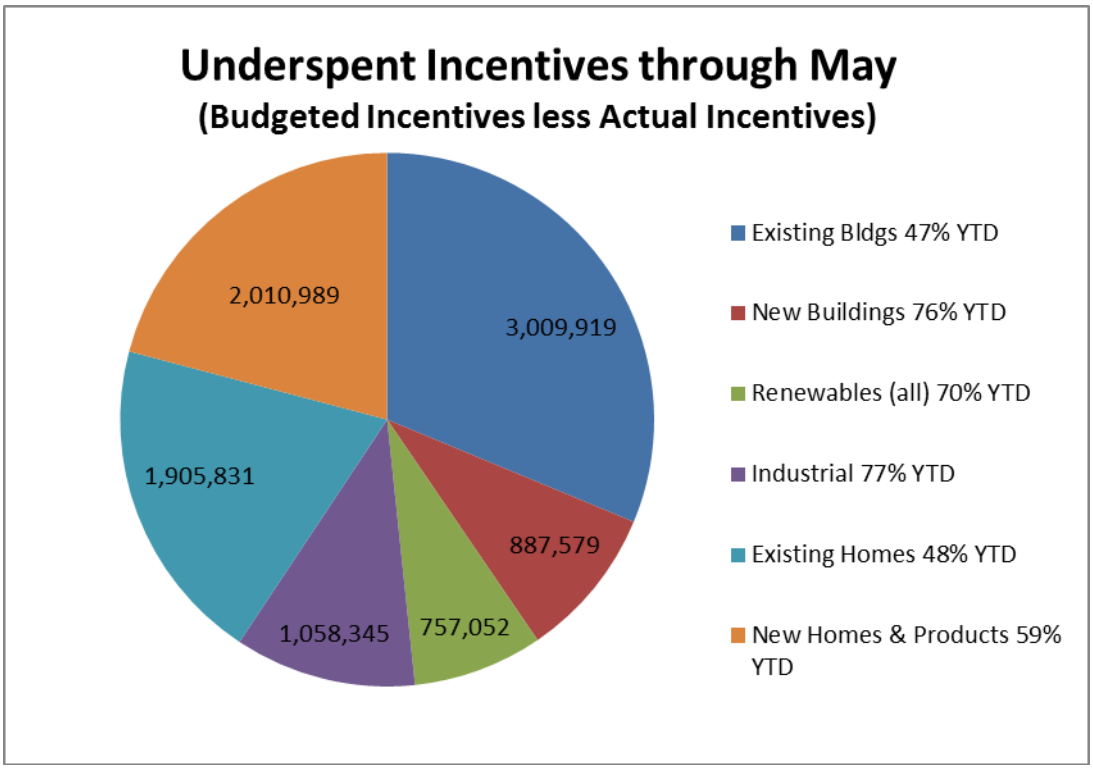
May-13	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	37,791,891	37,583,477	208,414	1%
PAC	22,988,104	22,015,380	972,724	4%
NWN	16,395,528	16,252,992	142,536	1%
CNG	1,280,345	2,045,873	(765,528)	-37%
Investment Income	36,227	50,000	(13,773)	-28%
Total	78,492,095	77,947,722	544,373	1%

Expenses

Total company expenses YTD are $41 million, which is $13 million less than budgeted spending. Incentive spending makes up $9.6 million (74%) of the total amount underspent; 92% of that is from the efficiency programs. Incentive spending by month is gradually picking up pace since the low point in January. This is partly due to the normal 'hockey stick' we frequently talk about in relation to spending and energy savings acquisition, plus two PMC transitions, plus other timing factors within each program.



The following chart shows, by program, the incentive variance (versus budget) for the first five months. The % figure next to the program indicates how much of the current year's budgeted incentives have been spent. Industrial, for example, has spent 77% of their January to May incentive budget, the remaining unspent 23% representing $1,058,345 in incentive spending variance.



We know that the two programs that transitioned to new PMC's (Existing homes and Existing buildings) are experiencing start-up issues, as the new teams continue to build their pipelines and settle into new routines. The program managers continue to express optimism for meeting the annual targets, but acknowledge the slow start could have been better represented in the seasonal budget curves used to compute monthly and quarterly spending and energy goals. We will get more information about trends and year end expectations when the quarterly report is complete following the June close.

The other expense category with variances of note is professional services, primarily in planning and IT, with spending budget of $2 million, or 56%, due to budgeted projects not yet underway.

Incentives thru May 2013	Total Incentives Year-to-Date 2013			
	Actual	Budget	Variance	Var %
Existing Buildings	2,636,874	5,622,635	2,985,761	53%
New Buildings	2,775,676	3,663,256	887,580	24%
Production Efficiency	3,584,882	4,643,227	1,058,345	23%
Existing Homes	1,763,801	3,636,265	1,872,464	51%
New Homes & Products	2,881,032	4,849,557	1,968,525	41%
WA Programs - Combined	85,352	185,340	99,988	54%
Solar	1,229,523	1,732,107	502,584	29%
Open Soliciation	135,670	140,440	4,770	3%
Biopower	360,716	610,415	249,699	41%
Total Incentives	15,453,526	25,083,240	9,629,713	38%
EE Only	**13,727,617**	**22,600,280**	**8,872,663**	**39%**

Incentives thru May 2012	Total Incentives Year-to-Date (Prior Year)			
	Actual	Budget	Variance	Var %
Existing Buildings	5,582,979	5,169,443	(413,536)	-8%
New Buildings	2,493,335	3,112,643	619,308	20%
Production Efficiency	2,943,340	2,858,459	(84,881)	-3%
Existing Homes	3,837,575	4,914,078	1,076,503	22%
New Homes & Products	4,009,710	5,246,790	1,237,080	24%
WA Programs - Combined	116,343	202,988	86,645	43%
Solar	6,771,405	1,817,624	(4,953,781)	-273%
Open Soliciation	142,773	266,075	123,302	46%
Biopower	216,100	458,000	241,900	53%
Total Incentives	26,113,560	24,046,096	(2,067,464)	-9%
EE Only	**18,983,282**	**21,504,401**	**2,521,119**	**12%**

Energy Trust of Oregon, Inc
BALANCE SHEET
May 31, 2013
(Unaudited)

	MAY 2013	APR 2013	DEC 2012	Change from Prior Month	Change from Beg. of Year
Current Assets					
Cash & Cash Equivalents	82,083,349	84,404,348	64,005,605	(2,320,999)	18,077,744
Restricted Cash (Escrow Funds)	252,690	252,683	462,692	7	(210,002)
Investments	4,980,004	0	0	4,980,004	4,980,004
Receivables	8,584	8,066	123,795	518	(115,211)
Prepaid Expenses	913,387	903,613	265,829	9,775	647,558
Advances to Vendors	1,007,075	1,716,087	2,109,014	(709,013)	(1,101,939)
Total Current Assets	**89,245,088**	**87,284,796**	**66,966,935**	**1,960,292**	**22,278,154**
Fixed Assets					
Computer Hardware and Software	1,368,867	1,353,958	1,347,388	14,909	21,479
Leasehold Improvements	313,333	313,333	287,385	0	25,948
Office Equipment and Furniture	600,662	600,662	600,662	0	0
Total Fixed Assets	**2,282,863**	**2,267,953**	**2,235,435**	14,909	47,427
Less Depreciation	(1,306,826)	(1,293,360)	(1,183,098)	(13,466)	(123,727)
Net Fixed Assets	**976,037**	**974,593**	**1,052,337**	**1,444**	**(76,300)**
Other Assets					
Rental Deposit	64,461	64,461	64,461	0	0
Deferred Compensation Asset	434,461	429,348	409,369	5,113	25,092
Total Other Assets	**498,922**	**493,809**	**473,830**	**5,113**	**25,092**
Total Assets	**90,720,047**	**88,753,198**	**68,493,102**	**1,966,849**	**22,226,946**
Current Liabilities					
Accounts Payable and Accruals	6,160,626	7,203,396	21,430,138	(1,042,770)	(15,269,512)
Deposits Held for Others	(0)	6,555	49,433	(6,555)	(49,433)
Salaries, Taxes, & Benefits Payable	670,171	649,494	585,703	20,677	84,469
Total Current Liabilities	**6,830,798**	**7,859,445**	**22,065,273**	**(1,028,648)**	**(15,234,476)**
Long Term Liabilities					
Deferred Rent	342,363	338,538	323,237	3,825	19,126
Deferred Compensation Payable	434,461	429,348	409,369	5,113	25,092
Other Long-Term Liabilities	13,904	13,934	13,674	(30)	230
Total Long-Term Liabilities	**790,727**	**781,819**	**746,279**	**8,909**	**44,448**
Total Liabilities	**7,621,525**	**8,641,264**	**22,811,553**	**(1,019,739)**	**(15,190,028)**
Net Assets					
Temporarily Restricted Net Assets	252,690	252,683	462,692	7	(210,002)
Unrestricted Net Assets	82,845,833	79,859,251	45,218,858	2,986,582	37,626,975
Total Net Assets	**83,098,523**	**80,111,934**	**45,681,549**	**2,986,588**	**37,416,973**
Total Liabilities and Net Assets	**90,720,047**	**88,753,198**	**68,493,102**	**1,966,849**	**22,226,946**

BS-Acct-YTD-001

Energy Trust of Oregon
Cash Flow Statement-Indirect Method
Monthly 2013

	January	February	March	April	May	Year to Date
Operating Activities:						
Revenue less Expenses	$ 10,219,705	10,927,972	7,324,090	5,958,617	2,986,589	$ 37,416,973
Non-cash items:						
Depreciation	27,270	27,452	28,129	27,410	27,977	$ 138,238
Loss on disposal of assets						
Receivables	53,256	66,082	35	(5,470)	(0)	$ 113,903
Interest Receivable	546	129	(496)	1,647	(518)	$ 1,308
Advances to Vendors	705,543	733,344	(1,456,911)	410,950	709,011	$ 1,101,937
Prepaid expenses and other costs	(559,565)	51,323	(82,665)	(46,877)	(9,774)	$ (647,558)
Accounts payable	(14,214,238)	1,481,611	(2,237,661)	700,669	(1,049,325)	$ (15,318,944)
Payroll and related accruals	16,657	39,359	5,770	21,984	25,790	$ 109,560
Deferred rent and other	(271)	(1,101)	(1,829)	(1,217)	(1,318)	$ (5,736)
Cash rec'd from / (used in) Operating Activities	(3,751,097)	13,326,171	3,578,462	7,067,713	2,688,432	$ 22,909,681
Investing Activities:						
Purchase of Investments Held to Maturity					(4,980,004)	$ (4,980,004)
(Acquisition)/Disposal of Capital Assets	-	(6,570)	(25,948)	-	(29,420)	$ (61,938)
Cash rec'd from / (used in) Investing Activities	-	(6,570)	(25,948)	-	(5,009,424)	$ (5,041,942)
Cash at beginning of Period	64,468,299	60,717,202	74,036,802	77,589,318	84,657,031	$ 64,468,299
Increase/(Decrease) in Cash	(3,751,097)	13,319,602	3,552,516	7,067,713	(2,320,992)	$ 17,867,741
Cash at end of period	60,717,202	74,036,802	77,589,318	84,657,031	82,336,039	$ 82,336,039

Energy Trust of Oregon
Cash Flow Projection
January 2013 - December 2014

	Actual					2013 Budget						
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	15,975,013	18,276,561	16,633,304	14,890,395	12,680,595	11,700,000	11,600,000	11,000,000	11,200,000	12,800,000	12,300,000	16,200,000
From other sources	53,256	66,082	35	(4,540)	(0)							
Investment Income	7,847	6,746	7,212	9,359	6,368	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Total cash in	16,036,116	18,349,389	16,640,551	14,895,214	12,686,963	11,712,000	11,612,000	11,012,000	11,212,000	12,812,000	12,312,000	16,212,000
Cash Out:	19,787,213	5,029,788	13,088,038	7,827,499	15,007,955	12,600,000	13,900,000	13,900,000	17,200,000	15,000,000	15,400,000	24,600,000
Net cash flow for the month	(3,751,097)	13,319,601	3,552,516	7,067,718	(2,320,989)	(888,000)	(2,288,000)	(2,888,000)	(5,988,000)	(2,188,000)	(3,088,000)	(8,388,000)
Beginning Balance: Cash & MM	64,468,297	60,717,200	74,036,802	77,589,318	84,657,036	82,336,047	81,448,047	79,160,047	76,272,047	70,284,047	68,096,047	65,008,047
Ending cash & MM	60,717,200	74,036,802	77,589,318	84,657,036	82,336,047	81,448,047	79,160,047	76,272,047	70,284,047	68,096,047	65,008,047	56,620,047
Dedicated funds Adjustment	(10,600,000)	(10,600,000)	(7,900,000)	(8,100,000)	(8,400,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)
Committed Funds Adjustment	(37,200,000)	(40,000,000)	(33,900,000)	(46,300,000)	(45,800,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)
Cash Reserve	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**6,717,200**	**17,236,802**	**29,589,318**	**24,057,036**	**21,936,047**	**20,548,047**	**18,260,047**	**15,372,047**	**9,384,047**	**7,196,047**	**4,108,047**	**-**
Escrow Cash Balance												
Beginning Balance	462,692	381,052	381,090	381,118	252,683	252,690	77,955	77,963	77,971	77,979	77,987	77,995
Net Escrow (Payments)/Funding	(81,682)		-	(128,457)		(174,743)						
Interest Paid on Escrow Balances	42	38	28	22	7	8	8	8	8	8	8	0
Ending Escrow Balance1	381,052	381,090	381,118	252,683	252,690	77,955	77,963	77,971	77,979	77,987	77,995	77,996

1Included in "Ending cash & MM" above

Dedicated funds adjustment: reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements
Committed funds adjustment: reduction in available cash for commitments to Efficiency program projects with signed agreements
Cash reserve: reduction in available cash to cover cashflow variability and winter revenue risk
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon
Cash Flow Projection
January 2013 - December 2014

	2014 Board Approved Projection											
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	15,700,000	16,800,000	16,900,000	15,100,000	13,400,000	11,800,000	11,700,000	11,100,000	11,300,000	12,900,000	12,300,000	16,300,000
From other sources												
Investment Income	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total cash in	15,710,000	16,810,000	16,910,000	15,110,000	13,410,000	11,810,000	11,710,000	11,110,000	11,310,000	12,910,000	12,310,000	16,310,000
Cash Out:	25,700,000	8,800,000	12,300,000	11,500,000	10,600,000	13,600,000	12,200,000	12,400,000	15,700,000	13,300,000	13,700,000	23,500,000
Net cash flow for the month	(9,990,000)	8,010,000	4,610,000	3,610,000	2,810,000	(1,790,000)	(490,000)	(1,290,000)	(4,390,000)	(390,000)	(1,390,000)	(7,190,000)
Beginning Balance: Cash & MM	56,620,047	46,630,047	54,640,047	59,250,047	62,860,047	65,670,047	63,880,047	63,390,047	62,100,047	57,710,047	57,320,047	55,930,047
Ending cash & MM	46,630,047	54,640,047	59,250,047	62,860,047	65,670,047	63,880,047	63,390,047	62,100,047	57,710,047	57,320,047	55,930,047	48,740,047
Dedicated funds Adjustment	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)	(9,300,000)
Committed Funds Adjustment	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)	(45,400,000)
Cash Reserve	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**-**	**-**	**-**	**1,960,047**	**4,770,047**	**2,980,047**	**2,490,047**	**1,200,047**	**-**	**-**	**-**	**-**
Escrow Cash Balance												
Beginning Balance	77,996	78,012	78,028	25	25	25	25	25	25	25	25	25
Net Escrow (Payments)/Funding			(78,003)									
Interest Paid on Escrow Balances	16	16	-	-	-	-	-	-	-	-	-	0
Ending Escrow Balance1	78,012	78,028	25	25	25	25	25	25	25	25	25	25

1Included in "Ending cash & MM" above

Dedicated funds adjustment: reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements
Committed funds adjustment: reduction in available cash for commitments to Efficiency program projects with signed agreements
Cash reserve: reduction in available cash to cover cashflow variability and winter revenue risk
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon, Inc
INCOME STATEMENT - ACTUAL AND YTD COMPARISON
For the Five Months Ending May 31, 2013
(Unaudited)

	May			YTD		
	Actual	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**
REVENUES						
Public Purpose Funds-PGE	2,684,619	2,793,916	(109,296)	15,564,836	15,810,496	(245,660)
Public Purpose Funds-PacifiCorp	2,003,068	1,960,185	42,883	11,490,137	10,855,345	634,792
Public Purpose Funds-NW Natural	2,033,625	2,311,912	(278,286)	15,174,031	15,607,441	(433,409)
Public Purpose Funds-Cascade	134,088	216,715	(82,627)	1,280,345	2,045,873	(765,528)
Total Public Purpose Funds	**6,855,401**	**7,282,728**	**(427,327)**	**43,509,350**	**44,319,155**	**(809,805)**
Incremental Funds - PGE	3,842,099	4,180,268	(338,169)	22,227,054	21,772,980	454,074
Incremental Funds - PacifiCorp	1,983,096	1,959,329	23,766	11,497,967	11,160,036	337,931
NW Natural - Industrial DSM	0	0	0	575,946	0	575,946
NW Natural - Washington	0	0	0	645,551	645,551	0
Contributions	0	0	0	930	0	930
Revenue from Investments	6,983	10,000	(3,017)	36,227	50,000	(13,773)
Gain or Loss on Investments	(97)	0	(97)	0	0	0
TOTAL REVENUE	**12,687,481**	**13,432,325**	**(744,844)**	**78,493,025**	**77,947,722**	**545,303**
EXPENSES						
Program Subcontracts	4,055,250	3,751,653	(303,597)	18,477,363	18,978,244	500,881
Incentives	4,304,211	5,628,353	1,324,142	15,453,526	25,083,240	9,629,714
Salaries and Related Expenses	820,264	901,404	81,140	3,996,883	4,474,894	478,011
Professional Services	284,681	761,540	476,859	1,992,097	4,544,457	2,552,360
Supplies	1,904	10,354	8,450	12,839	51,768	38,930
Telephone	4,611	4,453	(158)	21,306	22,515	1,209
Postage and Shipping Expenses	1,206	833	(373)	4,583	4,167	(416)
Occupancy Expenses	54,253	58,434	4,180	274,648	292,168	17,520
Noncapitalized Equip. & Depr.	54,579	31,930	(22,649)	260,563	366,017	105,455
Call Center	58,834	44,917	(13,918)	310,733	224,583	(86,150)
Printing and Publications	18,157	17,112	(1,045)	72,784	85,562	12,778
Travel	16,538	15,849	(689)	54,770	81,793	27,024
Conference, Training & Mtng Exp	14,341	31,174	16,833	57,615	169,596	111,981
Interest Expense and Bank Fees	35	625	590	478	3,125	2,647
Insurance	8,205	9,167	961	39,405	45,833	6,428
Miscellaneous Expenses	168	225	57	348	1,125	777
Dues, Licenses and Fees	3,654	10,134	6,481	46,112	58,733	12,622
TOTAL EXPENSES	**9,700,893**	**11,278,155**	**1,577,263**	**41,076,051**	**54,487,822**	**13,411,771**
TOTAL REVENUE LESS EXPENSES	**2,986,588**	**2,154,169**	**832,419**	**37,416,973**	**23,459,900**	**13,957,074**

IS-Acct-YTD-001

Energy Trust of Oregon, Inc
Statement of Functional Expenses
For the Five Months Ending May 31, 2013

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Budget	Variance
Program Expenses									
Incentives/ Program Management & Deliver	32,146,058	1,784,831	33,930,889				33,930,889	44,061,485	10,130,596
Payroll and Related Expenses	1,159,974	351,294	1,511,268	771,805	365,036	1,136,841	2,648,109	2,790,586	142,477
Outsourced Services	1,307,541	161,884	1,469,425	66,363	287,423	353,786	1,823,211	3,559,902	1,736,691
Planning and Evaluation	769,425	34,740	804,165				804,165	1,175,498	371,333
Customer Service Management	487,506	8,598	496,104				496,104	437,876	(58,228)
Trade Allies Network	147,400	6,671	154,071				154,071	187,874	33,803
Total Program Expenses	**36,017,904**	**2,348,019**	**38,365,923**	**838,168**	**652,459**	**1,490,627**	**39,856,550**	**52,213,219**	12,356,669
Program Support Costs									
Supplies	3,773	981	4,754	3,650	1,037	4,687	9,441	32,684	23,243
Postage and Shipping Expenses	1,954	362	2,316	708	339	1,047	3,363	3,273	(90)
Telephone	1,301	572	1,873	474	287	761	2,634	2,486	(148)
Printing and Publications	66,192	3,414	69,606	204	1,264	1,468	71,074	82,324	11,250
Occupancy Expenses	84,842	26,067	110,909	51,040	24,447	75,487	186,396	186,999	603
Insurance	12,233	3,758	15,991	7,359	3,525	10,884	26,875	29,437	2,562
Equipment	12,906	8,154	21,060	2,226	1,066	3,292	24,352	9,971	(14,381)
Travel	20,744	5,924	26,668	7,307	1,568	8,875	35,543	58,835	23,292
Meetings, Trainings & Conferences	14,963	2,609	17,572	9,352	2,606	11,958	29,530	115,220	85,690
Interest Expense and Bank Fees		100	100	378		378	478	3,125	2,647
Depreciation & Amortization	21,108	7,451	28,559	12,699	6,082	18,781	47,340	42,936	(4,404)
Dues, Licenses and Fees	22,211	8,839	31,050	(2,296)	1,797	(499)	30,551	24,165	(6,386)
Miscellaneous Expenses	330		330	18		18	348	753	405
IT Services	530,942	62,500	593,442	105,890	52,244	158,134	751,576	1,682,397	930,821
Total Program Support Costs	**793,498**	**130,731**	**924,229**	**199,010**	**96,263**	**295,273**	**1,219,502**	**2,274,604**	**1,055,102**
TOTAL EXPENSES	**36,811,402**	**2,478,749**	**39,290,151**	**1,037,178**	**748,722**	**1,785,900**	**41,076,051**	**54,487,822**	**13,411,771**
OPUC measure vs. 9%	**3.45%**								

Exp-Acct-YTD-002

Energy Trust of Oregon, Inc
Year to Date by Program/Service Territory - joint costs allocated at program level
For the Five Months Ending May 31, 2013
(Unaudited)

	ENERGY EFFICIENCY											RENEWABLE ENERGY				TOTAL		
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	Clark PUD WA	NWN WA	Total WA	ETO Total	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change
REVENUES																		
Public Purpose Funding	$12,030,020	$8,927,630	$20,957,650		$15,174,031	$1,280,345	$37,412,026				$37,412,026	$3,534,816	$2,562,507	$6,097,323		$43,509,349	$44,319,155	$809,806
Incremental Funding	22,227,054	11,497,967	33,725,021	575,946			34,300,967		645,551	645,551	34,946,518					34,946,518	33,578,567	(1,367,951)
Contributions															930	930		(930)
Revenue from Investments															36,227	36,227	50,000	13,773
TOTAL PROGRAM REVENUE	**34,257,074**	**20,425,597**	**54,682,671**	**575,946**	**15,174,031**	**1,280,345**	**71,712,993**		**645,551**	**645,551**	**72,358,544**	**3,534,816**	**2,562,507**	**6,097,323**	**37,157**	**78,493,025**	**77,947,722**	**(545,302)**
EXPENSES																		
Program Management (Note 3)	1,026,767	709,462	1,736,229	45,796	475,261	31,031	2,288,317	394	90,504	90,898	2,379,215	122,096	229,198	351,294	**0**	2,730,509	2,503,720	(226,789)
Program Delivery	7,829,886	5,482,599	13,312,485	150,472	2,066,922	141,368	15,671,247	704	110,288	110,992	15,782,239	26,418	32,504	58,922	**0**	15,841,161	16,643,967	802,806
Incentives	7,562,383	3,569,534	11,131,917	599,459	1,773,510	137,378	13,642,264	-378	85,730	85,352	13,727,616	897,162	828,749	1,725,911	**0**	15,453,527	25,083,242	9,629,715
Program Eval & Planning Svcs.	659,987	408,465	1,068,452	24,317	211,828	13,459	1,318,057	49	12,416	12,465	1,330,522	12,968	21,772	34,740	**0**	1,365,262	2,295,947	930,685
Program Marketing/Outreach	849,026	588,147	1,437,173	9,512	450,673	27,180	1,924,538	0	12,526	12,526	1,937,064	23,529	12,328	35,857	**0**	1,972,921	2,148,376	175,455
Program Quality Assurance	12,264	13,133	25,397	0	15,002	696	41,095	0	0	0	41,095	725	0	725	**0**	41,820	106,250	64,430
Outsourced Services	79,495	60,126	139,621	1,097	42,410	2,117	185,245	0	0	0	185,245	65,093	60,209	125,302	**0**	310,547	1,015,211	704,664
Trade Allies & Cust. Svc. Mgmt.	149,721	116,391	266,112	1,510	107,827	6,158	381,607	34	10,673	10,707	392,314	9,817	5,411	15,228	**0**	407,542	459,501	51,959
IT Services	233,548	159,224	392,772	5,984	111,151	6,484	516,391	45	14,507	14,552	530,943	25,599	36,901	62,500	**0**	593,443	1,328,626	735,183
Other Program Expenses	187,224	150,329	337,553	6,695	134,132	6,931	485,311	57	19,779	19,836	505,147	32,145	36,127	68,272	**0**	573,419	492,099	(81,320)
TOTAL PROGRAM EXPENSES	**18,590,302**	**11,257,409**	**29,847,711**	**844,842**	**5,388,716**	**372,803**	**36,454,072**	**905**	**356,423**	**357,328**	**36,811,402**	**1,215,553**	**1,263,198**	**2,478,749**	**0**	**39,290,151**	**52,076,939**	**12,786,788**
ADMINISTRATIVE COSTS																		
Management & General (Notes 1 & 2)	490,745	297,172	787,918	22,302	142,251	9,841	962,312	24	9,408	9,432	971,744	30,812	34,622	65,434	**0**	1,037,178	1,478,451	441,272
Communications & Customer Svc (Notes 1 & 2)	354,260	214,523	568,784	16,099	102,689	7,104	694,676	17	6,791	6,808	701,484	22,243	24,993	47,236	**0**	748,722	932,438	183,716
Total Administrative Costs	**845,006**	**511,696**	**1,356,702**	**38,402**	**244,939**	**16,945**	**1,656,988**	**41**	**16,199**	**16,240**	**1,673,228**	**53,055**	**59,615**	**112,670**	**0**	**1,785,900**	**2,410,887**	**624,989**
TOTAL PROG & ADMIN EXPENSES	**19,435,308**	**11,769,105**	**31,204,413**	**883,243**	**5,633,656**	**389,748**	**38,111,060**	**947**	**372,621**	**373,568**	**38,484,628**	**1,268,608**	**1,322,813**	**2,591,421**	**0**	**41,076,051**	**54,487,822**	**13,411,771**
TOTAL REVENUE LESS EXPENSES	**14,821,766**	**8,656,492**	**23,478,258**	**(307,297)**	**9,540,375**	**890,597**	**33,601,933**	**(947)**	**272,930**	**271,983**	**33,873,916**	**2,266,208**	**1,239,694**	**3,505,902**	**37,157**	**37,416,973**	**23,459,896**	**(13,957,079)**
Cumulative Carryover at 12/31/12 (Note 4)	12,168,475	3,036,549	15,205,024	1,099,798	3,013,149	(392,281)	18,925,690	50,734	353,174	403,908	19,329,598	8,211,384	7,461,615	15,672,999	10,678,953	45,681,550	37,070,557	(8,610,993)
Interest attributed	1,740,000	1,160,000	2,900,000		5,000,000	392,281	8,292,281				8,292,281	585,000	2,235,000	2,820,000	(11,112,281)		7,900,000	7,900,000
Interest re-attributed	(1,740,000)	(1,160,000)	(2,900,000)		(5,000,000)		(7,900,000)				(7,900,000)				7,900,000		(7,900,000)	(7,900,000)
TOTAL NET ASSETS CUMULATIVE	**26,990,241**	**11,693,041**	**38,683,282**	**792,501**	**12,553,524**	**890,597**	**52,919,904**	**49,787**	**626,104**	**675,891**	**53,595,795**	**11,062,592**	**10,936,309**	**21,998,901**	**7,503,829**	**83,098,523**	**60,530,453**	**(22,568,072)**

Note 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.
Note 2) Administrative costs are allocated for management reporting only. GAAP for Not for Profit organizations does not allow allocation of administrative costs to program expenses.
Note 3) Program Management costs include both outsourced and internal staff.
Note 4) Cumulative carryover at 12/31/2012 reflects audited results.

Energy Trust of Oregon, Inc
Program Expense by Service Territory
For the Five Months Ending May 31, 2013
(Unaudited)

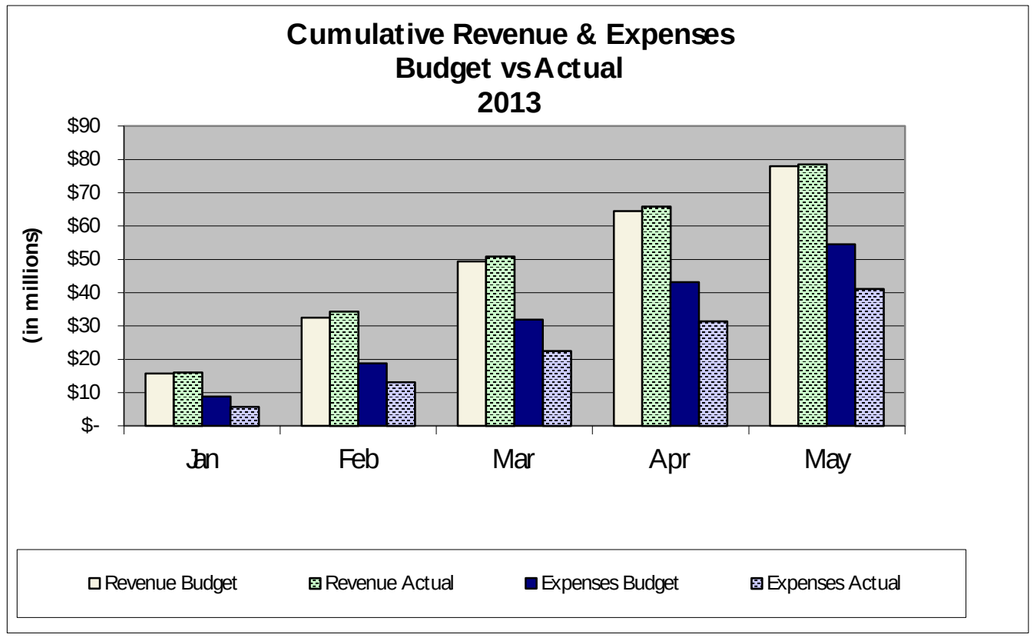
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	Clark PUD WA	NWN WA	Total WA	ETO Total	YTD Budget	Variance
Energy Efficiency														
Commercial														
Existing Buildings	4,052,821	3,049,197	7,102,018	24,488	1,262,450	44,555	1,331,493	8,433,511	948	119,770	120,718	8,554,229	12,535,295	3,981,066
New Buildings	3,691,846	1,247,944	4,939,790	56,976	192,295	54,885	304,156	5,243,946				5,243,946	6,676,987	1,433,041
NEEA	623,972	470,716	1,094,688				**0**	1,094,688				1,094,688	1,180,817	86,129
Total Commercial	**8,368,639**	**4,767,857**	**13,136,496**	**81,464**	**1,454,745**	**99,440**	**1,635,649**	**14,772,145**	**948**	**119,770**	**120,718**	**14,892,863**	**20,393,099**	**5,500,236**
Industrial														
Production Efficiency	4,689,317	2,200,736	6,890,053	801,781	203,726	32,398	1,037,905	7,927,958				7,927,958	9,459,184	1,531,226
NEEA	330,861	249,598	580,459					580,459				580,459	582,489	2,030
Total Industrial	**5,020,178**	**2,450,334**	**7,470,512**	**801,781**	**203,726**	**32,398**	**1,037,905**	**8,508,417**				**8,508,417**	**10,041,673**	**1,533,256**
Residential														
Existing Homes	2,021,223	2,164,372	4,185,595		2,471,905	114,714	2,586,619	6,772,214		158,301	158,301	6,930,515	9,550,141	2,619,626
New Homes/Products	2,982,188	1,599,659	4,581,847		1,503,280	143,196	1,646,476	6,228,323		94,550	94,550	6,322,873	8,985,310	2,662,437
NEEA	1,043,080	786,886	1,829,966					1,829,966				1,829,966	1,632,618	(197,348)
Total Residential	**6,046,491**	**4,550,917**	**10,597,408**		**3,975,185**	**257,910**	**4,233,095**	**14,830,503**		**252,851**	**252,851**	**15,083,354**	**20,168,069**	**5,084,715**
Energy Efficiency Program Cos	**19,435,308**	**11,769,105**	**31,204,413**	**883,243**	**5,633,656**	**389,748**	**6,906,649**	**38,111,060**	**947**	**372,621**	**373,568**	**38,484,628**	**50,602,841**	**12,118,207**
Renewables														
Biopower	14,613	475,001	489,614					489,614				489,614	805,447	315,833
Solar Electric (Photovoltaic)	1,123,128	573,867	1,696,995					1,696,995				1,696,995	2,551,692	854,697
Other Renewable	130,866	273,945	404,811					404,811				404,811	527,843	123,032
Renewables Program Costs	**1,268,608**	**1,322,813**	**2,591,421**					**2,591,421**				**2,591,421**	**3,884,982**	**1,293,562**
Cost Grand Total	**20,703,915**	**13,091,921**	**33,795,834**	**883,243**	**5,633,656**	**389,748**	**6,906,649**	**40,702,481**	**947**	**372,621**	**373,568**	**41,076,049**	**54,487,822**	**13,411,771**

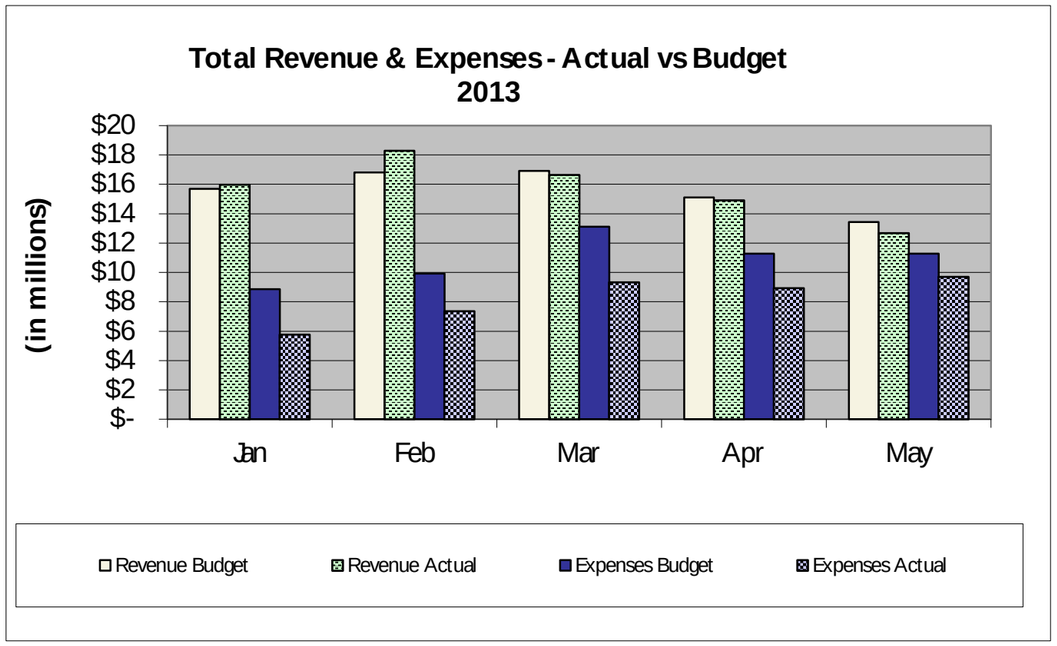
PUC-Proj-ST-07-C

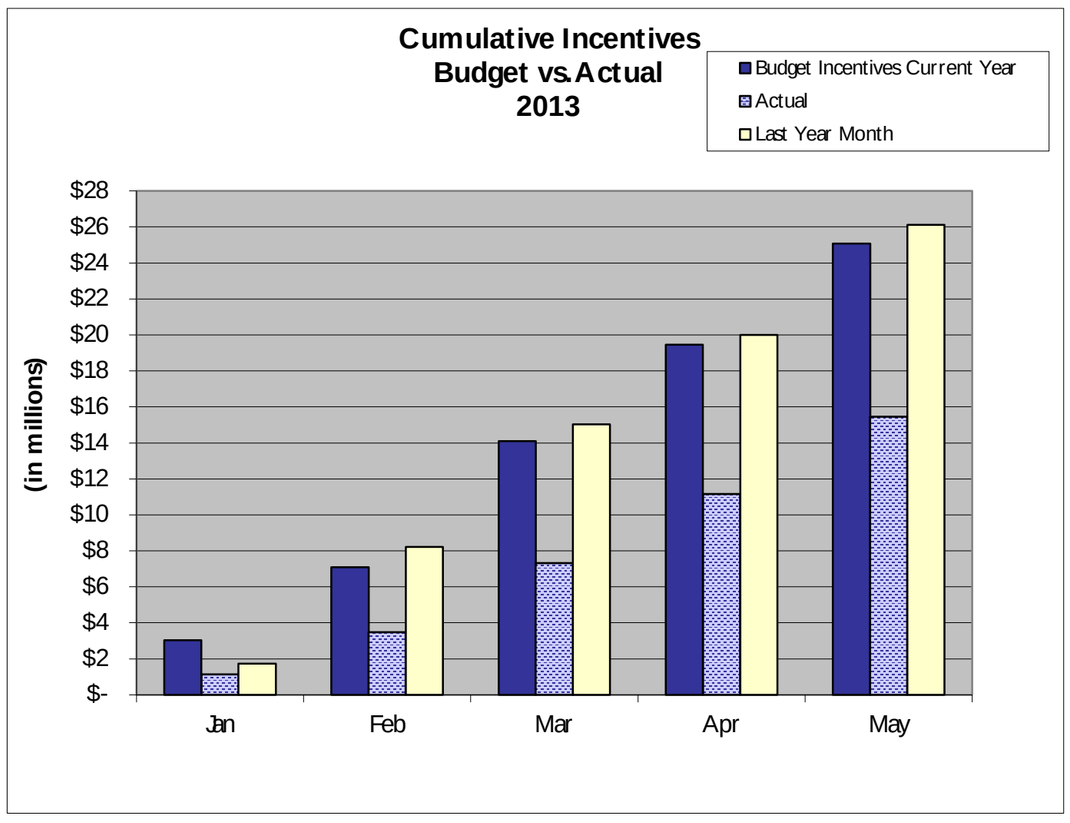
Energy Trust of Oregon, Inc.
ADMINISTRATIVE EXPENSES
For the Two Months and Year to Date Ended May 31, 2013
(Unaudited)

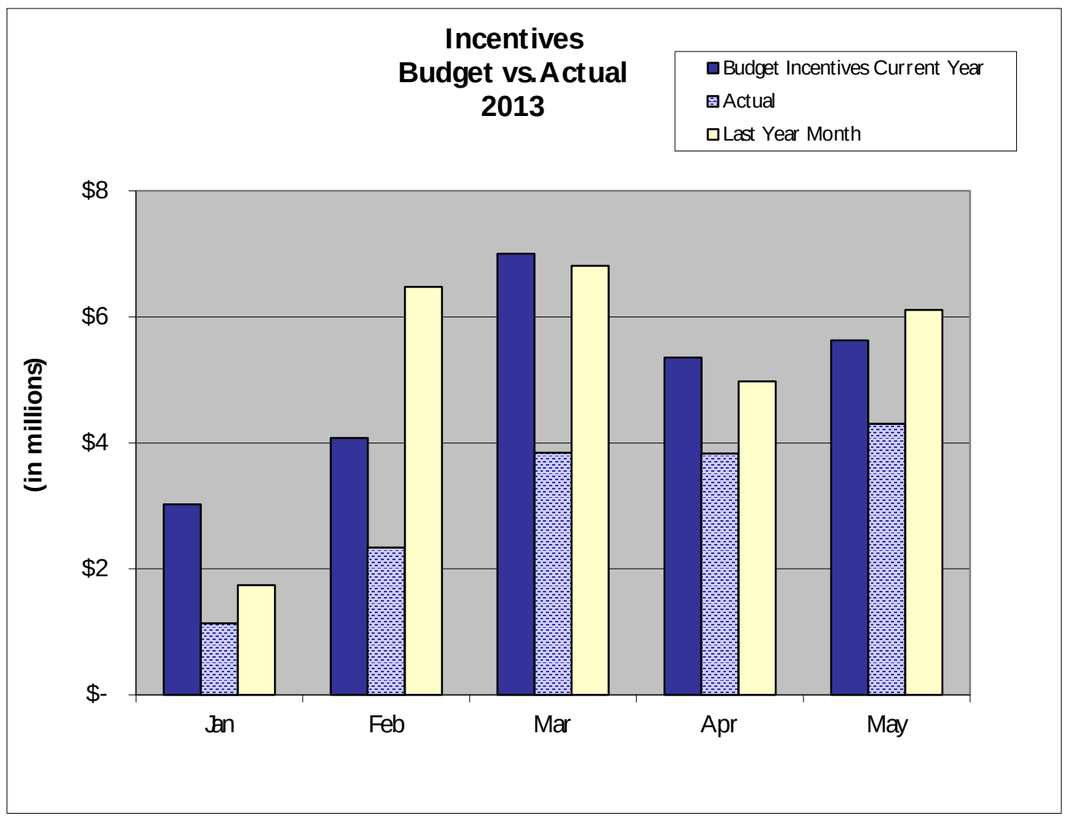
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	QTD	QUARTERLY	QUARTER	YTD			QTD	QUARTERLY	QUARTER	YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
EXPENSES												
Outsourced Services	$23,325	$124,546	$101,221	$63,362	$190,910	$127,548	$81,626	$232,500	$150,874	$287,423	$387,500	$100,077
Legal Services	2,842	22,500	19,659	3,002	37,500	34,499						
Salaries and Related Expenses	308,756	512,450	203,693	771,805	828,085	56,281	152,673	208,331	55,659	365,036	346,765	(18,271)
Supplies	76	1,575	1,499	1,738	2,625	887	95	250	155	121	417	296
Telephone		350	350		583	583	45		(45)	60		(60)
Postage and Shipping Expenses								1,000	1,000		1,667	1,667
Noncapitalized Equipment								250	250		417	417
Printing and Publications	30	150	120	40	250	210	556	13,750	13,194	1,186	22,917	21,731
Travel	3,896	11,833	7,938	7,307	19,722	12,415	948	1,750	802	1,568	2,917	1,349
Conference, Training & Mtngs	5,450	46,147	40,697	9,352	75,137	65,785	1,596	7,125	5,529	2,606	11,875	9,270
Interest Expense and Bank Fees	112	1,875	1,763	378	3,125	2,747						
Miscellaneous Expenses	18	50	32	18	83	65						
Dues, Licenses and Fees	(3,579)	3,120	6,700	(2,296)	2,000	4,296	376	500	124	1,797	833	(964)
Shared Allocation (Note 1)	29,831	48,964	19,133	76,583	81,554	4,970	16,233	24,156	7,923	36,682	40,234	3,552
IT Service Allocation (Note 2)	39,616	100,196	60,580	105,890	236,875	130,985	19,546	49,447	29,901	52,244	116,897	64,654
TOTAL EXPENSES	**410,371**	**873,757**	**463,386**	**1,037,178**	**1,478,451**	**441,272**	**273,692**	**539,059**	**265,366**	**748,722**	**932,438**	**183,716**

Note 1) Represents allocation of Shared (General Office Management) Costs
Note 2) Represents allocation of Shared IT Costs


Cumulative Revenue & Expenses
Budget vs Actual
2013
(in millions)
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
Jan
Feb
Mar
Apr
May
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2013
(in millions)
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2013
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$28
$26
$24
$22
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May


Incentives
Budget vs. Actual
2013
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May

R00407

For contracts with costs through: 6/1/2013

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 6/17/2013

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**6,878,507**	**2,068,026**	**4,810,481**		
Communications & Outreach							
		Communications & Outreach Total:	**2,801,348**	**1,511,150**	**1,290,198**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	24,308,369	14,830,311	1/1/10	7/1/15
ICF Resources, LLC	PMC BE 2013	Fairfax	7,731,351	2,950,656	4,780,695	1/1/13	12/31/13
Fluid Market Strategies LLC	2013 HES PMC	Portland	7,338,775	2,761,851	4,576,924	1/1/13	12/31/13
Portland Energy Conservation, Inc.	PMC NHP 2013	Portland	6,315,684	2,410,825	3,904,859	1/1/13	12/31/13
Portland Energy Conservation, Inc.	2013 NBE PMC	Portland	4,736,060	1,690,909	3,045,151	1/1/13	12/31/13
Intel Corporation	Intel D1X Megaproject	Hillsboro	4,000,000	2,540,546	1,459,454	11/15/12	12/31/14
Lockheed Martin Services, Inc.	2013 MF PMC	Cherry Hill	2,673,341	1,026,415	1,646,926	1/1/13	12/31/13
OPOWER, Inc.	OPOWER Agreement	Arlington	2,092,200	2,009,920	82,280	3/2/10	2/28/14
Oregon State University	CHP Project - OSU	Corvallis	2,024,263	1,920,000	104,263	12/20/10	1/31/16
Portland General Electric	PDC - PE 2013		1,871,000	668,272	1,202,728	1/1/13	12/31/13
Cascade Energy, Inc.	PDC - PE 2013	Walla Walla	1,725,055	800,239	924,816	1/1/13	12/31/13
RHT Energy Solutions	PDC - PE 2013	Medford	1,278,651	517,880	760,771	1/1/13	12/31/13
Cascade Energy, Inc.	PDC - PE 2013 Small Industrial	Walla Walla	1,147,500	517,519	629,981	1/1/13	12/31/13
Evergreen Consulting Group, LLC	PE Lighting PDC 2013	Tigard	1,071,000	438,282	632,718	1/1/13	12/31/13
Northwest Power & Conservation Council	Annual Work Plan		874,652	550,195	324,457	3/20/12	12/31/14
NEXANT, INC.	PDC - PE 2013	San Francisco	825,818	262,242	563,576	1/1/13	12/31/13
Navigant Consulting Inc	PE Program Impact Evaluation	Boulder	548,000	548,000	0	12/15/11	6/30/13
Ecova Inc	Plug Load Solutions Funding	Spokane	499,950	152,804	347,146	1/1/13	12/31/13
Evoworx Inc.	EnergySavvy Online Audit Tool	Seattle	472,500	266,584	205,916	1/1/12	12/31/13
Clean Energy Works Oregon Inc	Clean Energy Works	Portland	448,500	300,000	148,500	1/1/10	6/30/13
OPOWER, Inc.	OPower Personal Energy Reports	Arlington	425,850	155,760	270,090	8/1/13	7/31/15
SBW Consulting, Inc.	BE Program Impact Evaluation	Bellevue	400,000	395,681	4,319	1/15/12	6/30/13
The Cadmus Group Inc.	NB Impact Eval 2010-2011	Watertown	295,000	232,588	62,412	1/13/12	12/31/13
Conservation Services Group, Inc.	2013 HES PMC Final Transition	Boston	273,000	219,624	53,376	1/1/13	3/31/13
Fluid Market Strategies LLC	2013 HES WA PMC	Portland	265,000	126,840	138,160	1/1/13	12/31/13
Research Into Action, Inc.	EB Evaluation	Portland	210,000	210,000	0	1/1/12	4/30/13
ICF Resources, LLC	NWN WA BE 2013	Fairfax	191,538	39,091	152,447	1/1/13	12/31/13
Research Into Action, Inc.	PE Evaluation	Portland	170,000	127,096	42,904	2/1/12	5/30/13
Home Performance Contractors Guild of Oregon	Existing Homes Program Support	Portland	155,000	88,943	66,057	1/1/12	3/31/14
D&R International LTD	Market Lift Program	Silver Spring	150,000	0	150,000	1/1/13	9/30/13
ICF Resources, LLC	CHP Performance	Fairfax	116,320	77,920	38,400	8/5/09	6/30/13
ICF Resources, LLC	NWN DSM Initiative 2013	Fairfax	110,000	9,465	100,535	1/1/13	12/31/13
J. Hruska Global	Quality Assurance Services	Columbia City	100,000	33,283	66,718	1/1/13	12/31/14
PWP, Inc.	NBE Process Evaluation	Gaithersburg	100,000	71,388	28,612	1/6/12	12/31/13
Vitesse LLC	Vitesse Data Center	Menlo Park	100,000	0	100,000	10/18/12	10/30/13

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Energy Efficiency Funding Group Inc	Training Classes/Workshops	San Francisco	75,000	67,590	7,410	6/1/11	5/31/13
Pollinate Inc	Web Application Development	Portland	67,000	66,444	556	1/1/12	3/31/13
Glumac Inc	Data Center Analysis	Portland	64,525	51,424	13,101	6/7/12	4/30/13
Portland Energy Conservation, Inc.	EE Consultant Services	Portland	54,170	50,758	3,412	6/1/11	12/31/13
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	50,000	35,252	14,749	7/1/11	12/31/13
Benenson Strategy Group	Residential Awareness 2013	Santa Monica	45,000	15,000	30,000	4/15/13	12/31/13
PWP, Inc.	Comm SEM Initiative Evaluation	Gaithersburg	45,000	28,386	16,615	7/1/12	6/30/14
Pollinate Inc	Energy Savings Estimate	Portland	44,500	36,870	7,630	11/1/12	4/1/13
KEMA Incorporated	Shelf Space Survey	Oakland	42,750	21,375	21,375	12/1/12	9/30/13
Portland General Electric	Utility Data Payment - OPOWER	Portland	40,000	19,928	20,072	8/1/10	2/28/14
NW Natural	Info Transfer & Reimbursement	Portland	35,000	21,263	13,737	7/12/10	2/28/14
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	13,055	21,945	4/1/12	12/31/13
WegoWise Inc	Wegowise Benchmarking License	Boston	35,000	20,000	15,000	5/14/12	5/14/14
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	34,000	5,007	28,994	9/1/12	8/30/14
Navigant Consulting Inc	Sustainable Energy Syst Pilot	Boulder	30,000	19,381	10,619	2/15/11	6/30/13
Stellar Processes, Inc.	BE Measure Evaluation	Portland	25,000	18,875	6,125	10/24/12	10/24/14
Triple Point Energy Inc.	SEM Workshops	Portland	24,240	0	24,240	4/29/13	1/15/14
Hitachi Consulting Corporation	SOW #16 PMC Transition Eval	Dallas	20,280	20,383	-103	4/22/13	4/29/13
Michael Blasnick & Associated	Billing Analysis Process	Boston	20,000	3,938	16,063	1/1/10	12/31/13
Oregon Assoc. of Clean Water Agencies	SEM Training - Round III		19,920	0	19,920	5/23/13	6/15/14
Northwest Food Processors Association	NW Industrial EE Summit 2013	Portland	17,500	17,500	0	12/10/12	12/31/13
Lane Community College, NEEI Science Division	2013 Scholarship Grant	Eugene	16,600	0	16,600	1/1/13	12/31/13
Consortium for Energy Efficiency	Membership Dues - 2013		15,551	15,551	0	1/1/13	12/31/13
Oregon Department of Energy	Oregon Leaders Project	Salem	15,000	15,000	0	9/19/11	1/31/14
Portland State University Foundation	Green Modular Classroom Proj	Portland	10,500	5,500	5,000	6/13/12	7/31/14
Consumer Opinion Services Inc	Customer Engagement Survey	Seattle	8,200	3,345	4,855	3/15/13	9/30/13
American Council for and Energy Efficient Economy	Utility Behavior Landscape		7,500	7,500	0	2/1/13	10/31/13
American Council for and Energy Efficient Economy	Case Studies		7,500	7,500	0	2/1/13	10/31/13
American Council for and Energy Efficient Economy	Opportunities for Scaling Up		7,500	7,500	0	2/1/13	10/31/13
Future Energy Conference	Future Energy Conference 2012	Portland	6,500	6,500	0	12/10/12	12/31/13
Hood River County School District	Energy Model Recalibration	Hood River	6,000	0	6,000	12/5/12	3/31/13
	Energy Efficiency Programs Total:		**90,799,424**	**49,030,007**	**41,769,417**		
Joint Programs							
D&R International LTD	Better Data Better Design	Silver Spring	133,500	25,000	108,500	4/30/13	4/30/14
Abt SRBI Inc.	Fast Feedback Survey	New York	65,000	6,929	58,071	3/1/13	2/28/14
Portland State University	Technology Forecasting		57,674	45,060	12,614	11/7/11	12/31/13

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Issues & Answers Network Inc	Residential Awareness 2013	Virginia Beach	30,000	0	30,000	4/15/13	12/31/13
Navigant Consulting Inc	P&E Consultant Services	Boulder	22,040	22,040	0	6/30/11	7/1/13
Glumac Inc	Planning Technical Analysis	Portland	15,000	15,000	0	10/17/12	10/17/14
Strategic Research Associates LLC	Trade Ally Survey	Spokane	14,000	750	13,250	5/1/13	12/31/13
CoStar Realty Information Inc	Property Data	Baltimore	12,668	11,646	1,023	6/1/11	1/31/14
American Council for and Energy Efficient Economy	ACEEE Sponsorship - 2013		10,000	10,000	0	1/1/13	12/31/13
KRH Consulting	Work Load Mangement	Portland	10,000	5,047	4,953	4/23/13	10/1/13
International Business Machines Corp	SPSS License & Support	Beaverton	6,247	6,247	0	5/22/13	6/22/13
		Joint Programs Total:	**376,129**	**147,718**	**228,411**		
Renewable Energy Program							
Outback Solar LLC	Outback Solar	Portland	5,000,000	4,950,000	50,000	5/9/12	5/9/37
Sunway 3, LLC	Prologis PV installation		3,405,000	3,396,044	8,956	9/30/08	9/30/28
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	0	2,000,000	10/18/12	10/18/32
Rough & Ready Lumber Company	Biopower Funding Agreement	Cave Junction	1,685,088	1,685,088	0	7/21/06	7/21/26
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	750	1,549,250	9/11/12	9/11/32
Alder Solar LLC	Habilitation Center PV	Portland	1,236,750	1,224,244	12,506	1/18/08	12/31/28
Central Oregon Irrigation District	Juniper Ridge Hydroelectric	Redmond	1,000,000	1,000,000	0	10/31/08	6/30/31
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	250,000	750,000	10/25/12	10/25/27
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	0	1,000,000	4/25/12	4/25/32
RES - Ag FGO LLC	Biogas Manure Digester Project	Washington	883,320	331,245	552,075	10/27/10	10/27/25
Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Corvallis	827,000	551,334	275,666	6/24/09	6/24/29
RBS Asset Finance Inc	Black Cap Solar PV Funding	Chicago	600,000	600,000	0	10/1/12	10/1/37
Tioga Solar VI, LLC	Photovoltaic Project Agreement	San Mateo	570,760	497,399	73,361	2/1/09	2/1/30
C Drop Hydro LLC	C Drop Project - Klamath Irrig	Idaho Falls	490,000	490,000	0	11/1/11	11/1/31
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	487,000	487,000	0	3/2/10	3/2/30
City of Medford	750kW Combined Heat & Power	Medford	450,000	225,000	225,000	10/20/11	10/20/31
City of Pendleton	Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/12	4/20/32
K2A Properties, LLC	Doerfler Wind Farm Project	Aumsville	230,000	166,489	63,511	5/20/10	5/20/30
Farmers Irrigation District	Low Line Canal Pressurization	Hood River	150,000	95,000	55,000	9/26/12	11/30/32
Farmers Irrigation District	Indian Creek Corridor Project	Hood River	100,000	100,000	0	1/5/10	1/4/29
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	10,440	89,560	10/1/11	10/1/13
Stoller Vineyards, Inc.	Stoller Vineyards PV	Dayton	79,815	77,390	2,425	12/1/05	12/1/26
Wallowa Resources Community Solutions Inc	Integrated Biomass Energy Camp	Enterprise	70,000	70,000	0	2/1/12	1/31/27
City of Portland Water Bureau	Vernon Hydro	Portland	65,000	65,000	0	11/15/10	11/15/30
Bloomberg LP	Insight Services	San Francisco	45,600	50,383	-4,783	4/1/11	1/1/14
University of Oregon	UO SMRL Contribution - 2013	Eugene	45,000	45,000	0	3/9/13	3/9/14
MC Energy LLC	Small Wind Incentive	Spokane	43,250	43,250	0	9/21/10	9/21/25

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Clean Energy States Alliance	CESA Year 10 (2013)		39,543	39,543	0	7/1/12	6/30/13
Wind Products Inc	Wind Consultant	Brooklyn	37,500	17,500	20,000	2/6/12	12/31/13
Harold Hartman dba Lynhart Farms	17.5 kW PV project	Malin	32,500	31,386	1,114	5/25/07	5/25/27
Northwest SEED	Grant Agreement	Seattle	30,000	30,000	0	10/3/11	12/31/13
SPS of Oregon Inc	Spaur Microhydro	Wallowa	25,000	25,000	0	7/23/10	7/23/30
Robert Migliori	42kW wind energy system	Newberg	24,125	8,561	15,564	4/11/07	1/31/24
Solar Oregon	Outreach Services	Portland	24,000	10,000	14,000	1/1/13	12/31/13
Wind Products Inc	Web Portal Tool	Brooklyn	24,000	25,000	-1,000	6/25/12	9/20/13
Farmers Conservation Alliance	FID Small Hydro Analysis	Hood River	20,000	0	20,000	11/1/12	6/30/13
Solar Oregon	Energy Education Sponsor 2013	Portland	16,000	16,000	0	1/1/13	12/31/13
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/05	10/1/20
Corbett Water District	Corbett Water District Hydro	Corbett	12,000	1,316	10,684	4/16/12	6/30/32
Clean Energy States Alliance	CESA ITAC		10,000	10,000	0	1/1/13	12/31/13
American Wind Group LLC	Anemometer Incentive Funding	Oasis	4,031	4,031	0	7/22/11	2/15/14
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
	Renewable Energy Program Total:		**23,878,432**	**16,791,647**	**7,086,785**		
	Grand Totals:		**124,733,840**	**69,548,548**	**55,185,291**		

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Notes on June 2013 Financial Statements

July 23, 2013

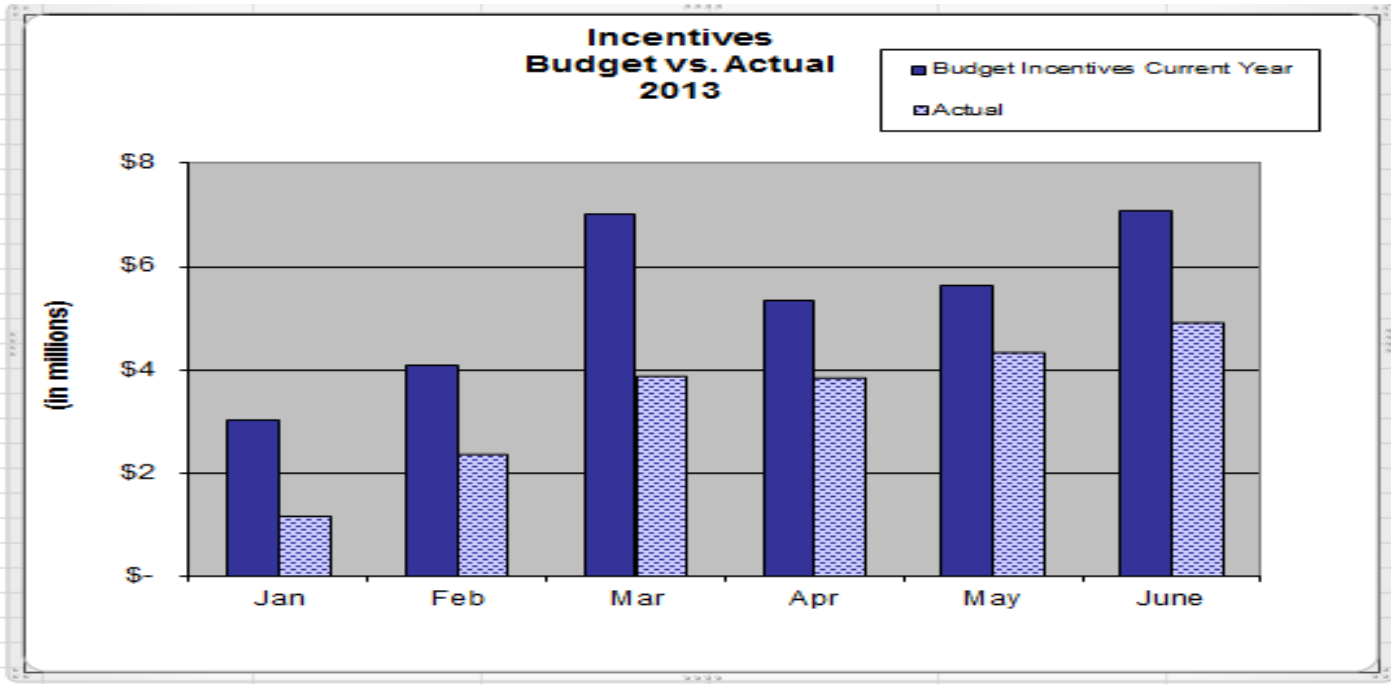
Revenue & Cash

YTD Revenues are close to budgeted amounts for all utilities other than CNG. The revenue shortfall in Cascade's service territory has been addressed and will be ameliorated prior to year end. We are doing what we can to improve investment income, but current rates are so low it will be unlikely that we'll meet the budget.

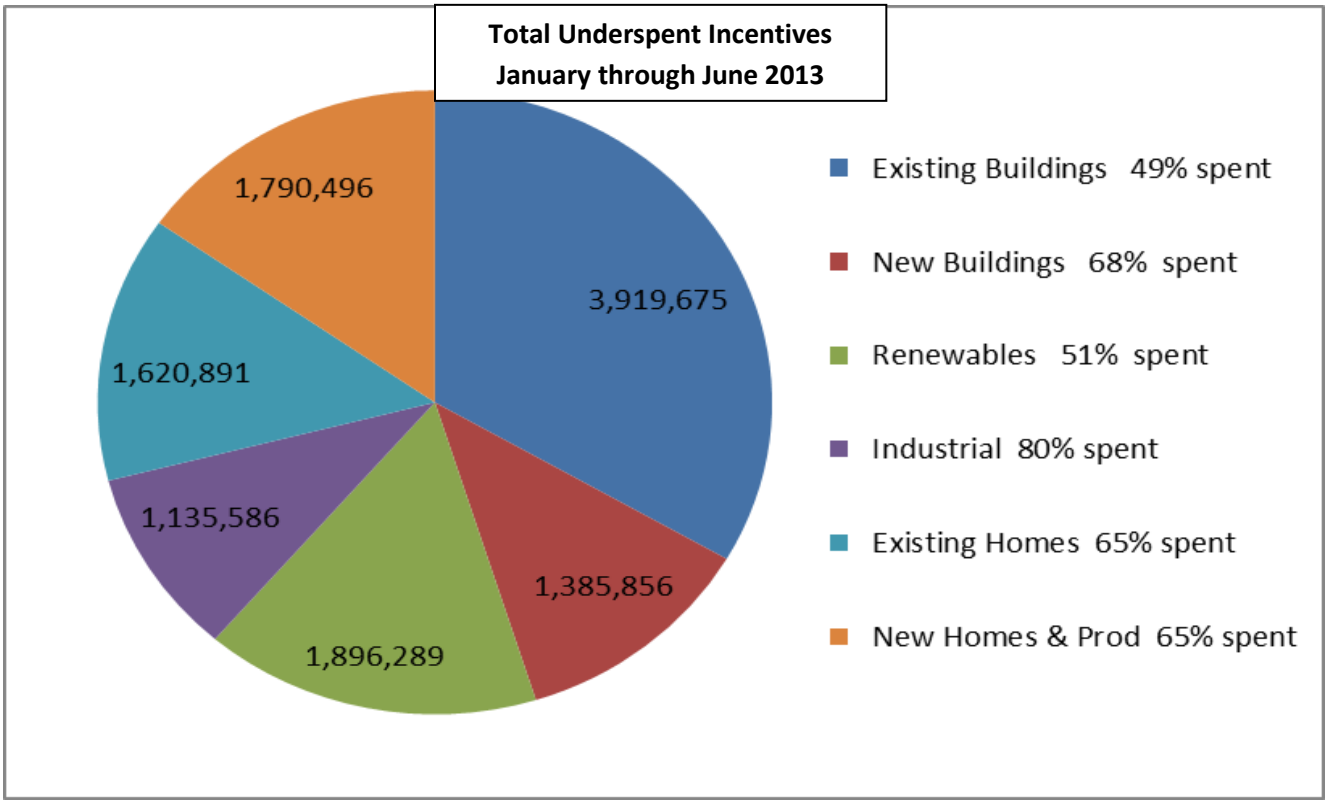
Jun-13	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	44,095,121	43,907,483	187,638	0%
PAC	26,750,554	25,802,688	947,866	4%
NWN	17,784,512	17,762,626	21,886	0%
CNG	1,365,341	2,193,703	(828,362)	-38%
Investment Income	42,703	60,000	(17,297)	-29%
Total	90,038,231	89,726,500	311,731	0%

Expenses

Total company expenses YTD are $51 million, which is $16 million less than budgeted spending. Incentive spending makes up $11.8 million (72%) of the total amount underspent; 84% of that is from the efficiency programs. Incentive spending during June showed some significant increases but remains below budget.



The following chart shows, by program, the incentive variance (versus budget) for the first six months. The % next to the program indicates how much of the current year's budgeted incentives have been spent. Industrial, for example, has spent 80% of their January to June incentive budget, the remaining unspent 20% totals $1,135,586 of incentive spending variance.



Existing Buildings believes they can achieve conservative goals. They will need to recruit and close large projects in order to meet goals for all utilities. The program anticipates that they will end up spending less than the entire incentive budget in all utility territories.

Existing Homes also anticipates reaching conservative goals through additional promotions, marketing, trade ally support, etc. CEWO projects are slow in being recognized (only 50% of the 2013 total has been processed through 6/30) and the overall CEWO projection has been reduced by one third (from 1500 to 1000 projects). To meet goals, there will need to be more reliance on Energy Saver Kits than originally budgeted.

New Homes believes that the growth in new homes will help meet gas goals. Electric savings have been low because of low appliance redemptions and changes in retail lighting offerings. Electric savings will get a boost from new initiatives planned for Q3 (possibly including expanded LED offerings and clothes washer recycling).

Solar activity has picked up in response to new business incentives that were launched in late April, but incentive payments on completed projects are still slow. This is due to a low pipeline of commercial projects, including several cancellations, dating back to 2012. We anticipate improved numbers next quarter as projects stimulated by the increased business incentives begin to complete and the summer weather drives more residential installations.

The other expense category with variances of note is professional services, primarily in planning and IT. There are several budgeted projects not yet underway.

Incentives thru June 2013	Total Incentives Year-to-Date 2013			
	Actual	Budget	Variance	Var %
Existing Buildings	3,722,491	7,642,166	3,919,675	51%
New Buildings	2,950,744	4,336,600	1,385,856	32%
Production Efficiency	4,536,276	5,671,862	1,135,586	20%
Existing Homes	2,958,109	4,579,001	1,620,891	35%
New Homes & Products	4,028,972	5,819,468	1,790,496	31%
WA Programs - Combined	150,463	230,214	79,751	35%
Solar	1,494,860	3,078,655	1,583,796	51%
Open Soliciation	139,646	202,440	62,794	31%
Biopower	360,716	610,415	249,699	41%
Total Incentives	20,342,276	32,170,819	11,828,542	37%
EE Only	**18,347,055**	**28,279,311**	**9,932,256**	**35%**

Incentives thru June 2012	Total Incentives Year-to-Date (Prior Year)			
	Actual	Budget	Variance	Var %
Existing Buildings	6,547,555	6,393,946	(153,609)	-2%
New Buildings	3,611,820	3,735,173	123,353	3%
Production Efficiency	3,367,432	4,266,726	899,294	21%
Existing Homes	5,244,237	5,859,068	614,831	10%
New Homes & Products	4,674,024	6,027,296	1,353,272	22%
WA Programs - Combined	136,157	243,966	107,809	44%
Solar	7,917,733	2,430,740	(5,486,993)	-226%
Open Soliciation	391,748	363,025	(28,723)	-8%
Biopower	216,100	625,082	408,982	65%
Total Incentives	32,106,806	29,945,018	(2,161,788)	-7%
EE Only	**23,581,224**	**26,526,175**	**2,944,951**	**11%**

Energy Trust of Oregon, Inc
BALANCE SHEET
June 30, 2013
(Unaudited)

	JUN 2013	MAY 2013	DEC 2012	Change from Prior Month	Change from Beg. of Year
Current Assets					
Cash & Cash Equivalents	83,626,597	82,083,349	64,005,605	1,543,248	19,620,992
Restricted Cash (Escrow Funds)	252,696	252,690	462,692	6	(209,995)
Investments	4,980,057	4,980,004	0	53	4,980,057
Receivables	8,119	8,584	123,795	(465)	(115,676)
Prepaid Expenses	833,677	913,387	265,829	(79,710)	567,848
Advances to Vendors	2,314,471	1,007,075	2,109,014	1,307,396	205,457
Total Current Assets	**92,015,617**	**89,245,088**	**66,966,935**	**2,770,529**	**25,048,683**
Fixed Assets					
Computer Hardware and Software	1,368,867	1,368,867	1,347,388	0	21,479
Leasehold Improvements	313,333	313,333	287,385	0	25,948
Office Equipment and Furniture	600,662	600,662	600,662	0	0
Total Fixed Assets	**2,282,863**	**2,282,863**	**2,235,435**	0	47,427
Less Depreciation	(1,334,802)	(1,306,826)	(1,183,098)	(27,977)	(151,704)
Net Fixed Assets	**948,060**	**976,037**	**1,052,337**	**(27,977)**	**(104,277)**
Other Assets					
Rental Deposit	64,461	64,461	64,461	0	0
Deferred Compensation Asset	440,575	434,461	409,369	6,113	31,206
Total Other Assets	**505,036**	**498,922**	**473,830**	**6,113**	**31,206**
Total Assets	**93,468,713**	**90,720,047**	**68,493,102**	**2,748,666**	**24,975,612**
Current Liabilities					
Accounts Payable and Accruals	7,289,994	6,160,626	21,430,138	1,129,368	(14,140,144)
Deposits Held for Others	(0)	(0)	49,433	0	(49,433)
Salaries, Taxes, & Benefits Payable	673,319	670,171	585,703	3,148	87,617
Total Current Liabilities	**7,963,314**	**6,830,798**	**22,065,273**	**1,132,516**	**(14,101,960)**
Long Term Liabilities					
Deferred Rent	346,188	342,363	323,237	3,825	22,951
Deferred Compensation Payable	440,575	434,461	409,369	6,113	31,206
Other Long-Term Liabilities	13,904	13,904	13,674	0	230
Total Long-Term Liabilities	**800,666**	**790,727**	**746,279**	**9,939**	**54,387**
Total Liabilities	**8,763,980**	**7,621,525**	**22,811,553**	**1,142,455**	**(14,047,573)**
Net Assets					
Temporarily Restricted Net Assets	252,696	252,690	462,692	6	(209,995)
Unrestricted Net Assets	84,452,038	82,845,833	45,218,858	1,606,205	39,233,180
Total Net Assets	**84,704,734**	**83,098,523**	**45,681,549**	**1,606,211**	**39,023,184**
Total Liabilities and Net Assets	**93,468,713**	**90,720,047**	**68,493,102**	**2,748,666**	**24,975,612**

BS-Acct-YTD-001

Energy Trust of Oregon
Cash Flow Statement-Indirect Method
Monthly 2013

	January	February	March	April	May	June	Year to Date
Operating Activities:							
Revenue less Expenses	$ 10,219,705	10,927,972	7,324,090	5,958,617	2,986,589	1,606,211	$ 39,023,184
Non-cash items:							
Depreciation	27,270	27,452	28,129	27,410	27,977	27,977	$ 166,215
Loss on disposal of assets							$ -
Receivables	53,256	66,082	35	(5,470)	(0)	0	$ 113,904
Interest Receivable	546	129	(496)	1,647	(518)	465	$ 1,772
Advances to Vendors	705,543	733,344	(1,456,911)	410,950	709,011	(1,307,397)	$ (205,460)
Prepaid expenses and other costs	(559,565)	51,323	(82,665)	(46,877)	(9,774)	79,710	$ (567,848)
Accounts payable	(14,214,238)	1,481,611	(2,237,661)	700,669	(1,049,325)	1,129,368	$ (14,189,576)
Payroll and related accruals	16,657	39,359	5,770	21,984	25,790	9,262	$ 118,822
Deferred rent and other	(271)	(1,101)	(1,829)	(1,217)	(1,318)	(2,289)	$ (8,025)
Cash rec'd from / (used in) Operating Activities	(3,751,097)	13,326,171	3,578,462	7,067,713	2,688,432	1,543,307	$ 24,452,988
Investing Activities:							
Purchase of Investments Held to Maturity					(4,980,004)	(53)	$ (4,980,057)
(Acquisition)/Disposal of Capital Assets	-	(6,570)	(25,948)	-	(29,420)	-	$ (61,938)
Cash rec'd from / (used in) Investing Activities	-	(6,570)	(25,948)	-	(5,009,424)	(53)	$ (5,041,995)
Cash at beginning of Period	64,468,299	60,717,202	74,036,802	77,589,318	84,657,031	82,336,039	$ 64,468,299
Increase/(Decrease) in Cash	(3,751,097)	13,319,602	3,552,516	7,067,713	(2,320,992)	1,543,255	$ 19,410,996
Cash at end of period	60,717,202	74,036,802	77,589,318	84,657,031	82,336,039	83,879,294	$ 83,879,294

Energy Trust of Oregon
Cash Flow Projection
January 2013 - December 2014

	Actual						2013 Budget					
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	15,975,013	18,276,561	16,633,304	14,890,395	12,680,595	11,539,660	11,600,000	11,000,000	11,200,000	12,800,000	12,300,000	16,200,000
From other sources	53,256	66,082	35	(4,540)	(0)	0						
Investment Income	7,847	6,746	7,212	9,359	6,368	6,941	13,000	13,000	13,000	13,000	13,000	13,000
Total cash in	16,036,116	18,349,389	16,640,551	14,895,214	12,686,963	11,546,601	11,613,000	11,013,000	11,213,000	12,813,000	12,313,000	16,213,000
Cash Out:	19,787,213	5,029,788	13,088,038	7,827,499	15,007,955	10,003,347	11,200,000	14,200,000	17,800,000	15,700,000	16,000,000	25,600,000
Net cash flow for the month	(3,751,097)	13,319,601	3,552,516	7,067,718	(2,320,989)	1,543,254	413,000	(3,187,000)	(6,587,000)	(2,887,000)	(3,687,000)	(9,387,000)
Beginning Balance: Cash & MM	64,468,299	60,717,202	74,036,802	77,589,318	84,657,031	82,336,039	83,879,294	84,292,294	81,105,294	74,518,294	71,631,294	67,944,294
Ending cash & MM	60,717,202	74,036,802	77,589,318	84,657,031	82,336,039	83,879,294	84,292,294	81,105,294	74,518,294	71,631,294	67,944,294	58,557,294
Dedicated funds Adjustment	(10,600,000)	(10,600,000)	(7,900,000)	(8,100,000)	(8,400,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)
Committed Funds Adjustment	(37,200,000)	(40,000,000)	(33,900,000)	(46,300,000)	(45,800,000)	(41,200,000)	(39,900,000)	(39,600,000)	(39,600,000)	(38,200,000)	(38,200,000)	(33,200,000)
Cash Reserve	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**6,717,202**	**17,236,802**	**29,589,318**	**24,057,031**	**21,936,047**	**23,179,294**	**24,892,294**	**22,005,294**	**15,418,294**	**13,931,294**	**10,244,294**	**5,857,294**
Escrow Cash Balance												
Beginning Balance	462,692	381,052	381,090	381,118	252,683	252,690	252,696	77,959	77,965	77,971	77,977	77,983
Net Escrow (Payments)/Funding	(81,682)		-	(128,457)			(174,743)					
Interest Paid on Escrow Balances	42	38	28	22	7	6	6	6	6	6	6	0
Ending Escrow Balance1	381,052	381,090	381,118	252,683	252,690	252,696	77,959	77,965	77,971	77,977	77,983	77,984

1Included in "Ending cash & MM" above

Dedicated funds adjustment: reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements
Committed funds adjustment: reduction in available cash for commitments to Efficiency program projects with signed agreements
Cash reserve: reduction in available cash to cover cashflow variability and winter revenue risk
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon
Cash Flow Projection
January 2013 - December 2014

	2014 Board Approved Projection											
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	15,700,000	16,800,000	16,900,000	15,100,000	13,400,000	11,800,000	11,700,000	11,100,000	11,300,000	12,900,000	12,300,000	16,300,000
From other sources												
Investment Income	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total cash in	15,710,000	16,810,000	16,910,000	15,110,000	13,410,000	11,810,000	11,710,000	11,110,000	11,310,000	12,910,000	12,310,000	16,310,000
Cash Out:	26,600,000	8,800,000	12,300,000	11,500,000	10,600,000	13,600,000	12,200,000	12,400,000	15,700,000	13,300,000	13,700,000	23,500,000
Net cash flow for the month	(10,890,000)	8,010,000	4,610,000	3,610,000	2,810,000	(1,790,000)	(490,000)	(1,290,000)	(4,390,000)	(390,000)	(1,390,000)	(7,190,000)
Beginning Balance: Cash & MM	58,557,294	47,667,294	55,677,294	60,287,294	63,897,294	66,707,294	64,917,294	64,427,294	63,137,294	58,747,294	58,357,294	56,967,294
Ending cash & MM	47,667,294	55,677,294	60,287,294	63,897,294	66,707,294	64,917,294	64,427,294	63,137,294	58,747,294	58,357,294	56,967,294	49,777,294
Dedicated funds Adjustment	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)	(13,300,000)
Committed Funds Adjustment	(36,200,000)	(37,400,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)	(39,900,000)
Cash Reserve	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**-**	**-**	**887,294**	**4,497,294**	**7,307,294**	**5,517,294**	**5,027,294**	**3,737,294**	**-**	**-**	**-**	**-**
Escrow Cash Balance												
Beginning Balance	77,984	78,000	78,016	13	13	13	13	13	13	13	13	13
Net Escrow (Payments)/Funding			(78,003)									
Interest Paid on Escrow Balances	16	16	-	-	-	-	-	-	-	-	-	0
Ending Escrow Balance1	78,000	78,016	13	13	13	13	13	13	13	13	13	13

1Included in "Ending cash & MM" above

Dedicated funds adjustment: reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements
Committed funds adjustment: reduction in available cash for commitments to Efficiency program projects with signed agreements
Cash reserve: reduction in available cash to cover cashflow variability and winter revenue risk
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon, Inc
INCOME STATEMENT - ACTUAL AND YTD COMPARISON
For the Six Months Ending June 30, 2013
(Unaudited)

	June			YTD		
	Actual	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**
REVENUES						
Public Purpose Funds-PGE	2,650,055	2,529,159	120,897	18,214,892	18,339,655	(124,763)
Public Purpose Funds-PacifiCorp	1,889,366	1,895,279	(5,913)	13,379,503	12,750,624	628,879
Public Purpose Funds-NW Natural	1,388,984	1,509,634	(120,650)	16,563,015	17,117,075	(554,060)
Public Purpose Funds-Cascade	84,996	147,830	(62,834)	1,365,341	2,193,703	(828,362)
Total Public Purpose Funds	**6,013,401**	**6,081,902**	**(68,501)**	**49,522,751**	**50,401,057**	**(878,306)**
Incremental Funds - PGE	3,653,175	3,794,848	(141,673)	25,880,229	25,567,828	312,401
Incremental Funds - PacifiCorp	1,873,084	1,892,028	(18,944)	13,371,051	13,052,064	318,987
NW Natural - Industrial DSM	0	0	0	575,946	0	575,946
NW Natural - Washington	0	0	0	645,551	645,551	0
Contributions	0	0	0	930	0	930
Revenue from Investments	6,477	10,000	(3,523)	42,703	60,000	(17,297)
TOTAL REVENUE	**11,546,137**	**11,778,778**	**(232,641)**	**90,039,161**	**89,726,500**	**312,662**
EXPENSES						
Program Subcontracts	3,703,757	3,708,695	4,938	22,181,120	22,686,939	505,819
Incentives	4,888,750	7,087,581	2,198,830	20,342,276	32,170,821	11,828,545
Salaries and Related Expenses	828,237	901,404	73,167	4,825,120	5,376,297	551,178
Professional Services	312,539	908,765	596,226	2,304,636	5,453,222	3,148,586
Supplies	3,195	10,354	7,159	16,033	62,122	46,089
Telephone	4,638	4,703	65	25,943	27,218	1,275
Postage and Shipping Expenses	681	833	153	5,264	5,000	(264)
Occupancy Expenses	53,768	58,434	4,666	328,416	350,601	22,185
Noncapitalized Equip. & Depr.	53,411	68,230	14,819	313,973	434,247	120,274
Call Center	40,970	44,917	3,947	351,703	269,500	(82,203)
Printing and Publications	2,731	17,112	14,381	75,516	102,675	27,159
Travel	21,093	24,399	3,306	75,862	106,192	30,330
Conference, Training & Mtng Exp	8,387	38,174	29,787	66,002	207,770	141,767
Interest Expense and Bank Fees	0	625	625	478	3,750	3,272
Insurance	8,205	9,167	961	47,610	55,000	7,390
Miscellaneous Expenses	242	225	(17)	590	1,350	760
Dues, Licenses and Fees	9,323	18,117	8,794	55,434	76,850	21,416
TOTAL EXPENSES	**9,939,926**	**12,901,732**	**2,961,807**	**51,015,977**	**67,389,554**	**16,373,577**
TOTAL REVENUE LESS EXPENSES	**1,606,211**	**(1,122,954)**	**2,729,165**	**39,023,184**	**22,336,945**	**16,686,239**

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Energy Trust of Oregon, Inc
Statement of Functional Expenses
For the Six Months Ending June 30, 2013

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Budget	Variance
Program Expenses									
Incentives/ Program Management & Deliver	40,460,222	2,063,174	42,523,396			0	42,523,396	54,857,760	12,334,364
Payroll and Related Expenses	1,405,540	418,026	1,823,566	919,389	438,958	1,358,347	3,181,913	3,354,592	172,679
Outsourced Services	1,545,250	184,696	1,729,946	70,136	308,998	379,134	2,109,080	4,339,655	2,230,575
Planning and Evaluation	929,576	41,971	971,547			0	971,547	1,401,647	430,100
Customer Service Management	566,358	10,647	577,005			0	577,005	523,895	(53,110)
Trade Allies Network	179,620	8,130	187,750			0	187,750	224,170	36,420
Total Program Expenses	**45,086,565**	**2,726,644**	**47,813,209**	**989,524**	**747,955**	**1,737,479**	**49,550,688**	**64,701,719**	15,151,031
Program Support Costs									
Supplies	4,300	1,164	5,464	4,916	1,708	6,624	12,088	39,221	27,133
Postage and Shipping Expenses	2,155	423	2,578	839	399	1,238	3,816	3,926	110
Telephone	1,664	682	2,346	762	355	1,117	3,463	3,183	(280)
Printing and Publications	68,790	3,413	72,203	225	1,375	1,600	73,803	98,789	24,986
Occupancy Expenses	100,771	30,951	131,722	61,369	29,153	90,522	222,244	224,399	2,155
Insurance	14,677	4,508	19,185	8,938	4,246	13,184	32,369	35,323	2,954
Equipment	13,588	11,871	25,459	2,669	1,268	3,937	29,396	11,965	(17,431)
Travel	25,746	10,749	36,495	11,929	1,748	13,677	50,172	78,642	28,470
Meetings, Trainings & Conferences	15,294	3,061	18,355	12,862	2,606	15,468	33,823	144,220	110,397
Interest Expense and Bank Fees		100	100	378		378	478	3,750	3,272
Depreciation & Amortization	25,155	8,885	34,040	15,319	7,277	22,596	56,636	51,563	(5,073)
Dues, Licenses and Fees	25,507	8,839	34,346	(1,096)	1,972	876	35,222	35,367	145
Miscellaneous Expenses	572		572	18		18	590	903	313
IT Services	643,697	75,773	719,470	128,378	63,339	191,717	911,187	1,956,584	1,045,397
Total Program Support Costs	**941,916**	**160,420**	**1,102,336**	**247,507**	**115,445**	**362,952**	**1,465,288**	**2,687,835**	**1,222,547**
TOTAL EXPENSES	**46,028,481**	**2,887,064**	**48,915,545**	**1,237,032**	**863,400**	**2,100,432**	**51,015,977**	**67,389,554**	**16,373,577**
OPUC measure vs. 9%	**3.56%**								

Exp-Acct-YTD-002

Energy Trust of Oregon, Inc
Year to Date by Program/Service Territory - joint costs allocated at program level
For the Six Months Ending June 30, 2013
(Unaudited)

	ENERGY EFFICIENCY											RENEWABLE ENERGY				TOTAL		
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	Clark PUD WA	NWN WA	Total WA	ETO Total	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change
REVENUES																		
Public Purpose Funding	$14,077,149	$10,398,393	$24,475,542		$16,563,015	$1,365,341	$42,403,898				$42,403,898	$4,137,743	$2,981,111	$7,118,854		$49,522,751	$50,401,057	($878,306)
Incremental Funding	25,880,229	13,371,051	39,251,280	575,946			39,827,226		645,551	645,551	40,472,777					40,472,777	39,265,443	1,207,334
Contributions															930	930		930
Revenue from Investments															42,703	42,703	60,000	(17,297)
TOTAL PROGRAM REVENUE	**39,957,378**	**23,769,444**	**63,726,822**	**575,946**	**16,563,015**	**1,365,341**	**82,231,124**		**645,551**	**645,551**	**82,876,675**	**4,137,743**	**2,981,111**	**7,118,854**	**43,633**	**90,039,161**	**89,726,500**	**312,661**
EXPENSES																		
Program Management (Note 3)	1,224,273	831,902	2,056,174	60,852	542,067	35,131	2,694,224	1,306	100,475	101,781	2,796,005	149,804	268,222	418,026		3,214,031	2,998,103	(215,928)
Program Delivery	9,456,128	6,535,895	15,992,023	178,958	2,508,321	171,499	18,850,801	1,274	140,757	142,031	18,992,832	32,011	35,942	67,953		19,060,785	19,893,511	832,726
Incentives	9,639,695	5,002,708	14,642,403	797,438	2,579,344	177,410	18,196,595	6,993	143,470	150,463	18,347,058	1,069,257	925,966	1,995,223		20,342,281	32,170,822	11,828,541
Program Eval & Planning Svcs.	761,898	475,462	1,237,361	29,888	251,004	15,440	1,533,693	508	14,551	15,059	1,548,752	15,999	25,972	41,971		1,590,723	2,741,186	1,150,463
Program Marketing/Outreach	1,030,785	709,424	1,740,209	13,665	540,351	31,697	2,325,922	0	13,359	13,359	2,339,281	28,462	15,100	43,562		2,382,843	2,585,375	202,532
Program Quality Assurance	14,383	15,888	30,271	0	18,469	793	49,533	0	0	0	49,533	725	0	725		50,258	127,500	77,242
Outsourced Services	114,777	85,864	200,641	3,140	60,476	2,876	267,133	0	0	0	267,133	71,831	68,579	140,410		407,543	1,276,358	868,815
Trade Allies & Cust. Svc. Mgmt.	179,800	141,444	321,244	2,151	130,802	7,056	461,253	363	12,608	12,971	474,224	12,029	6,707	18,736		492,960	548,566	55,606
IT Services	282,417	192,732	475,149	8,219	135,102	7,586	626,056	470	17,172	17,642	643,698	31,615	44,158	75,773		719,471	1,545,155	825,684
Other Program Expenses	210,398	171,127	381,525	8,202	152,281	7,371	549,379	516	20,078	20,594	569,973	40,475	44,213	84,688		654,661	608,835	(45,826)
TOTAL PROGRAM EXPENSES	**22,914,554**	**14,162,447**	**37,077,001**	**1,102,512**	**6,918,216**	**456,859**	**45,554,589**	**11,429**	**462,471**	**473,900**	**46,028,481**	**1,452,209**	**1,434,858**	**2,887,064**		**48,915,545**	**64,495,411**	**15,579,855**
ADMINISTRATIVE COSTS																		
Management & General (Notes 1 & 2)	580,170	358,262	938,432	27,993	174,378	11,535	1,152,338	285	11,580	11,865	1,164,203	35,532	37,297	72,829		1,237,032	1,779,456	542,424
Communications & Customer Svc (Notes 1 & 2)	404,936	250,053	654,989	19,538	121,709	8,051	804,287	199	8,083	8,282	812,569	24,800	26,032	50,832		863,400	1,114,693	251,292
Total Administrative Costs	**985,106**	**608,315**	**1,593,421**	**47,532**	**296,087**	**19,586**	**1,956,625**	**484**	**19,663**	**20,147**	**1,976,772**	**60,332**	**63,329**	**123,661**		**2,100,432**	**2,894,149**	**793,716**
TOTAL PROG & ADMIN EXPENSES	**23,899,662**	**14,770,764**	**38,670,426**	**1,150,042**	**7,214,301**	**476,444**	**47,511,213**	**11,913**	**482,133**	**494,046**	**48,005,259**	**1,512,540**	**1,498,187**	**3,010,727**		**51,015,977**	**67,389,554**	**16,373,577**
TOTAL REVENUE LESS EXPENSES	**16,057,718**	**8,998,682**	**25,056,400**	**(574,098)**	**9,348,712**	**888,896**	**34,719,910**	**(11,913)**	**163,417**	**151,504**	**34,871,414**	**2,625,202**	**1,482,924**	**4,108,126**	**43,633**	**39,023,184**	**22,336,940**	**(16,686,233)**
Cumulative Carryover at 12/31/12 (Note 4)	12,168,475	3,036,549	15,205,024	1,099,798	3,013,149	(392,281)	18,925,690	50,734	353,174	403,908	19,329,598	8,211,384	7,461,615	15,672,999	10,678,953	45,681,549	37,070,557	(8,610,993)
Interest attributed	1,740,000	1,160,000	2,900,000		5,000,000	392,281	8,292,281				8,292,281	585,000	2,235,000	2,820,000	(11,112,281)		7,900,000	7,900,000
Interest re-attributed	(1,740,000)	(1,160,000)	(2,900,000)		(5,000,000)		(7,900,000)				(7,900,000)				7,900,000		(7,900,000)	(7,900,000)
TOTAL NET ASSETS CUMULATIVE	**28,226,193**	**12,035,231**	**40,261,424**	**525,700**	**12,361,861**	**888,896**	**54,037,881**	**38,821**	**516,591**	**555,412**	**54,593,293**	**11,421,586**	**11,179,539**	**22,601,125**	**7,510,305**	**84,704,734**	**59,407,497**	**(25,297,226)**

Note 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.
Note 2) Administrative costs are allocated for management reporting only. GAAP for Not for Profit organizations does not allow allocation of administrative costs to program expenses.
Note 3) Program Management costs include both outsourced and internal staff.
Note 4) Cumulative carryover at 12/31/2012 reflects audited results.

Energy Trust of Oregon, Inc
Program Expense by Service Territory
For the Six Months Ending June 30, 2013
(Unaudited)

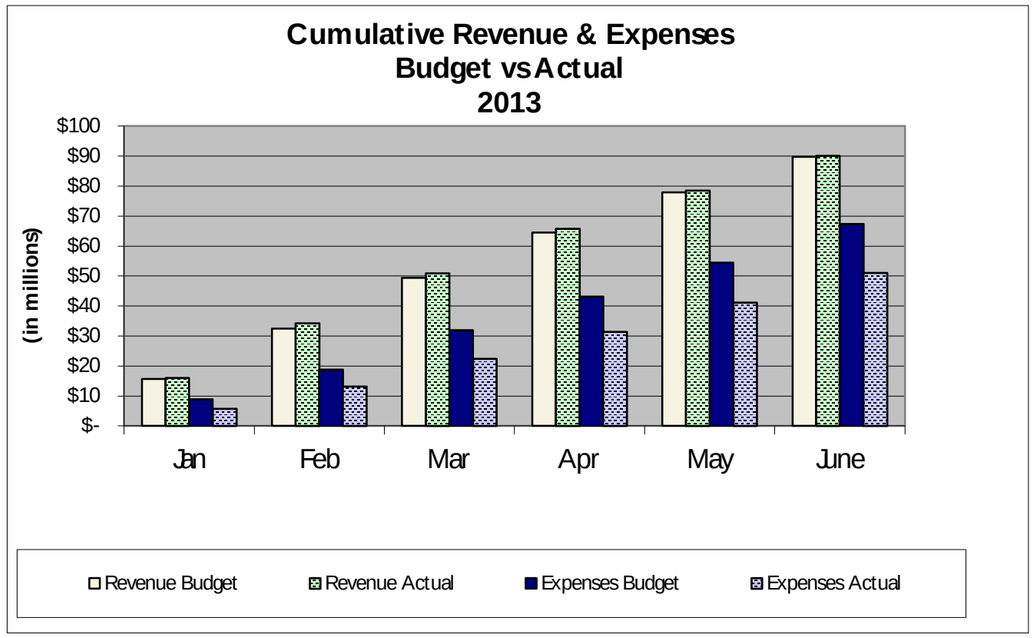
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	Clark PUD WA	NWN WA	Total WA	ETO Total	YTD Budget	Variance
Energy Efficiency														
Commercial														
Existing Buildings	5,280,184	3,717,150	8,997,334	86,864	1,581,141	61,089	1,729,094	10,726,428	11,913	163,363	175,276	10,901,704	15,881,911	4,980,207
New Buildings	4,031,809	1,446,704	5,478,513	57,214	253,875	62,415	373,504	5,852,017				5,852,017	7,934,959	2,082,942
NEEA	743,812	561,121	1,304,933					1,304,933				1,304,933	1,415,799	110,866
Total Commercial	**10,055,805**	**5,724,975**	**15,780,780**	**144,078**	**1,835,016**	**123,504**	**2,102,598**	**17,883,378**	**11,913**	**163,363**	**175,276**	**18,058,654**	**25,232,669**	**7,174,015**
Industrial														
Production Efficiency	5,608,145	2,775,952	8,384,097	1,005,964	240,783	35,204	1,281,951	9,666,048				9,666,048	11,457,289	1,791,241
NEEA	398,460	300,594	699,054					699,054				699,054	691,232	(7,822)
Total Industrial	**6,006,605**	**3,076,546**	**9,083,151**	**1,005,964**	**240,783**	**35,204**	**1,281,951**	**10,365,102**				**10,365,102**	**12,148,521**	**1,783,419**
Residential														
Existing Homes	2,593,976	2,865,522	5,459,498		3,330,429	143,021	3,473,450	8,932,948		186,346	186,346	9,119,294	11,588,684	2,469,390
New Homes/Products	3,962,275	2,137,352	6,099,627		1,808,073	174,715	1,982,788	8,082,415		132,424	132,424	8,214,839	10,758,962	2,544,123
NEEA	1,281,001	966,369	2,247,370					2,247,370				2,247,370	1,973,186	(274,184)
Total Residential	**7,837,252**	**5,969,243**	**13,806,495**		**5,138,502**	**317,736**	**5,456,238**	**19,262,733**		**318,770**	**318,770**	**19,581,503**	**24,320,832**	**4,739,329**
Energy Efficiency Program Cos	**23,899,662**	**14,770,764**	**38,670,426**	**1,150,042**	**7,214,301**	**476,444**	**8,840,787**	**47,511,213**	**11,913**	**482,133**	**494,046**	**48,005,259**	**61,702,022**	**13,696,763**
Renewables														
Biopower	17,532	491,424	508,956					508,956				508,956	878,624	369,668
Solar Electric (Photovoltaic)	1,344,270	698,993	2,043,263					2,043,263				2,043,263	4,147,223	2,103,960
Other Renewable	150,738	307,770	458,508					458,508				458,508	661,685	203,177
Renewables Program Costs	**1,512,540**	**1,498,187**	**3,010,727**					**3,010,727**				**3,010,727**	**5,687,532**	**2,676,805**
Cost Grand Total	**25,412,202**	**16,268,951**	**41,681,153**	**1,150,042**	**7,214,301**	**476,444**	**8,840,787**	**50,521,940**	**11,913**	**482,133**	**494,046**	**51,015,977**	**67,389,554**	**16,373,577**

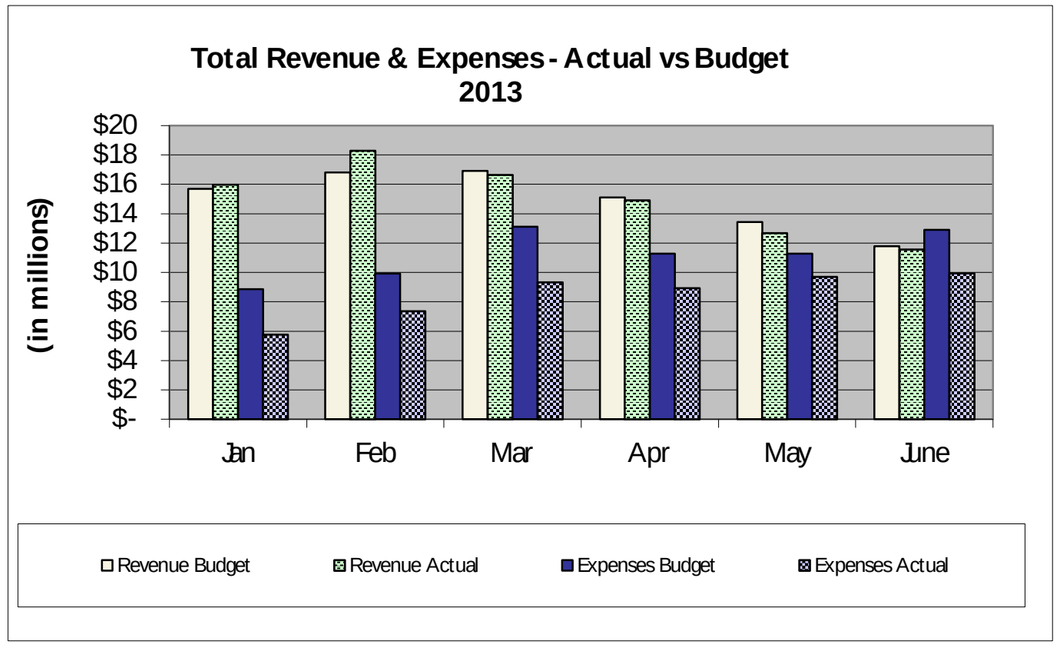
PUC-Proj-ST-07-C

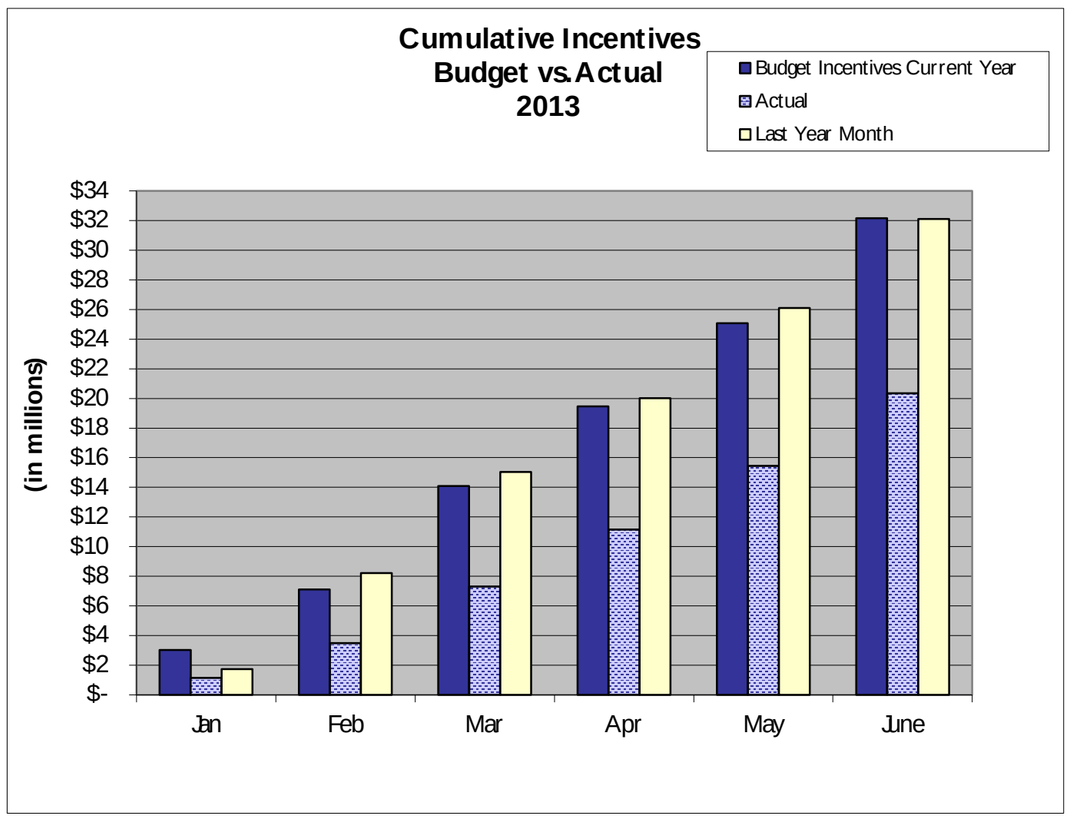
Energy Trust of Oregon, Inc.
ADMINISTRATIVE EXPENSES
For the Three Months and Year to Date Ended June 30, 2013
(Unaudited)

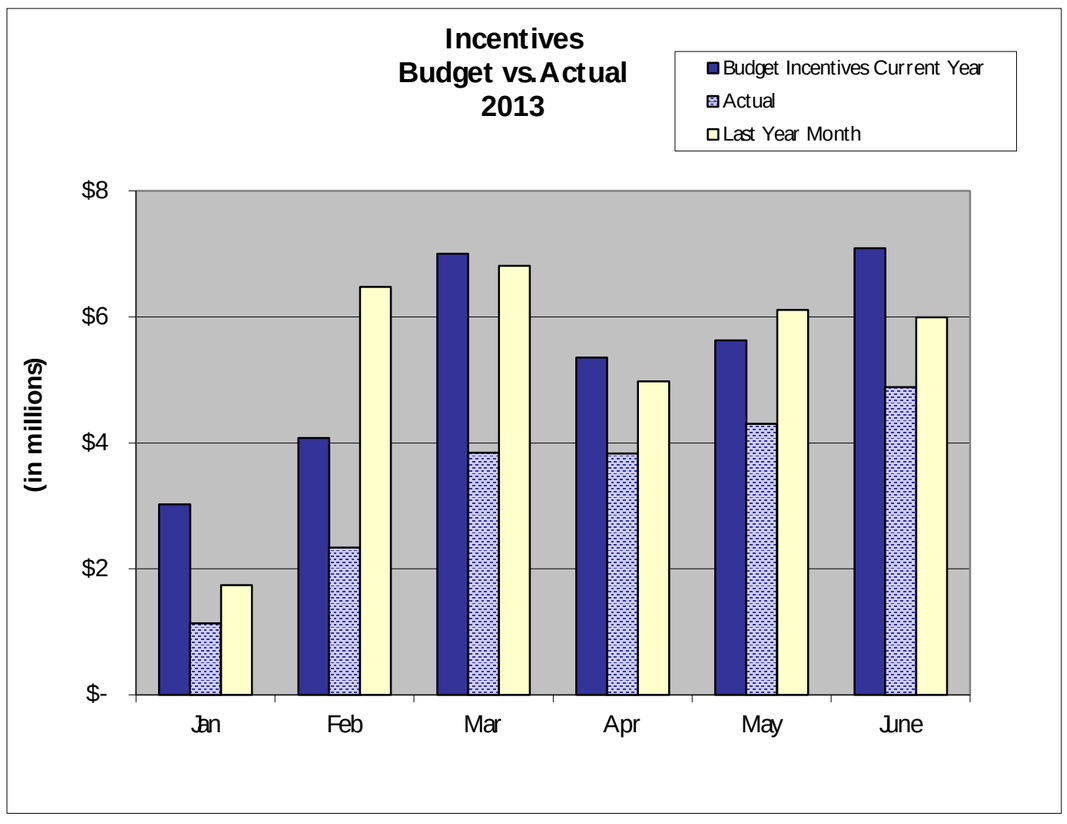
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	QUARTER			YTD			QUARTER			YTD		
	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	VARIANCE
EXPENSES												
Outsourced Services	$27,097	$124,546	$97,449	$67,134	$235,758	$168,624	$103,200	$232,500	$129,300	$308,998	$465,000	$156,002
Legal Services	2,842	22,500	19,659	3,002	45,000	41,999						
Salaries and Related Expenses	456,340	512,450	56,109	919,389	998,835	79,446	226,594	208,331	(18,263)	438,958	416,208	(22,749)
Supplies	1,023	1,575	552	2,685	3,150	465	623	250	(373)	648	500	(148)
Telephone	142	350	208	142	700	558	45		(45)	60		(60)
Postage and Shipping Expenses								1,000	1,000		2,000	2,000
Noncapitalized Equipment								250	250		500	500
Printing and Publications	50	150	100	60	300	240	667	13,750	13,083	1,297	27,500	26,203
Travel	8,517	11,833	3,316	11,929	23,667	11,738	1,128	1,750	622	1,748	3,500	1,752
Conference, Training & Mtngs	8,961	46,147	37,187	12,862	90,520	77,657	1,596	7,125	5,529	2,606	14,250	11,645
Interest Expense and Bank Fees	112	1,875	1,763	378	3,750	3,372						
Miscellaneous Expenses	18	50	32	18	100	82						
Dues, Licenses and Fees	(2,379)	3,120	5,500	(1,096)	4,320	5,416	551	500	(51)	1,972	1,000	(972)
Shared Allocation (Note 1)	45,398	48,964	3,566	92,150	97,875	5,725	23,326	24,156	830	43,776	48,286	4,510
IT Service Allocation (Note 2)	62,103	100,196	38,093	128,378	275,480	147,102	30,640	49,447	18,806	63,339	135,949	72,610
TOTAL EXPENSES	**610,224**	**873,757**	**263,532**	**1,237,032**	**1,779,455**	**542,423**	**388,370**	**539,059**	**150,688**	**863,400**	**1,114,693**	**251,293**

Note 1) Represents allocation of Shared (General Office Management) Costs
Note 2) Represents allocation of Shared IT Costs


Cumulative Revenue & Expenses
Budget vs Actual
2013
(in millions)
$100
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
Jan
Feb
Mar
Apr
May
June
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2013
(in millions)
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
June
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2013
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$34
$32
$30
$28
$26
$24
$22
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
June


Incentives
Budget vs. Actual
2013
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
June

R00407

For contracts with costs through: 7/1/2013

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 7/18/2013

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**6,617,905**	**1,884,425**	**4,733,480**		
Communications & Outreach							
		Communications & Outreach Total:	**2,659,186**	**1,513,425**	**1,145,761**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	25,017,382	14,121,298	1/1/10	7/1/15
ICF Resources, LLC	PMC BE 2013	Fairfax	7,731,351	3,612,444	4,118,907	1/1/13	12/31/13
Fluid Market Strategies LLC	2013 HES PMC	Portland	7,338,775	3,364,259	3,974,516	1/1/13	12/31/13
Portland Energy Conservation, Inc.	PMC NHP 2013	Portland	6,315,684	2,945,901	3,369,784	1/1/13	12/31/13
Portland Energy Conservation, Inc.	2013 NBE PMC	Portland	4,736,060	2,007,217	2,728,843	1/1/13	12/31/13
Intel Corporation	Intel D1X Megaproject	Hillsboro	4,000,000	2,540,546	1,459,454	11/15/12	12/31/14
Lockheed Martin Services, Inc.	2013 MF PMC	Cherry Hill	2,673,341	1,250,273	1,423,068	1/1/13	12/31/13
OPOWER, Inc.	OPOWER Agreement	Arlington	2,092,200	2,047,420	44,780	3/2/10	2/28/14
Oregon State University	CHP Project - OSU	Corvallis	2,024,263	1,920,000	104,263	12/20/10	1/31/16
Portland General Electric	PDC - PE 2013		1,871,000	813,498	1,057,502	1/1/13	12/31/13
Cascade Energy, Inc.	PDC - PE 2013	Walla Walla	1,725,055	921,019	804,036	1/1/13	12/31/13
RHT Energy Solutions	PDC - PE 2013	Medford	1,278,651	608,127	670,524	1/1/13	12/31/13
Cascade Energy, Inc.	PDC - PE 2013 Small Industrial	Walla Walla	1,147,500	619,058	528,442	1/1/13	12/31/13
Evergreen Consulting Group, LLC	PE Lighting PDC 2013	Tigard	1,071,000	510,872	560,128	1/1/13	12/31/13
Northwest Power & Conservation Council	Annual Work Plan		874,652	550,195	324,457	3/20/12	12/31/14
NEXANT, INC.	PDC - PE 2013	San Francisco	825,818	301,698	524,120	1/1/13	12/31/13
Ecova Inc	Plug Load Solutions Funding	Spokane	499,950	213,419	286,531	1/1/13	12/31/13
Evoworx Inc.	EnergySavvy Online Audit Tool	Seattle	472,500	266,584	205,916	1/1/12	12/31/13
Clean Energy Works Oregon Inc	Clean Energy Works	Portland	448,500	300,000	148,500	1/1/10	7/31/13
OPOWER, Inc.	OPower Personal Energy Reports	Arlington	425,850	155,760	270,090	8/1/13	7/31/15
SBW Consulting, Inc.	BE Program Impact Evaluation	Bellevue	400,000	395,681	4,319	1/15/12	6/30/13
The Cadmus Group Inc.	NB Impact Eval 2010-2011	Watertown	295,000	232,588	62,412	1/13/12	12/31/13
Fluid Market Strategies LLC	2013 HES WA PMC	Portland	265,000	148,020	116,980	1/1/13	12/31/13
ICF Resources, LLC	NWN WA BE 2013	Fairfax	191,538	53,412	138,126	1/1/13	12/31/13
Research Into Action, Inc.	PE Evaluation	Portland	170,000	127,096	42,904	2/1/12	7/31/13
Home Performance Contractors Guild of Oregon	Existing Homes Program Support	Portland	155,000	93,943	61,057	1/1/12	3/31/14
D&R International LTD	Market Lift Program	Silver Spring	150,000	0	150,000	1/1/13	9/30/13
ICF Resources, LLC	CHP Performance	Fairfax	116,320	77,920	38,400	8/5/09	6/30/13
ICF Resources, LLC	NWN DSM Initiative 2013	Fairfax	110,000	20,502	89,498	1/1/13	12/31/13
J. Hruska Global	Quality Assurance Services	Columbia City	100,000	41,095	58,905	1/1/13	12/31/14
PWP, Inc.	NBE Process Evaluation	Gaithersburg	100,000	74,628	25,372	1/6/12	12/31/13
Vitesse LLC	Vitesse Data Center	Menlo Park	100,000	0	100,000	10/18/12	10/30/13
Evergreen Economics	New Homes Process Eval - 2013	Portland	70,000	0	70,000	6/24/13	3/31/14
Portland Energy Conservation, Inc.	EE Consultant Services	Portland	54,170	50,758	3,412	6/1/11	12/31/13
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	50,000	35,252	14,749	7/1/11	12/31/13

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Benenson Strategy Group	Residential Awareness 2013	Santa Monica	45,000	15,000	30,000	4/15/13	12/31/13
PWP, Inc.	Comm SEM Initiative Evaluation	Gaithersburg	45,000	30,136	14,865	7/1/12	6/30/14
KEMA Incorporated	Shelf Space Survey	Oakland	42,750	21,375	21,375	12/1/12	9/30/13
Portland General Electric	Utility Data Payment - OPOWER	Portland	40,000	19,928	20,072	8/1/10	2/28/14
NW Natural	Info Transfer & Reimbursement	Portland	35,000	21,263	13,737	7/12/10	2/28/14
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	13,055	21,945	4/1/12	12/31/13
WegoWise Inc	Wegowise Benchmarking License	Boston	35,000	35,000	0	5/14/12	5/14/14
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	34,000	8,022	25,979	9/1/12	8/30/14
MetaResource Group	Data Center Evaluation	Portland	30,000	2,246	27,754	5/1/13	12/31/14
Navigant Consulting Inc	Sustainable Energy Syst Pilot	Boulder	30,000	19,381	10,619	2/15/11	6/30/13
Seattle City Light	Lighting Design Lab	Seattle	30,000	0	30,000	1/1/13	12/31/13
Stellar Processes, Inc.	BE Measure Evaluation	Portland	25,250	18,875	6,375	10/24/12	10/24/14
Northwest Food Processors Association	NW Industrial EE Summit 2014	Portland	25,000	0	25,000	7/16/13	1/15/14
Triple Point Energy Inc.	SEM Workshops	Portland	24,240	9,114	15,126	4/29/13	1/15/14
Michael Blasnick & Associated	Billing Analysis Process	Boston	20,000	3,938	16,063	1/1/10	12/31/13
Oregon Assoc. of Clean Water Agencies	SEM Training - Round III		19,920	8,000	11,920	5/23/13	6/15/14
Northwest Food Processors Association	NW Industrial EE Summit 2013	Portland	17,500	17,500	0	12/10/12	12/31/13
Lane Community College, NEEI Science Division	2013 Scholarship Grant	Eugene	16,600	0	16,600	1/1/13	12/31/13
Consortium for Energy Efficiency	Membership Dues - 2013		15,551	15,551	0	1/1/13	12/31/13
Oregon Department of Energy	Oregon Leaders Project	Salem	15,000	15,000	0	9/19/11	1/31/14
Portland State University Foundation	Green Modular Classroom Proj	Portland	10,500	10,500	0	6/13/12	7/31/14
Consumer Opinion Services Inc	Customer Engagement Survey	Seattle	8,200	4,642	3,558	3/15/13	9/30/13
American Council for and Energy Efficient Economy	Utility Behavior Landscape		7,500	7,500	0	2/1/13	10/31/13
American Council for and Energy Efficient Economy	Case Studies		7,500	7,500	0	2/1/13	10/31/13
American Council for and Energy Efficient Economy	Opportunities for Scaling Up		7,500	7,500	0	2/1/13	10/31/13
Future Energy Conference	Future Energy Conference 2012	Portland	6,500	6,500	0	12/10/12	12/31/13
Hood River County School District	Energy Model Recalibration	Hood River	6,000	0	6,000	12/5/12	3/31/13
Social Enterprises Inc.	GoGreen Sponsorship - 2013	Portland	5,000	0	5,000	6/17/13	10/31/13
	Energy Efficiency Programs Total:		**89,657,369**	**51,634,089**	**38,023,280**		
Joint Programs							
D&R International LTD	Better Data Better Design	Silver Spring	133,500	25,000	108,500	4/30/13	4/30/14
Abt SRBI Inc.	Fast Feedback Survey	New York	65,000	14,039	50,961	3/1/13	2/28/14
Portland State University	Technology Forecasting		57,674	45,060	12,614	11/7/11	12/31/13
Issues & Answers Network Inc	Residential Awareness 2013	Virginia Beach	30,000	0	30,000	4/15/13	12/31/13
Glumac Inc	Planning Technical Analysis	Portland	15,000	15,000	0	10/17/12	10/17/14
Strategic Research Associates LLC	Trade Ally Survey	Spokane	14,000	1,850	12,151	5/1/13	12/31/13
CoStar Realty Information Inc	Property Data	Baltimore	12,668	12,168	500	6/1/11	1/31/14

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
American Council for and Energy Efficient Economy	ACEEE Sponsorship - 2013		10,000	10,000	0	1/1/13	12/31/13
KRH Consulting	Work Load Mangement	Portland	10,000	5,047	4,953	4/23/13	10/1/13
International Business Machines Corp	SPSS License & Support	Beaverton	6,247	6,247	0	5/22/13	6/22/13
		Joint Programs Total:	**354,089**	**134,410**	**219,679**		
Renewable Energy Program							
Outback Solar LLC	Outback Solar	Portland	5,000,000	4,950,000	50,000	5/9/12	5/9/37
Sunway 3, LLC	Prologis PV installation		3,405,000	3,396,044	8,956	9/30/08	9/30/28
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	0	2,000,000	10/18/12	10/18/32
Rough & Ready Lumber Company	Biopower Funding Agreement	Cave Junction	1,685,088	1,685,088	0	7/21/06	7/21/26
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	750	1,549,250	9/11/12	9/11/32
Alder Solar LLC	Habilitation Center PV	Portland	1,236,750	1,224,244	12,506	1/18/08	12/31/28
Central Oregon Irrigation District	Juniper Ridge Hydroelectric	Redmond	1,000,000	1,000,000	0	10/31/08	6/30/31
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	250,000	750,000	10/25/12	10/25/27
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	0	1,000,000	4/25/12	4/25/32
RES - Ag FGO LLC	Biogas Manure Digester Project	Washington	883,320	331,245	552,075	10/27/10	10/27/25
Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Corvallis	827,000	551,334	275,666	6/24/09	6/24/29
RBS Asset Finance Inc	Black Cap Solar PV Funding	Chicago	600,000	600,000	0	10/1/12	10/1/37
Tioga Solar VI, LLC	Photovoltaic Project Agreement	San Mateo	570,760	497,399	73,361	2/1/09	2/1/30
C Drop Hydro LLC	C Drop Project - Klamath Irrig	Idaho Falls	490,000	490,000	0	11/1/11	11/1/31
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	487,000	487,000	0	3/2/10	3/2/30
City of Medford	750kW Combined Heat & Power	Medford	450,000	225,000	225,000	10/20/11	10/20/31
City of Pendleton	Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/12	4/20/32
K2A Properties, LLC	Doerfler Wind Farm Project	Aumsville	230,000	166,489	63,511	5/20/10	5/20/30
Farmers Irrigation District	Low Line Canal Pressurization	Hood River	150,000	95,000	55,000	9/26/12	11/30/32
Farmers Irrigation District	Indian Creek Corridor Project	Hood River	100,000	100,000	0	1/5/10	1/4/29
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	11,850	88,150	10/1/11	10/1/13
Stoller Vineyards, Inc.	Stoller Vineyards PV	Dayton	79,815	77,390	2,425	12/1/05	12/1/26
Bloomberg LP	Insight Services	San Francisco	79,200	50,383	28,817	4/1/11	1/1/14
Wallowa Resources Community Solutions Inc	Integrated Biomass Energy Camp	Enterprise	70,000	70,000	0	2/1/12	1/31/27
City of Portland Water Bureau	Vernon Hydro	Portland	65,000	65,000	0	11/15/10	11/15/30
University of Oregon	UO SMRL Contribution - 2013	Eugene	45,000	45,000	0	3/9/13	3/9/14
MC Energy LLC	Small Wind Incentive	Spokane	43,250	43,250	0	9/21/10	9/21/25
Wind Products Inc	Wind Consultant	Brooklyn	37,500	27,500	10,000	2/6/12	12/31/13
Harold Hartman dba Lynhart Farms	17.5 kW PV project	Malin	32,500	31,386	1,114	5/25/07	5/25/27
Northwest SEED	Grant Agreement	Seattle	30,000	30,000	0	10/3/11	12/31/13
SPS of Oregon Inc	Spaur Microhydro	Wallowa	25,000	25,000	0	7/23/10	7/23/30
Robert Migliori	42kW wind energy system	Newberg	24,125	8,561	15,564	4/11/07	1/31/24
Solar Oregon	Outreach Services	Portland	24,000	12,000	12,000	1/1/13	12/31/13
Wind Products Inc	Web Portal Tool	Brooklyn	24,000	25,000	-1,000	6/25/12	9/20/13

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Farmers Conservation Alliance	FID Small Hydro Analysis	Hood River	20,000	0	20,000	11/1/12	6/30/13
Solar Oregon	Energy Education Sponsor 2013	Portland	16,000	16,000	0	1/1/13	12/31/13
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/05	10/1/20
Corbett Water District	Corbett Water District Hydro	Corbett	12,000	1,316	10,684	4/16/12	6/30/32
Clean Energy States Alliance	CESA ITAC		10,000	10,000	0	1/1/13	12/31/13
Garrad Hassan America Inc	RE Consulting Services	San Diego	6,840	0	6,840	6/11/13	2/28/15
American Wind Group LLC	Anemometer Incentive Funding	Oasis	4,031	4,031	0	7/22/11	2/15/14
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
	Renewable Energy Program Total:		**23,879,329**	**16,765,514**	**7,113,815**		
	Grand Totals:		**123,167,878**	**71,931,863**	**51,236,015**		

*The city indicated is the contractor's mailing address, not necessarily the location where work was performed.

Financial Glossary

(for internal use) - updated August 9, 2012

Administrative Costs

Costs that, by nonprofit accounting standards, have general objectives which enable an organization's programs to function. The organization's programs in turn provide direct services to the organization's constituents and fulfill the mission of the organization.
i.e. management and general and general communication and outreach expenses

I. **Management and General**
- Includes governance/board activities, interest/financing costs, accounting, payroll, human resources, general legal support, and other general organizational management costs.
- Receives an allocated share of indirect costs.

II. **General Communications and Outreach**
- Expenditures of a general nature, conveying the nonprofit mission of the organization and general public awareness.
- Receives an allocated share of indirect costs.

Allocation
- A way of grouping costs together and applying them to a program as one pool based upon an allocation base that most closely represents the activity driver of the costs in the pool.
- Used as an alternative to charging programs on an invoice–by–invoice basis for accounting efficiency purposes.
- An example would be accumulating all of the costs associated with customer management (call center operations, Energy Trust customer service personnel, complaint tracking, etc). The accumulated costs are then spread to the programs that benefited by using the ratio of calls into the call center by program (i.e. the allocation base).

Allocation Cost Pools
- Employee benefits and taxes.
- Office operations. Includes rent, telephone, utilities, supplies, etc.
- Information Technology (IT) services.
- Planning and evaluation general costs.
- Customer service and trade ally support costs.
- General communications and outreach costs.
- Management and general costs.
- Shared costs for electric utilities.
- Shared costs for gas utilities.
- Shared costs for all utilities.

Auditor's Opinion
- An accountant's or auditor's opinion is a report by an independent CPA presented to the board of directors describing the scope of the examination of the organization's books, and certifying that the financial statements meet the AICPA (American Institute of Certified Public Accountants) requirements of GAAP (generally accepted accounting principles).

- Depending on the audit findings, the opinion can be unqualified or qualified regarding specific items. Energy Trust strives for and has achieved in all its years an unqualified opinion.
- An unqualified opinion indicates agreement by the auditors that the financial statements present an accurate assessment of the organization's financial results.
- The OPUC Grant Agreement requires an unqualified opinion regarding Energy Trust's financial records.
- Failure to follow generally accepted accounting principles (GAAP) can result in a qualified opinion.

Board-approved Annual Budget

- Funds approved by the board for *expenditures* during the budget year (subject to board approved program funding caps and associated policy) for the stated functions.
- Funds approved for *capital* asset expenditures.
- Approval of the general allocation of funds including commitments and cash outlays.
- Approval of expenditures is based on assumed revenues from utilities as forecasted in their annual projections of public purpose collections and/or contracted revenues.

Carryover Funds

- In any one year, the amount by which revenues exceed expenses for that year in a designated category that will be added to the cumulative balance and brought forward for expenditure to the next budget year.
- In any one year, if expenditures exceed revenues, the negative difference is applied against the cumulative carryover balance.
- Does not equal the cash on hand due to noncash expense items such as depreciation.
- Tracked by major utility funder and at high level program area--by EE vs RE, not tracked by program.

Commitments

- Represents funds obligated to identified efficiency program participants in the form of signed applications or agreements and tracked in the project forecasting system**.**
- If the project is not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Funds are expensed when the project is completed.
- Funds may be held in the operating cash account, or in escrow accounts.

Contract obligations

- A signed contract for goods or services that creates a legal obligation.
- Reported in the monthly Contract Status Summary Report.

Cost-Effectiveness Calculation

- Programs and measures are evaluated for cost-effectiveness.
- The cost of program savings must be lower than the cost to produce the energy from both a utility and societal perspective.
- Expressed as a ratio of energy savings cost divided by the presumed avoided utility and societal cost of energy.
- Program cost-effectiveness evaluation is "fully allocated," i.e. includes all of the program costs plus a portion of Energy Trust administrative costs.

Dedicated Funds

- Represents funds obligated to identified renewable program participants in the form of signed applications or agreements and tracked in the project forecasting system.

- May include commitments, escrows, contracts, board designations, master agreements.
- Methodology utilized to develop renewable energy activity-based budgets amounts.

Direct Program Costs

- Can be directly linked to and reflect a causal relationship to one individual program/project; or can easily be allocated to two or more programs based upon usage, cause, or benefit.

Direct Program Evaluation & Planning Services

- Evaluation services for a specific program rather than for a group of programs.
- Costs incurred in evaluating programs and projects and included in determining total program funding caps.
- Planning services for a specific program rather than for a group of programs.
- Costs incurred in planning programs and projects and are included in determining program funding expenditures and caps.
- Evaluation and planning services attributable to a number of programs are recorded in a cost pool and are subsequently allocated to individual programs.

Escrowed Program (Incentive) Funds

- Cash deposited into a separate bank account that will be paid out pursuant to a contractual obligation requiring a certain event or result to occur. Funds can be returned to Energy Trust if such event or result does not occur. Therefore, the funds are still "owned" by Energy Trust and will remain on the balance sheet.
- The funds are within the control of the bank in accordance with the terms of the escrow agreement.
- When the event or result occurs, the funds are considered "earned" and are transferred out of the escrow account ("paid out") and then are reflected as an expense on the income statement for the current period.

Expenditures/Expenses

- Amounts for which there is an obligation for payment of goods and/or services that have been received or earned within the month or year.

FastTrack Projects Forecasting

Module developed in FastTrack to provide information about the timing of future incentive payments, with the following definitions**:**

- Estimated-Project data may be inaccurate or incomplete. Rough estimate of energy savings, incentives and completion date by project and by service territory.
- Proposed-Project that has received a written incentive offer but no agreement or application has been signed. Energy savings, incentives and completion date to be documented by programs using this phase. For Renewable projects-project that has received Board approval.
- Accepted-Used for renewable energy projects in 2nd round of application; projects that have reached a stage where approval process can begin.
- Committed-Project that has a signed agreement or application reserving incentive dollars until project completion. Energy savings/generations, incentives and completion date by project and by service territory must be documented in project records and in FastTrack. If project not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Dedicated-Renewable project that has been committed, has a signed agreement, and if required, has been approved by the board of directors.

Incentives

I. **Residential Incentives**

- Incentives paid to a residential program participant (party responsible for payment for utility service in particular dwelling unit) exclusively for energy efficiency and renewable energy measures in the homes or apartments of such residential customers.

II. **Business Incentives**

- Incentives paid to a participant other than a residential program participant as defined above following the installation of an energy efficiency or renewable energy measure.
- Above market cost for a particular renewable energy project.

III. **Service Incentives**

- Incentives paid to an installation contractor which serves as a reduction in the final cost to the participant for the installation of an energy efficiency or renewable energy measure.
- Payment for services delivered to participants by contractors such as home reviews and technical analysis studies.
- End-user training, enhancing participant technical knowledge or energy efficiency practices proficiency such as “how to” sessions on insulation, weatherization, or high efficiency lighting.
- CFL online home review fulfillment and PMC direct installations.
- Technical trade ally training to enhance program knowledge.
- Incentives for equipment purchases by trade allies to garner improvements of services and diagnostics delivered to end-users, such as duct sealing, HVAC diagnosis, air filtration, etc.

Indirect Costs

- Shared costs that are “allocated” for accounting purposes rather than assigning individual charges to programs.
- Allocated to all programs and administration functions based on a standard basis such as hours worked, square footage, customer phone calls, etc.
- Examples include rent/facilities, supplies, computer equipment and support, and depreciation.

IT Support Services

- Information technology costs incurred as a result of supporting all programs.
- Includes FastTrack energy savings and incentive tracking software, data tracking support of PMCs and for the program evaluation functions.
- Includes technical architecture design and physical infrastructure.
- Receives an allocation of indirect shared costs.
- Total costs subsequently allocated to programs and administrative units.

Outsourced Services

- Miscellaneous professional services contracted to third parties rather than performed by internal staff.
- Can be incurred for program or administrative reasons and will be identified as such.

Program Costs

- Expenditures made to fulfill the purposes or mission for which the organization exists and are authorized through the program approval process.
- Includes program management, incentives, program staff salaries, planning, evaluation, quality assurance, program-specific marketing and other costs incurred solely for program purposes.
- Can be direct or indirect (i.e. allocated based on program usage.)

Program Delivery Expense

- This will include all PMC labor and direct costs associated with: incentive processing, program coordination, program support, trade ally communications, and program delivery contractors.
- Includes contract payments to NEEA for market transformation efforts.
- Includes performance compensation incentives paid to program management contractors under contract agreement if certain incentive goals are met.
- Includes professional services for items such as solar inspections, anemometer maintenance and general renewable energy consulting.

Program Legal Services

- External legal expenditures and internal legal services utilized in the development of a program-specific contract.

Program Management Expense

- PMC billings associated with program contract oversight, program support, staff management, etc.
- ETO program management staff salaries, taxes and benefits.

Program Marketing/Outreach

- PMC labor and direct costs associated with marketing/outreach/awareness efforts to communicate program opportunities and benefits to rate payers/program participants.
- Awareness campaigns and outreach efforts designed to reach participants of individual programs.
- Co-op advertising with trade allies and vendors to promote a particular program benefit to the public.

Program Quality Assurance

- Independent in-house or outsourced services for the quality assurance efforts of a particular program (distinguished from program quality control).

Program Reserves

- Negotiated with utilities annually, with a goal of providing a cushion of approximately 5% above funds needed to fulfill annual budgeted costs. Management may access up to 50% of annual program reserve without prior board approval (resolution 633, 2012).

Program Support Costs

- Source of information is contained in statement of functional expense report.
- Portion of costs in OPUC performance measure for program administration and support costs.
    - Includes expenses incurred directly by the program.
    - Includes allocation of shared and indirect costs incurred in the following categories: supplies; postage and shipping; telephone; printing and publications; occupancy expenses; insurance; equipment; travel; business meetings; conferences and training; depreciation and amortization; dues, licenses,

subscriptions and fees; miscellaneous expense; payroll & related expense; outsourced services; and an allocation of information technology department cost.

Project Specific Costs (for Renewable Energy)

- Expenses directly related to identified projects or identified customers to assist them in constructing or operating renewable projects. Includes services to prospective as well as current customers.
- Must involve direct contact with the project or customer, individually or in groups, and provide a service the customer would otherwise incur at their own expense.
- Does not include general program costs to reach a broad (unidentified) audience such as websites, advertising, program development, or program management.
- Project-Specific costs may be in the categories of; Incentives, Staff salaries, Program delivery, Legal services, Public relations, Creative services, Professional services, Travel, Business meetings, Telephone, or Escrow account bank fees.

Savings Types

- **Working Savings/Generation:** the estimate of savings/generation that is used for data entry by program personnel as they approve individual projects. They are based on deemed savings/generation for prescriptive measures, and engineering calculations for custom measures. They do not incorporate any evaluation or transmission and distribution factors.
- **Reportable Savings/Generation:** the estimate of savings/generation that will be used for public reporting of Energy Trust results. This includes transmission and distribution factors, evaluation factors, and any other corrections required to the original working values. These values are updated annually, and are subject to revision each year during the "true-up" as a result of new information or identified errors.
- **Contract Savings**: the estimate of savings that will be used to compare against annual contract goals. These savings figures are generally the same as the reportable savings at the time that the contract year started. For purposes of adjusting working savings to arrive at this number, a single adjustment percentage (a SRAF, as defined below) is agreed to at the beginning of the contract year and is applied to all program measures. This is based on the sum of the adjustments between working and reportable numbers in the forecast developed for the program year.
- **Savings Realization Adjustment Factors (SRAF):** are savings realization adjustment factors applied to electric and gas working savings measures in order to reflect more accurate savings information through the benefit of evaluation and other studies. These factors are determined by the Energy Trust and used for annual contract amendments. The factors are determined based on the best available information from:
  - Program evaluations and/or other research that account for free riders, spill-over effects and measure impacts to date; and
  - Published transmission and distribution line loss information resulting from electric measure savings.

Total Program and Admin Expenses (line item on income statement)

- Used only for cost effectiveness calculations, levelized cost calculations and in management reports used to track funds spent/remaining by service territory.
- Includes all costs of the organization--direct, indirect, and an allocation of administration costs to programs.
- Should not be used for external financial reporting (not GAAP).

Total Program Expenses (line item on income statement)

- All indirect costs have been allocated to program costs with the exception of administration (management and general costs and communications & outreach).
- Per the requirements of Generally Accepted Accounting Principles (GAAP) for nonprofits, administrative costs should not be allocated to programs.
- There is no causal relationship—costs would not go away if the program did not exist.

Trade Ally Programs & Customer Service Management

- Costs associated with Energy Trust sponsorship of training and development of a trade ally network for a variety of programs.
- Trade Ally costs are tracked and allocated to programs based on the number of allies associated with that program.
- Costs in support of assisting customers which benefit all Energy Trust programs such as call center operations, customer service manager, complaint handling, etc.
- Customer service costs are tracked and allocated based on # of calls into the call center per month.

True Up

- True-up is a once-a-year process where we take everything we've learned about how much energy programs actually save or generate, and update our reports of historic performance and our software tools for forecasting and analyzing future savings.
- Information incorporated includes improved engineering models of savings (new data factor), anticipated results of future evaluations based on what prior evaluations of similar programs have shown (anticipated evaluation factor), and results from actual evaluations of the program and the year of activity in question (evaluation factor).
- Results are incorporated in the Annual Report (for the year just past) and the True-up Report (for prior years).
- Sometimes the best data on program savings or generation is not available for 2-3 years, especially for market transformation programs. So for some programs, the savings are updated through the annual true-up 2 or 3 times

Board Decision
Amending the Other Renewables Policy

July 31, 2013

Summary

Amend the Other Renewables policy to reflect the merger of the Biopower and other renewable programs into a "Custom Renewables Program," which will encompass hydropower, biopower, geothermal and wind projects.

Background

- Energy Trust's Renewable Energy group now has three board-recognized programs, each with its own budget: Solar, Biopower, and Other Renewables (hydro, geothermal, and wind):
    - The board approved the Solar Program (also called solar electric) in April, 2003.[1] Incentives were standardized on the basis of installed wattage.
    - The board approved the Biopower Program in May, 2005. Incentives are determined case by case, based on Energy Trust's above-market cost methodology.
    - The Other Renewables Program was originally called the Open Solicitation Program, a catch-all for projects not covered by other programs. In August, 2012, the Open Solicitations Program was renamed the Other Renewables Program, with two tracks: (1) mature technologies—hydropower and wind, approved by the executive director for less than $500,000 in incentives, with board approval for $500,000 or more; and (2) other technologies, whose approval requirements vary based on incentive amount.

- Historically, these divisions served the programs well, allowing us to support a portfolio of technologies.

Discussion

- In recent years, renewable energy program budgets have decreased as cash carryovers were expended. Demand for incentive funds now regularly exceeds Energy Trust budgets.

- To manage demand for non-solar project incentives, in 2012 we began pooling incentive funds from the Biopower and Other Renewables budgets, and requested proposals for projects regardless of technology. This enables us to respond to market conditions and strategically deploy funds as opportunities arise.

- As a practical matter, we now treat Biopower and Other Renewables program funds as though they were one pot of funds—biopower incentive dollars may go to other technologies, and *vice versa*.

[1] Oregon law defines renewable energy as a renewable resource that generates electricity. Because solar hot water heating does not generate electricity, it is defined as an efficiency measure rather than as a renewable resource.

- In making incentive commitments, we continue to seek board approval of projects, and report to the board on program budgets as required by board policy.

- However, treating multiple program budgets as a single pool of funds creates some confusion in program management and reporting:
    - Currently, when reporting on biopower program commitments, we imply that dollars were committed to biopower projects, which may or may not be the case.
    - Having a separate biopower program implies that there will be funds for biopower regardless of what happens in other technology areas, which is not the case.

- Merging the programs into one Custom Renewables program would align our program and budget structure with practice and more accurately reflect how these programs function. The program would continue to support a portfolio of technologies.

- Merging the programs also would make the annual budget and reporting processes more efficient by requiring one program budget rather than two, and half as much reporting (quarterly reports, dashboards, and other documents).

- Having a custom program and a standard solar program aligns with the PUC's renewable benchmarks. They specify a goal for standard solar and a separate goal for custom projects.

- Small wind and custom solar do not fit as cleanly into these proposed categories: small wind incentives are semi-standardized based on estimated production, and large solar project incentives are customized. We view these as minor mismatches, and would include small wind in Custom Renewables and large solar in the Solar Program.

- All technologies in the Custom Renewables program would continue to be subject to current approval requirements:
    - Biopower, wind, and hydro: incentives of $500,000 or more require board approval; the executive director may approve lesser incentives
    - Geothermal and other less mature technologies:
        - Incentives over $125,000 require board approval
        - Incentives of $50,000 to $125,000 require board approval and are put on the consent agenda
        - Incentives under $50,000 may be approved the by executive director.

- The change would also require amendment of the "Other Renewables" policy as shown in Attachment 1.

Recommendation

Amend the Other Renewables policy to reflect the merger of the Biopower and other renewable programs into a "Custom Renewables Program," by approving resolution number 671.

RESOLUTION 671
AMENDING THE OTHER RENEWABLES POLICY TO REFLECT THE MERGER OF BIOPOWER AND OTHER RENEWABLES PROGRAM INTO A CUSTOM RENEWABLES PROGRAM

WHEREAS:

1. **Energy Trust's Renewable Energy group has had three board-recognized programs, each with its own budget: Solar, Biopower, and Other Renewables (hydro, geothermal, and wind).**
2. **In recent years, renewable energy program budgets have decreased as cash carryovers were expended. Demand for incentive funds now regularly exceeds our budgets. To manage demand for non-solar project incentives, in 2012 Energy Trust began pooling incentive funds from the Biopower and Other Renewables budgets and solicits proposals for projects, regardless of technology.**
3. **Merging the Biopower and Other Renewables programs into one Custom Renewables program would align Energy Trust's program and budget structure with practice, more accurately reflect how programs function, and make management and reporting more efficient.**

It is therefore RESOLVED that the Board of Directors hereby approves amendment of the Other Renewables Projects policy as shown in Attachment 1, reflecting the merger of the Biopower and Other Renewables programs into a single Custom Renewables program with a single budget.

Moved by:		Seconded by:
Vote:	In favor:	Abstained:
	Opposed:	

4.13.0001-A Review Process for ~~Other~~ Custom Renewable Energy Projects

History			
Source	**Date**	**Action/Notes**	**Next Review Date**
Board Decision	April 30, 2003	Approved (R183)	April 2006
Board Policy Committee	April 2006	No change	April 2009
Board Decision	May 6, 2009	Amended (R513)	May 2012
Board Decision	August 22, 2012	Amended (R638)	August 2015

Purpose

To recognize the merger of the Energy Trust Biopower Program with other non-solar renewable energy programs into a single "Custom Renewables" program, ~~clarify~~ and establish a formal review process for ~~renewable energy~~ projects under the Custom ~~proposed through the Other~~ Renewables Program.

Background

Before July, 2013, Energy Trust had three board-recognized renewable energy programs: Solar, Biopower, and Other Renewables (hydro, geothermal, and wind). In August, 2013, the Biopower and Other Renewables programs merged into a new, "Custom Renewables" program, to allow more efficient budget management. The Solar Program was not affected. ~~The Open Solicitation Program was established following discussion by the board at its January 30, 2002, meeting.~~

~~In early 2002 the Renewable Energy Advisory Council recommended establishing a procedure for considering and funding unsolicited proposals. Their intentions included:~~

- ~~Quick implementation~~
- ~~Fund good ideas that languish for want of a little push~~
- ~~Fund new technologies in established applications~~
- ~~Fund old technologies in new applications~~
- ~~Establish an ongoing path for projects that do not fit criteria for subsequent Energy Trust programs~~

~~The application form establishes both general and specific criteria for evaluation. These criteria include: location, viability, replicability, energy generation, leverage/partnership, expansion potential, market transformation, environmental benefits, best practices, education and capability expansion. Staff evaluates the proposals based on these criteria and the guidelines above. The staff review includes resource, engineering and financial data as appropriate to evaluate project feasibility and chances for success. Staff generally requests additional information for about half of the proposals received.~~

~~If the final information is complete and the proposal meets the criteria, staff calculates the above- market costs of the proposed project and compares these to the request. We use the approved methodology but also calculate alternate views of the market value of the power (if the appropriate data exist). Typically, recommendations are presented to the Renewable Energy~~

~~Advisory Council for discussion. This has been presented in a structured format for larger projects and as general conversations for smaller projects. On occasion, the council has taken straw votes to help draw wide-ranging discussions to a conclusion.~~

~~In 2009~~The Custom Renewables program will operate with ~~,~~ the ~~board created~~same two tracks for project approval ~~in~~ as the ~~Open Solicitation~~Other Renewables program: (1) A "mature technologies" track for hydropower and wind, in which the executive director could approve projects involving less than $500,000 in incentives; and (2) for other technologies, ~~the current Open Solicitation process (~~approval requires RAC review and board approval for projects involving $50,000 or more~~) for other projects~~. ~~Initially, only traditional hydropower projects would be included in the "mature technologies" track; later in 2009, the board added wind projects to this track, and may add new technologies later.~~

~~In 2012, the board renamed this program the "Other Renewables" program, and amended the policy to reflect that fact that wind is included in the mature technologies track.~~.

POLICY ESTABLISHING ~~OTHER~~ CUSTOM RENEWABLES PROGRAM PROJECT APPROVAL

~~**WHEREAS:**~~

~~**1) The Open solicitation Program was established by the board in 2002 to deal with unusual technologies or applications; because of their novelty, these projects undergo more extensive review than established technologies and applications;**~~

~~**2) By 2009, the Open Solicitation Program had become more focused on established technologies such as hydropower generation. Because these projects are relatively well understood, it was appropriate to re-configure the program to reflect different levels of review for different project types.**~~

~~**3) The board later included wind in the mature technologies track.**~~

~~**Therefore, BE IT RESOLVED: That t**~~**The Energy Trust of Oregon, Inc., Board of Directors:**

1) Authorizes two tracks for approval of projects within the ~~Other~~ Custom Renewables Program and not covered by other Energy Trust solar ~~renewable~~ energy programs:
   - **a. Mature technologies, i.e., biopower projects, traditional hydropower projects, wind projects, and such other technologies as the board may designate in the future: The executive director may approve projects involving incentives less than $500,000; board approval is required for projects involving $500,000 or more.**
   - **b. Other projects:**
     - **i. Projects involving incentives of $50,000 or less may be approved by the executive director. A summary of any such project will be provided subsequently to the board and Renewable Advisory Council.**
     - **ii. Projects entailing incentives of $50,000 to $125,000 require review by the Renewable Advisory Council and will be placed on a consent agenda for board action unless a member of the board asks to have the project placed on the regular agenda.**
     - **iii. Projects involving incentives of more than $125,000 will be reviewed by the Renewable Advisory Council and placed on the regular agenda for board approval.**

2) ~~**Replaces the current Open Solicitation Policy with this resolution.**~~

Energy Trust Policy Committee Meeting Notes

July 2, 2013, 4:00-5:30pm

Attending by phone

Roger Hamilton, John Reynolds, Rick Applegate, Alan Meyer, Ken Canon, and Margie Harris

Attending in person

Steve Lacey, Peter West, Fred Gordon, Debbie Menashe, Thad Roth

1. Update on Lessons Learned from PMC Transitions

Margie reported on the PMC transition "lessons learned" project. Recognizing the significant impact across the organization of the 2012 PMC transitions, staff engaged Hitachi Consulting for a compilation of lessons learned from the process. While memories were still relatively fresh, Hitachi interviewed internal staff members and participating program manager vendors, those who were selected as PMCs through the process and those who were not. This review assumed that Energy Trust's business model is to subcontract for implementation of programs; given this model, Hitachi's objective was to catalogue observations about what went well in the PMC transition process and what we would not do again. Hitachi presented their findings to Energy Trust's Management Team, and a number of overarching lessons learned emerged, including:

A. Don't do two large PMC competitions at the same time; consider changing the timing of any such transitions from year-end.
B. Make sure all support groups in the organization plan for resources needed for a transition of PMCs and are engaged at the right time throughout the process.
C. Engage IT more closely throughout the process to ensure appropriate identification of systems requirements on the part of PMC candidates and selected vendors for Energy Trust program delivery.
D. Use a dedicated project management resource throughout the transition and employ Energy Trust change management tools.
E. Keep thinking about ways to break up the RFPs into multiple scopes; even though scopes ended up essentially combined, this appears to have resulted in a greater number of RFP responses.
F. Clearly define PMC and Energy Trust roles during the transition—initially and on an ongoing basis.
G. Keep using training formats (e.g. Energy Trust University) and time training as new PMC staff comes onboard.

2. Update on Annual Goals, Funding Nomenclature, and Relationship to Utility IRPs

On May 22nd at the Energy Trust board strategic utility roundtable, staff presented information and options for simpler and clearer nomenclature to characterize utility IRP targets and corresponding Energy Trust savings goals, related OPUC performance measures for Energy Trust and Energy Trust reserve accounts. These topics were discussed at length by roundtable participants. Margie and Steve convened a small group to address the following two outstanding issues:

A. How best to assess Energy Trust annual performance given agreement to link accomplishments to multi-year utility IRP action plans and,
B. Further discussion on reserve accounts, including the appropriate level of an interest (contingency) reserve for the organization as a whole and the concept of negotiated program reserves for each individual utility.

The small group discussion included representatives from each of the utilities, plus PUC staff. It was a good discussion, but no clear conclusions were regarding metrics for assessing Energy Trust annual performance given the link to accomplishments in a multi-year IRP. Instead, there was general acknowledgment that it is the PUC's role and responsibility to keep Energy Trust accountable and on track towards its multi-year goal. Committee members expressed their approval of this structure and approach.

Next steps are to update a draft report on these issues and ask for additional review by the members of the strategic utility roundtable group, then present the report in briefing paper format to the full board for discussion at the upcoming July 31st board meeting.

3. Update on PDC Selection Process

The four current contracts with Energy Trust's Industrial and Agriculture Program's Custom Track Program Delivery Contractors (PDCs), in place since 2009, ends this year. Peter described the competitive process employed for the identification of vendors for new PDC contracts to implement the Program's existing resource acquisition and outreach strategy. Program staff issued an RFQ in April.

The RFQ closed on May 22nd. Twelve companies submitted qualifications by the deadline. A review team comprised of five Energy Trust employees and one external reviewer assessed the applications and selected five companies for in-person interviews. The review team and interview panel intend to make their final recommendations to the Production Efficiency (PE) Program by the end of the first week of July. PE Program staff will prepare background information and request contracting authority at the full board meeting on July 31st.

4. Policy for Review

Proposed Amendment to Program Designations and Open Solicitation Project Approval Policy

Thad Roth, Energy Trust's Renewable Sector Lead, made a brief presentation to the Committee regarding a proposal to reorganize the structure of Energy Trust's Renewable Energy group from three board-recognized programs, each with its own budget: Solar, Biopower, and Other Renewables (hydro, geothermal, and wind) to two: Solar and Custom, each with its own budget.

Historically, these divisions served the programs well, allowing us to support a portfolio of technologies. However, in recent years, renewable energy program budgets have decreased as cash carryovers were expended. Demand for incentive funds now regularly exceeds Energy Trust budgets. To manage demand for non-solar project incentives, in 2012 program staff began pooling incentive funds from the Biopower and Other Renewables budgets, and requested proposals for projects regardless of technology. This enables the program to respond to market conditions and strategically deploy funds as opportunities arise. Biopower and Other Renewables program funds are currently treated as though they are one pot of funds—biopower incentive dollars may go to other technologies, and *vice versa*.

Having a custom program and a standard solar program aligns with the PUC's renewable benchmarks. They specify a goal for standard solar and a separate goal for custom projects.

Small wind and custom solar do not fit as cleanly into these proposed categories: small wind incentives are semi-standardized based on estimated production, and large solar project incentives are customized. Staff views these as minor mismatches, and would include small wind in Custom Renewables and large solar in the Solar Program.

All technologies in the Custom Renewables program would continue to be subject to current approval requirements:

- Biopower, wind, and hydro: incentives of $500,000 or more require board approval; the executive director may approve lesser incentives
- Geothermal and other less mature technologies:
  - Incentives over $125,000 require board approval
  - Incentives of $50,000 to $125,000 require board approval and are put on the consent agenda
  - Incentives under $50,000 may be approved the by executive director.

Merging the programs into one Custom Renewables program would align program and budget structure with practice and more accurately reflect how these programs function. The program would continue to support a portfolio of technologies. The change would also require amendment of the "Other Renewables" policy as shown in Attachment 1, and it is this change that staff is presenting to the Policy Committee.

Committee members had no objections to the proposed program realignment, and approves the policy change as reflected in the "Other Renewables" policy. The policy, as amended, is recommended for approval by the full board at the July 31st meeting.

5. Short Updates

Update on Cost-Effectiveness Exception Request
Fred updated the committee regarding the OPUC's order granting Energy Trust's request for temporary exception from current cost-effectiveness guidelines for all gas measures and programs. This exception is in place through October 18, 2014 and reflects the OPUC's preference for a holistic approach for gas efficiency measures rather than having Energy Trust file multiple requests for exceptions. Between now and October 18, 2014, Energy Trust is expected to take active steps to make its gas programs as cost-effective as possible and develop a plan to modify or eliminate measures that are either (a) clearly not cost-effective now, (b) not likely to be cost-effective in the future, or (c) do not meet the exception criteria as set forth in UM 1530. Energy Trust will continue to work closely with OPUC staff on specific and individual questions of cost-effectiveness and program design during the exception period. Energy Trust is also required to report back to the OPUC by July 1, 2014.

Update on planning for the Board Strategic Planning Workshop Part II
The Energy Trust Board of Directors Annual Strategic Planning Workshop Part II is scheduled for July 31, 2013 at Energy Trust offices and just prior to the board's regularly scheduled board meeting for that day. Planning for the workshop has been underway with staff, and the Board's Strategic Planning Committee met on June 26, 2013 to review the agenda for Workshop Part II, as well as materials to be submitted to the board. Debbie and Fred reported that renewables sector staff will be presenting an update on the focus and operations of their work, primarily as a status update from presentations at 2012's Strategic Planning Workshop. In addition, a panel of solar contractors is expected for a discussion with the board at the morning workshop.

Legislative Update
Debbie provided the latest information on bills and discussions from the session. The session is expected to close in the next few days. Breaking as of the committee's meeting and of significance to Energy Trust is the passage of HB 2435, which adds geothermal energy to types of electrical energy to which the net metering statute applies. A minority report that would have allowed low-income customers to opt out of the public purpose charge failed. A final session report will be provided to the board after the legislative session ends.

Next meeting
Tuesday, August 13, 2013, 4:00 pm

Renewable Energy Advisory Council Meeting Notes

May 1, 2013

Attending from the council:
Glenn Montgomery, Oregon Solar Energy Industries Association
Vijay Satyal, Oregon Department of Energy
Frank Vignola, University of Oregon
Suzanne Leta-Liou, Atkins
Bruce Barney, Portland General Electric
Dick Wanderschied, Bonneville Enviromental Foundation
Jason Busch, Oregon Wave Energy Trust

Attending from Energy Trust:
Chris Dearth
Sue Fletcher
Jackie Cameron
Betsy Kauffman
Jed Jorgensen
Thad Roth
Fred Gordon
Rob Del Mar
Dave McClelland
Dave Moldal
Pete Gibson
Peter West

Others attending:
Erik Anderson, PacifiCorp
Lance Kaufman, Oregon Public Utility Commission
Josh Peterson, University of Oregon
Bill Eddie, OneEnergy
Matt Hale, Oregon Department of Energy

1. Welcome and introductions

Betsy Kauffman called the meeting to order at 9:30 a.m. There were no objections to the previous minutes. The agenda, notes and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public: meetings/REACouncil.aspx.

Betsy announced that Dave McClelland is now the solar manager, replacing Kacia Brockman who left for a position with the Oregon Department of Energy. Dave has been with the program since 2006 and served in many capacities, with a particular emphasis in data analysis. Rob Del Mar has taken on some additional work with this transition, including serving as the technical lead for installation requirements and overseeing verifier contracts. Thad Roth expressed confidence in the team and appreciation for new staff in these roles.

Betsy announced that a new Request for Proposals, RFP, was issued on Monday. A link will be sent to Renewable Energy Advisory Council members. It is for competitive project development assistance. Reponses are due June 3.

Pacific Power also has an RFP out currently for its Oregon Solar Program. It is for 6.7 megawatts in generation and is on its website. The due date is June 11. Qualifying projects must be between 500 kW to 5 MW in nameplate capacity.

Thad announced that in addition to the projects received as part of the competitive RFP for projects in Pacific Power territory, Energy Trust also has received four applications for custom projects in PGE territory. He reported this to give a sense of current activity levels. Of those four, two have been evaluated and don't presently meet requirements, and two are still under evaluation. Two of the applicants are also looking at the opportunity announcement from the state on combined heat and power, CHP, as well as a Renewable Energy Development grant. This is a case where the CHP is really an efficiency project.

2. Update on RFPs

Energy Trust issued two RFPs in the first quarter, one for solar in PGE territory and the second for custom non: solar projects in Pacific Power territory. The RFPs were issued in late January and responses came in during February. Staff has been reviewing proposals since that time.

Betsy: Energy Trust received five responses to the custom RFP, requesting $7.5 million across a range of technologies and sizes. Three applications are not being moved forward for an incentive at this time, and one is being presented today. Energy Trust is still in conversations with the fifth respondent. There may be some dollars left over. Projects that are not funded when first proposed can be reconsidered in a later RFP.

Suzanne Leta-Liou: I'm glad to see that applications came in.

Vijay Satyal: Do you have a sense of average project size?
Betsy: They ranged from 3.5 MW to 10 MW, across technologies.

Bruce Barney: So to be clear, three fell out, one is going forward and one is left for consideration?
Betsy: Yes.

Matt Hale: Of the three that fell out was the technology the same?
Betsy: Two were the same, one was not. We cannot provide more information during this stage; we keep as much information confidential as possible.
Thad: The projects that are not being funded at this time may come back in the future.

Dave McClelland presented the results of the solar RFP for $1 million in PGE territory. It closed in early March and four applications were received for $2.75 million. That is over the amount of funding available. The projects ranged from 400 kW to 10 MW. One of the proposals did not move to scoring because it was not ready to meet the development timeline, but the others were scored. Of the three, two scored high enough to be considered for funding. The one that didn't score high enough had requested an overly large incentive. Unfortunately, one of the projects that scored high enough for consideration pulled out. There will likely be some funds left over that will be redeployed. The proposal that remains for consideration is for a 400 kW project.

Matt: Why did the one project drop out?
Dave: The project owner moved out of state.

3. COID Juniper Ridge Phase 2 hydro project

Jed Jorgensen presented on a hydro project that is moving forward for approval as a result of the custom RFP.

This is the Central Oregon Irrigation District, COID, Juniper Ridge Phase 2 project. It is a hydro plant that first came to Energy Trust in 2006. It was always represented as a two-phase system, in part because of financing. In response to the initial application, Energy Trust approved a $1 million incentive. It has been the most cost-effective hydro project ever for the program. The plant came online in 2010 and was built as a 5-MW facility, but the first phase included only enough penstock to reach 3.5 MW of generation. It moves a tremendous amount of water, and it restored water back to the Deschutes River.

The forebay has a trash rack on it. It keeps the water level even. The powerhouse has a Francis turbine. The big cost is the pipe itself. The powerhouse and pipe from the first phase stay unchanged. Phase two is going to add 4,000 feet of penstock and a new forebay. Total cost for

phase two is $6.5 million. Benefits of this project are increased generation and water restoration.

Bruce: Do they bury the pipe?
Jed: Yes.

Suzanne: They pipe the water in the canal. How does it get back to the river?
Jed: Because less water seeps into the ground with pipe, less water is withdrawn from the river.

Jason Busch: Does that mean that someone is getting less water for irrigation?
Jed: They are delivering the same amount of water because they are losing less; the pipe keeps it from soaking in to the ground.

Jed continued his presentation. There is no new capacity on this project. They are moving the project to the full generation of 5 MW. The same owners will still own the project. It is located just north of Bend. They will start construction in fall 2013 after the irrigation season ends and then restart the project in spring 2014.

Energy Trust is proposing a $1.28 million incentive.

Because it is the same owner, there is past experience to gain confidence from. There is also confidence in the resource, since it has performed as expected. The development is straightforward for this project and the power purchase agreement is already in place with Pacific Power. The interconnection is already in place, too.

Jason: The work with the Federal Energy Regulatory Commission was done with the first project and did they pay for permitting then?
Jed: Yes, they have a conduit exemption, meaning that they are exempt from part of the federal power act. They looked at the entire project in the first phase because the marginal cost was very little to consider both phases.

Dick Wanderschied: Does this fall under older Schedule 37 rates.
Jed: Yes.

Dick: Are there any issues with fish passage? What did they do?
Jed: The first phase of the project worked through the fish passage issues.

Lance Kaufman: What happens with the discharge water not used for irrigation?
Jed: It goes to Deschutes River. I don't know how far down.

Josh: How has this phase increased the megawatts with this project?
Jed: By getting more head, which increases the pressure in the pipe.

Jed continued. Projects costs are driven mostly by the cost of pipes and forebay construction. Project financing includes resources from the Pelton Fund and other sources. The project owners believe that all of these funds are likely to come in and they have been successful at obtaining funding from the same sources in the past. The project does not have an Oregon Business Energy Tax Credit and was not eligible to apply for the Oregon Department of Energy's Renewable Energy Development grant.

Dick: Why was it not eligible?

Jed: What I heard from the project owner was that the grant did not allow for this project's characteristics.
Vijay: It could be the criteria that are in place and the information provided about the project.
Jed: They asked the Oregon Department of Energy and heard that the project wasn't eligible.
Matt: It is part of the process to allow those questions and answers to happen. We could revisit and see why this project may not have been eligible.
Jed: There is a fee and the owners wanted to be sure before applying.
Glenn Montgomery: It may be because they were not adding new capacity.
Vijay: We will look back and email Jed with the reason.
Jed: The first phase did have a Business Energy Tax Credit.

Jed continued. In considering this project, revenue including performance over time and power sales with new generation was examined, along with grants. Revenue is compared to costs, including capitalized and operational expenses. The above-market costs for this project are $1.28 million.

Energy Trust has proposed an incentive to cover the total above-market costs. The application asked for $1.5 million but the above-market costs were less. The project is viewed as low risk and the staff recommendation is to pay the entire incentive in one lump sum. One hundred percent of the additional Renewable Energy Certificates, RECs, will be acquired by Energy Trust at $17 a REC. It is a cost of $3.01 million per aMW.

Suzanne: That seems like a high cost per REC.
Jed: We take our incentive amount and divide it by the number of RECs to get dollar per REC.

Vijay: The operating costs look very low.
Jed: It is not the total operating costs, just the operating costs related to the new penstock and forebay.

Betsy announced that staff is looking for support from the Renewable Energy Advisory Council today and then this project will go to the board on May 22.

Frank: If the Business Energy Tax Credit were in place what would the cost be?
Jed: $250,000 would be the most that they could get from the Oregon Department of Energy's current incentive program. It would reduce the above-market cost by that amount. If the old Business Energy Tax Credit were in place, it would cover 35 percent of project cost. Not having a grant or a Business Energy Tax Credit changes the way these projects look.

Dick: Did you take 100 percent of the RECs in Phase 1?
Jed: No. We took 75 percent on the first project, and paid 75 percent of the above-market cost.

Dick: What is the operating schedule?
Jed: It operates from April through October, with some winter stock runs for cattle.

Bruce: On a cost per MW basis, the first phase looks more expensive, but with this phase the incentive is going up.
Jed: The Business Energy Tax Credit was significant the first time, as well as the grants they got, and they secured an Energy Loan Program, SELP, loan.

Thad: A couple years back, we did some analysis on the impact on Energy Trust funding for projects without the availability of the Business Energy Tax Credit. That analysis showed that our incentive might need to double or triple. This project is an example of that impact.

Dick: I support the project.
Suzanne: I agree.

Vijay: Why the 8 percent discount rate?
Jed: We try to look at the cost of capital for an entity like this and the risks that they are taking. We also view public entities as being willing to take a longer payback. It is a number that we have tested over time and works well for municipal projects.

Vijay: The project makes a lot of sense.

Betsy: I would like to make a motion to approve and move this project to the board for consideration.

No objections were raised.

4. Discussion of Renewable Energy Advisory Council purpose and member roles

Betsy led the conversation and framed the it as a check-in on the purpose of the Renewable Energy Advisory Council. Betsy said that a similar discussion was held recently at the Conservation Advisory Council. Betsy posed three questions to council members:

- Who are you and how long have you served on the council?
- What do you see as your purpose on the council?
- What are the key roles for the council?

Betsy asked that each Renewable Energy Advisory Council member answer these three questions and time permitting, the discussion would be opened to people who are at the meeting, but are not regular Renewable Energy Advisory Council members. Betsy said that there are established documents that frame Renewable Energy Advisory Council purpose and roles, and she wanted to have this conversation without looking at those documents for reference.

Dick Wanderschied is vice president of the Renewable Energy Group at Bonneville Environmental Foundation, BEF, working on watershed restoration, renewable energy certificates and other projects. He took Margie Gardner's place on the Renewable Energy Advisory Council several years back. He has deep utility experience and worked for the City of Ashland for more than 30 years. He has tried to replicate what Energy Trust is doing in public utility district territory and has a goal of moving the small renewable market forward in Oregon. He believes that the key roles of the council are to question assumptions, ask questions that the board is going to ask of staff, and express concerns so that presentations and proposals can be amended or enhanced.

Jason Busch is executive director of Oregon Wave Energy Trust, a private nonprofit funded through the Oregon Innovation Council. Prior to the Oregon Wave Energy Trust, Jason was a lawyer in practice in Oregon in the fields of land use and energy. He has served for two years on the council but time demands at the coast keeps him from attending some meetings. The Renewable Energy Advisory Council provides him with a broad understanding of the renewable industry. He is on the council to represent the ocean industry, which is close to becoming commercially viable. He see the role of council member as bringing an educated and experienced perspective to project discussions, and to identify and expose problems with projects to improve them. By reviewing expert staff material brought to the council, council members are helping staff to avoid bad decisions.

Vijay Satyal has worked at the Oregon Department of Energy for the last five years in the renewable policy division. He works across divisions on incentive policy development. He has been on the council for the last three years and desires to coordinate and align incentive offerings and changes between Energy Trust and the Oregon Department of Energy. Serving on the council has been valuable for Vijay in serving as a link between Energy Trust's approach to policy issues and the Oregon Department of Energy's. He sees a role for council members to serve as advisors and says that minutes capture the discussion so that the board hears those opinions. He sees the council as a forum for transparency, with experts around the table with deep background in reviewing projects.

Glenn Montgomery works for the Oregon Solar Energy Industries Association, whose members are commercial and residential installers, utilities, nonprofits, manufacturers and others. He has served for three years on the council and sees the benefit as being informed on how Energy Trust is exercising its authority and its purpose and how that will affect the solar industry. He has prior background working for the state at Business Oregon and brings that experience to the table. Glenn agrees with his council colleagues that the Renewable Energy Advisory Council should serve an advisory role, offer expertise and look at angles differently. Renewable Energy Advisory Council members also help look at the big picture and weigh in on strategy.

Frank Vignola is the director of the Solar Radiation Monitoring Lab at the University of Oregon and has served for 10 years on the Renewable Energy Advisory Council. He sees his main role as creating a sound, reliable infrastructure to build the solar future, and does this by providing information for decision-makers and expertise in solar infrastructure investment and net metering. As a council member, he sees his purpose as making sure that staff are using funds wisely and addressing barriers to renewable energy development. He has worked on shade analysis for Energy Trust, and assisted with different technical problems. Council members can share what is happening in the industry. Council members need to look at the project proposals and make sure that nothing is overlooked; having a variety of backgrounds on the Renewable Energy Advisory Council helps do that work. He appreciates the transparency and openness of the process.

Suzanne Leta-Liou has been on the council since 2008, when she was at Renewable Northwest Project. She then transitioned to RES Americas and is now with Atkins. Prior to moving to Oregon, she was with nonprofit advocacy organizations for renewable energy development on the East Coast and sat on a similar board in New Jersey. She sees her primary purpose on the council as offering a higher level of organizational thinking, as well as permitting and siting experience. One of the values of being part of the Renewable Energy Advisory Council is helping Energy Trust think through what is the next step for the organization. Council members can provide guidance on longer-term vision and planning, and discussion of policy issues. Suzanne also sees value in reviewing where the market is going as part of the approval process. She also sits on the Citizens' Utility Board of Oregon and brings a consumer perspective and ratepayer interest.

Bruce Barney has been on the council for six months, filling in after Thor Hinckley left. He has been with PGE for 11 years, and has background in mechanical and electrical engineering and biology. At PGE he works on interconnection and serves as a conduit bringing information back and forth between PGE and Energy Trust. He believes the utility perspective he brings is a benefit to the council. He sees the Renewable Energy Advisory Council's purpose as advisory, providing transparency and offering staff expertise through members' shared knowledge.

Betsy asked two attendees at the meeting who are not Renewable Energy Advisory Council members, but often attend council meetings, to weigh in.

Erik Anderson is customer manager for PacifiCorp and is focused on small-scale projects, typically solar. He manages this work, including internally run incentive programs, for all six states PacifiCorp serves. He sees value in what is discussed at the Renewable Energy Advisory Council and its applicability to his group. He has been coming for a year when topics are relevant. He sees the purpose for PacifiCorp as participating in long-term planning and coordination.

Matt Hale has been coming to the Renewable Energy Advisory Council for two years and manages the energy technology team at the Oregon Department of Energy. The Oregon Department of Energy sends staff to the meeting based on what is on the agenda and has a lot of interaction on a daily basis with Energy Trust outside of the Renewable Energy Advisory Council. Matt sees the council as a good forum with the right level of expertise, and a resource for sharing ideas and information.

Betsy commented that she didn't hear much reference to the budget process and solicited feedback on that point.

Suzanne: I think that is a critical component and part of our role.

Vijay: The budget conversation at the council is robust and information comes out in project discussions, too. You could remind us of the budget when we are having project discussions, and we can always email with questions.

Glenn: I feel as though we have the right view into the budget. I don't feel qualified to offer solid advice on the budget because we don't cover it deeply during the year. If we cover it more deeply, I will become more comfortable offering advice.

Frank: We have had carryover in the past. That has changed, which makes budget discussions more important. We do discuss the budget throughout the year.

Jason: When I have reviewed the budgets, I thought that there were a lot of assumptions that went into the numbers. I have had some questions regarding the assumptions but I don't know if that is a board or Renewable Energy Advisory Council role.

Betsy opened the conversation to some additional questions. Are there areas of the Renewable Energy Advisory Council process or responsibilities that are unclear? Are there important voices in the renewable community that are missing? What kinds of topics would you like to see on the agenda that haven't been?

Vijay: I first attended the Renewable Energy Advisory Council to deliver a presentation. I would like to see broader presentations, particularly about what is happening outside of Oregon. I would also like to hear from Energy Trust about your experience with other project funders. I would like to know more about those other funders and their role in project development.

Suzanne: I also like the concept of using the Renewable Energy Advisory Council as an educational forum. Our organization has developed a tool that aids in project development that could be shared here. Also, discussions of permitting and what developers need to be more successful could take place here.

Frank: There are a lot of proposals for projects where problems exist. Maybe some of these problems should be brought to the Renewable Energy Advisory Council. Then we can discuss solutions to these problems. We could discuss targeting incentives differently, or interconnection issues, for example.

Vijay: It would be good to hear from the utilities as well. Sometimes we have third party or interconnection issues. If they are addressing those issues in some way we would like to have those discussions here. Maybe every meeting could have a rotating educational component.

Glenn: It would be good to have someone from the Bonneville Power Administration, BPA. Presentations would be good as well. Mark Kendall could bring a depth of experience. It may also be helpful to have someone who is supportive of renewables but is outside of the renewable industry. Also, it could be helpful to have some attendees who we interact with but aren't always in agreement with our approach.
Betsy: BPA has been a member in the past.

Vijay: I wonder if key board conversations should be shared with the Renewable Energy Advisory Council from the previous board meeting.

Bruce: I didn't have a good understanding of the role of the Renewable Energy Advisory Council when I started. It would be helpful to get a welcome packet for new members.

Frank: Solar Oregon could be a good addition as well as the Citizen's Utility Board of Oregon. It is helpful to get a public perspective.

Vijay: It might be helpful to hear more on the OPUC process with Energy Trust. What is the engagement process?

Suzanne: I wonder if it is of value to have a state legislator on the Renewable Energy Advisory Council.

Dick: It might be useful to look at some of the past projects to see what we thought we would get in terms of results and what we actually got. I also like the idea of visiting some of the projects to see cutting-edge technologies at work. It might be good to have more representation from the developer community or Matt Mylet, a lender to developers.

Josh: It could be interesting to have someone on the Renewable Energy Advisory Council from Washington State.
Betsy: It can be difficult to have someone farther afield dedicate the time to attend.
Peter: Perhaps those types of attendees could be guest speakers.

Frank: It might be good to have a legislative staff member.

Jason: I would suggest Oregon State University as a participant at these meetings.

5. Public comment

Frank announced that University of Oregon now has funding for testing of photovoltaic modules at his lab. He also announced that they are holding a meeting at Energy Trust on May 21 from 10 a.m. to 1 p.m. on the regional solar monitoring project.

On May 15 Portland State University has agreed to have a tour organized by Solar Oregon to two of three lab facilities that Portland State University runs. It is part of Solar Drinks. To learn more go to www.solaroregon.org.

The geothermal working group will meet on May 15 at the Port of Portland to see the heat pump system at the airport that utilizes ground source heat pumps.

Glenn announced a document now available on his website that lays out a bold vision for the next 20 years.

6. Meeting adjournment

Betsy thanked council members for their participation and adjourned the meeting at 11:40 a.m.

Next Meeting

The next full council meeting is June 19, 2013.

Renewable Energy Advisory Council Meeting Notes

June 19, 2013

Attending from the council:
Glenn Montgomery, Oregon Solar Energy Industries Association
Frank Vignola, University of Oregon
Megan Decker, Renewable NW Project
Dick Wanderscheid, Bonneville Environmental Foundation
Tashiana Wangler, PacifiCorp

Attending from Energy Trust:
Betsy Kauffman
Jed Jorgensen
Thad Roth
Lizzie Rubado

Attending from Energy Trust, continued:
Dave McClelland
Dave Moldal
Peter West
Fred Gordon
Shelly Carlton

Others attending:
John Reynolds, Energy Trust Board, University of Oregon
Erik Anderson, PacifiCorp
Matt Hale, Oregon Department of Energy
Jimmy Lindsay, Renewable NW Project
Juliet Johnson (phone for first two topics), Oregon Public Utility Commission

1. Welcome and introductions

Betsy Kauffman called the meeting to order at 9:30 a.m. There were no objections to the previous minutes. The agenda, notes and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public: meetings/REACouncil.aspx.

2. Follow-up regarding discussion of Renewable Energy Advisory Council purpose and role

Betsy provided a summary of discussion and action items. At the last meeting, staff asked council members to talk about their individual backgrounds, how long they have been on the Renewable Energy Advisory Council and what they think is the purpose of the council. A summary of the roles included: advise on strategy, review budgets, review projects, provide market information and represent constituency. The Renewable Energy Advisory Council is a functional, integrated and useful group. Members have an accurate understanding of their roles and are aligned with board and staff priorities. Members do want more context regarding the budget. In response, staff will present quarterly dashboards and additional budget updates throughout the year as needed.

At the last meeting, the council also discussed ideas for agenda topics, including follow-up on previous projects and issues, discussions of cross-technology issues, site visits, more guest speakers and hearing from each other more.

Betsy: Suggestions are always welcome. This is a two-way conversation.
Matt: Half-day site visits would be good, with time to reflect afterward.

Others agreed. Betsy will circulate a list of potential sites and dates.

Thad: Budget presentations are based on our budget process. Is there value in understanding ahead of time where these presentations might occur and give you time to prepare?
Tashiana: This would be helpful, and I would like to know about the general cycle.

Betsy: In the fall there is definitely a cycle, so we can provide that.

Matt: For site visits, would we have to meet here, or could we meet elsewhere? Could we invite others from our organization?
Thad: That will be related to each site and how many we can accommodate there. Seeing the project makes a big difference.
Frank: Does it have to be an Energy Trust project?
Thad and Betsy: Ideally yes, but we're open to and interested in others.

Betsy: One thing that did not come up in the last meeting but came up later in a staff meeting is the idea of training. The Conservation Advisory Council had training on cost-effectiveness, and maybe we could provide a training on a useful topic as well, although it should be said that we have not had the impression that there are gaps in knowledge among this group.

Juliet: As Energy Trust is ramping up early stage development and looking at barriers to technology, I think it would be interesting to get this group involved in those discussions early on. Such a diverse group of folks could contribute to the discussion of barriers regarding cross-technology issues.
Betsy: Great suggestion.

3. Inaugural dashboard presentation

Jed Jorgensen presented an overview of a "dashboard" for the Renewable Energy sector.

Jed: We set up dashboards for our Management Team so that they understand the state of the business. There are differences between renewable energy and energy-efficiency dashboards. Renewables dashboards include confidential information, so we're looking for ways to present meaningful data that also protects confidential information.

> Our budgets are complex and can be difficult to understand. What we do drives the complexity. We give incentives for project development assistance or project installations. When we make a commitment to a project or a development assistance activity we set aside the funds from our current year budget for future payments. This is a key point. We don't necessarily make a payment in the year that we commit to an incentive. For custom projects we often make payments over time, which means we set aside money in 2011, for instance, for payments that may not start until 2014 and which will continue through 2016.
>
> We utilize two different budget views: an action plan budget and a profit and loss budget. The action plan shows how we commit or spend the new funds for a given calendar year. This shows the dollars available for new projects or activities in that year. There are no previously dedicated funds in the action plan.
>
> The Profit and Loss (P&L) budget tracks only spending and expected spending in a given calendar year. This shows previously dedicated funds and any action plan funds that are committed and spent within the same year.

Megan: To clarify, carryover rolls over into the next year's action plan fund?
Jed: Yes. It rolls from one action plan to the next.

Jed showed the action plan budget and activity from Quarter 1 for PGE and Pacific Power.

Jimmy: How many projects are represented in these graphs?

Dave McClelland and Thad: The action plan doesn't tell the whole story for completed projects because it won't show any completions that occurred from funds that were previously dedicated. This would only show what's dedicated and completed in Quarter 1 from 2013 new funds.

Frank: A comparison between this year and last year would be helpful.
Jed: That's a great point and something we can try to add. If we were looking at comparison, we would see that this is one-half of what occurred in 2012.

Jed: Here are the things we'll expect to see in Quarter 2 on the action plan: the funds that were committed from the RFP for custom projects in Pacific Power territory such as the Central Oregon Irrigation District project that came to the council in April. By the end of the year we would expect to see the bars reaching the targets with a combination of completed and committed funds. Any gap would become cash carryover that would roll into the next year.

Dave McClelland: Previously dedicated funds are not shown here. What if a project cancels? Where do those funds show up?
Jed: The funds do go back to the program, but technically the budget is finalized so we don't change where the bars are. So we could go over the budget bars based on money returning to the program. That would then show up as a variance we would explain in a quarterly report to the Oregon Public Utility Commission.

Dick: Sometimes your project funding is based on performance. Are there ever more payments based on better performance?
Jed: There's always a cap on the amount of funds.
Dave McClelland: But a project could get paid more quickly if it performs better than expected.
Betsy: If that happens the present value of the incentive goes up, because they get it faster, but it doesn't increase the amount of our incentive.

Jed: Now let's look at the P&L budget. This budget looks at spending, including previously dedicated funds and any new funds that are committed and spent in this year. We make our budgets in August, so there is always a degree of uncertainty about project completion timeline. If a project's commercial operation date slips it will move off of this budget. That means the white area at the top could grow bigger. That doesn't mean more money is available; it tells us our expectations changed.

> Blue is what's been done this year, and green is contractually obligated. Green can change based on schedules for projects changing from 2013 completion to 2014 completion. We don't see our expectations for the Solar program for the second half of this year on this chart either. We would expect to see the chart turn fully blue by the end of the year as projects complete.

Betsy: Another way of thinking about the P&L budget is that it is the checks we'll write over the course of 2013, regardless of when we set aside that money.

Megan: What is the gray bar?
Jed: The gray bar is the budget that we set in August based on our understanding of project completion schedules and our expectations about development assistance and other incentives we would award over the year. It is difficult to hit exactly at the gray bar because schedules change all the time.

Dick: Do you need board approval when you go over the gray bar?
Jed: No, but we do need to explain it.

Thad: This is included in quarterly reports, so differences between performance and budget will be somewhat expected.

Jimmy: Is it fair to say that the activity budget is the more important one?
Jed: They are both important and they show us different things. Our performance goals for generation are driven by the P&L budget because generation is acquired when we spend our funds.
Megan: But as far as what you have to commit to this year, the action plan is the one.
Peter: If you looked at a typical financial report for an organization, the P&L budget would be on the first page, and the action plan would be buried in the budget notes. We are trying to be more transparent by being clear about our action plan.
Betsy: I would say that the action plan is more of a barometer of market conditions. If the market is bad, it will show up in the action plan first.

Glenn: The gap, could it also include uncommitted projects that are unanticipated?
Betsy: If someone decides to install solar in July and actually does so in October, that's in the white on the P&L chart.

Thad: We know this is a complicated topic, and we'll come back to it again and again. There will be practical examples of how these change over time.
Betsy: The goal today was to introduce these budgets. We'll provide more detail over time.

4. Program and budget merge for Biopower and Other Renewables programs

Betsy: We are planning to merge Energy Trust's Biopower and Other Renewables budgets and programs. This would make our structure match the way we have been functioning for some time. Our competitive Requests for Proposals are technology-agnostic, as long as the technology is not solar. We commit to projects that are the best use of our funds. Externally, the merge would not be evident. We would still support a portfolio of technologies, each supported by a staff member. There will be two budgets: one for Solar and one for Other Renewables. This aligns our budget structure with our practice. We are concerned that with a separate budget for biopower, we are indicating that there is money for that regardless of the opportunity. This change would create a more accurate visibility to our work. We also feel this is a better use of staff resources by avoiding duplication of effort. This goes to the board Policy Committee in July. We are giving the Renewable Energy Advisory Council visibility to it.

Thad: Some things that will not change include developers will still see that we're supporting their chosen technology. Also, we're not giving up opportunities in individual technologies. I encourage you to think of these as how we allocate our funding. The custom side evaluates each project, and that's how we allocate funding. We won't lose any detail in terms of tracking by technology, but it will get a little more complicated internally. Lastly, on the custom side, an organizational benefit is the similarity among technologies in the way they develop. Three project managers in the custom team will be dedicated to building the pipeline. What we'll strive to do is cross-train based on the opportunities available during each year across technologies.

Frank: What if there's a solar project that doesn't fit into standard incentives? How would that be handled?
Thad: We've done a number of projects with PGE and Pacific Power of this type. Our approach is to fund them if we have unallocated dollars in the rest of our budget.

Frank: What about solar thermal electric?

Betsy: There would be discussion, but the solar group would likely handle it, with help from the custom group on evaluating the financials. We wouldn't necessarily want to do this at the expense of the standard solar program, but if it fits, we would work with it.

Thad: We are open to all opportunities

Dick: Are we moving to a competitive RFP process for PGE?
Thad: We may be moving to that. We have used the RFP eligibility requirements for PGE in assessing project applications, but we have enough funding now for all proposed projects. We currently deal with PGE projects on a first-come, first-served basis, but in 2014, we expect that to happen.

Dick: I am interested in the schedule for the rest of the year. Are more RFPs coming?
Thad: To be clear, we can't mix funds between the two utilities. We will review as we go and see what is available. Two projects on the PGE side are still in negotiations, and they've applied for state funding programs. The results of that will affect our funding for the project.

Matt: I thought we were only considering one PGE project?
Thad: The question I was answering was related to custom non-solar, you are referring to the custom solar RFP. Those dollars are available for our standard program, but if someone comes along, our door is always open.

Frank: How long does it typically take to make a funding decision?
Thad: We're prepared to do that in 60 days. Depending on demand for funding it may take longer.

5. Update on solar commercial program

Lizzie: When staff last talked with the council, we described some changes we were thinking about for 2013 in response to a very lean pipeline for commercial solar projects. We gathered market intelligence, talked to many trade ally contractors and stakeholders, ran lots of models, and came up with a new incentive structure that we released in mid-April. The updated incentives are on the Energy Trust website.

> Projects in PGE territory sized up to 35 kW can now receive $1.20 per watt. For projects 36-200 kW, the rate decreases (not linearly) from $1.20-$0.60/watt. Systems 201-500 kW are eligible for $0.60/watt for a max of $300,000.
>
> Pacific Power is $1.10/watt up to 35 kW. From 36-200 kW, it drops from $1.10-$0.50/watt, with a max of $100,000. The maximum size system that could use the standard incentive is 1 MW.
>
> We've seen a steady stream of activity, about 1 MW of applications, since we made the change. We've been able to acquire the projects at a blended average incentive of $0.77/watt, which is competitive, and the result of getting a good blend of large and small projects. We now have an OPUC benchmarks for our activity, which is 0.66 aMW for standard solar electric, and our goal is to get one-half of that through commercial and industrial installations. With the response to the changed incentives, we feel like we'll make that goal.
>
> We have seen a particularly healthy rebound in Pacific Power territory, which typically moves more quickly than PGE. We are nearing the end of the current Step One allotment. In the standard solar program, we allocate blocks of our incentive budget at a

given incentive rate in order to manage the budget. We can then adjust the incentive based on market demand. It allows us to control activity in the program and exposes us to less risk. It's a control mechanism and it creates more transparency for trade allies. When we transition to the next incentive step, we expect to reduce the incentive by approximately 10 percent.

Remaining funds in any given step are regularly communicated to trade allies in a Solar Status report that is posted on Energy Trust's website. The report shows the current step allocations for PGE and Pacific Power. You can see on the chart that things were flat at the beginning of the year. When the new incentive rates were published, activity started up again. This report keeps trade allies apprised of changes coming up. If things run too hot and we cannot sustain the activity, we step down the incentive rate. We have options, which is great.

Dick: Why does the Pacific Power market react faster?
Lizzie: The time between pitching and closing sales seems to be shorter. There is more solar resource in Pacific Power's territory, as well as some ongoing market building initiatives in Southern Oregon, such a Rogue Solar. We also see projects that apply for but don't receive the volumetric incentive rate.

Jimmy: Why the different incentive structures for PGE and Pacific Power?
Lizzie: Pacific Power has a better solar resource and a lower budget. We have under $1.5 million for Pacific Power this year. So we can and must offer lower incentive rates.

Tashiana: How many projects do these graphs represent?
McClelland: There are about 20, and 12 are in Pacific Power territory.

Tashiana: What's the size of those?
Lizzie: It depends on each contractor's business model and sales approach. Most are between 30 and 60 kW.

Lizzie: Last year we teamed up with the New Buildings program to develop solar-ready solutions for commercial new construction. We've done this in the past with residential, and there's been interest. For commercial buildings it's more complex, but we finally pulled all the pieces together. There's been a lot of interest, and it just launched about three weeks ago. It's being delivered and administered through New Buildings. We'll be checking in to evaluate at three months, six months and eight months.
John: Does it involve additional efficiency?
Lizzie: The projects must be enrolled with the New Buildings program. They can engage with a variety of offers from certification programs to lighting-only or Market Solutions. We're not mandating anything particular.

John: Can we see this online?
Lizzie: Yes. From the homepage of the website, follow the links from commercial, to new construction to solar ready. From these pages you can download forms and reference a template. Technical requirements have been developed with the New Buildings program.

Dick: It's a $10,000 maximum?
Lizzie: $15,000 maximum for the Solar-Ready Construction phase, depending on the size of space made available. There are no other programs offering commercial solar-ready in the U.S. We're blazing new ground, and this is being done as a pilot. One goal is to try to understand the

cost added for making a building solar ready. They have to submit this information. They're just moving things around, rather than installing things, so this is a data gathering venture.

Jimmy: If a solar project comes to fruition, do they qualify for additional incentives?
Lizzie: Yes, they would qualify for our standard installation incentives. Because this is a pilot, we won't reduce incentives for actual installation of solar on these buildings initially. Later that may change. Developers want confidence that this will actually come to fruition, and are concerned that this will be value-engineered out.

6. Public comment

No public comment.

7. Meeting adjournment

Betsy thanked the council members for their participation and adjourned the meeting at 11:30 a.m.

Next Meeting

The next full council meeting is July 17, 2013.

Conservation Advisory Council Meeting Notes

May 1, 2013

Attending from the Council:

Anne Snyder-Grassman, PGE
Lance Kaufman, OPUC
Don Jones, Jr., Pacific Power
Scott Inman, ORA
Jim Abrahamson, Cascade Natural Gas
Wendy Gerlitz, Northwest Energy Coalition
Warren Cook, Oregon Department of Energy
Stan Price, Northwest Energy Efficiency Council
Karen Horkitz, Northwest Energy Efficiency Alliance

Attending from Energy Trust:

Kim Crossman
Peter West
Tom Beverly
Fred Gordon
Oliver Kesting
Sue Fletcher
Amber Cole

Attending from Energy Trust, continued:

Steven Jonas
Athena Ehnot
Eric Wilson
Susan Jowaiszas

Others attending:

Ginger Roberts, Home Performance Guild of Oregon
Mark Kendall, Board of Directors
Charlie Grist
Marty Stipe, Oregon Department of Energy
Roger Spring, Evergreen Consulting
Whitney Rideout, Evergreen Consulting
Bob Stull, PECI
Curt Nichols, ICF
Clark Fisher, Energy 350
John Ulman
Josh Weissert, Energy 350
Patrick Lorenz, Rogers Machinery
Andrew Regan, Rogers Machinery
Pam Barrow, Northwest Food Processors' Association

1. Welcome and introductions

Kim Crossman convened the meeting at 1:30 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public-meetings/CACMeetings.aspx.

2. Old business/updates

Kim: We have discussed Conservation Advisory Council operating principles in two previous council meetings and subsequently reviewed a redlined document by email. Today's handouts include clean copies of the revised operating principles as well as the redlined versions. Today I suggest focusing on the numbered section. After we adopt these operating principles, we should reconsider them every one to two years.

Jim Abrahamson: On item number two, sometimes the Conservation Advisory Council meeting agendas are loaded with a long train of issues with too many quick discussions. I would like to see the annual schedule as far in advance as possible, so we can ensure we get to discuss things and offer recommendations. We need to have the flexibility to have a full discussion, or be prepared to move the item to another meeting.

Kim: In just about five minutes we'll discuss what comes to the council, which is related to Jim's question. The more we talked about this in our previous meetings, the more we learned that much of what we bring to the council really does belong here. We can plan for many things in advance, but some topics are driven by what comes up in our planning and operations. It will require more discipline for agenda development.

Jim: I do understand that some of these topics come out of the blue, and we do need to cover them. We should look at moving items previously considered important off the agenda in favor of important add-ons, or we need to have more meetings.

Kim: I move that we adopt these operating principles.

Kim requested comments from Conservation Advisory Council members.

Wendy Gerlitz: You've done a great, thorough job helping us through the operating principles.

Stan Price: I agree with Wendy.

Don Jones: I'm supportive.

Jim: I'm supportive, but need to be sure we understand that they are not set in stone, and that we may need to revisit the operating principles later on.

Warren Cook: No objections.

Scott Inman: I agree.

Mark Kendall: I appreciate the work, thought and restructuring, and I agree it has been a long time since we looked at these things. The document title is a problem for me, but I can let that go.

Karen Horkitz: It looks good and I appreciate the work you've done. Is there anything you wanted to see as a board member, Mark?
Mark: The board relies on staff and marketplace advice, and this is an advisory group. Things should be recommended to the board, and this group doesn't make very many recommendations. As an advisory group to the board, I think we're missing part of that in the document.
Kim: The group talked a lot about the board and Conservation Advisory Council interaction, but we ended up taking many of these items out of the document, because they were board responsibilities, not Conservation Advisory Council responsibilities. The board should be able to get the right information from Conservation Advisory Council meeting notes and documents prepared by staff for these meetings.
Don: Item number seven does say that our thinking on topics can take the form of a recommendation.

Kim: I know we have people standing in for the OPUC and Home Performance Contractors Guild. I did speak with Juliet from the OPUC and Don from the guild on the phone, and they said they supported the revised document.

Anne Snyder-Grassman: PGE supports it.

Jim: I attend most board meetings also. Many times, when considering decisions related to energy efficiency, board members ask if the Conservation Advisory Council has looked at the information, or commented on it.
Kim: In the charter, it says we are an advisory group to the board and staff. Many things we discuss here in detail never come to the board at that level of detail. We're focused on measures, markets and other issues where staff makes the determinations. You are all critical advisors to staff and board members.

All feedback was collected from the council and the council adopted the revised operating principles.

Peter West: I think it was time for this refresh, and I am pleased that you went through it. The board packets always have the Conservation Advisory Council meeting notes, so board members can see all perspectives.
Mark: The difference is that we have these cliff notes at the board level, but I've never really seen a recommendation from the Conservation Advisory Council at the board meetings.

Kim: The second item I wanted to cover is a look at the topics we cover in Conservation Advisory Council meetings. I entered agenda items we've covered over the last three years into a spreadsheet, and categorized them by sector, time and nature of the item. I considered rating them based on how controversial they were, although that thought process did not make it into the list. I was surprised at the diversity of topics we've covered over the last three years. Every possible topic you could dream up about energy efficiency. It shows we are tackling what we should.

> We asked which types of topics come up most often. There are three basic categories of topics: information, discussion and recommendation. More than one-half of all topics were listed on the agendas as information topics. At closer inspection, at least one-half of those more appropriately would be categorized as discussion topics. Going forward, I want to look at whether the council would be likely to discuss an agenda item, or receive the topic as information, without discussion.
>
> We also found that in the last three years only three out of 102 items were categorized as recommendations. In each case, the topics were tied to a board-level policy change, and power generation or renewable energy was involved. Renewable energy topics get heard at the board level more extensively than energy efficiency topics. The review of how we characterize agenda items shows that "recommendations" are formal Conservation Advisory Council input that directly informs board policy decisions, and that these are very rare agenda topics.
>
> The vast majority of your guidance is reflected in the program strategies and innovations, and ultimately in the action plans driving our budgets, rather than in board agenda items. It may not be about formal recommendations. The basic premise is that the Conservation Advisory Council is about advice that addresses some of the subjective program, measure and initiative design decisions that staff face. We get that advice from the council through "discussion" items. Given this, it would be expected that the majority of Conservation Advisory Council agenda items should be "discussion" items going forward. That seems to be the highest and best use of our time, looking back over the last three years.
>
> Categorizing agenda items by sector also pointed to who should be Conservation Advisory Council members, and what type of background or knowledge may be helpful. Only 7 percent of items were industrial, while 37 percent were commercial and 43 percent were residential.
>
> I sent this spreadsheet in an email for you to review.
>
> At the next council meeting, I would like to set aside 20 minutes to look at this, and talk about what topics should come to the Conservation Advisory Council. The priority and

types of topics are all over the board. Please look at the spreadsheet before the next meeting.

Jim: Make sure we don't trip over the term recommendation. Items clearly identified are policies and things the board deals with directly. We most often are polled about program and incentive changes, following staff presentations and discussions. Subsequently these items are packaged and given to the board. Maybe we need to change nomenclature.

Peter: Amber and the communications team break out every substantive comment and response when it comes to the budget and action plan. Separately, you see more Renewable Energy Advisory Council items for the board because they make decisions for everything greater than $500,000 in incentives; and that's many renewable energy projects these days.

Don: Mark, would you like to receive recommendations more frequently? Do the notes work as they are or is something more needed?
Mark: To the extent that items create dissent here, or require a board decision, I get the Conservation Advisory Council minutes, which show a dialog, context and examples, and then I ask staff to interpret them. The notes are thorough, but by reading them, I don't see where the Conservation Advisory Council ended up. Staff has to interpret it for us.
Stan: I hear what you're saying, Mark. When I look at the principles, it's a good thing that we don't force the Conservation Advisory Council to work toward consensus. If those were the rules, we would spend a lot more time here, and not requiring consensus means the board is getting a variety of recommendations. We have many strongly held opinions here. Short of a strong, split vote, it's difficult to recommend anything by consensus.
Kim: I think with both the Renewable Energy Advisory Council and Conservation Advisory Council we aren't looking for consensus, but are looking for discussion and views. We used to have majority and minority opinions spelled out in the notes, and these views continue being portrayed in the notes but without the labels.
Fred Gordon: The board is interested in two or three views if there are different perspectives, rather than consensus.
Peter: The board appreciates the fact that we don't interpret for the Conservation Advisory Council as a group; we report on discussions. That's been the history, and I also appreciate this approach.
Fred: Board members seek a dialectic view of what's coming out of this group, not necessarily advice.
Kim: While the Conservation Advisory Council doesn't technically make many "recommendations," and I'm being very specific here about the term, we shouldn't forget that you do make them informally in many ways.

Kim: Thank you. Jim and Don both say the same thing about prioritizing topics. All our time historically was spent across all of these categories, so let me know what you think, and get back to me next time. We'll plan for more time to discuss if we need to.

3. First quarter results

Peter: Each quarter, we distribute results data as soon as possible after the quarter closes. Prior to presenting, we need to ensure the data is quality checked, analyzed and reviewed. For some quarters, such as this one, we cannot do this and get the data to you a week prior to the Conservation Advisory Council meeting. These meetings aren't always aligned with the quarter close. Rather than delaying the information until the following month, we'd rather give it to you as soon as we can.

On the results slides, one bar shows our gross savings pipeline for the year. It shows what we've done or know is coming up. The second bar on the charts is our forecast for 2013, adjusting the first bar for known dropout and replacement rates and other trends. The third bar on the chart shows what's in store for 2014.

The first quarter is always very preliminary, as there's not enough information about the year ahead to forecast with certainty. Right now, we're looking for anything that's truly out of alignment. In the second quarter we'll have a better look into the year and the 2014 pipeline.

As of the end of the first quarter, results for PGE and NW Natural are ahead of pace. Results for Pacific Power and Cascade Natural Gas are at pace. So overall we're on target to meet or exceed our goals. Relative to others, Pacific Power has a shorter Existing Buildings pipeline. We'll provide additional outreach resources for the program. The Existing Buildings pipeline for Cascade Natural Gas is a little behind, as well. We've worked with their district offices and will do some joint outreach to improve this.

Of special note is that Production Efficiency and New Buildings both received American Council for an Energy-Efficient Economy awards for exemplary and outstanding programs; this is quite an accomplishment.

We're also trying to make the dashboard handouts more standalone documents. We worked to make the handouts more descriptive and better explain the numbers and bar charts. If the changes are not sufficient, we need to know. I've noticed that some of you don't mind taking on some homework, so please review the handouts to see if you get enough from them.

Kim: We'll make this an agenda item and consider it along with other topics. We historically have spent about 20 to 25 percent of our time with these types of updates. Is it helpful to send these out upfront, have less discussion and more time to read them? Many of you said you are here to gather information you can take back to your organizations. Consider the dashboards in that light. Are you getting what you need from them, and does it offset the need for extended discussion during the meeting?

Fred: While it may be embedded in the details, the definition of "adjusted" seems to have disappeared from the dashboards.
Kim: We are planning to pull the charts into a Word document, and acknowledge that currently they have a lot of text in small fonts. We'll have more readable text next quarter.

Peter: This meeting's materials are also available on the Energy Trust website.

Charlie Grist: Are these printouts just for Energy Trust use?
Kim: Some of these highlights are provided to OPUC and utilities. We constantly respond to requests for information, and we know that an improved version of these handouts may be a way to fulfill requests with less work.
Peter: These dashboards are the start of the OPUC reporting cycle; they are the front end of the quarterly reports. The OPUC reports are the key, official reports of the organization.

Kim: We're out of time, but will come back to this.

Jim: I appreciate the material that's in the section about special considerations by program. It helps me understand things. Having more information in the special considerations list helps.

Charlie: Maybe develop a glossary of acronyms, also.

4. Industry and agriculture sector savings trends

Kim: Steven Jonas will present information about our Industry and Agriculture savings trends for the past few years.

Steven Jonas: I'll cover past information and Kim will cover future plans.

On the slides, PE represents the Production Efficiency team, which develops and manages the program in-house. I'm a member of that group. Unlike the residential and commercial sectors, we don't have a Program Management Contractor, PMC. So in addition to design and development, we provide project management, data entry and data quality control.

Program Delivery Contractors, PDCs, help deliver the program and are contact points to the market both for contractors and customers. They are assigned their own territories and goals.

Allied Technical Assistance Contractors, ATACs, are engineering consultants. If a PDC goes into a plant and identifies an opportunity, we have an ATAC do a study to quantify the savings.

Industrial Technical Service Providers, ITSPs, provide Strategic Energy Management and direct technical assistance.

Savings sources as shown on the slides have some nuances. We base them on working savings, which is their value before we apply transmission and distribution losses and evaluation factors. The slides show the numbers that ATACs came up with in their studies. Evaluation factors change from year to year, so using working savings is a way to normalize the data, helps us see trends and helps with program design.

The chart shows 2012 Production Efficiency savings by source. The savings are differentiated by type of project and delivery track used to obtain them. The two big categories are custom projects and streamlined projects. Everything here belongs in one of those two categories. Custom projects involve custom analysis and savings verification. ATACs study the savings potential of a project. Custom projects, megaprojects, custom operations and maintenance, O&M, and Strategic Energy Management, SEM, all fall within the custom category. The streamlined category includes lighting and small industrial. These projects are associated with predetermined savings.

Custom O&M and custom capital projects are developed similarly. PDCs identify the opportunities and ATACs quantify the savings. Capital projects involve actual capital investment, while O&M projects involve behavioral changes. SEM involves training operations people in best practices. Megaprojects are very large, unique projects with custom studies and large incentives. The one from 2012 is being completed in multiple phases, and only the first phase is reflected on the slides.

Lighting and small industrial are more about the type of project than the size of the facility. They are trade ally driven.

The next slide shows 2012 electrical savings sources within the context of previous years. You can see the massive impact a megaproject can have. If you apply evaluation factors, the spikes aren't as dramatic; this shows the downside of using working numbers. If you take the megaprojects out, the savings are consistent from 2004 to 2009. The big jump in 2010 was due to a portfolio change to look for new types of projects. Growth was maintained. In 2012, we saw a decrease in lighting, and O&M and capital projects dropped in savings. With diversification, and the megaproject, we nevertheless obtained good savings results.

Custom projects make up 57 percent of the program's gas savings. Streamlined projects brought in the other 43 percent. Many of the largest industrial sites aren't eligible for our program because their gas is purchased from other entities. They are transport customers. So, streamlined projects play a larger role in gas than electric.

We started getting gas savings in 2009. In 2011 we saw the first O&M and SEM savings, and they have continued through 2012. There was a 30 percent overall decrease in gas savings in 2012. The gas pipeline is composed of fewer projects, and when dealing with long-term custom projects, it only takes a small number of really big projects shifting their completion dates to change our results for a given time period. We had a few of them shift into 2013. O&M was the exception within this overall decrease; O&M savings doubled.

Charlie: The change in 2010-2011 lighting was about double the previous one. Why was that?
Eric Wilson: We offered a big bonus in 2011, which brought in quite a few projects. From 2009 to 2010 we focused on industrial lighting. Some of the 2011 projects were pulled in from 2012 by a fall bonus incentive.
Kim: When the Production Efficiency program came in-house, lighting and industrial had previously been part of our commercial programs. We started looking for lighting in industrial facilities, so we got more of it. Most industrial facilities are behind on their lighting retrofits; it's not part of their primary processes. Commercial facilities had already gone a long way with lighting, but there are still a lot of opportunities in industrial.
Roger Spring: You also increased the goal that year.
Kim: Yes, and increased funding for it, also.

Charlie: What kinds of measures are in small industrial gas?
Steven: We'll get some insight into that shortly.

Between 2007 and 2011 we had a very big ramp. Adding streamlined projects into the program really increased the overall total, and that started in 2007.

You can clearly see the small industrial ramp in the 2008 line chart. Lighting was steady, whereas custom capital projects stayed in the same range. In 2012, there was a 20 percent increase in small industrial. There was an increase in irrigation projects, and that pulled in electric and gas savings. Lighting decreased 5 percent from 2011 to 2012. It's interesting because the average amount of lighting savings per project decreased by 31 percent. Custom capital has stayed in the same range since 2008, but there was a drop from 2011 to 2012. Savings per project went up in custom capital. Project volume was down 30 percent, but savings only dropped by 12 percent.

Mark: So far fewer projects accounted for more savings.
Steven: Yes.

The slide shows our top 10 system types. Multisystem projects were at the top, with 33 million kWh. These are projects that include more than one system. They are most often Strategic Energy Management engagements and tuning operations with low- and no-cost operational changes. They represent a holistic approach. You wouldn't have seen this a few years back, and it shows the success of Strategic Energy Management. Industrial lighting accounted for 20 percent of savings in 2012, and 25 percent of Production Efficiency savings since we began offering lighting incentives.

To better understand the slide, here are some definitions. Primary processes are things on an industrial production line that don't fit in other categories. Secondary processes are related to the production line but not on the line; air abatement and dust collection, for example. That shows the great diversity of equipment we touch.

Kim: I want to point out that our primary opportunities are multisystem, primary processes and secondary processes. These aren't widgets or something that companies normally call specialties. That's why we don't have a lot of trade allies or energy service companies involved in the program. They aren't classic efficiency measure projects; they are more system focused, and they take special skills.

Steven: On the gas side, you see a lot of savings from greenhouses and streamlined projects. These are often secondary processes, but also show up as water heaters, tanks, piping and the like.

Fred: Would process heat and cooling be secondary processes?
Eric: That depends on the project.
Mark: It depends if it's a greenhouse or boiler.
Kim: Yes; it would depend. If they cool things for a living, it would be primary. It's tough to categorize. Steven has a constant need to tune up and normalize how we characterize projects.

Steven: We break these out as much as possible, but every time there seems to be something tough to categorize.

Many projects are computers and electronics manufacturing. That's heartening to see, because that industry has great electrical savings potential, but it's been under-realized by the program. We assigned a dedicated PDC to the top 10 high-tech manufacturing sites, and that has helped. The 2012 megaproject was at a high-tech site. Without it, savings from high tech would be at the same level as food products and wood products.

Food products and wood products each accounted for 14 percent of electrical savings. Food products were up 19 percent and wood products had a 23 percent decrease. We can't draw any conclusions from this yet. We would need to see a steady incline or decline over multiple years to see a pattern in order to understand the causes.

Greenhouses are at the top on the gas side, at 23 percent of our 2012 gas savings. We saw a 37 percent decrease for overall gas savings from the previous year. Irrigation saw a 74 percent increase from 2011, and is an area of focus.

Don and Mark: What does gas fuel related to irrigation?
Eric: A good example would be upgrades to a processing building at an irrigation site.

Jim: Maybe it needs to be re-categorized; irrigation doesn't quite fit.

Kim: Yes, and we are doing a massive data project at Energy Trust and will have a chance to insert some consistency. It's tricky because we're trying to report across different sectors. What may work for us may not work everywhere.

Jim: Can we go back to Charlie's measure question at each site?
Kim: With industrial, the system type is a proxy for the measure type. Custom primary process would be the measure category. This ends up being our best way of measuring. Compressed air might be 150 different things, but each site may use it differently. We do 78 percent custom projects.

Jim: I might want a guide or glossary, down the road, to help me translate from resource potential studies into system types you report on.

Fred: You need to get good examples of common secondary process measures. You'll need a glossary. Compressed air has a lot of categories, where lighting is cut and dried. We don't attempt to go into the micro level for industrial resource assessments. We estimate based on project experience for savings, based on this level of detail.

Jim: Secondary is tough because it's not their primary business. I don't know if NW Natural has that same issue.
Kim: NW Natural will typically call us if they have questions about a project.

Jim: We run into trouble when we compare savings against resource assessments at the end of the year.

Charlie: A single year is interesting, but lumpy. Multi-year reports will show you more interesting things. It's helpful if it's easy to do, and it might offer some perspective.

Kim: The process evaluation took a high level look at resource potential versus accomplishments to date. It concluded we'll reach the 20-year potential in 14 years. In 2010 and beyond, we accelerated. The in-house focus of this trends report focuses less on planning and more on where savings are occurring, which markets are moving and what types of systems are being addressed. These statistics help inform what we should do in the future. This is what we need to know to continue being successful. It doesn't tackle the big picture of 20-year resource potential that planning looks at.

Jim: The industrial Integrated Resource Plan, IRP, for Oregon couldn't include a measures list like residential and commercial. There were issues with the Stellar study; some industrial were in commercial and managers were doing a mix and match. There was a substantial increase in technical potential. The OPUC said we seemed to be light on our details about potential. The next time around we need a better understanding to communicate clearly in our IRP.
Kim: I'll note that. Resource potential studies are light on planning details.

Jim: We also need to look at the ramp rate and get a better understanding of how you're doing the technical detail.

Fred: With respect to the resource assessment, more details won't get you better answers. We make it work by being conservative. I will speak with Jim about it more offline.

Mark: Will the impact evaluation have this same level of resource specificity?
Kim: The two evaluations look at the overarching picture of what we saved versus the technical potential. It's at a very macro level by sector. The impact evaluation won't touch on any of this.

Fred: Also, the sample size by process type falls apart statistically.

Lance Kaufman: Is there anything about incentive costs? Can you get a general sense for all industrial?
Kim: We could divvy up incentives by market or type of measure, but because it happens all at once it can't be parsed out very well. In order to build our budget, we actually do our own analysis on cost per first kWh savings by source of savings, and develop assumptions about how much of each savings source will we get. It's not extremely accurate, but we find that as we put more data into it the inaccuracies cancel each other out. Industrial spending has no budget variance this quarter. This is the first we've had it happen. It changes a lot year to year. We need to stay under a benchmark with all the projects being cost effective and the program needing to be cost effective. Savings come from all over, incentives shift and costs shift. Costs for lighting savings went up quite a bit in 2012, but projects were much smaller. Bonuses also made them more expensive than they had been historically.

Lance: How has spending changed from 2004 to present?
Kim: The program design has changed so radically that I don't look at it. Looking from 2007 to present is more important, since that's when we brought the program in house. Much of what we do now we hadn't thought of doing back in the beginning. Many of these sources of savings didn't exist before, but levelized cost hasn't gone up very much for the program.

Scott: Is it more or less expensive for industrial facilities to save energy?
Kim: Really, it's neither. They simply look for good investments and we try to help them find those things. They look for two- to four-year paybacks, and that hasn't changed. If we bring them something expensive, they won't go forward. There's a lot more we could do on cost, but we haven't yet.

Charlie: Are the almost 1,000 projects completed per year a combination of everything? What's the split between electric and gas?
Kim: It's probably one gas to 20 electric. Steven has some of that information.

Charlie: That's a lot of projects. Can that be maintained or accelerated?
Steven: I believe yes. We see typically see more stabilizations than declines. We usually find and exploit an opportunity and it stabilizes, but seldom goes away.

Charlie: Do you get repeat customers?
Kim: Most are repeat customers.

Charlie: So the relationship gets established and you continue to mine the sites over time?
Steven: A way to look at it is whether we've served them before. The number of new sites would be interesting to look at it.
Kim: We see probably 90 percent from repeat customers, anecdotally.
Steven: It wouldn't be that extreme in looking at project counts, but if you look at the amount of savings from repeat customers it would be 90 percent or more.
Kim: I like the idea of looking at first time participants. We're reaching out to the new customers, but by and large that's not where we get our savings.

Mark: It appears the count of smaller streamlined projects is because the increase is in small industrials.

Warren: Reacquisition might be where the savings could come from.

Jim: Businesses will do what makes sense at the time. A decrease in gas prices might make marginal projects that were good to move forward suddenly fall off. Are you looking at new sources?
Kim: We weren't out there doing gas three years ago, and we've still not tapped out the low-hanging fruit.

Jim: It will be interesting to see how many new core industrials are being brought in.
Kim: Some core industrials may be on commercial rates, so that may be confusing. Light manufacturing would show up in commercial, for instance.
Jim: It would be good to know. Core means non-transport to us.

5. Market research on Energy Trust business customers

Susan Jowaiszas presented the results of four research studies completed in the last year and focused on building long-term business customer relationships. She stressed that the presentation focuses on the marketing-oriented findings and encouraged the Conservation Advisory Council members to read the full studies available on Energy Trust's website.

The four studies covered Production Efficiency industrial, Existing Buildings, New Buildings and Existing Multifamily. The methodology for Production Efficiency, New Buildings and Existing Multifamily was deep-dive executive-style interviews with past participants, Energy Trust's main points of contact for projects. The Existing Buildings study had three parts. Two focus groups of customers from locally and regionally owned companies, and another with representatives of companies that are nationally owned. The second portion was a small number, 10-12, executive interviews with the executive sponsors of Energy Trust's primary points of contact. The last portion was an online survey of past participants since 2009.

Part of the initial goal of the studies was to determine if Energy Trust could apply segmentation to business customers to better target marketing. It's something commonly used in residential customer research and staff wanted to see if and how it applied beyond vertical market sectors.

The objectives of the studies were to probe the conventional barriers to energy efficiency adoption: no money, no expertise to implement, no ideas of how to save, no faith in savings, no appropriate payback and no clear decision-making path. Which of these barriers are real, which are perceived and which are able to be overcome?

A summary of key marketing findings from each study:

Production Efficiency: Money talks and payback matters. Customers value the technical assistance provided by Energy Trust. They want and need program help since energy management isn't necessarily an explicit part of their job. They also propose projects only if they are certain they will be approved. While most industrial companies see environmental stewardship as important to their company, it's not a deciding factor in making energy-efficiency investments.

Existing Buildings: One of the most interesting things learned is that decision-makers are 76 percent men over 45 years of age, and a majority of the group is over 55. This points to, and away from, certain marketing strategies, in particular social media. Staff also heard that incentives are extremely attractive and that tight payback criteria, or simple payback, are enforced. Energy projects are perceived to be more complicated than other projects. Another barrier to investment is that companies are signing shorter leases, putting a squeeze on an already tight payback criteria.

New Buildings: Architects and engineers, Energy Trust's traditional point of entry for the program, also see the program as being complicated. In addition, while they advocate for energy efficiency in their projects, they'll only push owners so far. They won't endanger their client relationship to push efficiency if the owner isn't interested. This points to an opportunity to talk more directly with owners about the value proposition. That said, architects and engineers like to demonstrate the ability to get Energy Trust incentives to owners. Staff heard that new buildings are complicated projects, and the program has started to address the barriers with program offers like Market Solutions. People who develop large buildings are risk takers, but do everything they can to minimize it.

Existing Multifamily: A couple of interesting findings stood out. First, direct installs were a big part of the historic savings, and conventional wisdom is that they lead to capital projects at the same properties. The other is that property owners and managers highlight the units' energy efficiency to attract tenants. Neither of them proved to be true in this study. It's interesting that ACEEE had the opposite findings in their recent study. Energy Trust results may be related to the fact that the local rental vacancy rate is around 0.13 percent right now.

The overall findings from the four studies were that money is important and incentives really matter, and that return on investment is looked at differently by different customers. That's a very important consideration. Staff also found that customers say they need assistance and they don't know where to start. Energy Trust hears that same concern from utility outreach representatives.

The studies also found that a 1.5 to three-year simple payback is the sweet spot. Using cash versus financing is important, as are incentives. Staff heard that companies are self-financing energy-efficiency investments.

Kim: I recommend you read the studies, because what we hear from customers is very, very different from what we hear in the halls of policy.

Charlie: We've made assumptions for a long time based on what people say. When the economy is better, people might accept longer paybacks, but then it swings back to this spot.

Susan: We also learned that financing is not at the top of the list for why people don't do efficiency.

Scott: Belt tightening is true across the board. People won't look at long paybacks.

Fred: As for the history of this type of study, going back 25 years, we learned that a three-year payback is kind of the outer bound for most customers. There are always exceptions, but we generally end up back at 1.5 to three years, despite economic fluctuations.

Charlie: I wonder if the lack of interest in financing isn't because of the short payback. Maybe if a project meets our payback standards, we don't need financing.

Kim: Also, these businesses don't do the complex level of financial analysis we think they do. Instead, they think: "Why would I assume debt for a project I don't need to do?"

Susan: We learned that senior commercial leaders have saving energy in their "want" column instead of their "need" column. They want to know if there are incentives. The environmental considerations are secondary to them. They are an added benefit instead of a decision-making

factor. We learned that easy-to-see projects are easier to sell up the chain of command, and they want a solid proposal and high confidence in the savings. This is why lighting works, along with being very visible.

> We heard that they initially do projects for the money, then they're really happy because of the side benefits, and that's what they talk about. When it comes time for the next project, they go back to money again. Non-energy benefits are nice but are not selling projects.
>
> Segmentation started as an idea, and the survey confirmed that the market doesn't segment by typical industry. We found that company culture was the biggest factor. Companies with a sustainability initiative, such as a green team, would be more likely to communicate about savings and invest in projects. Companies that have higher levels of employee engagement seem also to be more likely to participate in our programs.

Anne: So how do you look at company culture to be able to segment and drive marketing?
Susan: We've found that it's more about building relationships than anything else.

Don: Did you ask about culture and these other drivers?
Susan: Yes. All of that is available in the reports.

Mark: Did the sample go broader than just participants?
Kim: This is just participants.

Susan: We tested messages to see which resonated with customers. We found that "competitive edge" for a business didn't work as a message, and neither did messages about customers being impressed with their environmental attributes. Money and assistance were most important. As a result, we are tuning up our website to showcase successes, and make it look and be easy to work with us.

Kim: This was quickly covered, but all of these are on the website, and they are worth looking at.

Kim: How many of you receive the Champion e-newsletter? As a result of our research, customers said our PDCs are doing a great job, but they're not convinced they're always hearing everything about Energy Trust from the PDCs. They want more information to come directly from us, so we started the newsletter. We've sent out three of them so far. We can enroll everyone on the Conservation Advisory Council unless there are objections.

6. Looking forward: Industrial issues and opportunities

Kim: We have some subtle Production Efficiency program design changes that we wanted to present. It's very subjective, which makes it a great topic for advice. In some ways, I'm setting us up for budgeting later this year as well.

> The Production Efficiency program has high satisfaction, hits its benchmarks and has been nationally recognized. It has been profiled as having best practices in five different national publications. So we're not fixing what's broken; we're improving on what we already have.
>
> Our custom PDC contracts are up for rebid, so we can look at what they do right now. We are redrawing territories and want to see if we can balance them better. As it is now, they are very different. We need to look at geographical- versus sector-based

approaches, along with a bigger idea to expand custom PDCs to serve all our industries that way.

Right now we have both geographical- and sector-based PDC territories. There is a design logic to either approach.

With sector-based territories, having a laser focus on a specific business type will drive us into that market. In some cases, the technology in that industry is specialized, so only a few PDCs would have the technical capabilities to do the work. Another reason for sector-based territories is when there's a need for centralized coordination with related stakeholder groups.

But this design logic doesn't entirely align with our experience. When we created the high-tech "territory," our experience was that the PDCs who had lost some territory to the new PDC were much more motivated to engage the sites they had kept, and we ended up with more savings from high-tech sites that were not among those placed in the high-tech sector. We also found that success was dependent more on the individual than the company. Once we got the right person in the PDC, the outcomes in their territory improved. That points to a geographic approach. Finally, If we put all of our eggs in one basket by assigning all of a market sector to a single PDC, the entire sector is at higher risk of being underserved if that PDC struggles.

Wastewater is one example. Recently, we had an individual with specialized expertise in wastewater assigned to handle that sector. This individual was stretched too thin, and in the end, his program expertise was not sufficient to get projects completed. When we went back to geographic territories, we saw three times more savings from the wastewater sector than before we changed it.

We learned that industry experts aren't program experts. They were great at wastewater or wood products, but we found that the technical generalists were better at running the program portions.

There may be something to note about the third point on the slide. The program staff has a big role in stakeholder coordination. It's mostly done here, with help from the PDCs. If we don't have a single PDC to work with key stakeholders in strategic markets, we do have a single staff member who does this.

The design logic of a geographic approach is much easier. The PDC's role is to interact with customers and help them get from here to there. A geographic territory emphasizes that each site is like a snowflake and is unique. PDCs aren't supposed to move markets, but rather move sites and individual customers toward taking action in the program. PDCs, while usually knowledgeable engineers, ideally are technical generalists, and know when to call in the system experts. They aren't focused deeply on one technology. Diverse territories that cross sectors provide some protection for PDCs against external market factors, also, that could jeopardize their ability to meet goals.

My question to the Conservation Advisory Council is whether you know of compelling reasons to continue the sector-based territories for some sectors in the future? Internally, we think geographical is better.

Pam Barrow: Initially, we felt that an expert in the food processing industry would yield good results because they understand our language. When we went that route, I still got calls to find

out who was our Energy Trust contact. We are just completing a study on barriers to implementing energy-efficiency measures, funded by the U.S. Department of Energy for later this summer. One thing I hear is that we don't know much about the incentives, programs or how to find out about them. Someone managing the project for us at a high level would really help. There is a host of technical experts to do the detailed work, but having a local person who could have more interaction with the facilities on a regular basis would be better than having the entire state as a service territory.

Warren: How would sector-based territories affect the interactions with ATACs?
Kim: The PDCs put in a request for a technical study, and we decide whether to hire an ATAC for the study. The only difference is how we draw the territories, so it doesn't change the interactions with ATACs.

Don: Does this support your second objective?
Kim: Yes. As long as you have this hybrid approach of both geographical- and market-based territories, it makes it difficult to sort and communicate with customers. Also, if the territory is spread out, you get drive time and other challenges.

Andrew Regan: I work for Rogers Machinery, and we do compressed air studies and implement projects. We are a trade ally, but in some ways we act like an ATAC, and we used to be an ATAC. Our standard approach to calculating savings from compressed air projects has been pretty well accepted. We've found that a change in a PDC tends to slow our pipeline. There's confusion about who to call, which slows things down. Customers get partway into projects and discover they are dealing with the wrong PDCs. We found some help by having one company handling a sector. Pulp and paper mills are few and well-established, and have a high risk of going out of business. For our folks, we are out beating the bushes. I like to tell Fred that our market has been totally transformed, and there are no free riders. The most important step for us is getting customer buy-in. Hopefully, you have management on board already. It simplifies the one- to three-year span on the custom side. It can be months on the small tools side. I can't project whether this proposed change will be positive or negative. We heard about the wastewater situation in the old days, and we learned that they were harder to approach because they had huge projects to consider versus our small ones.
Kim: Change is hard, and when it comes to a market actor like Rogers, we can see that change is hardest on trade allies. We have to keep that in mind.

Charlie Grist: A lot of this is about personal relationships and levels of trust that take years to develop. I hope that any redesign keeps that in mind. Building those relationships is a big investment. They aren't direct Energy Trust investments, but are necessary to get the job done.
Kim: I completely agree. We do have to re-cut our territories, even if we choose all the same incumbents; they just aren't optimal to achieve goals. Some relationships will need to change. Customers have relationships with the PDC but also with our staff. We've increased our work on building direct relationships because of the need for consistency. Also, people leave PDCs and that also means the relationship changes. Each time the relationship transitions, staff plans to meet with the customer and take the old and new PDCs with us to do a warm handoff. If there is a clear objection from the customer, we have to work through it and, as appropriate, make exceptions to the territories we are setting up. That's the primary transition task in the contracts.

Don: When you talk about rebalancing territories and lining up potential, will there be more or smaller territories? What are you balancing to?
Kim: I want to align savings potential with PDCs. The Bend area is a tough one, for example. There isn't a lot of load there. We're looking for three to six PDCs.

Don: Are you looking at other things, like no more than a two-hour drive to get to key people?
Kim: Yes, we're looking at that.
Jim: Yes, and look at things like how you serve Ontario.

Lance: When you took the high-tech industries out of certain territories, it spurred the PDCs. Are you looking at that type of competition building exercise again?
Kim: We always have competition under the PDC model. Each year, we establish goals and budgets for PDCs. If they are underperforming or other issues are occurring, we are always able to shift territories and assign the work to other fully functioning PDCs. That creates an ongoing competitive situation and mitigates risk to Energy Trust. One of the important things is that they function with us as a team. We don't want them competing for customers in any way, and therefore we are very careful to create territories with clear boundaries. After they get the bids done, and have contracts, they become very collaborative. We create a very subtle competition on an annual basis and through the contract bids, so they know they have to keep performing well.

Scott: They are all out selling the same thing. They're really sales and marketing companies with specialized engineering knowledge, but each territory must have different goals. Are there performance payments of some kind?
Kim: We have fairly small performance compensation for PDCs, typically tied to meeting and exceeding goals. But if we overemphasize incentives for PDCs, they focus on them too much. We try to get them to offer pristine customer service instead by having their contracts be almost entirely based on time and materials.

Mark: We heard that one thing people appreciate about Energy Trust is confidence in our technical knowledge. This seems to miss that finding. How do we work with ATACs to provide that part?
Kim: The ATACs are system experts rather than market experts. We do run into PDCs who are also ATACs and have deep expertise, but it influences what they do. A PDC who is an expert in dust collection will see dust collection opportunities wherever they go. They are amazing engineers, but they do need to be generalists to see more opportunities.

Karen: You asked if there were any reasons to continue the sector approach. If there is something sector-based that's working, that would be a compelling reason. Does that exist?
Kim: The approach is working, but is it better in some way than a geographic approach?

Karen: If you have a situation that's going well, that might be a compelling reason. Is there one that is going so well that you don't want to disrupt it?
Kim: I'm not seeing enough benefit to offset the complexity of this hybrid approach, but that's the type of question we have to look at. The council should be aware that some industrial customers will be getting new PDCs either way. How we do it is a nuance, but the fact remains that some will change PDCs as we re-draw territories. We make those decisions at the program level, and the Conservation Advisory Council can help us with making a program decision. How we cut the territories makes sense as a discussion for the Conservation Advisory Council.

Wendy: Have you talked to the customers who will be impacted?
Kim: They are aware of the competition but not the details. We don't know yet who will be impacted.

Wendy: In the residential arena you made a significant change, and I heard a lot of negative feedback from contractors in that world. While I'm sure you had good reasons, more outreach could have mitigated the negativity.

Kim: When I say we will be reaching out one-on-one to the customers, I mean that we are calling to say: "This is what we propose. Are you okay with this?" The intensity of the reaction will determine what we do. I have tried it with five so far to just discuss the concept and all have been both complimentary to their current PDC and okay with changes we might want to make.

Jim: This discussion is on the end of the agenda, and it looks like there is some meat to it. I heard that program managers have already decided, but then heard that we're going to get feedback from customers. Can you clarify that?
Kim: We have to run the rebid, so some territories and PDCs will definitely change.

Jim: You've got two potential changes, then?
Kim: Yes, there are some parts that are about the program model and others that are about the rebid. It's a fairly small impact, but it's good to discuss here, because it's a way to test these very subjective things where there's no one right answer. I'm going to reserve some time at the next meeting to discuss expansion of custom services to all industrial customer sizes, since we didn't get to it. My question for all of you is: should we only cover things we can dive deeply into?

Jim: If you think it's something that customers or trade allies are going to have a severe reaction to, especially because a lot of time and resources went into building the relationship, we should spend lots of time on it so no one can say your advisory council didn't look at it.

Don: I think you look for feedback about geography versus market and test the way winds are blowing. However, Energy Trust is running a business and you have policy requirements, customer service metrics and the like to keep track of. I think this is the right level of discussion. If we keep revisiting it, can you still keep your goals on track? Our group can spend a lot of time on it, but then we get further into running your business for you. I only want to see that you are headed in the right direction; then keep me informed.
Kim: The industrial sector is only 7 percent of Conservation Advisory Council topics, and they aren't hot topics. There's not that much drama in them. If the priority for the council is to make sure the drama comes to this group for discussion, you won't hear much from industrial. It helps me to get an hour or half hour on the agenda to get your advice.

Warren: A lack of drama here doesn't mean it isn't out there. We can't overstate that they might come in later with drama. During rebids, a PDC may slice things to show they are good in a geographical area or good in a certain sector. They will try to slice it the way that makes them look best. We have to speak for the customers and guess how they might feel too.

7. Adjourn

Kim: The next Conservation Advisory Council meeting is mostly residential, and I will probably come back with the expansion of small industrial the next time.

Kim thanked all council members for their participation and adjourned the meeting at 4:45 p.m.

Next Meeting

The next full council meeting is tentatively set for June 19.

Conservation Advisory Council Meeting Notes

June 19, 2013

Attending from the Council:

Garrett Harris, PGE
Don Jones, Jr., Pacific Power
Scott Inman, Oregon Remodelers Association
Warren Cook, Oregon Department of Energy
Juliet Johnson, Oregon Public Utility Commission
Brent Barclay, Bonneville Power Administration
Stan Price, Northwest Energy Efficiency Council
Don MacOdrum, Home Performance Guild
Charlie Grist, Northwest Power and Conservation Council
Andria Jacob, City of Portland
Karen Horkitz, Northwest Energy Efficiency Alliance

Attending from Energy Trust:

Kim Crossman
Peter West
Tom Beverly
Fred Gordon
Julianne Thacher
Andrew Shepard
Matt Braman
Taylor Bixby
Marshall Johnson
Diane Ferington

Others attending:

Tim Miller, Clean Energy Works of Oregon
Tim Davis, CSG
Sara Brockmeier, Fluid
Marilyn Morfitt, NW Natural
Kendall Youngblood, PECI
Keith Kueny, CAPO
Lis Saunders, NEEA
Christina Cabrales, CSG

1. Welcome and introductions

Kim Crossman convened the meeting at 1:35 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public-meetings/CACMeetings.aspx.

2. Old business and updates

Kim: We promised to revisit older items as a review at the beginning of each meeting. Last time, we asked the group to give us feedback about the program dashboards. Peter can tell a little more about it.

Peter: The assignment was to take a look at the one-pager dashboards we typically give out with our updates. We want to know if they're informative, timely and helpful. Many people who accepted the homework assignment aren't here this time. For one thing, it looks like we can stop limiting them to a single page. You can email your thoughts to us, also. It's a continuous improvement process and we'll give feedback as we make changes.

Juliet: The amount of information seems good. It would still be helpful to have the dashboards presented by staff at Conservation Advisory Council meetings.

3. Residential sector historical trends, current events and coming attractions

Residential sector

Matt Braman: The overall 2012 electric results for the residential sector were great. There was about 90 percent growth over the last four years, NEEA was consistent over the same time period and most of the growth was in Existing Homes. Fluid implements Existing Homes, and New Homes & Products is run by PECI.

> Our 2012 natural gas results were similar to electric. From 2009 to 2012, there was 105 percent growth in savings, so we basically doubled what we were doing.

Juliet Johnson: You are good at hitting the target, or just slightly above or below. Is there something at the very end of the year that you do to get so close?
Matt: That definitely happened in 2012. Part of it was that Existing Homes was great in some areas and New Homes & Products did well in others.
Marshall Johnson: There are some levers we can pull toward the end of the year to help us. That will become more challenging in the future as standards change. Simple marketing campaigns may not work as well to ramp things up or down.
Charlie Grist: We set many individual targets, and there are enough of them that if you're high or low in certain areas, you can still end up doing well overall. Unless there's a systematic overage or shortage, it shouldn't be a problem.

Kim Crossman: As Marshall mentioned, they do have some levers at their disposal to change outcomes, dial it in. Because of our long project development cycles, the programs serving large customers, like industrial, can't quickly ramp up and down, but residential can do that.

Matt: We expect natural gas savings to level off over the next few years, and it will take innovation to keep us on our current path.

New Homes & Products

Matt: New Homes & Products are two unique components of a single program. Products are sold at retail, while New Homes involves just new home construction. 2012 was harder for New Homes & Products. We fell short of savings goals, ending up with about 80 percent of electric and 90 percent of gas. For gas savings, Products realized a little under 300,000 therms, while New Homes realized about 500,000 therms.

> Electric savings in New Homes were trivial. Products drives electric savings for the full program and New Homes drives gas savings. Retail sales were down significantly in 2012. For appliances overall, which includes washers, fridges and lighting, the baselines are going up and savings are going down. As we see that happen, it becomes more difficult to hit the targets. We don't support LEDs, which also hurts our electric savings.

Juliet: You do ramp the incentives at the end of the year?
Matt: At the beginning of each year we adjust, but we don't typically ramp up or down during the year.

Matt: We also work with low-income agencies to hand out Energy Saver Kits to clients. They account for about 6 percent of electric savings. Retail showerheads and light bulbs account for a

lot of savings. A couple of large retailers quit carrying the showerheads, and we are still working with them.

Don MacOdrum: Was it just that they weren't selling?
Matt: With products, when we first offer them they usually do well, but then they taper off. The shelf space is valuable, so retailers fill it with other things. Bonuses and limited-time offers may get them back on the shelves.

Juliet: Do you provide the store with incentives for each one they sell?
Matt: We reimburse them. Showerheads are part of the Simple Steps regional program with the Bonneville Power Administration. Fluid works on it, and utilities can opt in. They figure the percentage of sales going to various utilities. It sums to 100 percent as far as who claims the savings, and we don't have to pay for savings outside our territories.

Matt continued his presentation. For New Manufactured Homes, we are working on measures we can use to continue engaging in the market. We need to look at the next thing we can go after. ENERGY STAR® is about 60 percent.

> Fridge recycling is about 25 percent of our electric savings, and lighting is the largest part of savings at about 50 percent. That's mostly compact fluorescent light bulbs and a few LEDs. *[See presentation for breakdown.]*
>
> Products don't have a lot of natural gas savings. High-efficiency washers use less and less water, and that's where gas savings come in. Energy Saver Kits with showerheads and faucet aerators have some gas savings related to them. Retail showerheads are another part, but they're a small part of the residential portfolio for gas savings.
>
> Energy Independence and Security Act of 2007, EISA, impacts are coming into effect, and we moved away from general purpose CFLs to specialty ones in response. CFLs increased through 2011, then dipped in 2012. Savings followed the volume trend. Savings per bulb have been declining, and there was a 15 percent decrease from 2011 to 2012. As EISA goes into effect, the standard hours-of-use assumptions changed the savings.

Don Jones: What kind of installation rate do you have with those?
Matt: It's about 80 percent, which follows the Regional Technical Forum closely.

Scott Inman: Is that just retail? It's nothing to do with energy audits?
Matt: Marshall will address that in his slides. With LEDs, a variety of products have shown up. We were on board with CFLs, but not with LEDs. That was the main driver in the decrease. Retail sales were down, also. We have worked with our Planning and Evaluation group to pick LEDs to support, and determine how we should support them. Last fall we added screw-in reflector LEDs, and we saw some increases. They are about 10 percent of this year's retail lighting sales.

Charlie: Are they program qualified? The rest were CFLs?
Matt: Yes, those are qualified, and the rest were down-lights.

Matt: LED A lamps are the next thing we're looking at to include in the programs. We're determining what types we should look at.

Charlie: This is the first time I've seen retailers jump out ahead of us. It makes setting a baseline tricky.
Matt: Costco had a lot of products, and could probably use bulk pricing to offer them competitively. We're hearing about $70 for a six pack of LEDs, which is reasonable for a 60 watt replacement.

Fred Gordon: A lot of manufacturers and retailers have filled the shelves with LEDs we wouldn't touch. The lumen outputs weren't comparable to the products they were using for comparisons. We want to wait until the options are comparable. An LED that costs more produces fewer lumens, in many cases. We're struggling to find value. They also have problems with dimmers, and we didn't want homeowners to get into products without dimmers. We've been asking others who ran out ahead of us how well they did. If they stay out of trouble, we'll follow. We're slow because we're watching consumer value.

Don MacOdrum: I just purchased LEDs, the dimmable candelabra style. For a product like that, should we eventually expect to see incentives, for specialty items?
Matt: We might offer incentives for good specialty lighting, so I wouldn't say we will ignore them.

Don: For a typical $15 bulb, what would the buy-down be?
Matt: Right about $3 per bulb. We're finding that $10 seems to be the right price to get people to buy them.

Charlie: Part of the challenge for you is deciding on a set of specifications that determines what's good and bad. The market is kind of like the Wild West right now.
Matt: We start with "Buy ENERGY STAR." ENERGY STAR is about 45 lumens per watt, and we're looking at a slightly higher bar. We hope that the buy down and point-of-purchase signage will help steer people in the right direction.

Charlie: Higher-end retail chains may be an option there.

Don: As a side note, LEDs have a great life span. Supposedly, my new bulbs will last about 22 years.
Matt: That's true that they last longer.

Matt: We just completed a lighting shelf survey with NEEA, and we oversample in Oregon. In 2011, 50 percent of stores stocked LEDs, and it was 70 percent by 2012. They continue to grow, especially in higher lumen outputs. In 2011, 53 percent were less than three watts. I don't know how much use those have. By 2012, it dropped to 28 percent, so we're reaching the level where they are viable replacements for regular lighting. One of the biggest trends was that fewer products were being stocked, overall. When a consumer goes to Home Depot or Lowe's, they are replacing what they had in the sockets, or are just happy with what they buy. The quantity of incandescents fell by about 50 percent, and by 25 percent for CFLs. They are moving toward fewer products in the store.

Scott: Do they have fewer environmental problems with LEDs?
Matt: There's no mercury, and they don't have as many disposal problems. They also don't have the breakage concerns of CFLs.

Scott: If you can make more margin selling good ones, it makes more sense that they move in that direction.
Charlie: They need to look at providing light and savings, and what's going to sell best.

Peter: With market uplift, we are trying to negotiate with retailers to not even carry the low-end models; so we're moving the baseline higher.

Don: Maybe you work with manufacturers to drop the lower-end models and only make the better ones, if this trend can influence the reduction of models.
Matt: Phil has good information about LEDs. A good dimmable LED has many uses, but we don't need as many different products to fit the bill. A 100 watt incandescent had to become 25 percent more efficient under EISA. By 2012, 72 percent of incandescents met EISA standards. The ones that didn't meet them are coming off the shelves. That's the trend we want to see. The worst ones are essentially gone.

Charlie: This is from the store survey?
Matt: This is from NEEA's shelf survey. Lighting is a big part of the program. As they move away from the 100 watt incandescents, customers are moving toward a lower output in lumens. We're trying to understand it.

Charlie: There's some swapping. People may decide they can live with a 75 watt equivalent, for now. Is that right?
Matt: The 100 watt incandescent may be more light than they needed. That's what we're finding.

Matt continued his presentation: Appliances are two different stories. For washers, we had multiple tiers from 2008 to 2010 and we lost state tax credits. Retailers find it easier to upsell people to a high-efficiency washer. Fridges are harder to do because people want certain sizes and configurations that are harder to match. 2011 was the first year we didn't have state tax credits, and it's hard to say that tax credits caused the drop when clothes washers stayed roughly the same.

> For fridges, the baseline is going up and incentives are going down. 2014 will probably be the last year we are likely to support a mail-in rebate. We want to work with retailers to make their whole stock more efficient. Fast Feedback shows that the sales staff has equal or greater influence than our incentives. There's a fair amount we can do by working with retailers and their sales staff. We are pushing the bar also with clothes washers. We need the retail market to understand why they should work with us. We're working with Kmart, they have flexibility on what they stock, and we're trying to support a higher market share of high-efficiency models. If you get below a $50 incentive, it's hard to justify a mail-in rebate. A time-of-sale incentive has an impact.

Juliet: Have you done that before?
Matt: We did it with Sears, and are wrapping up with them. We're going to talk about expanding it.

Juliet: Was the pilot successful?
Matt: We have some lessons from the pilot, and we're learning from the wrap-up. Redemption rates weren't as high as we wanted to see. They were at about 40 percent of products, and we would have liked staff to push harder, but the incentives caused commission decreases for staff.

Brent: 40 percent of qualifying units sold had redemption data? Would you still be able to account for the rest?
Matt: That's more of a market transformation approach, and we're trying to get better market data on them.

Scott: Would they allow you to do a sales spiff by salesperson?

Matt: Sales spiffs are a possible way to work with sales staff, outside the commission issue.

Fred: BPA has a frozen efficiency baseline, which means they include efficiency regardless of whether they helped cause it. We're trying to account for what would have happened without us.
Brent: If you hadn't had the rebate, maybe some of the models wouldn't have been there.

Charlie: What was the fridge story?

Matt: The economy was down and the state tax credit went away. As we changed the requirements, there were fewer options to upsell customers to. We found that people came into the store wanting a certain size and type of fridge. They have a certain size of space to fill in their kitchen.

Matt: Fridge recycling is something we've pushed for about five years. In 2012, we saw a 15 percent decrease from the last year. The top line in the chart is 2011 and the bottom is 2012. We had a lower incentive, which we expected to have an impact. As you get the old fridges off the grid, you would expect to run out of them. In July and August 2011 we got a lot of media attention for our Oldest Fridge contest. Technically, a 1935 fridge is pretty efficient; so there were some challenges with messaging. It got a lot of attention and pushed us over the top. In 2012, it decreased during the same months, and I believe that's because we didn't have a big media campaign. We want to do it again in 2013. We worked with Oregon Food Bank in 2013 to allow customers to donate their fridge recycling incentive. The money is important, but the convenience of having free pickup is a big thing customers like about the offering. The donation is for a good cause and is related to fridges. We launched it in June, and consumers can already donate. About 10 percent of incentives are being donated, early on. Right now it's about $1,200 per week in donations. Media interest will bring more donations and increases in volume.

Scott: Are most people buying new fridges, or do they just have an old fridge for pickup? Are retailers taking them as they buy new ones? Is that down this year, from 2012?
Matt: About one-half are replacing existing units. In some cases we work with retailers like Sears to have them pick the old ones.

Marshall: What about saturation? Can we keep doing this for a couple of years?
Matt: We think we can do this for about another two years.

Charlie: One thing that's happening is that the standards haven't changed much over time.

Don Jones: Your unit energy savings will head down. I've seen that from other regions. The avocado fridges are the right age to be the sweet spot.

Matt: We may have a different message for the older fridges in 2014. Right now, the incentive doesn't depend on age. We're considering using incentives based on age to push the market toward the older fridges.

Diane Ferington: Also, we saw decreases in 2011 because we were going heavy in Pacific Power territory, so we didn't market fridge recycling in that area.
Kim Crossman: That's an example of the levers we were talking about earlier.

Matt: The new homes market hasn't been a huge source of savings, and we used the time during the economic downturn to develop a more scalable delivery structure. We moved toward independent verifiers during this time. Our New Homes program is based on Energy

Performance Score, with six best practices that get builders to ENERGY STAR levels. About 90 percent reach ENERGY STAR and about one-half of those go beyond. In 2007, when we ramped up, market share was about 6 percent, but the housing market was also bigger at that time. The yellow line on the chart shows EPS rated homes we incented. The blue line is market share. 2008 – 2010 showed a decreasing number of homes but a larger market share. Code increased by about 10 percent in 2010, so we saw a decrease in market share as the new code came in. By the end of 2012, you see the effects of the 2011 code update, which added another 10 percent to efficiency requirements. In 2012, it was about 25 percent market share, and we had the largest number of EPS rated homes. We beat our target number by twice as many homes. We expect a bit of a decrease in 2013 because of code changes, but will rebound in 2014.

Scott: Is that because of the standards changing?
Matt: Yes

Charlie: It's also a natural lag in the market as they slow down to meet the new standards.
Matt: We want to push them to ENERGY STAR, but at least to go above code.

Warren Cook: Will savings-per-home drop enough that we need to do twice as many homes?
Matt: It's decreasing, but not yet by that much.

Charlie: Those things that are off the table are getting done in every home.

Brent: With homes that go ENERGY STAR but not EPS, do they get to claim the savings?
Matt: If you are ENERGY STAR qualified, you can get an EPS.

Existing Homes

Marshall Johnson: The next aspect of this presentation is focused on existing housing stock, and within Existing Homes, there are a few sub-programs and initiatives. Opower was a pilot in 2011 and 2012 with 60,000 dual-fuel customers of PGE and NW Natural. We're currently conducting a persistence study with a subset of the original sample, about 30,000 customers. We have tracks for Home Performance with ENERGY STAR, manufactured homes, Savings Within Reach and standard, prescriptive incentives. We're hitting a peak and leveling off. We're going to have to challenge ourselves to create innovative ways of driving savings on major measures. We knew that EISA was coming into play, and we wanted to achieve savings through Energy Saver Kits before that. Mobile homes were about 8 percent and Opower was about 17 percent in 2012. Two percent came from solar water heating in 2012. It was about 1 percent in 2010, and didn't register in 2011 and 2012. Cost is a challenge for solar water heating. We have plans for marketing solar pool heating in 2013.

> About 19 percent of gas savings came from Opower. 15 percent came from Home Performance and it's definitely a driver of gas savings over electric. The prescriptive track accounted for 66 of savings on the gas side. Savings come through individual measures in the prescriptive track, and are the base of the program. We claimed gas furnace market transformation in 2010 and 2011. We planned to claim 2013 and 2014 savings from gas furnace market transformation, but the glut of savings we planned to count are probably off the table due to challenges enforcing federal standards that were intended to mandate higher gas furnace efficiency levels; about 300,000 therms in 2014.
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> The majority of electric savings came from Energy Saver Kits and about 61 percent of those savings were from lighting. Lighting and water-saving devices comprise the

majority of electric savings. Equipment is about 12 percent, and weatherization is about 11 percent. Mobile homes are included in direct installs.

Charlie: Opower is a big part of the savings, but why isn't it included in major measures?

Juliet: Clean Energy Works of Oregon isn't included in this?

Marshall: Clean Energy Works of Oregon figures into a few categories within the pie. Opower is still a test, so I didn't include it here.

Charlie: So the kits include lighting?
Marshall: They include lighting and water-saving devices. Customers get information about the kits in a few ways, and they complete an online survey to receive a kit in the mail.

Don Jones: Is Opower considered behavioral change? The kits fall into the prescriptive bucket, so how much of the prescriptive savings are from Energy Saver Kits?
Marshall: The category of Opower is behavioral change, and is not included in this pie. I will come back to kits soon. This also doesn't include avoided costs.

Kim: These slides focus on meeting annual goals.

Marshall: About 31 percent of gas savings are from weatherization, and direct installs and kits make up about 51 percent of those. There were over $10 million in non-energy benefits we could quantify, like water savings. It's important that we can do that for cost-effectiveness test requirements.

This slide includes Existing Homes sites served with water heating, weatherization and heating improvements, but not kits. The chart shows the numbers and trend. Home Performance is steadily and modestly growing. Prescriptive is growing, but in 2013 we'll probably have fewer sites served. There could be 35 percent falloff of attic insulation and 10 percent falloff of floor insulation because of the new pre-existing qualifications.

We've penetrated the opportunity for manufactured home duct/air sealing in PGE territory, but less so in Pacific Power territory. Mobile homes in more rural areas may still show a fair amount of potential.

Home Performance is a sub-program track: The yellow on the chart is activity in Home Performance not including Clean Energy Works of Oregon. Clean Energy Works of Oregon is a Better Building-funded program we've worked with since 2009. Clean Energy Works of Oregon has accelerated penetration of Home Performance. We did about 1,660 Home Performance projects last year, and 75 percent went through Clean Energy Works of Oregon. It facilitates relationships between customers and trade allies, and packages the offer with incentives to the customers. A Home Performance assessment is a whole-house evaluation, and those aren't included in the numbers. The slide only shows installed measures that have savings associated.

Charlie: What kinds of measures?
Marshall: Air sealing, duct sealing, insulation, direct installs, water heating and heating system upgrades.

Juliet: With duct sealing and insulation requirement changes, will fewer projects be completed?

Marshall: Yes. The qualifications for existing insulation conditions became tighter, so fewer homes qualify. There's less savings if you start at a higher R-Value. We'll serve fewer customers with those measures, but get more savings from the ones we do. It's a program response to the need to increase gas savings per site weatherized.

Scott: If they insulate, but the starting value is above the base, you don't get credit for savings? Home Performance would go above code anyway, whether or not they qualify, but you won't take credit for that?
Marshall: Clean Energy Works of Oregon contractors use industry best practices and go beyond our requirements. From a cost-effectiveness perspective, the savings from R-30 to R-49 aren't justified. As we work on full implementation of Energy Efficiency and Sustainable Technology Act, EEAST, legislation, the rules are a little different. I don't know about claiming the savings.

Charlie: When they report their savings to you, would you back out those savings?
Marshall: They send us measure-level savings. The customer wants simplicity and the contractor comes with a whole-house package. We recognize savings only for those things that meet our measure-level criteria.

Brent: It opens the door to look at cost effectiveness differently. You can look at data for things that aren't comprehensive.
Marshall: With New Homes, you can look at the cost of going a little better than code. With Existing Homes, we are doing an assessment of homes where they just wanted to do energy improvements and wouldn't otherwise remodel. We can't as easily justify an incremental savings and cost approach.

Kim: Thanks to everyone for throwing out those ideas.

Marshall: Savings Within Reach contractors get the incentives from us and mark customer invoices down. It was aligned with Energize Clackamas, which accelerated activity. We're continuing to work on repayment on-bill for this customer segment, with the hope of coming out with something later this fall to sustain growth with these customers. They are primarily weatherization measures for a group of customers at 180 to 250 percent of federal poverty level. Their income is too high to get low-income services, but they can't pay full-freight for the improvements. There's a lot of potential. We require moderate-income customers to consent that they are informed about low-income services, but customers can decide to participate, based on their income. We promote weatherization measures, ductless heat pumps and gas furnaces.
Fred: The incentives are a little higher for these customers.

Charlie: A snapshot of the costs would be helpful with these.
Kim: We don't analyze trends of levelized costs by measure category. The trends analysis all sectors have been working on focuses on where our savings come from. In trying to split up the various program delivery costs across what went where, we would open up a massive project beyond the savings trends. There are clear technical barriers to doing that type of analysis.

Charlie: Efficiency is great, but it's a combination of savings targets and payment levels. We need to get an idea of expensive vs. inexpensive ones.
Marshall: It becomes difficult when you break out the subprograms. You can't attribute program management and delivery costs clearly to one measure or another.
Charlie: People are interested in costs. Some metrics at the right level may still be good.

Marshall: We intentionally started in about 2009 to shift activities, so that trade allies and market actors had a larger role. We gained Home Performance traction in 2009, largely through the Clean Energy Works of Portland pilot. Clean Energy Works of Oregon started in 2011, and assessments grew dramatically that year. We had a 46 percent follow-through with Home Energy Reviews and about 1.8 measures, and Home Performance assessments ended up with an average of about 3.8 measures and a 60 percent follow-through rate. In Clean Energy Works of Oregon, we see about one more measure per project than in the standard Home Performance track. The market is doing better at educating customers. That was part of our selection process for the new Program Management Contractor. Fluid wants to put more delivery components in the hands of the trade allies through innovative program design.
Peter: Phone-based Home Energy Reviews went up and direct referrals to contractors also went up. People are still being served, but differently.

Marshall: CSG developed a product so customers could get a phone-based Home Energy Review and receive referrals for a short list of contractors, who could come out to fulfill their needs. An in-person Home Energy Review is expensive with a lower return. Also, the mix of lighting opportunities is dropping, and we're trying to back out of the Energy Saver Kit model.

> We changed the kit offer in 2012, to have survey questions online and find out more about customers' homes and needs. Based on how they answer the questions, we tailor the kits to get more savings from what we send. They get more, or different products based on what's in the home. We ask the customer if they will use what we send. If not, we alter the kit. As a result, realization rates have gone up, and the savings increase is related to more bulbs and showerheads per kit. Water-saving benefits have a lot to do with benefit/cost ratio of the program portfolio.
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> It's a similar story for the gas side. In some cases there isn't overlap in gas and electric territories. If they had CFLs and it was gas-only territory, the overall cost of the kit included wasted CFL costs. We now have a gas-only kit to increase cost effectiveness. We send them to fewer sites and have three times more savings per site. In 2012, we pursued an initiative to follow up with a test Energy Saver Kit to past product participants. Three times more customers followed through than we expected; about 20 percent more than we budgeted for kits, last year. It was one of the levers we talked about, and helped us surpass last year's stretch goals.

Brent: There are no income requirements to be eligible?
Marshall: No. Also, marketing behind it varies. PGE emails have been great, but a utility bill stuffer has also worked. It's difficult to tell between renters, or multifamily and single family.

Brent: On the lighting side, is it general lamps or specialty ones?
Marshall: It can be up to four general and six specialty bulbs, depending on the answers to the survey.

Brent: With retail, you looked at specialty only, but you have general in the kits.
Marshall: Depending on baseline changes, we're not sure when we'll discontinue general lighting. We're in alignment with EISA.

Marshall continued his presentation. Direct installs are the same products but with higher savings per product. They are installed by trade allies. In an effort to save the mobile home duct sealing track, direct installs were added in 2009, and they really helped with cost effectiveness. In 2012, contractors who installed major measures also could install instant-savings measures.

The trend loosely follows mobile home fuel type, but we have increased outside of the mobile home track for instant-savings measures.

> Heat pump water heaters started in 2012. We're in a position to move away from standard-tank water heaters and go to tier two heat pump water heaters. There are challenges, but we can discuss those another time. Gas water heaters include upstream work on 0.67 EF water heaters. We worked with NW Natural on promotions in 2011, and built good momentum. 2012 was like 2011, but we still need to work on greater acceptance for 0.67 water heaters. There are challenges with accelerating quantity.

Kim: Would anyone in this group suggest solutions for this water heater challenge?
Marshall: The challenge is market adoption by trade allies. We had more dollars to put on the table in 2011. We had $150 for distributor incentives, but we couldn't sustain those.
Don: The graph, in absence of the back story, looks great.

Scott: What's the market share? What's the difference in costs between 0.67 and standard ones?
Marshall: We think there are about 55,000 water heaters replaced in our service territory each year. The incremental cost for a 0.67 EF model is about $250.

Karen Horkitz: Do you survey the contractors?
Marshall: Yes, we have the annual trade ally survey going out soon.

Don Jones: Do you have comparisons between like-size replacements? Water heating is a right-now business, and if the available 0.67 tank doesn't fit, that's an issue that cuts into it. Contractors just need to get hot water to the customer in that situation.
Marshall: We think there are products available for like-size, but as you mention this is an emergency replacement market and in some cases if the product is not on the truck it's not going to get installed.

Charlie: Is that combined 55,000? How many are gas?
Marshall: About 25,000 are gas water heaters.

Don MacOdrum: At the trade association level, I saw trends of who was participating, but have you talked to anyone about why they changed behavior and started installing them?
Marshall: Fluid is looking at trends and developing a strategy,now that the contract transition is over.
Peter: It would be worth having a group of contractors who do 0.67 water heaters coming in and looking at it.

Brent: Do customers have to submit an application? It may be good for instant rebate.
Marshall: That's a good point, and we did look at a small subset for instant incentives.

Tim Davis: Most plumbers said that to upgrade from 0.62 to 0.67, the additional step, plus adding seismic strapping and getting the installation up to code, is about a $400 incremental cost. Many plumbers went to tankless.
Don Jones: The gas line probably has to go bigger, also. It's rare that the existing line will work for tankless.
Marshall: Venting is another problem.
Don Jones: It's definitely a different installation. There's also a condensing version that's the next generation.

Marshall: We have two types of incentives for air-source heat pumps. One is for an upgrade from a less efficient heat pump. From 2010 – 2012, there was a decrease. Heat pump replacement has also decreased. Ductless systems may have something to do with the replacement market. Ductless heat pumps have increased dramatically. Since we are phasing out of lighting savings, and with Energy Saver Kits being at the tail end, 2013 is the year we need to count on ductless heat pumps to make up for it. We have accelerated, but have a ways to go. NEEA and BPA have helped with this.

Matt: Upstream intervention from NEEA has really helped with this, and the lack of a market development role from NEEA on gas water heaters in some ways can be used as an indicator on the value from market introduction support.

Marshall: Gas hearths have seen increases, with help from NW Natural. They are about 100,000 therms per year for NW Natural.

Charlie: This is an efficient gas hearth; a replacement? Where do the savings come from?
Marshall: It's an efficient unit with an efficient ignition system.

Matt: The target is the primary heat source.
Marshall: Yes. 20 hours per week during heating season is the target.

Marshall: Because of CSG's training we increased wall insulation between 2009 and 2010.

Garrett Harris: Is that both gas and electric? Would it look similar if broken out?
Marshall: Probably not.

Juliet: Will this go down next year based on things you told us earlier?
Marshall: Yes, that's the forward-looking trend.

Marshall: We have two tiers for windows, and starting in 2010 we introduced an R-5 window. We are currently at 18 percent for the higher tier of windows. We have a lot of these in the pipeline. We see ENERGY STAR changing things, and we have to decide if these are appropriate in the tier.

Matt: 2013 lighting sales are slower than expected, and we're doing more LED products and online sales. Market uplift started with Kmart this year, and we're talking to Sears about the same product categories, so we can raise efficiency within them. The costs don't always justify even instant incentives. We are looking for ways to work with NEEA, West Coast regional utilities and retailer collaborations. If we go with NEEA, and say we represent 16 percent of the U.S. population, retailers listen. We're looking at ways to streamline data-entry for verifiers of new homes through Pivotal, which is software that verifiers can use to certify homes and transmit things electronically. We're working on it for EPS in Oregon. They can go into the database and check what they want to do in the home, and it allows them to get a mix of measures and the ability to report to builders and others. We can integrate it with our systems to avoid incentive applications.

Matt: The 2014 rebid for New Buildings, and others this year, will lead us to request an extension on the PECI New Homes & Products contract for one year.

Kim: Next time we'll be looking at budget concepts, so this is really a preview.

Charlie: Do you think the rebid concept is still a good thing, or is it getting in the way?

Peter: There's good and bad. It's a lot of work and change, and potentially causes market disruptions. We went through this with the board after last year's transition. The board affirmed strongly that competitive rebids are better for the ratepayer. We've had the philosophy to bid things out as often as it made sense. The board is biased toward an openly competitive model and bidding things out even more often. Pacific Power puts theirs out for rebid every three years.

Don Jones: We can have three years and a couple of extensions, but I agree that you should be looking at the market on a schedule.

Peter: It's been a board philosophy from the beginning. These last few times around, we have received more and more responses to RFPs, especially as we signaled that the incumbents don't always win. You do get to select from the best.

Kim: As someone running a competition right now with an RFQ for Custom Track Production Delivery Contractors for the Production Efficiency program, the opportunity to re-tune performance comes with a hunger to win the rebid.

Don: Keeping the intellectual property in your house is good. It's a discipline of saying, "I know it and know how to run it," then bidding it out.

Peter: It's also a risk mitigation strategy, spreading our eggs out. We tried breaking things out even more last year, but found you get economies of scale at the level we're at with single PMC delivery.

Charlie: This is more to get feedback. I love to reaffirm my beliefs, but let the data speak for me.

Fred: We tried to benchmark costs across other's programs and we didn't get anything out of it. There are too many complexities. We tried and got rid of it.

Don: The rebid process is one of those things that will make you stronger if it doesn't kill you first.

Peter: Also, we have ratepayer money, so it's considered a best practice and is well-received by stakeholders.

Juliet: Going back to cost effectiveness and exceptions under UM551, there is a process shift. The staff made a request to Energy Trust that all things not meeting total resource cost tests come before the commission. One set came to us for a two-year exception last fall. As additional things came up, we would do a piece-by-piece review. We recently got another request that we've been working on. Staff is drafting a public meeting memo for a meeting a week from next Tuesday. Rather than doing this piecemeal, we'll request a blanket gas measure exception through 2014. More importantly, Energy Trust should come to us with a complete story of their whole gas program in about July 2014. We want them to make things as lean as possible before then and get rid of unneeded measures. The commissioners want to see the whole landscape. Then there will be a small process with public comment. It's not completely closed door, but only some public comment. By October there should be some decision. There is some interest in looking at a creative alternative, but probably not moving to a utility test solely. That's what we'll propose to the commission.

Don MacOdrum: When you say, "We'll propose it," do you mean the OPUC staff?

Juliet: Yes, we'll go to the commission with the recommendation from staff. Feel free to come support it, or talk about it at that time. Next Friday the memo will be public.

Don MacOdrum: Is there a lot of dialog before staff presents to the commission so they have expectations about how well they'll be received?
Juliet: It won't be a surprise; there has been back and forth discussion about it.

Don MacOdrum: As far as not moving to a utility test, is that just staff thinking, or does the commission's thinking factor into it?
Juliet: It would have to be a major turn in the tide, but there's no want for a long public process. There are compelling cases to consider, so I won't say it couldn't happen.

Don MacOdrum: There are a number of national organizations who want to donate their time to our area and discuss their thinking. It sounds like July through October would be the right timing.
Juliet: Probably leading up to July 2014, too. The commission would like to see proposals maybe in July.

Fred: We'll be spending several months before that framing options, which will entail lots of work. We are looking for some way that would sustain the programs within the framework of the TRC. We want to meet other objectives, but to present an option that will work for the OPUC so long as they stay within the familiar framework.

Kim: There will likely be Conservation Advisory Council agenda items on this topic between now and then.

Juliet: We want Energy Trust to make the programs lean now, so we know what their cost-effectiveness looks like by next July.

Stan Price: On July 23, we are hosting a conversation between Tom Eckman and Sammy Kwajon in Seattle. It will be streamed online, also. That could help with the discussion.

Charlie: What struck me about the presentation today was the remodeling of the kits, and using phones or online resources to do smart marketing. It was a big delta, and the techniques would work in other markets, too.
Marshall: We're looking at ways to evolve our delivery, and online tools are used in other programs very well.

Charlie: It's not a cure-all, but the smarter delivery and research will help.

Scott: I have a comment about condos and multifamily. Since the first of the year, individually owned condos are in Multifamily, and it's confusing for customers and trade allies.

Marshall: We talked about kits earlier, and the utilities classify them differently than we do. Our RFP was only for single-family homes, and we chose to move everything from duplexes on up to Multifamily. On January 1, that became a challenge. There were some customers sorted by ownership type. As Fluid started processing individual condo projects, they disqualified those customers. We had to work to uncover the customers who were disqualified, and help them. Multifamily was designed to reach out to property management companies, not individual condo owners. We're working with the PMCs to help, and are honoring existing incentives for now.

Scott: You're requiring them to use a Multifamily application and asking them to send in a 1099 like a business owner. Unless the whole building is done, they wouldn't qualify for anything.

Marshall: For weatherization, we treat the whole building, but windows can be replaced in an individual unit. It depends on ownership type and having the right measures.

Kim: This topic shows up on the transition slide. The challenges come up in the transitions, and they are trying to dial it in right now. Scott, do you know who to interact with on this?

Scott: I think the transition of condos from single-family has taken many of us by surprise. We're still not sure how to route customers.
Marshall: We will bring an update to the next trade ally stakeholder group.
Kim: I'll find out who you should talk to.

4. Public comment and meeting adjournment

Kim: For July, we have a rich agenda. We have 2014 budget concepts, which are our preliminary ideas before we budget. It's like drinking from a fire hose and there isn't much room to dig in on details, but we hoped these in-depth sector trends presentations we've done over the past three meetings would help prepare the group. Rather than giving you the basic programs in July, we will focus on what's changing. The other agenda item is work about setting our goals that has been done between Energy Trust's Management Team and the OPUC. How we set goals is an important topic for setting our budget. Going forward, I would like to have a few minutes at the end of the meetings to let you ask about other topics we should be discussing at the Conservation Advisory Council.

Kim: We also didn't have time for public comments, today. Did anyone in the audience hope to make comments today?

There were no comments from the public.

Diane: I did want to mention that Taylor Bixby deserves a second mention, and recognition, because of his work on the residential data.

Kim thanked all council members for their participation and adjourned the meeting at 4:35 p.m.

Next Meeting

The next full council meeting is July 17.

Briefing Paper
Energy Trust Memberships

July 31, 2013

Introduction

At the May 22 board meeting, two residents of Salem, Jim Scheppke and Evan White, expressed concern regarding Energy Trust's premium membership with the Salem Chamber of Commerce. They reported that this membership level offered the benefit of engagement in political action, and that the Salem Chamber is highly political. The board offered to review this membership and other memberships in light of this concern. This briefing document first offers a summary of Energy Trust's approach to memberships and the benefits they provide. It then offers information on Energy Trust's membership with the Salem Chamber of Commerce and how we manage relationships with member organizations to access benefits and prevent engagement in political activities.

Membership Overview

Memberships occur when Energy Trust pays a fee to become a member of an organization and receives specific benefits. Memberships are typically offered at standard levels, with associated benefits, based on criteria established by the member organization. Memberships are similar to sponsorships, but sponsorships offer more flexibility, often with custom benefits that can be negotiated with the sponsoring entity. This document focuses on memberships.

Energy Trust, or individual employees of Energy Trust, may be members of organizations to (1) assist with outreach to customers, (2) gain industry-specific education or information to assist with the design of programs or to gain professional training, knowledge or expertise, or to (3) maintain required licensing. Energy Trust classifies the first group of memberships as outreach memberships and the remainder as professional memberships. This report primarily addresses the outreach memberships that Energy Trust possesses, but also offers information on professional memberships.

Approach to Outreach Memberships

Energy Trust outreach memberships are a channel for promotion of Energy Trust programs and services to potential customers. OPUC rules permit the use of ratepayer funds for promotional activities, if prudent.

Outreach memberships are recommended through program management contractors, outreach representatives or marketing staff. Each membership is evaluated to make sure Energy Trust gets value as a networking and promotional channel. Some membership organizations offer a discount on advertising to their members. Energy Trust may become a member of an organization for the sole purpose of discounted advertising. In other cases, Energy Trust becomes a member for presentation or tabling opportunities at member organization functions. Energy Trust is a member of fewer organizations today than in the past, but memberships continue to be a good way to reach business decision-makers and potential participants.

Membership Levels and Benefits

Membership levels are typically determined by the size of the company (sliding scale membership fees), type of organization (reductions for nonprofit and other organizations), or by the type of benefits received. Membership levels are determined on a case-by-case basis. Selecting a membership level is based on how Energy Trust fits into the criteria established by the organization and an assessment of the cost and visibility the membership level will provide to promote Energy Trust services through advertising, presentations or events.

Typical benefits of memberships:

- Receive regular information on upcoming community and networking events
- Advertising opportunities to share information about Energy Trust events, offerings, trainings
- Opportunity for Energy Trust representatives to speak at the organization's events or regular meetings to promote Energy Trust services
- Inclusion in, and access to, membership directories
- Access to organization staff to help find people, facilities and services in the communities Energy Trust serves

Active Outreach Memberships*

Organization	Organization's Mission/Purpose	Primary Benefit of Membership for Energy Trust	Dollar Amount/Level
Albany Area Chamber of Commerce	Business and community advocate	Advertising and Customer Engagement	$60, Silver (lowest level)
Ashland Chamber of Commerce	Helping the business community prosper	Advertising and Customer Engagement	$141, Nonprofit
Association of Professional Energy Managers	Seeks to advance the understanding and practice of efficient energy use through forums, newsletter, facility tours, and face-to-face dialogue	Customer Engagement	$125 / year + $25 / forum (4x per year), Professional
Baker County Chamber of Commerce	Improve the local business climate and build a better community	Customer Engagement	$85, Nonprofit
Beaverton Area Chamber of Commerce	Focused on creating a strong local economy	Advertising and Customer Engagement	$250, Bronze (lowest level)
Bend Chamber of Commerce	To enhance the vitality of Bend	Advertising and Customer Engagement	$266, Standard
Building Owners and Managers of Oregon	Promote commercial real estate through leadership, networking, advocacy and professional development opportunities	Advertising and Customer Engagement	$2,000, Associate
Building Industry Association of Clark County	Region's leading building industry and small business advocate	Customer Engagement	$550, Standard

Organization	Organization's Mission/Purpose	Primary Benefit of Membership for Energy Trust	Dollar Amount/Level
Camas-Washougal Chamber of Commerce	Successful growth of the local economy	Advertising and Customer Engagement	$458, Nonprofit
Central Oregon Environmental Center	Community center for environmental education and action	Customer Engagement	$150, Nonprofit
Chehalem Valley Chamber of Commerce	Build strong local economy	Advertising and Customer Engagement	$299, Standard
Eugene Area Chamber of Commerce	Promote a healthy local economy by influencing business success, public policy and community development	Advertising and Customer Engagement	$517, Standard
Greater Hillsboro Area Chamber of Commerce	Promote business prosperity and a healthy, diverse community in greater Hillsboro	Advertising and Customer Engagement	$215, Nonprofit
Greater Vancouver Chamber of Commerce	Member services, advocacy and community building	Advertising and Customer Engagement	$350, Nonprofit
Hermiston Chamber of Commerce	Create and promote an environment in which current and future businesses thrive	Customer Engagement	$100, Nonprofit
International Council of Shopping Centers	Help members develop their businesses through networking, education, research and information	Customer Engagement	$50, Public
International Living Future Institute (Cascadia Green Building Council)	To lead a transformation toward a built environment that is socially just, culturally rich and ecologically restorative	Customer Engagement	$100, Individual
LeadingAge Oregon	State association of not-for-profit, mission-directed organizations dedicated to providing quality housing, health, community and related services to the elderly and disabled	Customer Engagement	$375, Associate
League of Oregon Cities	Voice of Oregon's cities and their authoritative and best source of information and training	Advertising and Customer Engagement	$500, Associate
Metro Home Builders Association	Dedicated to maximizing housing choice for all who reside in the greater Portland area	Advertising, direct connection to builders and trade allies for recruitment, educational and marketing opportunities	$965, Membership as a part of a sponsorship

Organization	Organization's Mission/Purpose	Primary Benefit of Membership for Energy Trust	Dollar Amount/Level
Multifamily NW (formerly MMHA - Metro Multifamily Housing Association)	Represent residential property managers and vendors and committed to promoting a high degree of professionalism for rental housing providers	Customer Engagement	$270, Affiliate
Northwest Environmental Business Council	Representing the Northwest's leading service and technology providers working to protect, restore and sustain the natural and built environment	Customer Engagement and Conferences	$1,350, Standard
Northwest Hydroelectric Association	Promotion of region's waterpower as a clean, efficient energy while protecting the fisheries and environmental quality	Customer Engagement	$1,000, Standard
Oregon Affordable Housing Management Association	Promoting development and preservation of quality affordable multifamily housing	Advertising and Customer Engagement	$350, Associate
Oregon Air Conditioning Contractors of America	Assisting members to be licensed, quality contractors	Customer Engagement, access to research	$500, Associate
Oregon Association of Minority Entrepreneurs	Promote and develop entrepreneurship and economic development for ethnic minorities in Oregon	Advertising and Customer Engagement	$300, Nonprofit
Oregon Automobile Dealers Association	Represent and promote the retail automobile business in Oregon	Customer Engagement	$300, Associate
Oregon Health Care Association	Oregon's voice for long-term care & senior housing	Advertising and Customer Engagement	$350, Standard
Oregon Restaurant & Lodging Association	Devoted to protecting and promoting the interests of the hospitality industry	Advertising and Customer Engagement	$280, Associate
Pendleton Chamber of Commerce	Strives to preserve, enhance and expand commerce for the prosperity of it's members, the greater Pendleton area and its citizens	Advertising and Customer Engagement	$164, Nonprofit
Portland Business Alliance	Voice for Portland businesses, Portland Chamber	Customer Engagement	$510, Nonprofit
Redmond Chamber of Commerce	Dedicated to providing a multitude of opportunities for businesses to leverage	Advertising and Customer Engagement	$no cost, Standard
Rotary Club of Wallowa County	Rotary club for Wallowa County	Customer Engagement	$266, Standard

Organization	Organization's Mission/Purpose	Primary Benefit of Membership for Energy Trust	Dollar Amount/Level
Solar Electric Power Association	Educational nonprofit dedicated to helping utilities integrate solar power into their energy portfolios	Customer Engagement, access to research	$500, Affiliate
Southern Oregon Rental Owners Association	Promote the rental industry	Customer Engagement	$120, Associate

**Energy Trust is sometimes listed as a member of an organization although the membership period has lapsed. This list is of memberships that are current and actively managed by Energy Trust.*

Professional and Licensing Organization Memberships

American Institute of CPA's
American Biogas Council
American Marketing Association
Association of Professional Energy Managers
ARMA International Inc.
Association of Energy Engineers
Consortium for Energy Efficiency
Clean Energy States Alliance
Clean Energy States Alliance - Interstate Turbine Advisory Council
Data Administration Management Association
Distributed Wind Energy Association
Green Grid
Hermiston Plan Center
Home Performance Contractors Guild
Illuminating Engineering Society of North America
National Council on Qualifications for the Lighting Professions
NW Energy Coalition
Oregon Energy Coordinators Association
Oregon Society of CPAs
Oregon Solar Energy Industries Association
Oregon State Bar
Portland Human Resource Management
Society of Human Resource Managers
Toastmasters International
U.S. Green Building Council

Existing Guidelines

Energy Trust maintains sponsorship guidelines to help Energy Trust staff and contractors determine if a sponsorship is a good fit for Energy Trust and good use of ratepayer dollars. Sponsorship guidelines also apply to memberships. The guidelines clarify that the sponsorship/membership must directly result in savings or generation, or support savings and generation goals. The guidelines also provide information on how to value the benefit of the sponsorship or membership. The current guidelines do address restrictions, including fundraisers and engagement in sponsorships/memberships that would be, or would be perceived to be, a misuse of ratepayer funds, in conflict with our mission, have a fuel bias, or be partisan in nature.

Salem Chamber of Commerce

Energy Trust reviewed its current membership with the Salem Chamber of Commerce in light of the concern raised at the May board meeting. Energy Trust was a 2012-2013 member of the Salem Chamber for the benefit of advertising in Chamber publications. The premium membership level was specifically selected because it offered a discounted advertising

package. Program staff was not aware that this benefit level offered engagement in political action, and did not enter this membership for that purpose.

Subsequent to the May board meeting, Energy Trust contacted the Salem Chamber of Commerce about the premium membership level and its benefits. Chamber staff stated it did not intend for the premium membership level to offer a political benefit. They updated the membership benefit language on their website and the premium membership no longer states that it provides that benefit.

Energy Trust's membership with the Salem Chamber expired on June 30, 2013. Energy Trust did not renew the membership for the period of July 1, 2013 – June 30, 2014 to allow time for this report to be completed, and to allow for further review of the Chamber and the benefits provided its members. The Salem Chamber has been an effective advertising channel to business customers in the area. Energy Trust will seek alternative channels to reach these customers at this time, but will plan to reconsider the Salem Chamber as a communication channel in the future, allowing access to their members through advertising and membership directories.

Other nonprofit organizations and utilities are members of the Salem Chamber and access its communication/advertising benefits. Some of those organizations include: Portland General Electric, NW Natural, March of Dimes, Habitat for Humanity, Community Action, The Salvation Army, Marion-Polk Food Share, Oregon Housing & Associated Services, Inc., and the American Red Cross.

Political Activities of Membership Organizations

In light of the concern raised at the board meeting, Energy Trust conducted a review of the websites of organizations in which Energy Trust maintains a membership, examining mission statements and benefits offered. In regards to the political engagement of these organizations, the following observations were made:

- Some membership organizations have political action committees
- Some membership organizations endorse candidates and take political positions
- Some membership organizations cover topics at meetings relating to elections or legislation or policy issues, or provide legislative updates
- Some membership organizations employ lobbyists or have committees dedicated to lobbying

Management of Risk

Energy Trust does not enter into memberships to participate in political activities. Outreach memberships offer low-cost access to customers and advertising channels. Professional memberships provide opportunities for professional development and, in some cases, are required for professional licensing of Energy Trust's legal and financial staff.

Specific actions are taken to prevent engagement in political activities of membership organizations, and also to manage the risk of perceived association with the political aspects of member organizations, so that Energy Trust can continue to receive the benefits provided. The following steps are taken to manage risk:

- Energy Trust does not contribute to the political action committee when paying the membership fee
- Energy Trust does not participate in forums or activities held by the organization that are political in nature
- Energy Trust does not purchase membership levels to gain access to political actions or activities
- Existing sponsorship guidelines are applied when making membership decisions to ensure that memberships that are entered into do not provide Energy Trust with political benefits, or association with an organization's political activities.

Staff Recommendation

It is Energy Trust's goal to utilize memberships as a path to reach customers at least cost, and to support staff as appropriate and provide opportunities for staff development. Sponsorship and membership guidelines are an effective means for ensuring that memberships are aligned with our objectives, and for managing risk. As next steps:

1) Additional training will be provided on existing guidelines to all Energy Trust staff and contractors making these determinations
2) New language will be added to the existing sponsorship guidelines, in addition to the specific restrictions that already exist, to make restrictions more explicit on the topic of political support:
   New language under Restrictions:
   - Participation at a member level that offers specific benefit through political action, or political activities
   - Direct funds from Energy Trust in support of a member organization's political action committee
3) Guidelines will include a new process step requiring that membership organizations are reassessed on an annual basis to see if the mission of the organization or its areas of focus have changed substantially
4) A common database of all Energy Trust memberships will be maintained to support ease of review and visibility across the organization

Glossary of Energy Industry Terms

Glossary provided to the Energy Trust Board of Directors for general use. Definitions and acronyms are compiled from a variety of resources. Energy Trust policies on topics related to any definitions listed below should be referenced for the most up-to-date and comprehensive information. Last updated June 2013.

Above-Market Costs of New Renewable Energy Resources
The portion of the net present value cost of producing power (including fixed and operating costs, delivery, overhead and profit) from a new renewable energy resource that exceeds the market value of an equivalent quantity and distribution (across peak and off-peak periods and seasonally) of power from a nondifferentiated source, with the same term of contract. Energy Trust board policy specified the methodology for calculating above-market costs.

Aggregate
Combining retail electricity consumers into a buying group for the purchase of electricity and related services. “Aggregator” is an entity that aggregates.

Air Sealing (Infiltration Control)
Conservation measures, such as caulking, better windows and weatherstripping, which reduce the amount of cold air entering or warm air escaping from a building.

Ampere (Amp)
The unit of measure that tells how much electricity flows through a conductor. It is like using cubic feet per second to measure the flow of water. For example, a 1,200 watt, 120-volt hair dryer pulls 10 amperes of electric current (watts divided by volts).

Anaerobic Digestion
A biochemical process by which organic matter is decomposed by bacteria in the absence of oxygen, producing methane and other byproducts.

Average Megawatt (aMW)
One megawatt of capacity produced continuously over a period of one year. 1 aMW equals 1 megawatt multiplied by the 8,760 hours in a year. 1 aMW equals 8,760 MWh or 8,760,000 kWh.

Avoided Cost
(Regulatory) The amount of money that an electric utility would need to spend for the next increment of electric generation they would need to either produce or purchase if not for the reduction in demand due to energy-efficiency savings or the energy that a co-generator or small-power producer provides. Federal law establishes broad guidelines for determining how much a qualifying facility (QF) gets paid for power sold to the utility.

Base Load
The minimum amount of electric power delivered or required over a given period of time at a steady rate.

Benefit/Cost Ratios
By law, Oregon public purpose funds may be invested only in cost-effective energy-efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources, unless exempted by the OPUC.

Energy Trust calculates Benefit/Cost ratios (BCR) on a prospective and retrospective basis. Looking forward, all prescriptive measures and custom projects must have a total resource cost test BCR > 1.0 unless the OPUC has approved an exception. As required in the OPUC grant agreement, Energy Trust reports annually how cost effective programs were by comparing total costs to benefits, which also need to exceed 1.0.

Biomass
Solid organic wastes from wood, forest or field residues which can be heated to produce energy to power an electric generator.

Biomass Gas
A medium Btu gas containing methane and carbon dioxide, resulting from the action of microorganisms on organic materials such as a landfill.

Blower Door
Home Performance test conducted by a contractor (or energy auditor) to evaluate a home's air tightness. During this test a powerful fan mounts into the frame of an exterior door and pulls air out of the house to lower the inside air pressure. While the fan operates, the contractor can determine the house's air infiltration rate and better identify specific leaks around the house.

British Thermal Unit
The standard measure of heat energy. The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

Cogeneration (Combined Heat & Power or CHP)
The sequential production of electricity and useful thermal energy, often by the recovery of reject heat from an electric generating plant for use in industrial processes, space or water heating applications. Conversely, may occur by using reject heat from industrial processes to power an electricity generator.

Compact Fluorescent Light Bulbs (CFL)
CFLs combine the efficiency of fluorescent lighting with the convenience of a standard incandescent bulb. There are many styles of compact fluorescent, including exit light fixtures and floodlights (lamps containing reflectors). Many screw into a standard light socket, and most produce a similar color of light as a standard incandescent bulb.

CFLs come with ballasts that are electronic (lightweight, instant, no-flicker starting, and 10–15 percent more efficient) or magnetic (much heavier and slower starting).Other types of CFLs include adaptive circulation and PL and SL lamps and ballasts. CFLs are designed for residential uses; they are also used in table lamps, wall sconces, and hall and ceiling fixtures of hotels, motels, hospitals and other types of commercial buildings with residential-type applications.

Conservation
While not specifically defined in the law or OPUC rules on direct access regulation, "conservation" is defined in the OPUC rule 860-027-0310(1)(a) as follows: Conservation means any reduction in electric power or natural gas consumption as the result of increases in efficiency of energy use, production or distribution. Conservation also includes cost-effective fuel switching.

Although fuel switching is part of the definition, this aspect of the rule has not been operationalized as of March 2013.

Cost Effective
Not specifically defined in SB 1149. The OPUC has a definition which refers to a definition from ORS 469.631 (4) stating that an energy resource, facility or conservation measure during its life cycle results in delivered power costs to the ultimate consumer no greater than the comparable incremental cost of the least-cost alternative new energy resource, facility or conservation measure. Cost comparison under this definition shall include but not be limited to: (a) cost escalations and future availability of fuels; (b) waste disposal and decommissioning cost; (c) transmission and distribution costs; (d) geographic, climatic and other differences in the state; and (e) environmental impact. ORS 757.612 (4) (SB 1149) exempts utilities from the requirements of ORS 469.631 to 469.645 when the public purpose charge is implemented.

By law, Oregon public purpose funds may be invested only in cost-effective energy-efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources, unless exempted by the OPUC.

Cumulative Savings
Sum of the total annual energy savings over a certain time frame while accounting for measure savings "lives." (For example, if a measure is installed for each of two years, the cumulative savings would be the sum of the measure installed in the first year, plus the incremental savings from the savings installed in the second year plus the savings in the second year from the measure installed in the first year.)

Decoupling
A rate provision which reduces or eliminates the degree to which utility profits are driven by the volume of electricity or gas sold. Decoupling is thought by its proponents to reduce utility disincentives to support efficiency. There are many specific variants employed in different states and with different utilities.

Direct Access
The ability of a retail electricity consumer to purchase electricity and certain ancillary services from an entity other than the distribution utility.

Economizer Air
A ducting arrangement and automatic control system that allows a heating, ventilation and air conditioning (HVAC) system to supply up to 100 percent outside air to satisfy cooling demands, even if additional mechanical cooling is required.

Energy Management System (EMS)
A system designed to monitor and control building equipment. An EMS can often be used to monitor energy use in a facility, track the performance of various building systems and control the operations of equipment.

ENERGY STAR®
ENERGY STAR is a joint Environmental Protection Agency and Department of Energy program that encourages energy conservation by improving the energy efficiency of a wide range of consumer and commercial products, enhancing energy efficiency in buildings and promoting energy management planning for businesses and other organizations.

Energy Use Intensity (EUI)
A metric that describes a building's energy use relative to its size. It is the total annual energy consumption (kBtu) divided by the total floor space of the building. EUI varies significantly by building type and by the efficiency of the building.

Enthalpy
Enthalpy is the useful energy or total heat content of a fluid. Ideally, the total enthalpy of a substance is the amount of useful work that substance can do. Enthalpy is used in fluid dynamics and thermodynamics when calculating properties of fluids as they change temperature, pressure and phase (e.g. liquid to liquid-vapor mixture). In HVAC, refrigeration and power cycle processes, enthalpy is used extensively in calculating properties of the refrigerant or working fluid. Additionally, in HVAC applications, enthalpy is used in calculations relating to humidity. An enthalpy economizer is a piece of HVAC equipment that modulates the amount of outdoor air entering into a ventilation system based on outdoor temperature and humidity.

Environmental Protection Agency (EPA)
Founded in 1970, this independent agency was designed to "protect human health and safeguard the natural environment." It regulates a variety of different types of emissions, including the greenhouse gases emitted in energy use. It runs several national end-use programs, like ENERGY STAR, SmartWay, Smart Growth programs and green communities programs.

Evaluation
After-the-fact analysis of the effectiveness and results of programs. *Process and Market Evaluations* study the markets to be addressed and the effectiveness of the program strategy, design and implementation. They are used primarily to improve programs. *Impact evaluations* use post-installation data to improve estimates of energy savings and renewable energy generated.

Feed-in Tariff
A renewable energy policy that typically offers a guarantee of payments to project owners for the total amount of renewable electricity they produce; access to the grid; and stable, long-term contracts.

Footcandle
A unit of illuminance on a surface that is one foot from a uniform point source of light of one candle and is equal to one lumen per square foot

Free Rider
This evaluation term describes energy efficiency program participants who would have taken the recommended actions on their own, even if the program did not exist. Process evaluations include participant survey questions, which lead to the quantification of the level of free rider impacts on programs that is applied as a discounting factor to Energy Trust reported results.

Geothermal
Useful energy derived from the natural heat of the earth as manifested by hot rocks, hot water, hot brines or steam.

Green Tags (Renewable Energy Credits or RECs)
A Green Tag is a tradable commodity that represents the contractual rights to claim the environmental attributes of a certain quantity of renewable electricity. For wind farms, the environmental attributes include the reductions in emissions of pollutants and greenhouse gases that result from the delivery of the wind-generated electricity to the grid.

Here's how emission reductions occur: When wind farms generate electricity, the grid operators allow that electricity to flow into the grid because it is less expensive to operate, once it has been built, than generators that burn fossil fuels. But the electricity grid cannot have more electricity flowing into it than is flowing out to electricity users, so the grid operators have to turn down other generators to compensate. They generally turn down those that burn fossil fuels. By forcing the fossil fuel generators to generate less electricity, wind farms cause them to generate fewer emissions of pollutants and greenhouse gases. These reductions in emissions are the primary component of Green Tags.

Green Tags were developed as a separate commodity by the energy industry to boost construction of new wind, solar, landfill gas and other renewable energy power plants. Green Tags allow owners of these power plants to receive the full value of the environmental benefits their plants generate. They also allow consumers to create the same environmental benefits as buying green electricity, or to neutralize the pollution from their consumption of fossil fuels.

Green Tags are bought and sold every day in the electricity market. Tens of millions of dollars in Green Tags are under contract today. They are measured in units, like electricity. Each kilowatt hour of electricity that a wind farm produces also creates a one-kilowatt hour Green Tag. Wind farm owners may sell Green Tags to other purchasers, remote or local, to obtain the extra revenues they need for their wind farms to be economically viable.

Gross Savings
Savings that are unadjusted for evaluation factors of free riders, spillover, and savings realization rates. Energy Trust reports all savings in net terms, not gross terms, unless otherwise stated in the publication.

Heat Pump
An HVAC system that works as a two-way air conditioner, moving heat outside in the summer and scavenging heat from the cold outdoors with an electrical system in the winter. Most use forced warm-air delivery systems to move heated air throughout the house.

Heating, Ventilation and Air Conditioning (HVAC)
The mechanical systems that provide thermal comfort and air quality in an indoor space are often grouped together because they are generally interconnected. HVAC systems include: central air conditioners, heat pumps, furnaces, boilers, rooftop units, chillers and packaged systems.

Hydroelectric Power (Hydropower)
The generation of electricity using falling water to turn turbo-electric generators.

Incremental Annual Savings
Energy savings in one year corresponding to the energy-efficiency measures implemented in that same year.

Incremental Cost
The difference in cost relative to a base case, including equipment and labor cost.

Instant-savings Measure (ISM)
Inexpensive energy-efficiency products installed at no charge, such as CFLs, low-flow showerheads and high-performance faucet aerators. Predominately used by the Existing Homes program and multifamily track to provide homeowners and renters with easy-to-install, energy-saving products.

Integrated Resources Planning (Least-Cost Planning)
A power-planning strategy that takes into account all available and reliable resources to meet current and future loads. This strategy is employed by each of the utilities served by Energy Trust, and for the region's electric system by the Northwest Power and Conservation Council. The term "least-cost" refers to all costs, including capital, labor, fuel, maintenance, decommissioning, known environmental impacts and difficult to quantify ramifications of selecting one resource over another.

Interconnection
For all distributed generation—solar, wind, CHP, fuel cells, etc.—interconnection with the local electric grid provides back-up power and an opportunity to participate in net-metering and sell-back schemes when they are available. It's important to most distributed generation projects to be interconnected with the grid, but adding small generators at spots along an electric grid can produce a number of safety concerns and other operational issues for a utility. Utilities, then, generally work with their state-level regulatory bodies to develop interconnection standards that clearly delineate the manner in which distributed generation systems may be interconnected.

Joule
A unit of work or energy equal to the amount of work done when the point of application of force of 1 newton is displaced 1 meter in the direction of the force. It takes 1,055 joules to equal a British thermal unit. It takes about 1 million joules to make a pot of coffee.

Kilowatt
One thousand (1,000) watts. A unit of measure of the amount of electricity needed to operate given equipment.

Large Customers (with reference to SB 838)
Customers using more than 1 aMW of electricity a year are not required to pay electric conservation charges under SB 838. Additionally, Energy Trust may not provide them with services funded under SB 838 provisions.

Least Cost
The term "least-cost" refers to all costs, including capital, labor, fuel, maintenance, decommissioning, known environmental impacts and difficult to quantify ramifications of selecting one resource over another.

Levelized Cost
The level of payment necessary each year to recover the total investment and interest payments (at a specified interest rate) over the life of the measure.

Local Energy Conservation
Conservation measures, projects or programs that are installed or implemented within the service territory of an electric company.

Low-income Weatherization
Repairs, weatherization and installation of energy-efficient appliances and fixtures for low-income residences for the purpose of enhancing energy efficiency. In Oregon, SB 1149 directs a portion of public purpose funds to Oregon Housing and Community Services to serve low-income customers. Energy Trust coordinates with low-income agencies and refers eligible customers.

Lumen
A measure of the amount of light available from a light source equivalent to the light emitted by one candle.

Lumens/Watt
A measure of the efficacy of a light fixture; the number of lumens output per watt of power consumed.

Market Transformation
Lasting structural or behavioral change in the marketplace and/or changes to energy codes and equipment standards that increases the adoption of energy-efficient technologies and practices. Market transformation is defined in the Oregon Administrative Rules.

Megawatt
The electrical unit of power that equals one million watts (1,000 kW).

Megawatt Hour
One-thousand kilowatt hours, or an amount of electrical energy that would supply 1,370 typical homes in the Western U.S. for one month. (This is a rounding up to 8,760 kWh/year per home based on an average of 8,549 kWh used per household per year [U.S. DOE EIA, 1997 annual per capita electricity consumption figures]).

Methane
A light hydrocarbon that is the main component of natural gas and marsh gas. It is the product of the anaerobic decomposition of organic matter, enteric fermentation in animals and is one of the greenhouse gases.

Monitoring, Targeting and Reporting (MT&R)
A systematic approach to measure and track energy consumption data by establishing a baseline in order to establish reduction targets, identify opportunities for energy savings and report results.

Municipal Solid Waste
Refuse offering the potential for energy recovery. Technically, residential, institutional and commercial discards. Does not include combustible wood by-products included in the term “mill residue.”

Net Metering
An electricity policy for consumers who own (generally small) renewable energy facilities (such as wind, solar power or home fuel cells). "Net," in this context, is used in the sense of meaning "what remains after deductions." In this case, the deduction of any energy outflows from metered energy inflows. Under net metering, a system owner receives retail credit for at least a portion of the electricity they generate.

Net-to-Gross
Net-to-gross ratios are important in determining the actual energy savings attributable to a particular program, as distinct from energy efficiency occurring naturally (in the absence of a program). The net-to-gross ratio equals the net program load impact divided by the gross program load impact. This factor is applied to gross program savings to determine the program's net impact.

Net Savings
Savings that are adjusted for evaluation factors of free riders, spillover and savings realization rates. Energy Trust reports all savings in net terms, not gross terms, unless otherwise stated in the publication.

Nondifferentiated Source (Undifferentiated Source)
Power available from the wholesale market or delivered to retail customers.

Non-energy Benefit (NEB)
The additional benefits created by an energy-efficiency or renewable energy project beyond the energy savings or production of the project. Non-energy benefits often include things like water and sewer savings (e.g. clothes washers, dishwashers), improved comfort (e.g. air sealing, windows), sound deadening (e.g. insulation, windows), property value increase (e.g. windows, solar electric), improved health and productivity and enhanced brand.

Path to Net Zero Pilot (PTNZ)
The Path to Net Zero pilot was launched in 2009 by Energy Trust's New Buildings program to provide increased design, technical assistance, construction, and measurement and reporting incentives to commercial building projects that aimed to achieve exceptional energy performance. Approximately 13 buildings worked with New Buildings to develop strategies to save 60 percent more energy than Oregon's already stringent code through a combination of 50 percent energy efficiency and 10 percent renewable power. The pilot demonstrates that a wide range of buildings can achieve aggressive energy goals using currently available construction methods and technology, as well as by testing innovative design strategies.

Photovoltaic
Direct conversion of sunlight to electric energy through the effects of solar radiation on semi-conductor materials. Photovoltaic systems are one type of solar system eligible for Energy Trust incentives.

Public Utility Commissions
State agencies that regulate, among others, investor-owned utilities operating in the state with a protected monopoly to supply power in assigned service territories.

Public Utility Regulatory Act of 1978 (PURPA)
Federal legislation that requires utilities to purchase electricity from qualified independent power producers at a price that reflects what the utilities would have to pay for the construction of new generating resources. The Act was designed to encourage the development of small-scale cogeneration and renewable resources.

Qualifying Facility (QF)
A power production facility that generates its own power using cogeneration, biomass waste, geothermal energy, or renewable resources, such as solar and wind. Under PURPA, a utility is required to purchase power from a QF at a price equal to that which the utility would otherwise pay to another source, or equivalent to the cost if it were to build its own power plant.

Renewable Energy Resources
a) Electricity-generation facilities fueled by wind, waste, solar or geothermal power or by low-emission nontoxic biomass based on solid organic fuels from wood, forest and field residues
b) Dedicated energy crops available on a renewable basis
c) Landfill gas and digester gas
d) Hydroelectric facilities located outside protected areas as defined by federal law in effect on July 23, 1999

Renewable Portfolio Standard
A legislative requirement for utilities to meet specified percentages of their electric load with renewable resources by specified dates, or a similar requirement. May be referred to as Renewable Energy Standard.

Retrofit
A retrofit involves the installation of new, usually more efficient equipment into an existing building or process prior to the existing equipment's failure or end of its economic life. In buildings, retrofits may involve either structural enhancements to increase strength, or replacing major equipment central to the building's functions, such as HVAC or water heating systems. In industrial applications, retrofits involve the replacement of functioning equipment with new equipment.

Roof-top Units (RTU)
Packaged heating, ventilating and air conditioning unit that generally provides air conditioning and ventilating services for zones in low-rise buildings. Roof-top units often include a heating section, either resistance electric, heat pump or non-condensing gas (the latter are called “gas-paks”). Roof-top units are the most prevalent comfort conditioning systems for smaller commercial buildings. Generally small (<10 ton) commodity products, but very sophisticated high-efficiency versions are available, as are units larger than 50 tons.

R-Value
A unit of thermal resistance used for comparing insulating values of different material. It is basically a measure of the effectiveness of insulation in stopping heat flow. The higher the R-Value number, a material, the greater its insulating properties and the slower the heat flow through it. The specific value needed to insulate a home depends on climate, type of heating system and other factors.

SB 1149
The Oregon legislation enacted in 1999 allowing for the creation of a third party, nonprofit organization to receive approximately 74 percent of a 3 percent utility surcharge (public purpose charge) and deliver energy-efficiency and renewable energy programs to the funding Oregon ratepayers of Portland General Electric and Pacific Power. Energy Trust was approved by the OPUC to deliver the services. The rest of the surcharge is distributed to school districts and Oregon Housing and Community Services.

SB 838
SB 838, enacted in 2007, augmented Energy Trust's mission in many ways. Most prominently, it provided a vehicle for additional electric efficiency funding for customers under 1 aMW in load, and restructured the renewable energy role to focus on generation plants that produce less than 20 aMW. SB 838 is also the legislation creating the state's Renewable Portfolio Standard and extended Energy Trust's sunset year from 2012 to 2026.

SBW Consulting, Inc
A consulting firm based in Bellevue, WA, with expertise in facility energy assessments, utility conservation programs and program evaluations.

Sectors
For energy planning purposes, the economy is divided into four sectors: residential, commercial, industrial and irrigation.

Self-Directing Consumers
A retail electricity consumer that has used more than one average megawatt of electricity at any one site in the prior calendar year or an aluminum plant that averages more than 100 average megawatts of electricity use in the prior calendar year, that has received final certification from the Oregon Department of Energy for expenditures for new energy conservation or new renewable energy resources and that has notified the electric company that it will pay the public purpose charge, net of credits, directly to the electric company in accordance with the terms of the electric company's tariff regarding public purpose credits.

Societal Cost
Similar to the total resource cost as including the full cost to install a measure including equipment, labor and Energy Trust cost to administer and deliver the program, societal cost also includes any costs beyond those realized by the participant and Energy Trust associated with the energy-saving project. Typically additional societal benefits are seen with energy-efficiency projects that can be difficult to quantify and include in the Societal Cost Test for cost effectiveness.

Solar Power
Using energy from the sun to make electricity through the use of photovoltaic cells.

Solar Thermal
The process of concentrating sunlight on a relatively small area to create the high temperatures needed to vaporize water or other fluids to drive a turbine for generation of electric power.

Spillover
Additional measures that were implemented by the program participant for which the participant did not receive an incentive. They undertook the project on their own, influenced by prior program participation.

Therm
One hundred thousand (100,000) British thermal units (1 therm = 100,000 Btu).

Total Resource Cost
The OPUC has used the “total resource cost” (TRC) test as the primary basis for determining conservation cost-effectiveness as determined in Order No. 94-590 (docket UM 551). SB 1149 allows the “self-directing consumers” to use a simple payback of one to 10 years as the cost-effectiveness criterion.

Tidal Energy
Energy captured from tidal movements of water.

U-Value (U-Factor)
A measure of how well heat is transferred by the entire window—the frame, sash and glass—either into or out of the building. U-Value is the opposite of R-Value. The lower the U-Value number, the better the window will keep heat inside a home on a cold day.

Wave Energy
Energy captured by the cyclical movement of waves in the ocean or large bodies of water.

Watt
A unit of measure of electric power at a point in time, as capacity or demand. One watt of power maintained over time is equal to one joule per second.

Wind Power
Harnessing the energy stored in wind via turbines, which then convert the energy into electricity. Mechanical power of wind can also be used directly.

Weatherization
The activity of making a building (generally a residential structure) more energy efficient by reducing air infiltration, improving insulation and taking other actions to reduce the energy consumption required to heat or cool the building. In practice, “weatherization programs” may also include other measures to reduce energy used for water heating, lighting and other end uses.

Energy Industry Acronyms

AAMA	American Architectural Manufacturers Association	Trade group for window, door manufacturers
A/C	Air Conditioning	
ACEEE	American Council for an Energy-Efficient Economy	Environmental Advocacy, Researcher
AEE	Association of Energy Engineers	
AEO	Annual Energy Outlook	
AESP	Association of Energy Services Professionals	Energy services and energy efficiency trade org
A+E	Architecture + Energy	Outreach program for architects
AFUE	Annual Fuel Utilization Efficiency	The measure of seasonal or annual efficiency of a furnace or boiler
AgriMet	Agricultural Meteorology	Program for soil moisture data
AIA	American Institute of Architects	Trade organization
AIC	Association of Idaho Cities	Local government organization
aMW	Average Megawatt	A way to equally distribute annual energy over all the hours in one year; there are 8,760 hours in a year
AOI	Associated Oregon Industries	
APEM	Association of Professional Energy Managers	
ARI	Air-Conditioning and Refrigeration Institute	AC trade association
ASE	Alliance to Save Energy	Environmental advocacy organization
ASERTTI	Assocation of State Energy Research and Technology Transfer Institutions, Inc.	
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers	Technical (engineers) association
ASME	American Society of Mechanical Engineers	Professional organization
ASiMi	Advanced Silicon Materials LLC	Manufacturer of polysilicon with plants in Moses Lake and Butte Mountain
AWC	Association of Washington Cities	Local government trade organization
BACT	Best Achievable Control Technology	
BCR	Benefit/Cost ratio	See definition in text
BEF	Bonneville Environmental Foundation	Nonprofit that funds renewable energy projects
BETC	Business Energy Tax Credit	Oregon tax credit
BOC	Building Operator Certification	Alliance funded project that trains and certifies building operators
BOMA	Building Owners and Managers Association	
BPA	Bonneville Power Administration	Federal power authority
C&RD	Conservation & Renewable Discount	BPA program
CAC	Conservation Advisory Council	
CARES	Conservation and Renewable Energy System	Defunct consortium of Pacific Northwest PUDs
CCS	Communications and Customer Service	A group within Energy Trust
CCCT	Combined Cycle Combustion Turbine	

CEE	Consortium for Energy Efficiency	National energy efficiency group
CEWO	Clean Energy Works Oregon	
CFL	Compact Fluorescent Light bulb	
CHP	Combined Heat and Power	
CNG	Cascade Natural Gas	Investor-owned utility
ConAug	Conservation Augmentation Program	BPA program
CHT	Coefficient of Heat Transmission (U-Value)	A value that describes the ability of a material to conduct heat. The number of Btu that flow through 1 square foot of material, in one hour. It is the reciprocal of the R-Value (U-Value = 1/R-Value.
COU	Consumer-Owned Utility	
COP	Coefficient of Performance	The Coefficient of Performance is the ratio of heat output to electrical energy input for a heat pump
CT	Combustion Turbine	
CUB	Citizens' Utility Board of Oregon	Public interest group
Cx	Commissioning	
DG	Distributed Generation	
DSI	Direct Service Industries	Direct Access customers to BPA
DOE	Department of Energy	Federal agency
DSM	Demand Side Management	
EA	Environmental Assessment	
EASA	Electrical Apparatus Service Association	Trade association
ECM	Electrically Commutation Motor	An Electrically Commutation Motor, also known as a variable-speed blower motor, can vary the blower speed in accordance with the needs of the system
EE	Energy Efficiency	
EER	Energy Efficiency Ratio	The cooling capacity of the unit (in Btu/hour) divided by its electrical input (in watts) at standard peak rating conditions
EF	Energy Factor	An efficiency ratio of the energy supplied in heated water divided by the energy input to the water heater
EIA	Energy Information Administration	
EIC	Energy Ideas Clearinghouse	Washington State University program that provides energy-efficiency information, Alliance funded project
EMS	Energy Management System	See definition in text
EPA	Environmental Protection Agency	Federal agency
EPRI	Electric Power Resource Institute	Utility organization

EPS	Energy Performance Score	Brand name used by Energy Trust for the rating that assesses a newly built or existing home's energy use, carbon impact and estimated monthly utility costs
EQIP	Environmental Quality Incentive Program	
EREN	Energy Efficiency and Renewable Energy Network	DOE program
ESS	Energy Services Supplier	
EUI	Energy Use Intensity	See definition in text
EWEB	Eugene Water & Electric Board	Utility organization
FCEC	Fair and Clean Energy Coalition	Environmental advocacy organization
FEMP	Federal Energy Management Program	
FERC	Federal Energy Regulatory Commission	Federal regulator
GHG	Greenhouse gas	
HER	Home Energy Review	A free visit to a customer's home by an Energy Trust energy advisor to assess efficiency and provide personalized recommendations for improvement
HSPF	Heating Season Performance Factor	
HVAC	Heating, Ventilation and Air Conditioning	
ICNU	Industrial Consumers of Northwest Utilities	Trade interest group
ICF	ICF International	Existing Buildings Program Management Contractor
ICL	Institute for Conservation Leadership	
IDWR	Idaho Department of Water Resources	State agency
IEEE	Institute of Electrical and Electronic Engineers	Professional association
IESNA	Illuminating Engineering Society of America	
IOU	Investor-Owned Utility	
IRP	Integrated Resource Plan	
ISIP	Integrated Solutions Implementation Project	
ISM	Instant-Savings Measure	See definition in text
kW	Kilowatt	
kWh	Kilowatt Hours	8,760,000 kWh = 1 aMW
LBL	Lawrence Berkeley Laboratory	
LED	Lighting Emitting Diode	Solid state lighting technology
LEED	Leadership in Energy & Environmental Design	Building rating system from the U.S. Green Building Council
LIHEAP	Low Income Housing Energy Assistance Program	
LIWA	Low Income Weatherization Assistance	
LOC	League of Oregon Cities	Local government organization
MEEA	Midwest Energy Efficiency Alliance	Midwest Market Transformation organization, Alliance counterpart
MLCT	Montana League of Cities and Towns	Local government organization

MLGEO	Montana Local Government Energy Office	Local government organization
MT&R	Monitoring, Targeting and Reporting	See definition in text
MW	Megawatt	Unit of electric power equal to one thousand kilowatts
MWh	Megawatt Hour	Unit of electric energy, which is equivalent to one megawatt of power used for one hour
NAHB	National Association of Home Builders	Trade association
NCBC	National Conference on Building Commissioning	
NEB	Non-Energy Benefit	See definition in text
NEEA	Northwest Energy Efficiency Alliance	
NEEC	Northwest Energy Efficiency Council	Trade organization
NEEI	Northwest Energy Education Institute	Training organization
NEEP	Northeast Energy Efficiency Partnership	Northwest market transformation organization, Alliance counterpart
NEMA	National Electrical Manufacturer's Association	Trade organization
NERC	North American Electricity Reliability Council	
NFRC	National Fenestration Rating Council	
NRC	National Regulatory Council	Federal regulator
NRCS	Natural Resources Conservation Service	
NRDC	Natural Resources Defense Council	
NREL	National Renewable Energy Lab	
NRTA	Northwest Regional Transmission Authority	
NWEC	Northwest Energy Coalition	Environmental advocacy organization
NWBOA	Northwest Building Operators Association	Trade organization
NWFPA	Northwest Food Processors Association	Trade organization
NWN	NW Natural	Investor-owned utility
NWPPA	Northwest Public Power Association	Trade organization
NWPCC	Northwest Power and Conservation Council	Regional energy planning organization, "the council"
NYSERDA	New York State Energy Research & Development Authority	New York public purpose organization
OBA	Oregon Business Association	Business lobby group
OEFSC	Oregon Energy Facility Siting Council	Authority to site energy facilities in Oregon
ODOE	Oregon Department of Energy	Oregon state energy agency
OPUC	Oregon Public Utility Commission	
OPUDA	Oregon Public Utility District Association	Utility trade organization
OPEC	Organization of Petroleum Exporting Countries	
ORECA	Oregon Rural Electric Cooperative Association	Utility trade organization
OSD	Office of Sustainable Development	
OSEIA	Solar Energy Industries Association of Oregon	Volunteer nonprofit organization dedicated to education/promotion
OTED	Office of Trade & Economic Development	Washington State agency
P&E	Planning and Evaluation	A group within Energy Trust
PDC	Program Delivery Contractor	Company contracted with Energy

		Trust to identify and deliver industrial and agricultural services to Energy Trust customers
PEA	Pacific Energy Associates	
PECI	Portland Energy Conservation, Inc.	Energy Trust Program Management Contractor
PGE	Portland General Electric	Investor-owned utility
PG&E	Pacific Gas & Electric	California investor-owned utility
PMC	Program Management Contractor	Company contracted with Energy Trust to deliver a program
PNGC	Pacific Northwest Generating Cooperatives	
PNUCC	Pacific Northwest Utilities Conference Committee	
PPC	Public Power Council	National trade group
PPL	Pacific Power	
PSE	Puget Sound Energy	Investor-owned utility
PTC	Production Tax Credit	
PTCS	Performance Tested Comfort Systems	Alliance project that promotes the efficiency of air-systems in residential homes
PTNZ	Path to Net Zero pilot	See definition in text
PUC	Public Utility Commission	Oregon and Idaho PUCs
PUD	Public Utility District	
PURPA	Public Utility Regulatory Policies Act	See definition in text
QF	Qualifying Facility	
RAC	Renewable Energy Advisory Council	
RE	Renewable Energy	
REIT	Real Estate Investment Trust	
RETC	Residential Energy Tax Credit	Oregon tax credit
RFI	Request for Information	
RFP	Request for Proposal	
RFQ	Request for Qualification	
RNP	Renewable Northwest Project	Renewable energy advocacy group
RSES	Refrigeration Service Engineers Society	Trade association
RTF	Regional Technical Forum	BPA funded research group
RTU	Rooftop HVAC Unit Tune Up	Rooftop HVAC unit tune up, an Existing Buildings incentive offering
SCCT	Single Cycle Combustion Turbine	
SCL	Seattle City Light	Public utility
SEED	State Energy Efficient Design	Established in 1991, requires all state facilities to exceed the Oregon Energy Code by 20 percent or more
SEER	Seasonal Energy Efficiency Ratio	A measure of cooling efficiency for air conditioners; the higher the SEER, the more energy efficient the unit

SGC	Super Good Cents	Alliance project & legacy BPA & utility program that promotes the sales of SGC homes
SIS	Scientific Irrigation Scheduling	Agricultural information program
SNOPUD	Snohomish Public Utility District	Washington State PUD
SEIA	Solar Energy Industries Association	Volunteer nonprofit organization dedicated to education/promotion
SWEEP	Southwest Energy Efficiency Partnership	Southwest market transformation group, Alliance counterpart
T&D	Transmission & Distribution	
TNS	The Natural Step	
TRC	Total Resource Cost	See definition in text
TXV	Thermal Expansion Valve	
	University of Oregon Solar Monitoring Laboratory	Solar resource database
U-Value		The reciprocal of R-Value; the lower the number, the greater the heat transfer resistance (insulating) characteristics of the material
USGBC	U.S. Green Building Council	Sustainability advocacy organization responsible for LEED
VFD	Variable Frequency Drive	An electronic control to adjust motion
WAPUDA	Washington Public Utility District Association	Utility trade organization
WNP	Washington Nuclear Power Plant	
WPPSS	Washington Public Power Supply System	Also called "whoops"
WUTC	Washington Utilities and Transportation Commission	
Wx	Weatherization	
W	Watt	