Energy Trust Board of Directors Annual Meeting

February 20, 2013

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118th Board Meeting—Annual Meeting

Wednesday, February 20, 2013, 12:15–3:30pm
421 SW Oak Street, Suite 300
Portland, Oregon

Agenda		Tab	Purpose
12:15pm	**Call to Order** *(John Reynolds)* • Approve agenda		
12:20pm	**General Public Comment** *The president may defer specific public comment to the appropriate agenda topic.*		
12:25pm	**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.* • December 14 Board meeting minutes • Signing authority for General Counsel (R659)	**1**	*Action*
12:35pm	**Nominating Committee** *(Alan Meyer)* • Election to new terms of office (R657) • Election of officers (R658) • Election of Anne Donnelly to the Energy Trust Board (R661)	**2**	*Action*
1:00pm	**President's Report** *(John Reynolds)*		
1:10pm	**Committee Reports** • Policy Committee *(Alan Meyer)*	**5**	*Information*
1:30pm	**Break and Board Photo**		

2:00pm	**Staff Report**
	• Highlights
	  ▪ Preliminary year-end results
	  ▪ Updates on project management contractor transitions
	• 2013 Legislation update *(Debbie Menashe)*
	• Feature presentation: Strategic Energy Management *(Kim Crossman)*
		7	*Information*

3:30pm	**Adjourn**		

The next meeting of the Energy Trust Board of Directors will be held
Wednesday, April 3, 2013 at 12:15pm
at Energy Trust of Oregon, 421 SW Oak Street, Suite 300, Portland

Tab 1 Consent Agenda
- December 14 meeting minutes
- Signing authority for General Counsel (R659)

Tab 2 Nominating Committee
- Election to new terms of office (R657)
- Election of officers (R658)
- Election of Anne Donnelly to the Energy Trust Board (R661)

Tab 3 Evaluation Committee
- December 14 meeting notes

Tab 4 Finance Committee
- November financials and contract summary report
- Financial glossary

Tab 5 Policy Committee
- December 11 meeting notes
- January 29 meeting notes

Tab 6 Advisory Council Notes
- November 28 RAC meeting notes
- November 28 CAC meeting notes

Tab 7 Staff Report
- 2013 Legislation Update
- Quarterly Market Indicators Report

Board Meeting Minutes—117th Meeting

December 14, 2012

Board members present: Rick Applegate, Ken Canon, Dan Enloe, Roger Hamilton, Mark Kendall, Jeff King (*by phone)*, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root (*by phone)*, Dave Slavensky (*by phone)*, Lisa Schwartz (Oregon Department of Energy ex officio), John Savage (Oregon Public Utility Commission ex officio, *by phone*)

Board members absent: Joe Benetti, Julie Brandis

Staff attending: Margie Harris, Ana Morel, Hannah Hacker, Amber Cole, Steve Lacey, Scott Clark, Sue Meyer Sample, Fred Gordon, John Volkman, Peter West, Phil Degens, Diane Ferington, Kate Scott, Erika Kociolek, Scott Swearingen, Matt Braman, Taylor Bixby, Kim Crossman, Alison Ebbott, Pati Presnail, Adam Bartini, Debbie Menashe, Dan Rubado, Sarah Castor, Sue Fletcher, Jackie Goss

Others attending: Juliet Johnson (OPUC, *by phone*), Jim Abrahamson (Cascade Natural Gas), Kendall Youngblood (PECI), Lauren Shapton (PGE), John Charles (Cascade Policy Institute), Mike Koszalka (ICF International), Tracy Scott (Lockheed Martin), Christina Bertalot (Coates Kokes), Steve Kokes (Coates Kokes), John Morris (Fluid)

Business Meeting

President John Reynolds called the meeting to order at 12:17 p.m.

General Public Comments

There were none.

Consent Agenda

The Amendment of FastTrack Development Contract (R652) was removed from the consent agenda at the request of Debbie Kitchin.

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) November 7 Board meeting minutes
2) November 7 Utility Strategic Roundtable notes

Moved by: Roger Hamilton		Seconded by: Dan Enloe
Vote:	In favor: 10	Abstained: 0
	Opposed: 0	

Amendment of FastTrack Development Contract (R652)

This item was removed from the consent agenda at the request of Debbie. She voiced concern at seeing another contract extension that involves a Program Management Contractor, PMC, undergoing transition to another contractor.

Debbie: When we are deciding on transitioning to a new PMC, are we adding in these additional costs? I think this is the second one we have seen as a result of making the switch to another PMC.

Margie: Yes, we did consider this. This is an unusual arrangement in that FastTrack is a product of CSG. They developed the product, and now maintain and upgrade it. As we continue work on the Integrated Solutions Implementation Project with Phase 2, we are analyzing whether to upgrade FastTrack to a newer version or to replace it completely.

Scott Clark: It is an ongoing cost for IT to maintain an application for a product we will continue to use. This maintenance is not part of the PMC transition cost. This cost would be incurred either way.

Debbie: Some of the discussion points make it sound like it is part of the transition.
Scott: I can clarify that. The mention of the transition is to clarify that we will have CSG support only through March 2013, and then bring that work internally after that date. This is an ongoing maintenance cost; in this case, it is custom software.

RESOLUTION 652
AUTHORIZING AMENDMENT OF A CONTRACT WITH
CONSERVATION SERVICES GROUP FOR SOFTWARE SUPPORT

WHEREAS:

1. **In 2003, Energy Trust contracted with Conservation Services Group (CSG) to help develop the FastTrack program management software. The term of the contract has been extended each year since 2003, and the work is ongoing.**
2. **CSG's work has helped increase transaction volume, developed a more open, service-oriented architecture to support web forms, and integrated other functions.**
3. **Energy Trust is continuing to use FastTrack through this contract period, and FastTrack requires continuing support in order to integrate with Clean Energy Works Oregon, HomeCheck, trade ally web applications and other functions.**
4. **The additional support will add $55,000 to the CSG contract, bringing the total contract amount to $684,000, which exceeds the executive director's signature authority and requires board of directors approval.**
5. **Energy Trust expects to make changes to its program tracking system in 2013, with the possibility that FastTrack will be replaced; it is not expected that this FastTrack development support contract will be extended again.**

It is therefore RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc. authorize the executive director to negotiate and sign an amendment to Energy Trust's contract with the Conservation Services Group adding $55,000 for FastTrack support through March 2013.

Moved by: Ken Canon Seconded by: Rick Applegate

Vote: In favor: 11 Abstained: 0

Opposed: 0

Ken Canon expressed his appreciation for the completeness of the meeting minutes from each board meeting. The rest of the board agreed.

John Reynolds welcomed Lisa Schwartz from the Oregon Department of Energy as the new ex officio special advisor to the Energy Trust board.

Lisa: I am thrilled to be here. Thank you.
Margie: At the next board meeting, which will be the annual board meeting, we will formally welcome Lisa. Congratulations on your new position as the director of the Oregon Department of Energy. We are grateful to the work Bob Repine completed while in that position.
Lisa: Bob asked me to pass along how supportive he is of all Energy Trust does and he wishes you the best.

President's Report

John Reynolds displayed a Lawrence Livermore National Laboratory graphic depicting 2011 United States estimated energy use. He said energy use is down slightly from 2010. The graph shows the sources of energy in the U.S. on the left, indicates where that energy goes and what happens to it as the final output on the right.

The graph does not include the direct use of the sun for daylighting, water heating or clothes drying. John indicated the line for solar is vanishingly small, saying one of the reasons is the simple, low-tech uses of the sun are not included.

John described a few concerns if viewing the graph from Energy Trust's perspective. Distributed electricity represents only retail electricity sales and does not include self-generation. Any solar electric that is behind the meter (e.g., net-metered projects) plus any combined heat and power are not included. Second, non-thermal resources like hydropower, wind and solar are reported in BTU-equivalent values that assume a typical fossil fuel plant "heat rate." Third, the end-use efficiency is estimated at 80 percent for residential, commercial and industrial sectors, and 25 percent for the transportation sector. John questioned whether Oregon would have end-use efficiency that is different than the rest of the nation.

Looking at all resources for electricity generation, it continues to be the case that 68 percent of the energy is waste heat and only 32 percent is used for electricity. The transportation sector input is 93 percent petroleum, 4 percent biomass, 3 percent natural gas and less than 1 percent electricity. As the market moves to more electric vehicles, this ratio should change.

Electricity generation is fueled by approximately 46 percent coal, 8 percent hydropower, 21 percent nuclear, 20 percent natural gas, 1 percent biomass, 0.7 percent petroleum, 0.4 percent geothermal and 0.04 percent solar.

Mark: One of the remarkable aspects is looking forward, there are no exports shown on the graph. It is just domestic consumption, and right now there is a lot of musing about the future of the U.S. energy supply and new exports.

Dan: There is one terminal license for natural gas export today and it is in Louisiana. There are four more being worked on and in negotiation.
Ken: And there are three in Oregon. There is so much money behind export terminals and they could be approved. There is also a huge facility being built in British Columbia.

Mark: This would be a nice chart to have for Oregon, and to include solar.
John: Yes, last time that was done was four to five years ago. I asked Lawrence about getting an updated graph, but the request is met with silence.

Jeff King joined the meeting by phone.

Amendment of Opower Contract (R655)

Kate Scott, Energy Trust project manager of the Opower pilot, advised the board that staff seeks authorization to amend the Opower contract by an additional $367,200 to conduct a 12-month study analyzing the persistence of behavioral change savings acquired through sending Personal Energy Reports to 60,000 residential customers since 2011. The effort aligns with a 2010-2014 Strategic Plan objective to explore opportunities to accelerate behavioral research and technology.

Personal Energy Reports detail household energy use compared to nearby households of similar heating type and size. Opower efforts are in more than 50 areas nationwide and save an average of 2 percent on energy use per household through behavior change actions, including turning off lights or turning down thermostats.

The Energy Trust pilot launched in January 2011. Reports were mailed to 60,000 dual-fuel customers of PGE and NW Natural. In total, 12 reports have been sent, about every two months, and the final, thirteenth report will go out in January 2013. With the last report, the first two-years of the Opower pilot will conclude. Kate showed a chart of budget and savings over the past two years, with a projection for year three. The benefit/cost ratio is 1.09, or 0.99 if start-up costs are included. The cost-effectiveness threshold is 1.0. If over 1.0, the activity is cost-effective; if below 1.0 it is not. The Opower pilot is right at the threshold, though that is without confirming its full measure life. This assessment of cost-effectiveness would account for persistence of savings.

Kate showed a bar chart for kilowatt hours and therms saved during the two-year pilot. Savings increased steadily over the length of the pilot. What is not known yet is whether savings will continue to ramp up, continue at all or decrease in year three.

Dan: The experiment was all or nothing. Did you consider decreasing the frequency to quarterly or semiannual instead of every other month? Or doing grouping? Also, how large does the sample size need to be for statistical validity? And do you need as large of a group as you have indicated for the persistence study?
Kate: We did look at comparing different frequencies or completely lowering frequency. We decided not to; lowering the size of the comparison groups to 20,000 would compromise statistical significance.

Dan: What is the statistical influence line? I do this at Intel with much smaller samples. I understand households and utilities are different. If you go from 20,000 to 5,000, how much certainty do you lose?

Phil: I was surprised at how large of a group is needed from control to test group in this kind of experiment. We concluded that we need at least 10,000 because the change we are measuring between groups is so small, as low as half of one percent. A large group ensures we can measure results.

Dan: So we are not that much over the minimum sample size?
Kate: If we broke up into three different treatments, each group would be smaller, but with two groups we are looking at 30,000 each.

Dan: We are going for all or nothing with the persistence study?
Kate: The decision to go with two comparison groups rather than more, and drop a full 50% of the current sample, was also a cost consideration.

John R: Was one of the advantages of more frequent compared to less frequent mailing that if you prod someone about energy consumption and pique their interest, would they want to wait a quarter before knowing how it worked?
Phil: Initially we would have liked to do quarterly but then we are separating out the treatment groups and results are not as strong. Some other utilities have looked at quarterly and they have savings but slightly less. We decided on every other month as the middle ground.

Kate continued. There are persistence studies being done through other efforts. Puget Sound Energy and Connexus in Minnesota found decay rates. They showed about 50 percent savings lost after the first 12 months. Energy Trust's study will also help lock down the cost effectiveness of the pilot.

Dan: I encourage you to share the results and choices you made with peer groups so others can learn from our experience.

Ken: Are there any studies of what happens to savings after one year? What if the rate decays to 0 after more than one year?
Kate: The most recent evaluations with Puget Sound Energy and Connexus went for two years. They saw about 5 to 20 percent continued decay depending on the effort.
Phil: Keep in mind the initiative needs to be cost-effective during the time it is being offered.
Kate: That is part of the larger discussion.

Kate said staff is proposing a 12-month study to analyze the persistence of the savings. Reports will continue to be sent to 30,000 households, reports will be discontinued for the other 30,000, and each group will be compared against the original control group. The cost of the 12-month study is $367,200. In the process, we would expect to save 5.6 million kWh and 181,000 annual therms for the 30,000 households that continue to get the reports. There could be additional savings if the study finds persistence from the 30,000 whose reports were discontinued.

Alan: I am skeptical about the value of this and I know the jury is still out. I am bothered that the staff needs to come to the board to spend $367,200 for this amendment but not $425,000 for a similar study with Pacific Power? Second, why are we doing a second study with Pacific Power when we do not have results from this two-year pilot yet?
Peter: To the first question, any single contract less than $500,000 does not require board approval. When we propose to add funds to a contract and it goes above $500,000, we go back to the board.

That is the case with the persistence study, the $367,200 brings the contract to more than the threshold for the executive director to sign without board approval. This policy was put in place by the board to ensure transparency in our contracting practices.

Ken: I have that question, too. On the Pacific Power-only effort, $425,000 does not have to be brought to the board but this persistence test does. Maybe in the future we need to be looking at bundling these?
Peter: On the first one, we are trying to be consistent with the policy. If you need something different, the Policy Committee could re-examine the policy, which is fine. On the second question, the Pacific Power effort is a small test. Pacific Power currently has an Opower contract in Utah and Washington. Pacific Power had approached us to see if we wanted to do an add-on for Oregon. Pacific has already defrayed part of the start-up cost in connection with its Utah and Idaho experience, and extending it to Oregon will teach us something about the cost of an electric-only program. The current Energy Trust Opower pilot is dual-fuel; it is very effective on the electric side, less so on the natural gas side. We thought we needed a dual fuel program to make it work but results are starting to show otherwise. What floats the savings with Pacific Power is targeting large energy users, which save more energy per unit. We responded to Pacific Power saying we would be interested in an add-on for a single fuel if we could test high-use consumers. We thought it would be better to have a small sample this time because it does tend to add to the costs. These are not one-year efforts, though. They really are at least two-year spans. For good results, we need data from more than one heating season. It also takes customers time to absorb and internalize information from the reports, and then act. Given that, we think the Pacific Power effort is useful and a good investment. When you look at it on the high-end user side it is extremely cost effective. The benefit-cost ratio for the Oregon part of it gets to 1.4.

Alan: If we know that, then why do continued evaluations for the two-year pilot? Why are we going down two different paths at the same time?
Peter: If we stop the two-year Opower pilot, can we claim any savings next year? How do I know if the customer persisted in their actions? Can I get more savings? Are we leaving savings on the table if they do show to carry forward? What the Pacific Power effort is about is to test whether or not reducing the effort creates a level of savings and for how long.

Phil: And also, for the gas and electric sample, there was not the interest from the utilities to expand this effort to look at other things. Pacific Power is very interested in this effort, and set up costs are much lower.

Lisa: Is Pacific Power going to focus on high-usage homes specifically?
Phil: Yes.
Lisa: Well that is quite a different study then. And knowing persistence is very important.

Margie: I appreciate there is clarification needed between the current Opower effort and the Pacific Power effort, which is single fuel and large users. There is a lot of interest in behavior change and we are trying to get the most out of investments we have already made, plus try new approaches that show promising savings. In the case of the dual fuel program, we made an investment that we are working now to document.

Ken: What about it makes it so expensive?

Kate: For Pacific Power it is a lower cost per customer due to efficiencies because Pacific Power has already invested the IT costs. The effort will be $425,850 for two years. For the persistence study $367,200 is for 12 months of reports.

Roger: For the bullet in the resolution that says Energy Trust is currently exploring other behavior opportunities for 2013, what are they?
Kate: Those are still being planned, but we want to look at other approaches and innovations, like Aclara, which is a competitor to Opower and utilizes more than social norming and feedback.

Roger: What drives behavioral changes?
Kate: There are reports on this; I will send them to you.
Roger: This is interesting given natural gas loads.
Peter: PGE had invested in software metering with Aclara. With PGE, we are interested in using that platform to develop similar reports for customers. If we do something, we have about $125,000 in the budget for an effort that could begin in the fall. We would be doing this with the utility as a direct customer engagement opportunity. We also have other sources in the marketing budget. One with Chinook book would capture customers with a “gaming” approach, leveraging their interest in purchasing. This addresses Portland customers who are environmentally friendly. We are also discussing with PGE an approach which adds an energy component to games like “Farmville” on Facebook. These are approaches we are considering and some are in discussion. The Aclara approach has a line in the 2013 budget.

Ken: I am very interested in behavior change. One of the aspects I am interested in is determining if we do not get persistence and it falls off, is it still beneficial to do them every month? And then doing tests on this approach, maybe going quarterly? Is it cost effective to continue doing it and providing value to ratepayers?

Peter: One can look at Strategic Energy Management and Industrial Energy Improvement as behavioral approaches. It is a place where we have stepped forward from NEEA’s work into implementation and made a national contribution.

Dave: Are there any examples of doing this behavioral change before the downturn in the economy to measure whether people are conserving because of financial circumstances?
Phil: Since this is experimental, we first took 120,000 people and randomly assigned them to a control or test group. Each group is going through the same financial considerations.
Ken: Do we have evaluation results even from other places that occurred prior to 2008 to compare a robust economy to one in a long-term recession?
Kate: Opower started in 2008.
Peter: The industrial and commercial efforts started in earnest in 2009. There were a couple of people in 2008. We do not really have experience prior to the economic downturn.

Kate clarified the Pacific Power effort includes a control group.

RESOLUTION 655
AUTHORIZING THE EXECUTIVE DIRECTOR
TO AMEND A CONTRACT WITH OPOWER

WHEREAS:

1. **Opower provides Personal Energy Reports to consumers comparing their home's energy consumption to that of similar homes, which can help consumers save energy.**
2. **If cost-effective, the Reports would make a significant contribution to achieving Energy Trust's energy savings goals.**
3. **Experience to date suggests that the Reports do help consumers save energy, and the savings are cost-effective or near cost-effective. Cost-effectiveness would be affected by whether and how long savings persist after Personal Energy Reports stop.**
4. **Testing the persistence of these savings would cost $367,200 and save an estimated 5.6 million kWh and 181,000 therms during a one-year test period.**

It is therefore RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc., hereby authorizes the executive director to sign an amendment to the current contract with Opower to (i)extend its term by up to 12 months in order to conduct a persistence study and (ii) increase its contract budget by up to $367,200.

Moved by: Debbie Kitchin Seconded by: Ken Canon

Vote: In favor: 11 Abstained: 0

Opposed: 0

Proposed 2013 Budget and Proposed 2013-2014 Action Plan

Margie and Sue Meyer Sample presented. Margie thanked the board for the time and effort they have given to review the extensive action plan and budget materials in the binder. She also brought their attention to a high level, one-page budget reference sheet.

Each year's budget and action plan is an all-hands effort. Margie thanked Sue Meyer Sample and Pati Presnail for their commitment to quality, Peter West for playing a strong role from a program perspective, and the Planning team, especially Elaine Prause and Lakin Garth, who calculated and analyzed the savings and generation related to goals.

Today's presentation is shorter than the November draft budget presentation, and will capture changes that have been made between the draft budget and action plan and today's proposed final version. There are many small changes, and the big picture has not changed.

Margie reviewed the forecast for 2012 savings, which is largely on target, as shown to the board in November. On the electric side, Energy Trust expects to save 50.3 average megawatts and at a lower cost than predicted: 2.9 cents per kWh, not 3.4 cents. That is a great story. For annual gas therm savings, the Oregon goal was 5.7 million at 40.6 cents; Energy Trust is projecting to beat stretch goal on the gas side as well and deliver close to 6 million therms at a lower-than-anticipated cost of 34 cents, compared to the budget of 40 cents. Again, a good story in that Energy Trust is acquiring more savings at a lower cost than anticipated.

Energy Trust is a projecting to be a little shy of the gas savings target in Washington. The goal was 253,000 annual therms for NW Natural commercial and residential customers in Washington. Energy Trust projects savings of 228,000 annual therms. Though the Existing Homes and New Homes programs are doing well, commercial savings are down because a number of schools are intentionally waiting for supplemental funding from the Washington State "Jobs Now" grant program. The 2013 pipeline for commercial savings in Washington looks very good as the schools take advantage of those funds to complete projects. Margie mentioned that the Washington commercial program is a small program, so when projects shift it has a larger impact on the overall program.

For the renewable energy sector, the 2012 goal was a range from 3.7 to 14.7 aMW of generation, reflecting uncertainty about the impact of changes in the Business Energy Tax Credit program. We expect to reach 5.8 aMW of generation.

Mark: Were these projects that have Business Energy Tax Credits?
Margie: There is a mix. Some projects move forward with our support, but without a state tax credit, as is the case for one biomass project.

Margie continued. Carryover from 2012 is different from what was presented in November as we approach the close-out of the year. Carryover may be about $4.3 million lower than expected. PGE revenue is down $1 million and Pacific Power revenue down $1.6 million. In addition, the board recently allocated $700,000 to cover Cascade Natural Gas' transition from a deferral account to a public-purpose charge funding mechanism. Renewable energy revenue also declined by approximately $300,000.

To calculate the $4.3 million carryover projection, staff completed an analysis of receipts and re-forecast revenue for what is anticipated by year-end for both energy efficiency and renewable energy. Also, there is a $200,000 shift in residential projects into 2013, and on the renewables side, increased commitments of $1.8 million in 2012, reflecting hydropower projects not previously captured.

Ken: Why are the energy-efficiency revenues down for PGE and Pacific Power?
Margie: Weather in part, as well as a decline in usage and sales. We are a likely part of the load decline as well as the down economy.

Roger: So the more we succeed, the less money?
Margie: Yes, I guess, at least during these times.

Margie continued. Typically at the end of the year Energy Trust books 30-40 percent of annual incentives. If this year follows that trend, the financials and forecast will hold until the end of the year.

Other differences from the draft budget to the proposed final:

- Overall, carryover between 2012 and 2013 was reduced by $2.7 million on a profit-and-loss basis and reduced by $4.3 million on an activity basis.
- PGE elected to front-load revenue for the next two years. Energy Trust agreed to this approach and does not anticipate needing to go to the OPUC for any rate adjustment with PGE for two years.
- PGE savings went up to reflect improved realization rates for appliances and the addition of new specialty LED lights.

- Energy Trust staff worked with Pacific Power to establish and finalize goals and funding. The Pacific Power IRP target is aligned with the Energy Trust conservative goal and as a result, Pacific Power revenue is $2.5 million lower than originally discussed with and budgeted for Pacific Power. The reduction was achieved by reducing Planning expenditures 4.5 percent in the Existing Building and Production Efficiency programs, and by reducing fridge recycling by 40 percent. Refrigerator recycling can ramp up if more savings are needed. With lower revenue from Pacific Power and less carryover, we will need to carefully monitor the pipeline in 2013.

Ken: Can you summarize how you make the judgment on what program offerings to scale down?
Margie: One consideration is whether the program or a specific offering in the program can scale back up quickly.
Peter: We also look at where we can control marketing early. For Existing Buildings and Production Efficiency, if we tone down some early marketing outreach we can slow the pace. If we lower activity too much we can easily speed back up with more outreach. Those two programs are trying to not sign up too many big projects right away. We will still engage those customers but monitor carefully.

Debbie: Do you change incentive levels, too?
Peter: We do not anticipate a need to change incentive levels for Existing Buildings and Production Efficiency customers. For refridgerator recycling and lighting, it is easier to pull back than to change the incentive. We like to only change incentives two times a year, especially for the residential side. Changes in this budget were vetted through the Conservation Advisory Council, including residential incentive levels. We also ended all Business Energy Tax Credit make-up incentives. So, for the Commercial and Industrial sectors, this budget is a return to prior incentive levels.

Alan: To get revenue down by $2.5 million, you reduced SB 838 funding, not SB 1149 funding?
Peter: Both are down because of weather.
Alan: It is what it is?
Peter: Yes.

Margie reviewed a reduction in the NW Natural Washington savings goal. Due to an error in the 2013 Washington budget workbook whereby it referenced working savings instead of reportable savings, the total savings should have been reduced by 7400 therms. A corrected version of this page has been provided.

Margie showed a pie chart of the 2013 overall budget, which is essentially the same as presented in November, with minor adjustments.

For 2014, there is an approximate $8 million increase anticipated for the budget, bringing the projected budget to $178 million. Margie emphasized that this reflects revenue projections, which can change. The 2014 budget is based on each utility's IRP, what savings Energy Trust can acquire in 2014, and timing and completion of renewables projects.

Margie reviewed the outreach process associated with this budget and action plan. In addition to travel to different parts of the state, we invited public comment for a period of about one month. All public comments received and staff responses to those comments are included in tab 3 of the public packet.

This year, staff initiated a new approach to discussing strategic concepts and program designs with the utilities in the summer. Staff shared plans early, solicited comments and received detailed comments from them. Those comments shaped the budget work, and the utilities were far more engaged. This proved to be a very valuable approach. It was a worthwhile investment and a close way to collaborate and cooperate with the utilities.

Also, the Renewable Energy Advisory Council and Conservation Advisory Council were both engaged. When incentives are changed, the councils weigh in on those changes. This year, there were significant changes on the Existing Homes incentives. Staff worked with the Conservation Advisory Council members, as well as a group of trade ally stakeholders, including Clean Energy Works Oregon, the Home Performance Guild, the Oregon Homebuilders Association, Weatherization Industries to Save Energy, Earth Advantage, Oregon Remodelers Association, Oregon Air Conditioning Contractors of America and Bonneville Power Administration. By working with these groups, staff reached a conclusion on incentive levels for air and duct sealing and received other valuable comments on the draft budget and action plan.

Lastly, budget and action plan presentations were given to residential and business customer groups. These two meetings which included representatives from the Association of Oregon Industries, Industrial Customers of Northwest Utilities, Building Owners and Managers Association, Portland Business Alliance, Northwest Energy Efficiency Alliance, PGE, Citizens' Utility Board of Oregon, Unico, Gunderson and Siltronic and Oregon and Portland Homebuilders Associations.

Debbie: I attended the business customer meeting and thought it was a great opportunity. I appreciated you taking the time to meet with these customer groups. It is a good opportunity for them to learn about how Energy Trust sets its goals. And Energy Trust reached customers that would not normally be engaged.

Margie: The outreach was so effective that we are going to do it again next year. The customer outreach was initiated by a request from PGE, who wanted to make sure its customers knew about Energy Trust plans, goals, strategies and planned expenditures.

Rick: I think the one-page document is a crisp summary of the benefits of Energy Trust. I particularly like the top of the second page on 2013 investments and what they buy. The document is very impressive and a nice summary.

Margie reviewed the feedback we gathered from the budget and action plan outreach. There was acknowledgement of strong 2012 forecasted results. The OPUC submitted detailed comments. The OPUC and utilities requested that we refine goal terminology when describing conservative goals, how it relates to IRP goals, and the rationale for funding to stretch goal. Energy Trust will engage with the board, OPUC and utilities on revising and making these terms more understandable.

Alan: Will there be an OPUC proceeding to clarify that?
Margie: We will talk about it with the OPUC; we don't expect it to require a docket, but perhaps a workshop.
Alan: The most active group would be industrial customers, and it does not really impact them. In a competitive world you typically budget to conservative goal and reach for stretch.

Juliet: A workshop setting is more likely than a docket.

Margie said a second theme from the feedback is cost management. Minimizing rate impact remains a priority for Energy Trust. Margie said Energy Trust keeps increasing goals for this least-cost resource and we know this is in a time of economic struggle. We want to make sure Energy Trust manages and contains costs while also effectively communicating the benefits all customers receive. Energy Trust keeps its administration costs well below the OPUC metric, and also could more openly share how cost management takes place.

Commenters appreciate Energy Trust's collaboration and communication. A number of commenters suggested more strategic planning, outreach activities and reporting. Margie said she recognizes the benefits of this approach and also knows such efforts do take time and resources, which can compete with cost management. She said it is a worthwhile balancing act.

Lisa: I am looking forward to working collaboratively with you and seeing how we both can reduce cost in communication and outreach.
Margie: Excellent, we are, too.

Margie said the last common theme was support for pilots and innovative approaches, such as Opower, deep retrofits in commercial buildings, lending allies and financing options like MPower. She said she appreciated all comments received and welcomes any other comments today from those in the audience.

Ken: Once we approve this budget, you will have another sheet like the first slide in the presentation that shows forecasted results? It is helpful to have such a clear, simple resource. Also, on the new handout, the first paragraph talks about kWh. I think you need to add aMW as that is what we talk about.

Mark: I have an editorial comment on the PGE and Pacific Power renewables budget sheets under the budget tab. It would be nice to reduce the number of decimals.

John asked for comments from the audience. There were none.

Debbie: I am curious about the Existing Buildings budget. There is a drop in program management between 2012 and 2013, plus no amount for marketing in 2013 and 2014 for the PMC.
Margie: Some may be Pacific Power's funding reduction and some the PMC transition.
Peter: PMC marketing is there, but seems to be rolled into the program delivery line item. The total is right. The reason program management is dropping is that with the redesign of the program, the intent is to move more activities out to the field. We want less overall management.
Debbie: That is a good move. One of the issues I hear from customers in the commercial sector is there is a gap in knowing what they could do, what is the best thing to do next.

Alan: Under the "Other Programs" tab, under Planning and Evaluation, the 21 percent increase in the budget for next year seems high.
Fred: Part of what you are seeing is a year where we are expecting to be fully staffed. We are comparing to what we actually got done this year and we had severe staffing gaps in the first half of this year. The activity level is the same.

Dan: I like to put things into relative scale. One of the things we see emerging is more electric vehicles. You can charge an electric vehicle with an 110V plug overnight for 10 hours. So your next year renewable generation would charge 700 cars for a year and the efficiency savings could charge 112,000 cars. Those are pretty dramatic levels of aMW we are moving and saving. Efficiency is going to enable the grid to better handle loads from electric vehicles.
Margie: Electric vehicles do bring potential opportunities for Energy Trust. Today, the final version of Governor Kitzhaber's 10-Year Energy Plan is being distributed. There is dialogue on how we can work with the Governor, the utilities and ODOE on this. We are also looking at transportation from a compressed natural gas perspective for fleets. We will see if those ideas are in the final plan.

Resolution to Adopt 2013 Budget (R653)

RESOLUTION 653
ADOPTION OF 2013 BUDGET AND PROJECTION FOR 2014

BE IT RESOLVED: That the Energy Trust of Oregon, Inc., Board of Directors approves the 2013 budget and 2014 projection as presented in the board packet.

Moved by: Roger Hamilton Seconded by: Debbie Kitchin
Vote: In favor: 11 Abstained: 0
Opposed: 0

Resolution to Adopt 2013-2014 Action Plan (R654)

RESOLUTION 654
ADOPTING 2013-2014 ACTION PLAN

BE IT RESOLVED: That Energy Trust of Oregon, Inc. Board of Directors approves the two-year 2013-2014 Action Plan as presented in the board packet.

Moved by: Ken Canon Seconded by: Rick Applegate
Vote: In favor: 11 Abstained: 0
Opposed: 0

Break

The board took a break at 1:55 p.m. and reconvened at 2:05 p.m.

Committee Reports

Evaluation Committee (Debbie Kitchin)
Notes in today's board packet are a summary from the meeting on October 30. The board talked a little at the last board meeting about the SB 838 evaluation that had been reviewed at the October Evaluation Committee meeting. In addition, the committee also had a meeting this morning where it continued discussion on the SB 838 evaluation. There was some concern the Evaluation Committee was not looped in early enough on the draft evaluation. The committee talked with staff about that and

came to a good resolution to be more cognizant in future. Even if not a full agenda item, there could be a status update so the board is more aware or any issues at a much earlier time. Having the board members so out of synch with what was happening was not appropriate and communication could have been done better to avoid surprises. Staff agreed to institute immediate improvements.

Also on the 30th, the committee reviewed a New Buildings process evaluation and Existing Homes process evaluation. Detailed notes are in the meeting minutes. The committee has the benefit of expert outside reviewers, including Ken Keating, former BPA evaluation lead and currently a consultant, and Tom Eckman from the Northwest Power and Conservation Council. The committee derives the benefit of outside perspectives when reviewing evaluations.

Today's meeting minutes will be in the next board packet.

Mark: Lauren Gage from BPA also participates as an evaluation expert.
Debbie: We certainly appreciate their commitment of time to evaluate studies and provide input into the process. We also have an excellent evaluation staff.

Finance and Compensation Committees (Dan Enloe)
The Finance and Compensation committees met December 3. In the Finance Committee, members worked on small nuances to the budget that were covered today. There were not a lot of other items beyond that. On the Compensation Committee, members looked at the performance of 401k investments and whether changes were needed. The committee noticed withdrawals from new retirees. Overall market returns were pretty poor, barely positive and mostly negative. Most positive increases in 401k plans were from employee contributions, which was smaller than the previous year and may be reflective of uncertainty in the economy.

Sue Meyer Sample: Staff presented a briefing paper on reserves to the committee, which is found in the board packet today. We are starting an ongoing discussion around interest reserves and program reserves, including historical uses. The Finance Committee approved a change in the calculation method from a two-year calculation to a one-year calculation. Because revenue negotiations now occur annually, this makes more sense. This results in a reserve requirement of approximately $6.2 million. There will be a larger discussion of reserves going forward.

Dan: How do we decide when to use interest reserves?
Sue: We seek board approval to shift interest reserves.
Dan: I want to look for cost-effective opportunities. The one-year cycle will serve us better and we will not need to carry so much reserve.

Ken: Does the Compensation Committee utilize an outside expert?
Dan: We bring in The Standard, the company that manages the funds for us. They help us monitor performance against various benchmarks.
Margie: Our employee participation rates are high, in the 84 percent range, which is good, especially given that we have a younger staff. We also hold educational forums for employees. It is part of our fiduciary responsibilities.

Alan: Did they conclude that everything is fine?

Dan: We have put a few funds on the watch list; one fund is a socially responsible fund that is not performing as well as the others. We want to give employees the option but it is not used as much.

Policy Committee (Roger Hamilton)

The Policy Committee talked about funding energy efficiency at Portland State University (PSU) with a co-funder, General Motors (GM), which would take all the carbon offsets. GM would work through the Bonneville Environmental Foundation. The committee emphasized that this decision should not be precedent-setting. The committee approved a letter from staff informing PSU and indirectly GM that we would not claim the carbon offsets related to the energy-efficiency projects at PSU.
Margie: This is not the first time that we have been engaged on an approach that links us to carbon reductions.
Ken: We do get something out of this, in that GM will put additional funding into efficiency projects at PSU. It is a good thing.

Juliet asked for clarification on the letter.
Roger: The proposed letter has not yet been sent out.
John Volkman: The letter to PSU will say we are delighted to cooperate with them on these projects, we do not intend in this case to assert any claim to carbon offsets, but we are not setting any precedents by doing this. The letter also reiterates the time period for which that assurance is valid.

Mark: Do you know what protocol they are developing for those white tags?
Roger: Bonneville Environmental Foundation (BEF).
Mark: BEF would be the transactor but what about the protocol?
John V: Oliver may know.
Margie: We will get back to you.

Roger: The committee got an update on the utility data sharing agreements we have been working on for four to five years. The deadline for finalizing the agreements was November 21. We have wrapped them up. PGE, Pacific Power and Cascade Natural Gas met the deadline. NW Natural obtained an extension to December 5, and reached an agreement by then. We are currently defining IT and communication tasks so we can share data under the new rules by May 1, 2013.
John V: Thank you Juliet and the OPUC for your help. We could not have done this without the OPUC's new rules. Negotiations with the utilities went fairly smoothly, and we owe them thanks for their professional attitude. We encountered obstacles and overcame them. We now have good agreements to help us manage programs more efficiently and save energy more effectively than ever before. A lot of thanks are due.
Margie: And we must thank you, John. You shepherded this through, working with many parties. And thank you to the utilities, and Juliet and the staff at OPUC. This came just in the nick of time before John goes into semi-retirement.

Roger: Fred also briefed the committee on cost-effectiveness investigations at the Washington Utilities and Transportation Commission.

Roger: Margie reminded us that the 2013 legislative session is approaching and we welcome any ideas on how we might brief the legislature on what we do, why it is important and the value to their districts.

Lisa: What has Energy Trust done in prior years?
Margie: We have been available as a resource to provide technical expertise. We do not take a position on any legislation and cannot lobby.

Lisa: Any proactive outreach?
Margie: We share results on an annual basis via mailings and also break out accomplishments by each legislative district, including savings, generation and economic benefits. We have proactively met with legislators to offer informational briefings.

Roger: The committee also had a briefing on a potential project that would involve a Portland Water Bureau pipeline as a hydropower project. Unfortunately, the project was really late in requesting funding from Energy Trust. This is a type of project we might look for in the future, a hydropower, zero-emissions project. Energy Trust has completed hydropower projects on irrigation canals and this one is a potential urban project.

John Morris, Fluid: Commenting as a representative of the Northwest Energy Efficiency Council (NEEC) board. NEEC is very interested in communicating Energy Trust's benefits in Salem. We would be interested in following up with you.
Margie: Thank you, it is always good knowing who the supporters are for the work we do.

Adjourn

The meeting adjourned at 2:30 p.m.

***Next meeting*.** The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, February 20, 2013, at 12:15p.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, 3rd Floor, Portland, Oregon.

_____
Rick Applegate, Secretary

Board Decision
Corporate Authorization Resolution (Bank Signing Authority)

February 20, 2013

RESOLUTION 659
AUTHORIZING APPROVED BANK SIGNERS

WHEREAS:

1. **Umpqua Bank and Bank of the Cascades provide general banking services to Energy Trust (collectively, the "Banks").**
2. **Section 7.3 of the Energy Trust bylaws requires that the board of directors authorize officers or agents to sign checks, drafts, or other orders for the payment of money, notes and other evidences of indebtedness ("authorized bank signers") by way of resolution from time to time.**
3. **Effective January 15, 2013, John Volkman retired from his position as General Counsel/Policy Director of Energy Trust, and Debbie Goldberg Menashe was appointed General Counsel.**
4. **John Volkman is currently an authorized bank signer for Energy Trust's accounts at the Banks.**
5. **In connection with appointment to the general counsel position, Debbie Goldberg Menashe should replace John Volkman as an authorized bank signer for the Banks.**

It is therefore RESOLVED that,

1. **John Volkman to be removed from the list of authorized bank signers for the Banks.**

2. **Debbie Goldberg Menashe to be added to the list of authorized bank signers for the Banks.**

3. **The resulting list of authorized bank signers for the Banks is as follows:**

    a. **John Reynolds, Board President**
    b. **Dan Enloe, Board Treasurer**
    c. **Margie Harris, Executive Director**
    d. **Susanne Meyer Sample, Chief Financial Officer**
    e. **Peter West, Director of Programs**
    f. **Steve Lacey, Director of Operations**
    g. **Debbie Goldberg Menashe, General Counsel**

4. **The Executive Director is authorized to execute all required documentation to implement this resolution.**

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Board Decision
Terms of Office

February 20, 2013

RESOLUTION 657
ELECTING DEBBIE KITCHIN, ALAN MEYER, AND JOHN REYNOLDS TO NEW TERMS ON THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

1. **The terms of incumbent board members Debbie Kitchin, Alan Meyer, and John Reynolds expire in 2013.**
2. **The board nominating committee has recommended that these members' terms be renewed.**

It is therefore RESOLVED:

1. **That the Energy Trust of Oregon, Inc., Board of Directors elects Debbie Kitchin, Alan Meyer, and John Reynolds, incumbent board members, to new terms of office that end in 2016.**

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

Board Decision
Election of Officers

February 20, 2013

RESOLUTION 658
ELECTING OFFICERS OF
ENERGY TRUST OF OREGON, INC.

WHEREAS:

1. **Officers of the Energy Trust of Oregon, Inc. (other than the Executive Director and Chief Financial Officer) are elected by the Board of Directors at the board's annual meeting.**
2. **The Board of Directors nominating committee has nominated the following directors to renew their terms as officers:**
   - **John Reynolds, President**
   - **Debbie Kitchin, Vice President**
   - **Dan Enloe, Treasurer**
3. **Rick Applegate will not be renewing his service as Secretary, and the nominating committee has nominated Alan Meyer to become the new Secretary.**

It is therefore RESOLVED that the Board of Directors hereby elects the following as officers of Energy Trust of Oregon, Inc., for 2013:

- **John Reynolds, President**
- **Debbie Kitchin, Vice President**
- **Alan Meyer, Secretary**
- **Dan Enloe, Treasurer**

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

Board Decision
Electing Anne Donnelly to Energy Trust Board

February 20, 2013

Summary

Elect Anne Donnelly to the board seat vacated by Joe Benetti.

Background

- Joe Benetti has announced that he does not wish to renew his term on the Energy Trust board, which expires this month.
- The board nominating committee, having reviewed candidates, nominates Ann Donnelly. Ms. Donnelly is Executive Director of the Coos County Historical Society in Coos Bay, Oregon.
- Ms. Donnelly has worked in natural resource conservation for many years, following several years as a Seattle trial lawyer.

Recommendation

Adopt the resolution below.

RESOLUTION 661
ELECTING ANNE DONNELY TO
THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

1. **Joe Benetti has resigned his position on the Energy Trust board. His term expires in February 2013.**
2. **The board nominating committee has reviewed candidates for the open board seat and nominates Anne Donnelly, lawyer and Executive Director of the Coos County Historical Society in Coos Bay.**

It is therefore RESOLVED:

That the Energy Trust of Oregon, Inc., Board of Directors elects Anne Donnelly to the Energy Trust Board of Directors, for a February 2013- 2016 term.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Anne Warrington Donnelly
Coos Bay OR 97420

EDUCATION:

B.A., Landscape Architecture, University of Oregon, Eugene, Oregon, 1992.
J.D., University of Washington, Seattle, Washington, 1981.
B.A., English, Trinity College, Hartford, Connecticut, 1976.

EXPERIENCE:

8/2004-present **Executive Director, Coos County Historical Society,** Coos Bay, Oregon. Oversight of all aspects of daily operation, and coordination and implemention of fundraising, publicity and logistics for construction of new facility and revision of programs for sustainable operation. Implemented new budget system, annual audits; hired and supervised new staff; renovated and expanded museum store, initiated highly successful schools partnership (now county-wide); extensive media and personal presentations. Built strong partnerships with local city, tribal, state and federal representatives.

1/2004-8/2004 **Consultant, Coos County Historical Society,** Coos Bay, Oregon. Advised non-profit group on issues associated with proposed construction of new facility.

8/2003-4/2004 **Snowy Plover Education Program Coordinator**, U.S. Bureau of Land Management, Coos Bay, Oregon. Developed inter-agency plan for on-site public education program re lifecycle and need for protecdtion of endangered species.

1/2002-3/2003 **Coastal Land Use Coordinator,** Oregon State Parks and Recreation Department. Responsible for coordinating park and shoreline conservation projects, permitting, enforcement of beach use regulations.

9/2000-11/2002 **Conservation Easement Program**, Coos Watershed Association, Charleston, Oregon. Secured and successfully implemented $1.2 million federal grant for purchase of conservation easements from private landowners, developing new state procedures for process. Extensive media outreach, neighborhood landowner meetings; worked with state and federal agencies to generate referrals and expand grant impact by combining funds with other agency programs. Coordinated all aspects of transactions, project implementation and reporting.

4/1994-9/2000 **Executive Director, Coos Watershed Association, Charleston, Oregon.** First director of group formed to foster communication and coordination among broad cross-section of private industrial and individual landowners and government land managers for design and implementation of projects to address natural resource issues. Organized corporation and secured 501(c)(3) status to assure group's independence and integrity. Extensive outreach to community and individual landowners; secured positive media coverage to build awareness, developed and oversaw innovative projects in partnership with industrial and

small private landowners. Secured significant state, federal, and private support; hired and supervised all staff, ultimately managing $750,000 annual budget.

1992-1994 **Planner, South Slough National Estuarine Research Reserve**, Charleston, Oregon. Contracted to rewrite management plan for oldest Reserve in national system; first revision in 15 years. Conducted extensive interviews and meetings with staff and interested parties, used collaborative approach to articulate goals and objectives, expand focus from land management to community connections, planning for future. Plan format ultimately recommended for national system by National Oceanographic and Atmospheric Administration.

1983-89 **Trial Attorney,** Seattle, Washington. Specialized in complex litigation (multi-party, multi-issue), including white collar crime, discrimination, bankruptcies, product liability).

1982-83 **Law Clerk, Honorable George T. Mattson,** Seattle, Washington. Coordinated all hearings and communications with attorneys in trial court; maintained press information in high profile cases; conducted legal research, prepared jury instructions, briefed motions; worked closely with clerks for other judges, developed motion management procedure adopted throughout courthouse.

1980-82 **Trial Attorney, Northwest Women's Law Center,** Seattle, Washington. As member of 3 person trial team for fledgling non-profit, successfully challenged sex discriminatory practices in Washington State University athletics program under then-untested state Equal Rights Amendment. Wrote pre-trial motions and briefs, prepared and examined witnesses, worked with local press, advised on ultimately successful state Supreme Court ruling.

References available upon request.

Evaluation Committee Meeting

December 14, 2012 9:00am-12:00pm

Attendees:

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

Energy Trust Staff:
Margie Harris, Executive Director
Peter West, Director of Energy Programs
Steve Lacey, Director of Operations
Fred Gordon, Director of Planning and Evaluation
Spencer Moersfelder, Business Sector Manager
Oliver Kesting, Business Sector Lead
Jackie Goss, Planning Engineer
Amber Cole, Director of Communications and Customer Service
Diane Ferington, Residential Sector Lead
Marshall Johnson, Residential Sr. Program Manager
Jessica Rose, Business Sector Manager
Ted Light, Planning Project Manager
Phil Degens, Evaluation Manager
Sarah Castor, Evaluation Sr. Project Manager
Erika Kociolek, Evaluation Project Manager
Dan Rubado, Evaluation Project Manager

Outside Attendees:
Lauren Gage, Bonneville Power Administration (phone)
Linda Dethman, The Cadmus Group

Agenda:

1. Review of SB 838 Utility Supplemental Funding Activities Evaluation
2. Existing Homes Program 2010-2011 Process Evaluation
3. Building Performance Tracking and Control (BPTaC) Pilot
4. Path to Net Zero Pilot
5. Existing Multifamily Process Evaluation
6. Ongoing and Upcoming Evaluations

1. Review of SB 838 Utility Supplemental Funding Activities Evaluation

Some questions came up at the last board meeting about the 838 evaluation. Typically the committee reviews evaluations at a draft stage so that the opinions and suggestions of the expert reviewers and committee members can be incorporated and disseminated to contractors through evaluation staff. Committee members noted that they would like to receive updates about evaluations, which may be done through e-mails or phone calls, if the committee will not be meeting for some time.

2. Existing Homes Program 2010-2011 Process Evaluation

Presented by Sarah Castor

We started this presentation at the last evaluation committee meeting, and will go through some of the first slides to refresh our memories. The evaluation was conducted by Skumatz Economic Research Associates (SERA) between July 2011 and March 2012. The main goal was to provide feedback to improve implementation of the Program, focusing on regional outreach, customer engagement and Home Energy Review (HER) changes, EnergySavvy (an online audit tool), Savings Within Reach (a moderate income offering), the trade ally (TA) rating system and development fund, and Energy Saver Kits (ESKs). Last time, we discussed the results of the database and document review and staff interviews. We just started on participant phone surveys and "non-participant" phone surveys (these aren't true non-participants because these individuals had an HER but did not install a measure afterwards). We'll continue with the participant and non-participant survey results and review findings from TA interviews.

Overall, 89% of participants are satisfied with the Program; this is in line with Fast Feedback (90% in 2011). People that had HERs and installed a measure were most satisfied. Among participants that installed measures, those that installed water heaters were most satisfied; this result differs from what we generally see with Fast Feedback. Two-thirds of HER respondents consulted the TA list, but only one-third of those who had installed a measure after their HER consulted that list. Less than half of respondents used website or TA star rating system and about a quarter said they used the online audit tool (EnergySavvy). Of those that used it, most found the TA star rating system to be pretty useful. The rating system has been somewhat controversial among trade allies. Mark asked if there was any response to the EnergySavvy tool. Sarah responded that the surveys were done when the tool was just launching, so few people we talked to had used the tool. Ninety-one percent of respondents said they were satisfied with their contractor. Satisfaction with energy bill savings was modest, which is not necessarily surprising or uncommon, since people often go into jobs without an idea of what they might save, and they may not be doing projects to achieve savings in the first place. Folks' experience with Energy Trust was as expected or better for all but 5% of respondents, which is good. Seventy-five percent are likely to recommend Energy Trust to others, and another 19% are somewhat likely. Seventy-three percent have already talked to others about their experience. Mark asked if the survey was done before or after folks had received their incentive. Sarah responded that we most likely talked to people after they received their incentive.

We were interested in non-energy benefits (NEBs) and the evaluator asked a battery of questions intended to quantitatively value NEBs. At this point, we do not have full explanations of the methods used to get NEB values in the report. Ken noted that the evaluator has 15-20 years of history in this field and this work is difficult to do. Mark asked if we attribute NEBs experienced by consumers in program materials. Phil responded that we promote them. People indicate they do value comfort and aesthetics, and we accept that people value non-energy benefits, but we have a hard time placing dollar values on NEBs. Peter noted that we have done market and messaging tests that suggest leading with the economic value of upgrades gets attention and gets people to act more often. Fred noted that unless we figure out NEBs, weatherization may not be cost-effective for some time. We know that some people value NEBs

but we don't have a clear numeric response to the question of "how highly do people value NEBs?" Alan asked why the evaluator would do research on NEBs if we are not accepting their work. Sarah responded that we wanted qualitative information and the evaluator provided quantitative results. We wanted to see the methods used to generate those quantitative findings as well as responses to the survey questions (i.e. "do you value comfort more or less than energy savings?"). Ken reiterated that the evaluator has worked for the Power Planning Council and Puget Sound Energy on these issues and is very aware of the literature for this field. Phil noted that we have done some valuation studies in the past; for example, a hierarchical study that looked at changes in how people value PV systems over time.

Recommendations from these participant interviews: there were a high number of showerhead removals, so showerheads in ESKs may need to be improved. The current Build Your Own Kit (BYOK) strategy should reduce non-installs. The evaluator also suggested that we take advantage of key decision points like remodeling, moving, or buying a home to encourage action since respondents said these activities played a role in their interest in energy efficiency. The Program has gotten more involved with Oregon Remodelers Association and real estate agents for some time. Marshall added that we are in the process of transition, moving from one implementer to another. Fluid sees the sale of an existing home as an opportunity to put an energy efficiency message in front of a new homeowner. We are currently evaluating how to approach working with real estate agents. Mark noted that messaging upgrades prior to sale may not be amenable to real estate agents since it could detract from affordability. Peter noted that the Program has seen this recommendation a lot; we agree with the idea of creating a point of contact and re-engaging new homeowners several months after purchase. Dave added that it would be neat to let homeowners know if work has already been done on the home. Sarah noted that could be helpful to homeowners, but we have policies about not sharing what has been done in the house previously. Another recommendation is to increase the use of the TA list, and expand the use of NEBs to encourage measure uptake.

Now we'll move on to talk about TA interviews. We drew our sample from a list of active TAs with a star rating. We completed 102 interviews, with mostly small to mid-size businesses that have been in business for more than 10 years. Fred asked if the sample included a few pivotal firms that do a lot of work. Sarah responded that we took a relatively stratified sample and looked at the number of jobs completed and specialties. All respondents agreed that Energy Trust is a credible source of information on energy efficiency and renewable energy. Respondents clustered in efficient heating equipment and air conditioning services. Duct sealing, insulation, and water heaters were also common services offered by respondents. There are a few respondents offering renewable energy services, but not many. Firms tend to do either heating or weatherization work. Mark asked how many firms these results represent. Sarah responded that we talked to only 1 person per firm, so the 102 respondents represent about 20% of all trade allies.

We asked respondents about why they became a trade ally. The primary reason was access to incentives; however, one does not need to be a trade ally to access most incentives. Respondents also noted they felt being a trade ally was a way to increase business and have credibility with customers. Forty-eight percent say they have more customers as a result of

being a trade ally and 83% believe it distinguishes them in their market. Some also said being a trade ally has expanded the services they offer. Training and marketing materials are also benefits.

We also asked about communication. Two-thirds said they read the Insider newsletter (which is used to communicate Program changes) but most prefer to hear about changes through direct e-mail. Most just scan the Insider rather than read it in-depth, which is consistent with results from the 2012 Trade Ally Survey. Many respondents are not sure who to contact about the Program, and felt there was high turnover. This is something to watch going into the PMC transition. Marshall noted that there have been multiple points of contact interacting with trade allies. With the new CRM, we have the ability to have a comprehensive picture of interactions with stakeholders and are in a good position to maintain uniformity regardless of who is interacting with a trade ally or customer. Diane added that there are a number of channels we use to communicate with trade allies, which can be confusing. Amber added we have established a hotline system so inquiries can get routed to the appropriate contact, although this happened after the surveys were conducted. Sarah added that this may be an issue of perceived turnover.

Ninety-two percent said their expectations were matched or exceeded. Ninety-eight percent said they would become a trade ally again if they had to do it over. Half said they have experienced delays either in receipt of incentives, paperwork processing, communication, or inspections. Applications and paperwork are consistent challenges we see across evaluations. The Program has made several changes in the last year, including web application forms, which are now available for everything but home performance. Paperwork will never be popular, but we hope that these changes will yield improvements. Alan noted that another recommendation coming out of the evaluation was ensuring the paperwork burden is commensurate with the scope of the project.

We asked about the TA rating system. Seventy-right percent reported they knew how scores were generated. We got mixed responses on the rating system itself. Mark asked if there was a strong correlation between scores and satisfaction with scores. Sarah responded that we didn't look at that, but there may be a relationship. There are separate stars for quality, quantity, and customer service; it is a misperception that the rating is primarily based on volume, not quality. The evaluator recommended creating ratings based on specific measures and changing the explanation of the rating system on the website.

The Development Fund was formerly called the Cooperative Marketing Fund. The name change was intended to increase awareness that funds may be used for things other than marketing, such as trainings, conferences, and memberships. Most TAs are aware of the fund; about half have used it. Eighty-two percent were satisfied with the fund overall, although some were dissatisfied with reimbursement time.

We asked TAs about the market for energy efficiency. Most said they have seen an increase in energy efficiency due to the economy, incentives/tax credits, and "green" messaging. TAs said many customers bring up energy efficiency themselves; they don't have to be the one to bring it up with customers. The primary driver for customers is saving money on bills; comfort and

needing repairs are also drivers, but these are a distant second and third, respectively. The primary barriers are high cost of projects and limited household budgets. The marketing they use emphasizes financial solutions; comfort is secondary for them. If we talked to home performance trade allies, comfort would likely be emphasized more. Two-thirds say the Program has reduced barriers somewhat (43%) or a lot (24%). The evaluator asked the same sorts of questions about NEBs of TAs. The findings were similar to those for participants; the qualitative results may be more useful for our purposes. TA suggestions for Program changes included increasing the amount and variety of incentives, simplifying paperwork and application processes, more marketing and outreach, making trainings more accessible and specific, and changes to the TA certification process and rating system.

Other recommendations include: streamlining paperwork, offering more measure-specific trainings (not clear which ones), more targeted and personal marketing by Energy Trust, and better communication on star rating status changes. Mark asked about the recommendation to increase the variety of incentives. Sarah responded that she thought this was related to gas heating equipment that we don't incentivize anymore. Phil added that we need to communicate with evaluators that there are certain measures that are not cost-effective and explain why these measures are not cost-effective. Debbie noted that some contractors might not understand why measures need to be cost-effective; we should reach out to contractors and clearly explain the cost-effectiveness criteria we face. Sarah added that there is a difference between saving energy and doing so cost-effectively. Diane noted that at the most recent roundtables, Matt Braman did a presentation about cost-effectiveness. We could look into doing this on a periodic basis. Sarah suggested that a webinar on this topic could use useful and Amber added that we can put this information in newsletters as well. Fred noted that having someone present on this and be available for questions is valuable; it is confusing when we do not incentivize certain measures but other programs offer loans for equipment that is not incentivized by Energy Trust.

Energy Trust Take: we have made significant process in areas of the market, manufactured homes and moderate income. We are continuing to expand to non-Portland Metro areas. Contractors and customers are generally satisfied with their Energy Trust experience. Some recommendations have already been implemented such as customer engagement, revisions to the star rating criteria for rural contractors, sales training for Energy Advisors, and changes in solar water heating requirements. Other recommendations are contrary to where Energy Trust has decided to take the program. Some of the strategies recommended would increase uptake in activity but also increase costs. The Program is opting to move customers to trade allies more quickly, enabling more marketing by trade allies, encouraging market-based training rather than Energy Trust-sponsored training, targeting high use customers, and providing offerings to specific groups like seniors and renters. Alan asked if we are doing anything differently in terms of HER follow-up. Sarah responded that we are doing a lot. Follow-up is not uniform for all customers; we are making follow-up phone calls and sending follow-up e-mails at specific intervals post-HERs to determine how this affects follow-through. This effort started in March and we will evaluate it starting next year.

3. Building Performance Tracking and Control (BPTaC) Pilot

Presented by Phil Degens

The evaluation was conducted by the Cadmus Group and the study period was June 2011 to October 2012. Building Performance Tracking and Control is quite a name and Spencer mentioned potentially renaming the initiative in the future. It is currently one of two commercial pilots focused on O&M. We're assuming there are savings that can be achieved in this area.

Through the pilot, we offered monitoring systems to commercial customers – as we know, monitoring systems don't save energy, people save energy. The monitoring systems were linked to a consulting service which gave feedback on energy use. Lockheed looked at the available services and selected three different types of systems for different applications.

Technology Approach	EMS	EIS	AOS
Product Name	Unity	Energy Expert	OptimumLOOP
Building Type	Between 50,000 and 100,000 sq. ft. (e.g. Small Office, Retail)	Greater than 100,000 sq. ft. with direct digital controls (e.g. Hotels)	Variable air volume systems and chiller plants 600 tons+ (e.g. Hospital)
Real Time Energy and Performance Monitoring	X	X	X
Automated Control Optimization	X	No**	X
Estimated Energy Savings	15% of total baseline	5% of total baseline	22% of HVAC baseline

EIS is expected to be installed in buildings with DDC controls. AOS would also be installed in a system that had controls. The potential savings were estimated at 15% for EMS, 5% for EIS, 22% for AOS. The measure life was set at 3 years, but it's a pilot, so we don't really know what the measure life or savings are going to be.

Spencer said since that the measure life could be extended to 5 years if the subscription service were extended. Measure life may be extended up to 10 years for AOS because it is more like controls.

Mark asked if the measure life would be based on follow up with customers on use of the subscription service, etc. Phil responded yes, or if they don't need the subscription service but are still using the system, the measure life could be extended.

This was the first of two reports on the BPTaC pilot. A year after implementation, we will talk to folks again about the systems. We are reserving judgment on savings until we have more data.

The vendors were in charge of recruitment for the pilot. Lockheed received scope of work and applications from the vendors. They then obtained billing data from customers to establish the baseline usage and verified project cost effectiveness according to the guidelines. Participants then engaged the vendors to install the systems. Lockheed performed post-install inspection and paid the incentives, which covered half of the cost. Energy Trust is now monitoring and evaluating the systems and savings.

The goals for the number of systems installed during the pilot have been revised down. Now they are hoping to complete 15 EMS, 10 EIS, and 2 AOS. Lower uptake may be due to a difficult economy, unfamiliar vendors and unproven systems, and the subscription service. One of the vendors had to submit projects repeatedly because they didn't understand the cost-effectiveness criteria.

Fred mentioned that this offering was intended for smaller commercial customers that can't do the larger SEM program. We are also testing out whether vendors can sell these things. We were paying 50% of cost of systems; not surprisingly, the vendors sold more where incentives were higher. However, some vendors said it is important for customers to have skin in the game so that they are engaged. Mark noted it's important for customers to engage to make this work

The EMS system is cool looking, while EIS is more basic. Intuitiveness of dashboard/interface for EMS is high but medium for EIS. EIS is geared more toward expert users. Alerts have been very effective when the parameters exceed preset limits. It was recommended that the systems include estimated energy savings in addition to estimate cost savings. Systems were quite customized for the most part. Both EMS and EIS report energy savings attained and are adjusted for weather. Neither reports demand savings, but this appears to be possible if there is interest from customers.

Vendors were motivated to participate in the pilot for business development purposes. They hoped it would showcase their products and justify incentives. They would like more marketing support from Energy Trust. Vendors did not understand why some proposals were not accepted by Energy Trust – they didn't understand the cost effectiveness criteria. Spencer commented that there is a need to identify buildings with high savings opportunity and where systems will be more cost-effective because those customers will get more out of this and be happier with the systems. We also need customers that will be engaged. EIS relies on customers to make improvements while EMS includes both active and passive changes and savings. They have similar approaches to help customers make changes by providing reports and through online portals. Both systems also alert customers if they detect high demand.

Customers cited the incentive in bringing down the cost and payback as determining factors in participating. Other reasons to participate were EMS scheduling capabilities, making a case for radical change, support for energy efficiency, and just investigating energy use in buildings. The paperwork was confusing to some; we could just have vendors fill this out in the future. Most customers were satisfied with vendor support and monitoring systems. Training was reported to

be good and of adequate length. They valued follow up Q&A sessions, and reported these helped them keep momentum.

All three EMS participants made operational changes and saw some savings. EIS participants also made low or no cost changes in operations based on recommendations. They considered it too soon to tell about savings. Most participants liked the sense of control they gained and the information about operations.

Mark asked why customers were targeted for a specific technology. Phil responded that EMS relies on buildings with existing control systems. There aren't really any good integrated control systems for small buildings. Spencer commented that control systems may not be cost-effective for smaller customers. Mark asked about load factors for smaller customers. Fred said that demand rates are not that high in Oregon.

Phil continued, saying that participants with building tenants also used monitoring information to better manage their tenants. Participants understood they were responsible for taking actions to get savings. Barriers to implementing recommendations included: building occupant tolerance (people will complain at a certain point), capital constraints on higher cost actions, and staffing constraints that prevented spending time on addressing operational issues.

Recommendations: The initiative should consider new approaches for increasing uptake. Energy Trust and ICF should help vendors with recruiting by acting as a credible reference and identifying leads. Vendors should work with prospects to understand internal barriers and hone marketing/messaging. One vendor teamed up with a control hardware vendor to offer a lease/buy option to customers. Another option is to design the program so payments don't exceed savings. Vendors should fill out application paperwork. The program and vendors should check in on customers regularly to document energy savings and changes. Energy Trust should examine if changing from a customer incentive to a vendor pay-for-performance incentive would be more cost-effective. Total kwh and therms savings as well as demand savings should be added to dashboards and reports. EIS should be expanded to include gas savings.

Energy Trust Take: The pilot is providing insight into what level of savings are achievable when EMS is bundled with O&M expert systems. We are cautiously optimistic about the future of this type of offering. We'll see more at the end of the pilot in the final report about costs and savings. Costs have gone up in some cases. The pilot is supposed to find the costs, benefits, and what the market is for this technology. Are there enough engaged customers out there? Linda said that hopefully positive results will come out of this and encourage other customers to participate. Some folks are very enthusiastic about this.

Ken asked if the EIS systems were designed for specific building types. Phil said NorthWrite used to be for industrial systems such as large refrigeration. Their consulting arm was focused more on commercial buildings and their systems are more focused on offices at this point.

Linda said that they are tailored to the customer. Ken commented that it is difficult to tailor to groceries; they are very different from offices. He added that vendors were trying to sell EMS to

grocery stores 15 years ago, but now they are pretty much standard practice, often designed by the corporate office. Fred said that there was a vendor for restaurants in the past but they left the region and Energy Trust hasn't seen any in the past six years. Debbie said that it was important to get testimonials from folks in similar facilities otherwise they are risk averse and won't proceed with installing this sort of thing. Alan said that trade and professional associations will spread the word if it works. Mark asked about the baseline energy use for the monitoring platforms. Phil said they use three years of billing data prior to installation for a baseline. Steve asked if the systems have the capability to track gas usage. Linda said she didn't know but would find out.

4. Path to Net Zero Pilot
Presented by Phil Degens

This is Energy Trust's longest running evaluation. It started in 2009 and was first reported on in 2010. Goals for this evaluation include: understanding the opportunities, motivations, and barriers to net zero buildings; describing design decisions, equipment, and strategies making these buildings possible; informing the design of new building efficiency programs; and encouraging the development of net zero buildings.

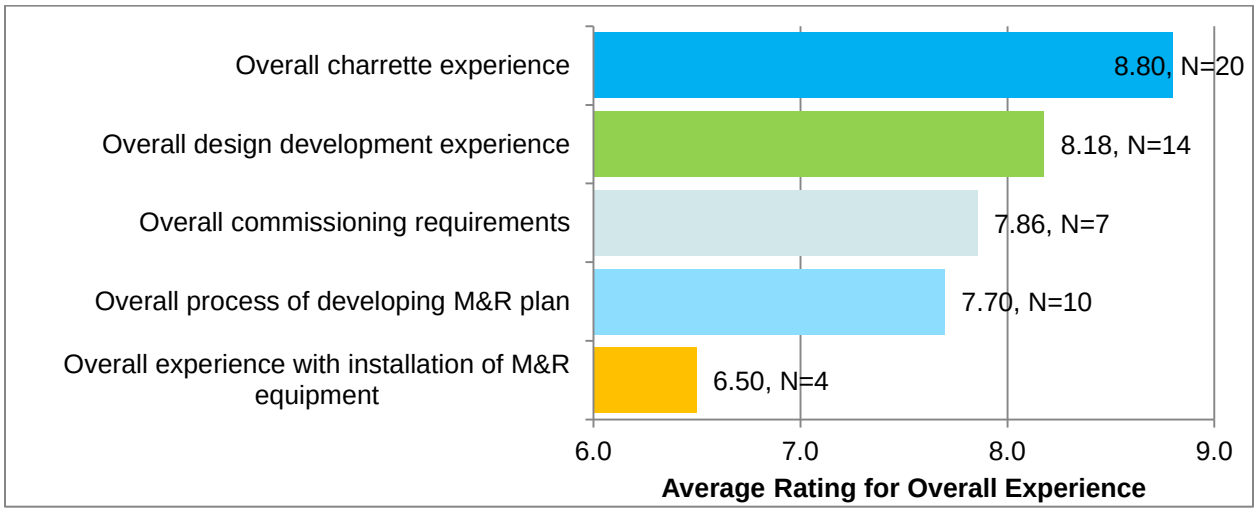
The pilot includes projects that are either 50% above code using only efficiency (2007), or 60% above code using both efficiency and renewables.

Services/incentives offered included early design assistance, technical assistance, installation and commissioning, and monitoring and reporting. The pilot enrolled 15 participants in 2009; 3 dropped out and were replaced, but 3 more dropped out in 2010. No others have been added due to the 2010 code change. Of the current 12 participants, 6 have completed their projects, 3 are in design development, and 3 are stalled. The projects range from 1,500 to 500,000 square feet and 6,000 kWh to 2.5 million kWh savings. The completed buildings are performing post-occupancy monitoring and reporting. There is a mix of building types including office, educational facilities, meeting spaces, and mixed use. Most are publicly owned.

Methods: The evaluation is tracking projects and outcomes over a 2-3 year period. This includes periodic staff interviews at key junctures and periodic interviews with owners and design teams after projects reach key phases. Typically, two people were interviewed for each project. This approach is also used with the New Buildings process evaluations. A review of program documents and background is also done as the pilot evolves.

Interview Findings: Participants are mostly aligned with pilot goals. Participation was driven by the owners, who wanted to contribute to sustainability through high performance buildings. The incentives helped respondents in making the decision to pursue these projects. There were some concerns about how savings goals would be reached and how to keep costs reasonable. Program aspects that worked well are incentives, people, and technical assistance. Areas in need of improvement are clarity of communication and use of EUI as baseline (which simplifies things).

Overall satisfaction: Customers dropped off as the pilot moved along and things got more challenging. As a result, satisfaction started out high and got lower as the pilot moved forward. Even so, overall satisfaction was above 6 (out of 10) for each component. Installing monitoring and reporting equipment was least liked. The reported benefits of the pilot were education, incentives to cover modeling and CFD, PR benefits, and credibility.



Early design assistance: This phase had fairly high satisfaction levels. Mark asked if interviewees were owners; Linda responded that they also included design team members. Phil said usually two people were interviewed per project but sometimes more. Important outcomes of early design assistance were: identifying energy savings strategies and influencing energy goals; hearing different perspectives from building users and experts; and aligning goals. The incentive was important; many reported the charrette wouldn't have happened without it. Program staff felt that setting goals and having commitment and alignment in goals early on was important to achieving the pilot goals. Having a common goal to reach kept people focused.

Technical assistance: The overall design development and technical assistance experience was rated highly by customers. Running repeated models was tedious and rated lower. There was confusion about part of the process including paperwork. The incentives reportedly did not cover the costs of the design development work. Program staff changes caused confusion or slowed the process in some cases. Design development was difficult because it was new territory. Technical assistance helped projects narrow in on the measures that would achieve the savings goals. A review showed that the Energy Analysis Reports provided robust analysis with sufficient detail. Challenges in finalizing energy models related to cost-effectiveness and measuring savings on an individual basis when designing integrated buildings. This goes back to using EUI as the baseline rather than looking at incremental change. Suggested improvements for technical assistance were: communications, altering the modeling approach, and increasing incentives for increased savings – more reward for doing better. Financial incentives were deemed very important.

Installation and commissioning: This phase of the pilot was rated very highly by participants, especially commissioning. The level of work required to do commissioning was not as well liked.

There was some confusion about program requirements. The incentive was rated pretty highly, although it was only one of many factors. Energy savings were a big factor as well.

Monitoring and reporting: People saw a lot of value in M&R, but actually implementing it was difficult and this was reflected in the satisfaction scores. Reported obstacles were: challenges with monitoring a high efficiency, solar-powered, multi-system building; pilot requirements; and technology that was relatively new to the market or untested. Some projects sought to impact human behavior through M&R with real time, public display of energy consumption. M&R planning helped teams think about monitoring and how it might help them operate their buildings better.

Common design strategies used in the pilot to meet efficiency/generation goals:

Design Strategies or Technologies	Number of Projects	Design Strategies or Technologies	Number of Pilot Projects
Increased insulation, high performance glazing, other envelope improvements	8	Plug Loads	3
*Heat Recovery	6	Geothermal	2
Day lighting	6	LED Lighting	2
Efficient Hot Water Heaters	6	Monitoring Display	2
Solar PV	5	Solar Water Heating	2
Low Flow Fixtures	5	Variable Refrigerant Flow	1
Hydronic Heating and/or Cooling	4	Displacement Ventilation	1
Passive Cooling	4	Transpired Solar Collectors	1
Natural Ventilation	4	Irrigation Water Heat Exchanger	1
Demand Controlled Ventilation	3		

A lot of the strategies used weren't new technologies. Passive cooling and natural ventilation have been used in the past and are now cycling back around. There was competition for roof space between day lighting (skylights), ventilation jacks, and PV systems. There were also trade-offs between thermal mass and acoustics, and day lighting and exterior envelope performance. Reasons for not installing measures were split between cost-effectiveness and other.

Measure cost and savings are being collected and used. Radiant heating costs collected during the pilot are now used in the program. The pilot is collecting building energy data but systems are not uniform. One building with one year of data is reaching the net zero goal while another has challenges due to an underperforming PV system.

Barriers to participation: These included increased costs, reluctance to try new design techniques, worries that the public wouldn't be receptive, a lack of data in the market to justify risk, skepticism about reaching a lofty goal like net zero, and uncertainty if additional revenue could cover higher costs. Suggestions for Energy Trust included: encouraging ambition while emphasizing feasibility, advertising pilot program experiences and making owners available, using a menu approach like small commercial, and leveraging LEED.

Lessons learned: Energy targets are important motivators. Early design and technical assistance were critical for success. The pilot was mentioned repeatedly in a recent market research study very favorably. There are challenges to meeting program requirements for individual measure cost-effectiveness. M&R in pilot buildings holds value for the broader high performance building market. Occupant and operator behavior is likely to be a more important part of performance in high performance buildings. Smaller buildings are an administrative challenge. Both financial and non-financial motivations strongly influenced owners wanting to build net zero buildings.

Recommendations: Ensure energy targets are a key feature of the program. Provide incentives for early design and technical assistance to ensure influence and assist in optimizing building design. Consider removing program cost-effectiveness requirements to let the owner decide what is cost-effective. Simplify analysis by considering the whole package of measures rather than measure by measure. Consider basing incentives on energy saving performance and providing incentives to help owners afford packages to meet energy goals. Incentives could be staged for different levels of achievement in percentile above code. Alan commented that the last two items are about the same cost-effectiveness issues we've been discussing elsewhere.

Debbie said performance payments sounds like you wouldn't pay until the end. Certain packages may be proven to save X amount and could be paid proactively. Fred responded that it is hard to generalize about new commercial buildings. Some things are pretty basic, like insulation. Natural ventilation just removes an entire category of energy consumption that would normally go toward that.

Other recommendations were to consider refining the M&R requirement to establish goals at the beginning of a project during the building design process. Consider including occupant behavior as explicit part of the program. Consider options for simplifying the requirements for small buildings by offering more streamlined processes and prescriptive packages. Consider structuring incentives to continue to push owners and design teams to enhance the design.

Energy Trust Take: There were many pilot findings incorporated into the NB program. Engaging the client early and aligning goals was viewed as an effective strategy for getting and retaining energy efficient features in new construction.

Debbie commented that getting involved early does create some risk to Energy Trust because there could be a lot of dry holes. Phil responded that it doesn't cost that much and it is the place to really influence decisions. Jessica said that discretion is used in who is selected for this and how early design meetings are done. Ken commented that because it is the "path" to net zero there may be definitional issues with what is really net zero. He said that he sees net zero

electricity use but not necessarily net zero overall energy use. This relies on occupants doing things a certain way. It is okay as aspirational goal, but more difficult as hard, quantitative goal.

5. Existing Multifamily Process Evaluation

Due to time constraints, the Existing Multifamily Process Evaluation will be reviewed at the next evaluation committee meeting.

6. Review of Ongoing and Upcoming Evaluations

Debbie asked Phil to highlight the various impact evaluations that are coming up. Phil noted that the Production Efficiency impact evaluation for 2009-2010 will be done in January 2013 and the Production Efficiency 2011 impact evaluation will be completed soon after. The Existing Buildings 2011 impact evaluation is coming up, as is the Existing Homes impact evaluation. The Existing Homes impact evaluation will be rolled out in April 2013, and is done in-house. We are currently working on 2009 and 2010 and then will have a process in place to do 2012 soon afterwards. This gives us the opportunity to re-engage with our review panel for billing analysis, Michael Blasnik and Scott Pigg. Alan asked if there are plans to do any renewable evaluations. Phil noted that we did a number of process evaluations for the renewable sector, but not impact evaluations because we are measuring what's coming out of the systems. Alan asked if those results get reported to the evaluation committee. Peter noted that we have done solar modeling and found 1% variation between forecasts and what was actually being produced. Fred added that we can pull together information about how well systems ran over the first few years and make this visible. Dave asked if we could add a column to this list of evaluation tasks noting when the evaluation committee will be reviewing these evaluations. Phil noted it might be better to put together a list of what we anticipate covering at the next several meetings.

The committee agreed to convene the morning before the next board meeting (February 20th). We will cover the Multifamily and Existing Buildings process evaluations, the Existing Buildings impact evaluation, and Production Efficiency impact evaluation.

Energy Trust of Oregon, Inc
BALANCE SHEET
November 30, 2012
(Unaudited)

	NOV 2012	OCT 2012	DEC 2011	Change from Prior Month	Change from Beg. of Year
Current Assets					
Cash & Cash Equivalents	75,188,094	77,475,477	73,128,210	(2,287,383)	2,059,884
Restricted Cash (Escrow Funds)	462,664	462,625	938,755	39	(476,091)
Receivables	60,267	25,236	7,599	35,032	52,668
Prepaid Expenses	319,548	386,577	293,703	(67,028)	25,846
Advances to Vendors	1,191,923	2,040,574	2,438,724	(848,651)	(1,246,801)
Total Current Assets	**77,222,497**	**80,390,488**	**76,806,991**	**(3,167,991)**	**415,506**
Fixed Assets					
Program Equipment			63,213	0	(63,213)
Computer Hardware and Software	1,335,329	1,335,329	974,712	0	360,616
Software Development			899,718	0	(899,718)
Leasehold Improvements	287,385	287,385	309,767	0	(22,382)
Office Equipment and Furniture	600,662	600,662	627,017	0	(26,355)
Total Fixed Assets	**2,223,376**	**2,223,376**	**2,874,427**	**0**	**(651,052)**
Less Depreciation	(1,155,828)	(1,128,894)	(1,049,110)	(26,935)	(106,718)
Net Fixed Assets	**1,067,547**	**1,094,482**	**1,825,317**	**(26,935)**	**(757,770)**
Other Assets					
Rental Deposit	64,461	64,461	62,461	0	2,000
Deferred Compensation Asset	366,794	362,428	301,336	4,366	65,458
Total Other Assets	**431,255**	**426,889**	**363,797**	**4,366**	**67,458**
Total Assets	**78,721,299**	**81,911,860**	**78,996,105**	**(3,190,561)**	**(274,806)**
Current Liabilities					
Accounts Payable and Accruals	7,663,521	6,654,198	23,501,523	1,009,323	(15,838,001)
Deposits Held for Others	50,508	51,613	0	(1,105)	50,508
Salaries, Taxes, & Benefits Payable	594,313	584,047	481,910	10,267	112,404
Total Current Liabilities	**8,308,342**	**7,289,858**	**23,983,432**	**1,018,484**	**(15,675,090)**
Long Term Liabilities					
Deferred Rent	319,412	309,736	31,090	9,676	288,322
Deferred Compensation Payable	366,794	362,428	301,336	4,366	65,458
Other Long-Term Liabilities	12,754	12,724	15,030	30	(2,277)
Total Long-Term Liabilities	**698,959**	**684,887**	**347,456**	**14,072**	**351,503**
Total Liabilities	**9,007,301**	**7,974,745**	**24,330,888**	**1,032,556**	**(15,323,587)**
Net Assets					
Temporarily Restricted Net Assets	462,664	462,625	938,755	39	(476,091)
Unrestricted Net Assets	69,251,334	73,474,490	53,726,462	(4,223,155)	15,524,872
Total Net Assets	**69,713,998**	**73,937,115**	**54,665,217**	**(4,223,117)**	**15,048,781**
Total Liabilities and Net Assets	**78,721,299**	**81,911,860**	**78,996,105**	**(3,190,561)**	**(274,806)**

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Energy Trust of Oregon
Cash Flow Statement-Indirect Method
Monthly 2012

	January	February	March	April	May	June	July	August	September	October	November	Year to Date
Operating Activities:												
Revenue less Expenses	$ 7,469,767	$ 4,298,486	$ 2,950,527	$ 3,140,662	$ 478,130	$ (919,095)	$ 1,537,444	$ (1,307,294)	$ 935,097	$ 688,175	$ (4,223,118)	$ 15,048,781
Non-cash items:												
Depreciation	28,028	16,871	26,398	18,587	22,172	12,333	17,683	$ 19,264	$ 19,147	$ 25,295	26,935	$ 232,712
Loss on disposal of assets				895,749					548	5,293	-	$ 901,590
Receivables	(61)	(2,776)	12	(117,154)	119,829	(6,133)	3,238	$ 178	$ (17,553)	$ 2,124	(36,650)	$ (54,945)
Interest Receivable	(856)	(149)	702	(331)	1,886	(3,486)	(688)	$ 4,015	$ (96)	$ (338)	1,619	$ 2,277
Advances to Vendors	974,854	674,855	(1,288,795)	393,582	692,603	(1,244,313)	465,438	$ 745,312	$ (1,520,765)	$ 505,379	848,651	$ 1,246,801
Prepaid expenses and other costs	(39,514)	38,551	(158,736)	70,773	(233,181)	(53,416)	75,050	$ 106,791	$ 10,449	$ 90,358	67,029	$ (25,846)
Accounts payable	(17,938,184)	680,260	1,050,450	(285,542)	3,360,946	(3,309,454)	(311,775)	$ (1,115,807)	$ 1,903,162	$ (829,768)	1,008,218	$ (15,787,494)
Payroll and related accruals	32,885	33,590	41,750	17,550	24,564	9,813	(15,750)	$ (7,608)	$ 6,409	$ 20,027	14,632	$ 177,862
Deferred rent and other	44,974	42,803	44,832	10,590	29,121	29,031	3,960	$ 3,382	$ (16)	$ 4,570	5,340	$ 218,587
Cash rec'd from / (used in) Operating Activities	(9,428,106)	5,782,491	2,667,140	4,144,466	4,496,070	(5,484,720)	1,774,600	(1,551,767)	1,336,382	511,115	(2,287,344)	$ 1,960,326
Investing Activities:												
(Acquisition)/Disposal of Capital Assets	(23,704)	-	(2,884)		5,179	(32,970)	(90,928)	$ (106,026)	$ (61,015)	$ (64,185)	-	$ (376,532)
Cash rec'd from / (used in) Investing Activities	(23,704)	-	(2,884)	-	5,179	(32,970)	(90,928)	(106,026)	(61,015)	(64,185)	-	$ (376,532)
Cash at beginning of Period	74,066,965	64,615,155	70,397,646	73,061,902	77,206,368	81,707,617	76,189,927	77,873,598	76,215,806	77,491,173	77,938,102	74,066,965
Increase/(Decrease) in Cash	(9,451,810)	5,782,491	2,664,256	4,144,466	4,501,249	(5,517,690)	1,683,672	(1,657,793)	1,275,367	446,930	(2,287,344)	1,583,794
Cash at end of period	$ 64,615,155	$ 70,397,646	$ 73,061,902	$ 77,206,368	$ 81,707,617	$ 76,189,927	$ 77,873,598	$ 76,215,806	$ 77,491,173	$ 77,938,102	$ 75,650,758	$ 75,650,759

Energy Trust of Oregon
Cash Flow Projection
January 2012 - December 2013

	2011	2012 Actual											2012 Forecast
	December	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:													
Public purpose and Incr funding	10,752,627	13,728,819	15,535,462	15,123,603	13,825,710	12,349,286	10,548,641	10,074,262	9,892,673	10,683,165	11,761,507	10,096,791	12,400,000
From other sources	1,400		3,055			120,669	367	3,238	178	8,262	15,125	5,555	
Investment Income	15,884	13,175	11,163	13,027	11,735	12,052	12,555	12,589	14,898	9,180	8,724	9,055	13,000
Total cash in	10,769,910	13,741,994	15,549,681	15,136,630	13,837,445	12,482,007	10,561,563	10,090,089	9,907,749	10,700,607	11,785,356	10,111,401	12,413,000
Cash Out:	25,113,539	23,193,804	9,767,190	12,472,373	9,692,980	7,980,759	16,079,253	8,406,418	11,565,544	9,425,241	11,338,427	12,398,746	23,700,000
Net cash flow for the month	(14,343,628)	(9,451,810)	5,782,491	2,664,257	4,144,465	4,501,248	(5,517,690)	1,683,672	(1,657,795)	1,275,366	446,929	(2,287,345)	(11,287,000)
Beginning Balance: Cash & MM	88,410,593	74,066,965	64,615,155	70,397,646	73,061,903	77,206,368	81,707,616	76,189,927	77,873,598	76,215,803	77,491,169	77,938,102	75,650,757
Ending cash & MM	74,066,965	64,615,155	70,397,646	73,061,903	77,206,368	81,707,616	76,189,927	77,873,598	76,215,803	77,491,169	77,938,102	75,650,757	64,363,757
Dedicated funds Adjustment	(18,900,000)	(16,200,000)	(18,700,000)	(25,100,000)	(24,500,000)	(25,000,000)	(24,800,000)	(19,600,000)	(19,700,000)	(19,700,000)	(20,800,000)	(18,800,000)	(13,500,000)
Committed Funds Adjustment	(27,500,000)	(27,600,000)	(26,400,000)	(38,000,000)	(36,600,000)	(39,500,000)	(38,900,000)	(55,800,000)	(61,500,000)	(52,200,000)	(49,100,000)	(42,000,000)	(31,300,000)
Cash Reserve	(6,800,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(8,200,000)	(6,200,000)	(6,200,000)
Ending Cash & MM, adj by Above	**20,866,965**	**12,615,155**	**17,097,646**	**1,761,903**	**7,906,368**	**9,007,616**	**4,289,925**	**-**	**-**	**-**	**-**	**8,650,757**	**13,363,757**
Escrow Cash Balance													
Beginning Balance	938,702	938,755	846,467	846,499	846,566	643,329	643,367	643,423	560,717	560,763	560,806	462,625	462,664
Net Escrow (Payments)/Funding	-	(92,305)		-	(203,270)			(82,753)			(98,220)		(45,000)
Interest Paid on Escrow Balances	53	17	32	67	33	38	56	46	46	43	39	39	28
Ending Escrow Balance[1]	938,755	846,467	846,499	846,566	643,329	643,367	643,423	560,717	560,763	560,806	462,625	462,664	417,692

[1] Included 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, modified 12/2012
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon
Cash Flow Projection
January 2012 - December 2013

	2013 Approved Budget											
	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:	28,900,000	9,800,000	12,000,000	11,400,000	10,700,000	13,700,000	12,300,000	12,400,000	15,700,000	13,400,000	13,900,000	22,300,000
Net cash flow for the month	(13,190,000)	7,010,000	4,910,000	3,710,000	2,710,000	(1,890,000)	(590,000)	(1,290,000)	(4,390,000)	(490,000)	(1,590,000)	(5,990,000)
Beginning Balance: Cash & MM	64,400,000	51,210,000	58,220,000	63,130,000	66,840,000	69,550,000	67,660,000	67,070,000	65,780,000	61,390,000	60,900,000	59,310,000
Ending cash & MM	51,210,000	58,220,000	63,130,000	66,840,000	69,550,000	67,660,000	67,070,000	65,780,000	61,390,000	60,900,000	59,310,000	53,320,000
Dedicated funds Adjustment	(13,900,000)	(13,900,000)	(13,800,000)	(15,100,000)	(15,400,000)	(15,700,000)	(17,800,000)	(17,800,000)	(17,800,000)	(17,800,000)	(17,800,000)	(17,800,000)
Committed Funds Adjustment	(33,000,000)	(34,100,000)	(36,100,000)	(46,600,000)	(49,000,000)	(49,000,000)	(48,600,000)	(48,600,000)	(48,600,000)	(48,600,000)	(48,600,000)	(48,600,000)
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	**-**	**4,020,000**	**7,030,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Escrow Cash Balance												
Beginning Balance	417,692	417,717	417,744	303,611	204,632	204,646	204,661	204,676	105,690	105,698	6,705	6,706
Net Escrow (Payments)/Funding			(114,162)	(99,000)				(99,000)		(99,000)		(6,706)
Interest Paid on Escrow Balances	25	27	29	21	15	15	15	15	7	7	0	0
Ending Escrow Balance[1]	417,717	417,744	303,611	204,632	204,646	204,661	204,676	105,690	105,698	6,705	6,706	0

[1] Included 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, modified 12/2012
Escrow: dedicated funds set aside in separate bank accounts

Energy Trust of Oregon, Inc
INCOME STATEMENT - ACTUAL AND YTD COMPARISON
For the Eleven Months Ending November 30, 2012
(Unaudited)

	November			YTD		
	Actual	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**
REVENUES						
Public Purpose Funds-PGE	2,734,836	2,579,048	155,788	33,294,713	31,419,661	1,875,052
Public Purpose Funds-PacifiCorp	1,846,953	2,250,975	(404,022)	23,146,309	24,214,429	(1,068,120)
Public Purpose Funds-NW Natural	708,672	781,983	(73,311)	15,673,604	17,399,451	(1,725,847)
Public Purpose Funds-Cascade	89,103	268,255	(179,152)	1,179,723	2,343,231	(1,163,508)
Public Purpose Funds-Avista				(25,458)		(25,458)
Total Public Purpose Funds	**5,379,564**	**5,880,261**	**(500,697)**	**73,268,890**	**75,376,772**	**(2,107,882)**
Incremental Funds - PGE	3,016,798	3,523,288	(506,490)	36,336,728	38,571,705	(2,234,978)
Incremental Funds - PacifiCorp	1,700,429	2,117,474	(417,045)	21,676,043	22,406,854	(730,811)
NW Natural - Industrial DSM				1,076,344	3,420,205	(2,343,861)
NW Natural - Washington				1,261,914	1,261,914	
Special Projects - Clackamas County				200		200
Consumer Owned Electric	42,180		42,180	57,646		57,646
Consulting Income				3,055		3,055
Contributions	25		25	30,515		30,515
Revenue from Investments	7,437	16,667	(9,230)	126,015	183,337	(57,322)
TOTAL REVENUE	**10,146,434**	**11,537,690**	**(1,391,256)**	**133,837,351**	**141,220,787**	**(7,383,436)**
EXPENSES						
Program Subcontracts	4,137,793	4,484,783	346,990	41,442,386	43,324,560	1,882,175
Incentives	8,826,823	11,894,936	3,068,114	60,410,943	81,660,642	21,249,700
Salaries and Related Expenses	748,857	808,737	59,880	8,143,549	9,233,838	1,090,289
Professional Services	475,932	873,282	397,350	6,012,067	10,156,886	4,144,819
Supplies	6,970	7,618	648	64,889	82,132	17,243
Telephone	4,751	4,530	(221)	43,475	50,194	6,719
Postage and Shipping Expenses	1,299	2,875	1,576	11,274	31,625	20,351
Occupancy Expenses	54,325	56,229	1,903	575,800	606,514	30,714
Noncapitalized Equip. & Depr.	43,305	147,958	104,653	1,292,032	1,178,977	(113,055)
Call Center	15,861	18,070	2,209	193,847	163,718	(30,129)
Printing and Publications	5,052	16,171	11,118	111,169	177,879	66,710
Travel	15,251	14,648	(603)	113,097	192,208	79,111
Conference, Training & Mtng Exp	5,390	31,495	26,105	116,472	359,944	243,473
Interest Expense and Bank Fees	30	625	595	5,030	6,875	1,845
Insurance	7,800	9,167	1,367	84,826	100,833	16,007
Miscellaneous Expenses	3,055	217	(2,839)	34,665	2,383	(32,282)
Dues, Licenses and Fees	17,055	7,733	(9,322)	133,050	124,892	(8,158)
TOTAL EXPENSES	**14,369,550**	**18,379,073**	**4,009,523**	**118,788,570**	**147,454,101**	**28,665,531**
TOTAL REVENUE LESS EXPENSES	**(4,223,117)**	**(6,841,383)**	**2,618,267**	**15,048,781**	**(6,233,313)**	**21,282,094**

IS-Acct-YTD-001

Energy Trust of Oregon, Inc
Statement of Functional Expenses
For the Eleven Months Ending November 30, 2012

	Energy Efficiency	Renewable Energy	Consulting Services	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Budget	Variance
Program Expenses										
Incentives/ Program Management & Deliv	88,542,103	13,311,225		101,853,328			0	101,853,328	124,985,203	23,131,875
Payroll and Related Expenses	2,268,575	749,207	1,544	3,019,326	1,697,268	735,084	2,432,352	5,451,678	5,990,938	539,260
Outsourced Services	3,605,174	426,336		4,031,510	195,473	536,350	731,823	4,763,333	8,478,438	3,715,105
Planning and Evaluation	1,571,995	78,238		1,650,233	15,937		15,937	1,666,170	2,344,721	678,551
Customer Service Management	594,836	21,439		616,275			0	616,275	623,931	7,656
Trade Allies Network	333,848	24,435		358,283			0	358,283	460,074	101,791
Total Program Expenses	**96,916,530**	**14,610,881**	**1,544**	**111,528,955**	**1,908,678**	**1,271,434**	**3,180,112**	**114,709,067**	**142,883,306**	**28,174,239**
Program Support Costs										
Supplies	33,156	5,888	3	39,047	9,759	5,969	15,728	54,775	49,462	(5,313)
Postage and Shipping Expenses	3,520	1,013	1	4,534	1,831	1,770	3,601	8,135	22,417	14,282
Telephone	3,546	1,996	1	5,543	2,261	731	2,992	8,535	6,382	(2,153)
Printing and Publications	79,132	3,614		82,746	634	22,266	22,900	105,646	169,813	64,167
Occupancy Expenses	164,956	59,821	60	224,837	108,116	56,797	164,913	389,750	399,986	10,236
Insurance	24,334	8,825	9	33,168	15,949	8,379	24,328	57,496	66,499	9,003
Equipment	9,034	35,466	3	44,503	737,424	3,111	740,535	785,038	24,279	(760,759)
Travel	38,607	20,863	376	59,846	27,211	3,889	31,100	90,946	163,333	72,387
Meetings, Trainings & Conferences	21,985	10,088		32,073	35,216	4,159	39,375	71,448	248,429	176,981
Interest Expense and Bank Fees				0	5,030		5,030	5,030	6,875	1,845
Depreciation & Amortization	42,137	21,152	15	63,304	27,617	14,509	42,126	105,430	141,701	36,271
Dues, Licenses and Fees	85,614	15,095		100,709	8,280	2,896	11,176	111,885	91,039	(20,846)
Miscellaneous Expenses	2,683	30		2,713	217	31,329	31,546	34,259	1,603	(32,656)
IT Services	1,654,411	137,101		1,791,512	276,016	183,600	459,616	2,251,128	3,178,979	927,851
Total Program Support Costs	**2,163,116**	**320,953**	**468**	**2,484,537**	**1,255,561**	**339,405**	**1,594,966**	**4,079,503**	**4,570,795**	**491,292**
TOTAL EXPENSES	**99,079,646**	**14,931,834**	**2,012**	**114,013,492**	**3,164,239**	**1,610,839**	**4,775,078**	**118,788,570**	**147,454,100**	**28,665,530**
OPUC measure vs. 9%	**5.42%**									

Exp-Acct-YTD-002

Energy Trust of Oregon, Inc
Year to Date by Program/Service Territory - joint costs allocated at program level
For the Eleven Months Ending November 30, 2012
(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	$25,894,554	$18,060,241	$43,954,795		$15,673,604	$1,179,723	$60,782,664				$60,782,664	$7,400,159	$5,086,068	$12,486,227		$73,268,891	$75,376,772	$2,107,881
Incremental Funding	36,336,728	21,676,043	58,012,771	1,076,344			59,089,115		1,261,914	1,261,914	60,351,029					60,351,029	65,660,678	5,309,649
Consumer Owned Electric Funding								57,646		57,646	57,646					57,646		(57,646)
Consulting Income															3,055	3,055		(3,055)
Contributions															30,515	30,515		(30,515)
Special Projects	34		34		166		200				200					200		(200)
Revenue from Investments															126,015	126,015	183,337	57,322
TOTAL PROGRAM REVENUE	**62,231,316**	**39,736,284**	**101,967,600**	**1,076,344**	**15,673,770**	**1,179,723**	**119,871,979**	**57,646**	**1,261,914**	**1,319,560**	**121,191,539**	**7,400,159**	**5,086,068**	**12,486,227**	**159,585**	**133,837,351**	**141,220,787**	**$7,383,436**
EXPENSES																		
Program Management (Note 3)	2,356,315	1,668,198	4,024,513	54,191	1,235,497	90,367	5,404,568	3,353	117,105	120,458	5,525,026	298,110	451,097	749,207	1,544	6,275,777	5,595,807	(679,970)
Program Delivery	16,490,607	11,553,102	28,043,709	401,848	4,939,196	391,317	33,776,070	1,204	220,481	221,685	33,997,755	114,729	103,754	218,483		34,216,238	36,978,211	2,761,973
Incentives	22,923,628	14,438,396	37,362,024	566,811	8,316,285	711,280	46,956,400	25,830	335,971	361,801	47,318,201	9,065,161	4,027,582	13,092,743		60,410,944	81,660,642	21,249,698
Program Eval & Planning Svcs.	1,627,223	1,078,787	2,706,010	47,781	581,071	49,608	3,384,470	1,130	48,197	49,327	3,433,797	32,776	45,462	78,238		3,512,035	5,199,365	1,687,330
Program Marketing/Outreach	2,163,327	1,470,894	3,634,221	11,893	1,251,395	88,209	4,985,718	0	84,309	84,309	5,070,027	52,275	20,839	73,114		5,143,141	5,439,069	295,928
Program Legal Services	275	246	521	0	289	10	820	0	0	0	820	0	0	0		820	6,876	6,056
Program Quality Assurance	42,884	37,172	80,056	50	42,120	1,442	123,667	0	0	0	123,667	863	0	863		124,530	267,269	142,739
Outsourced Services	226,882	166,218	393,099	2,817	117,326	5,309	518,552	0	0	0	518,552	207,415	144,945	352,360		870,912	2,624,317	1,753,405
Trade Allies & Cust. Svc. Mgmt.	361,444	269,634	631,078	2,285	260,138	14,175	907,675	823	20,187	21,010	928,685	34,971	10,903	45,874		974,559	1,084,005	109,446
IT Services	704,835	493,116	1,197,951	9,267	377,816	21,923	1,606,957	2,021	45,435	47,456	1,654,413	52,211	84,890	137,101		1,791,514	2,529,923	738,409
Other Program Expenses	225,781	147,358	373,138	6,512	84,452	7,268	471,371	1,494	35,841	37,335	508,706	102,180	81,671	183,851	468	693,025	807,607	114,582
TOTAL PROGRAM EXPENSES	**47,123,201**	**31,323,119**	**78,446,320**	**1,103,455**	**17,205,586**	**1,380,907**	**98,136,268**	**35,855**	**907,526**	**943,381**	**99,079,646**	**9,960,691**	**4,971,143**	**14,931,834**	**2,012**	**114,013,493**	**142,193,091**	**$28,179,596**
ADMINISTRATIVE COSTS																		
Management & General (Notes 1 & 2)	1,307,842	869,332	2,177,173	30,625	477,518	38,325	2,723,642	995	25,187	26,182	2,749,824	273,952	140,462	414,414		3,164,239	3,293,455	129,217
Communications & Customer Svc (Notes 1 & 2)	665,791	442,556	1,108,348	15,590	243,093	19,511	1,386,542	507	12,821	13,328	1,399,870	139,462	71,506	210,968		1,610,839	1,967,554	356,716
Total Administrative Costs	**1,973,633**	**1,311,888**	**3,285,521**	**46,215**	**720,612**	**57,836**	**4,110,184**	**1,502**	**38,008**	**39,510**	**4,149,694**	**413,414**	**211,968**	**625,382**		**4,775,078**	**5,261,009**	**$485,933**
TOTAL PROG & ADMIN EXPENSES	**49,096,834**	**32,635,005**	**81,731,839**	**1,149,671**	**17,926,197**	**1,438,745**	**102,246,452**	**37,356**	**945,532**	**982,888**	**103,229,340**	**10,374,106**	**5,183,111**	**15,557,217**	**2,012**	**118,788,569**	**147,454,100**	**$28,665,530**
TOTAL REVENUE LESS EXPENSES	**13,134,482**	**7,101,277**	**20,235,759**	**(73,326)**	**(2,252,427)**	**(259,020)**	**17,625,527**	**20,290**	**316,379**	**336,669**	**17,962,196**	**(2,973,946)**	**(97,043)**	**(3,070,989)**	**157,573**	**15,048,781**	**(6,233,313)**	**($21,282,093)**
Cumulative Carryover at 12/31/11 (Note 4)	10,744,010	18,682	10,762,692	1,389,821	6,895,922	150,877	19,224,770		247,771	247,771	19,472,541	16,410,883	8,267,775	24,678,658	10,514,019	54,665,217	51,243,554	(3,421,664)
Interest attributed	1,740,000	1,160,000	2,900,000		5,000,000		7,900,000				7,900,000	585,000	2,235,000	2,820,000	(10,720,000)			
Interest re-attributed	(1,740,000)	(1,160,000)	(2,900,000)		(5,000,000)		(7,900,000)				(7,900,000)				7,900,000			
TOTAL NET ASSETS CUMULATIVE	**23,878,492**	**7,119,959**	**30,998,451**	**1,316,495**	**4,643,495**	**(108,143)**	**36,850,297**	**20,290**	**564,150**	**584,440**	**37,434,737**	**14,021,937**	**10,405,732**	**24,427,669**	**7,851,592**	**69,713,998**	**45,010,241**	**($24,703,757)**

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 12/31/2011 reflects audited results.

Energy Trust of Oregon, Inc
Program Expense by Service Territory
For the Eleven Months Ending November 30, 2012
(Unaudited)

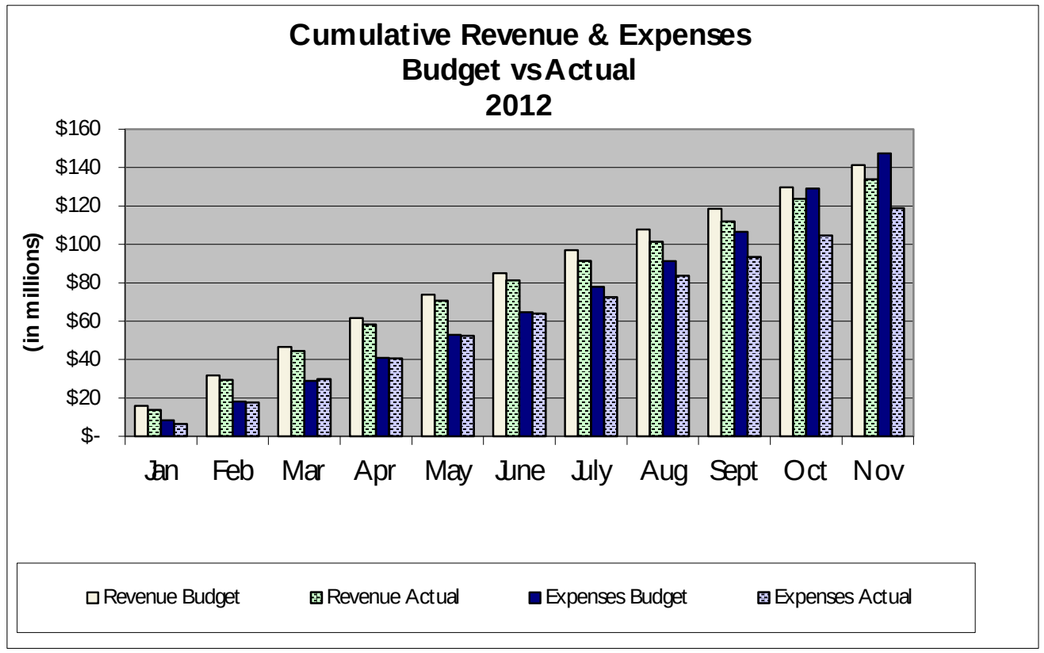
	PGE	Pacific Power	Elec. Utilities	NWN Industrial	NW Natural Gas	Cascade	Gas Providers	Oregon Total	Clark PUD WA	NWN WA	Total WA	Consulting	ETO Total	YTD Budget	Variance
Energy Efficiency															
Commercial															
Existing Buildings	12,555,077	8,284,928	20,840,005	140,968	5,366,636	256,359	5,763,963	26,603,968	37,356	322,019	359,375		26,963,343	37,793,294	10,829,951
New Buildings	7,163,926	4,095,204	11,259,130	100,647	984,963	131,344	1,216,954	12,476,084					12,476,084	13,398,013	921,929
NEEA	1,473,218	1,094,911	2,568,129					2,568,129					2,568,129	3,220,034	651,905
Total Commercial	**21,192,221**	**13,475,043**	**34,667,264**	**241,615**	**6,351,599**	**387,703**	**6,980,917**	**41,648,181**	**37,356**	**322,019**	**359,375**		**42,007,556**	**54,411,341**	**12,403,785**
Industrial															
Production Efficiency	10,350,644	6,300,917	16,651,561	908,056	298,590	307,984	1,514,630	18,166,191					18,166,191	25,067,977	6,901,786
NEEA	729,035	537,291	1,266,326					1,266,326					1,266,326	1,473,281	206,955
Total Industrial	**11,079,679**	**6,838,208**	**17,917,887**	**908,056**	**298,590**	**307,984**	**1,514,630**	**19,432,517**					**19,432,517**	**26,541,258**	**7,108,741**
Residential															
Existing Homes	7,061,800	6,297,454	13,359,254		7,421,414	247,615	7,669,029	21,028,283		398,298	398,298		21,426,581	24,645,677	3,219,096
New Homes/Products	7,612,548	4,401,929	12,014,477		3,854,594	495,443	4,350,037	16,364,514		225,215	225,215		16,589,729	19,654,907	3,065,178
NEEA	2,150,586	1,622,371	3,772,957					3,772,957					3,772,957	3,325,534	(447,423)
Total Residential	**16,824,934**	**12,321,754**	**29,146,688**		**11,276,008**	**743,058**	**12,019,066**	**41,165,754**		**623,513**	**623,513**		**41,789,267**	**47,626,118**	**5,836,851**
Energy Efficiency Program Costs	**49,096,834**	**32,635,005**	**81,731,839**	**1,149,671**	**17,926,197**	**1,438,745**	**20,514,613**	**102,246,452**	**37,356**	**945,532**	**982,888**		**103,229,340**	**128,578,717**	**25,349,377**
Renewables															
Biopower	124,567	1,141,592	1,266,159					1,266,159					1,266,159	2,097,561	831,402
Solar Electric (Photovoltaic)	9,994,242	2,744,418	12,738,660					12,738,660					12,738,660	13,078,941	340,281
Other Renewable	255,297	1,297,101	1,552,398					1,552,398					1,552,398	3,698,882	2,146,484
Renewables Program Costs	**10,374,106**	**5,183,111**	**15,557,217**					**15,557,217**					**15,557,217**	**18,875,384**	**3,318,167**
Consulting												2,012	2,012		(2,012)
Cost Grand Total	**59,470,940**	**37,818,116**	**97,289,056**	**1,149,671**	**17,926,197**	**1,438,745**	**20,514,613**	**117,803,669**	**37,356**	**945,532**	**982,888**	**2,012**	**118,788,570**	**147,454,101**	**28,665,532**

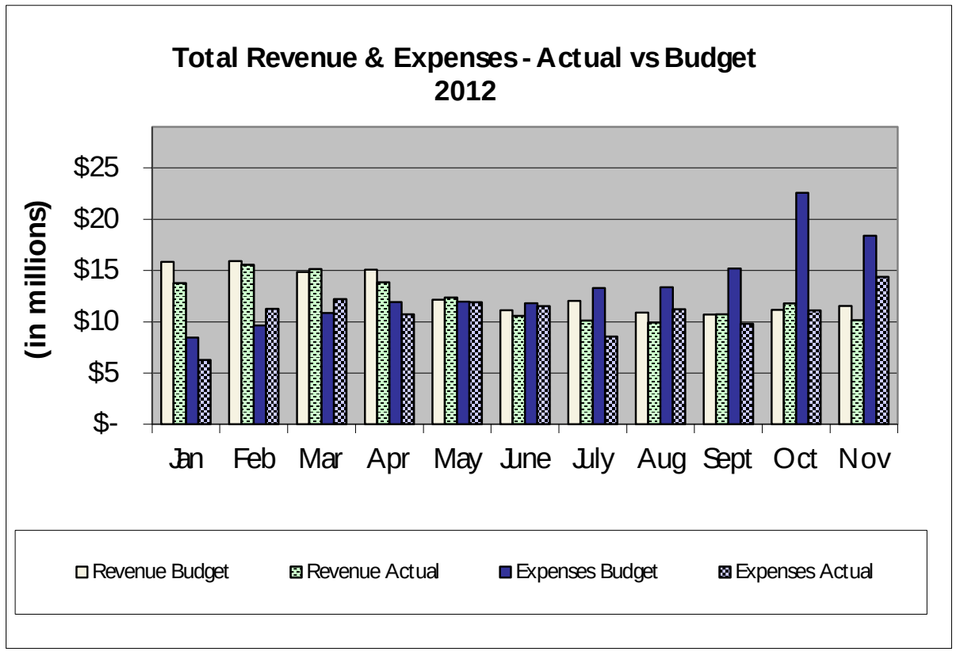
PUC-Proj-ST-07-C

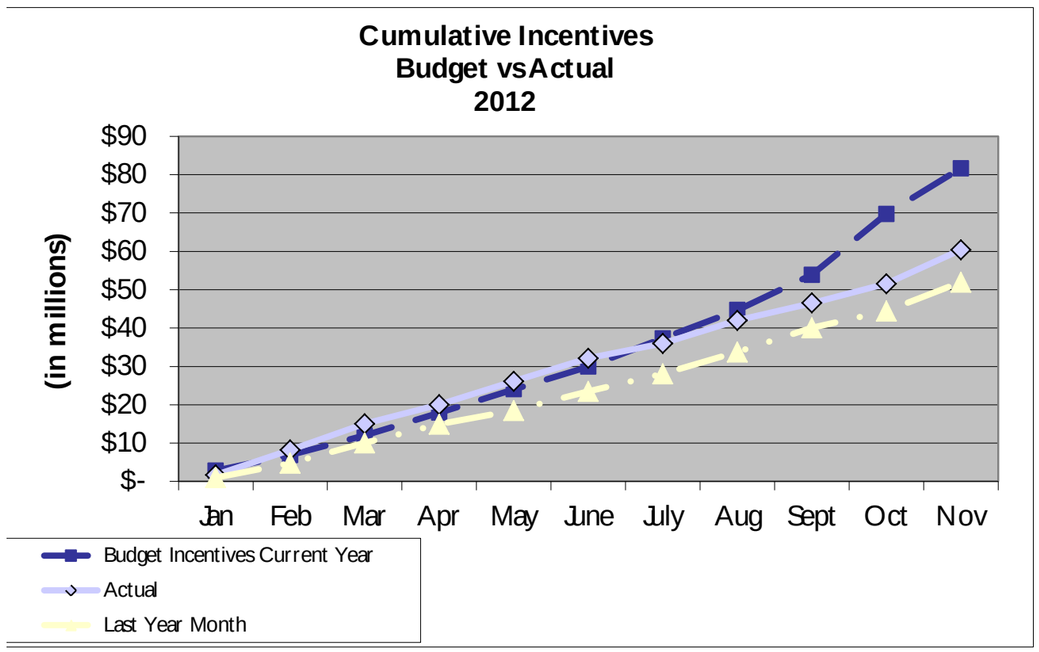
Energy Trust of Oregon, Inc.
ADMINISTRATIVE EXPENSES
For the Two Months and Year to Date Ended November 30, 2012
(Unaudited)

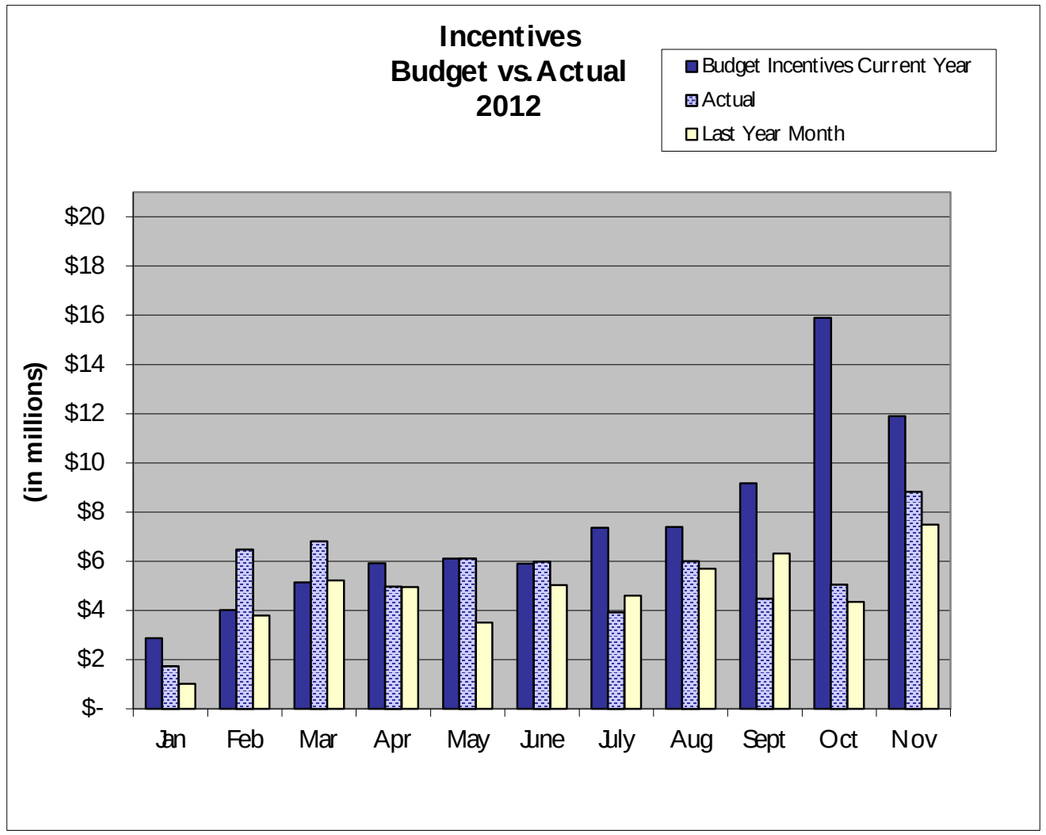
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	QTD ACTUAL	QUARTERLY BUDGET	QUARTER REMAINING	YTD ACTUAL	YTD BUDGET	YTD VARIANCE	QTD ACTUAL	QUARTERLY BUDGET	QUARTER REMAINING	YTD ACTUAL	YTD BUDGET	YTD VARIANCE
EXPENSES												
Outsourced Services	$18,684	$65,846	$47,162	$168,822	$408,936	$240,115	$104,243	$180,750	$76,507	$536,350	$687,750	$151,400
Legal Services		35,625	35,625	26,652	130,625	103,974						
Salaries and Related Expenses	318,266	522,062	203,796	1,697,268	1,945,654	248,386	142,853	227,545	84,692	735,084	832,351	97,268
Supplies	30	1,500	1,470	4,610	5,500	890	766	625	(141)	3,265	2,292	(973)
Telephone	136	350	214	1,362	1,643	281	30		(30)	259		(259)
Postage and Shipping Expenses								1,250	1,250	809	4,583	3,775
Noncapitalized Equipment				731,503		(731,503)		500	500		1,833	1,833
Printing and Publications	45	75	31	358	275	(83)	4,141	12,500	8,359	22,121	45,833	23,712
Travel	3,079	9,164	6,085	27,211	33,601	6,391	2,661	1,750	(911)	3,889	6,417	2,527
Conference, Training & Mtngs	2,879	38,835	35,956	35,216	143,895	108,679	619	5,125	4,506	4,159	18,792	14,633
Interest Expense and Bank Fees	30	1,875	1,845	5,030	6,875	1,845						
Miscellaneous Expenses		25	25	163	92	(71)	27,263		(27,263)	31,300		(31,300)
Dues, Licenses and Fees	512	3,208	2,696	8,280	8,331	51	789	625	(164)	2,896	2,292	(604)
Shared Allocation (Note 1)	29,397	54,851	25,454	165,813	195,818	30,005	15,642	29,731	14,089	87,108	106,138	19,030
IT Service Allocation (Note 2)	48,681	124,126	75,444	276,016	389,782	113,766	32,382	82,566	50,184	183,600	259,274	75,674
Planning & Eval (Note 3)	2,910	6,001	3,090	15,937	22,428	6,491						
TOTAL EXPENSES	**424,649**	**863,543**	**438,894**	**3,164,239**	**3,293,455**	**129,216**	**331,388**	**542,966**	**211,578**	**1,610,839**	**1,967,555**	**356,717**

Note 1) Represents allocation of Shared (General Office Management) Costs
Note 2) Represents allocation of Shared IT Costs
Note 3) Represents allocation of Planning & Evaluations Costs


Cumulative Revenue & Expenses
Budget vs Actual
2012
(in millions)
$160
$140
$120
$100
$80
$60
$40
$20
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2012
(in millions)
$25
$20
$15
$10
$5
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs Actual
2012
(in millions)
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Budget Incentives Current Year
Actual
Last Year Month


Incentives
Budget vs. Actual
2012
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov

R00407

For contracts with costs through: 12/1/2012

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 12/19/2012

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**7,977,526**	**2,755,380**	**5,222,146**		
Communications & Outreach							
		Communications & Outreach Total:	**2,764,907**	**2,230,365**	**534,543**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	26,200,340	12,938,340	1/1/10	7/1/15
Lockheed Martin Services, Inc.	PMC EB 2012	Cherry Hill	8,899,261	7,154,627	1,744,634	1/1/12	12/31/12
Conservations Services Group, Inc.	2012 HES PMC	Portland	6,961,172	6,477,336	483,836	1/1/12	12/31/12
Portland Energy Conservation, Inc.	PMC NHP 2012	Portland	6,527,624	5,807,037	720,587	1/1/12	12/31/12
Portland Energy Conservation, Inc.	2012 NBE PMC	Portland	4,780,560	4,203,878	576,682	1/1/12	12/31/12
Intel Corporation	Intel D1X Megaproject	Hillsboro	4,000,000	0	4,000,000	11/15/12	12/31/14
Oregon State University	CHP Project - OSU	Corvallis	2,024,263	1,920,000	104,263	12/20/10	12/20/13
Cascade Energy, Inc.	PDC - PE 2012	Walla Walla	1,777,494	1,502,643	274,851	1/1/12	12/31/12
Portland General Electric	PDC - PE 2012		1,753,000	1,594,020	158,980	1/1/12	12/31/12
OPOWER, Inc.	OPOWER Agreement	Arlington	1,725,000	1,717,720	7,280	3/2/10	2/28/13
Lockheed Martin Services Inc.	2012 MF PMC	Portland	1,660,001	1,306,289	353,712	1/1/12	12/31/12
RHT Energy Solutions	PDC - PE 2012	Medford	1,397,810	1,234,795	163,015	1/1/12	12/31/12
Cascade Energy, Inc.	PDC - PE 2012 Small Industrial	Walla Walla	1,139,688	920,197	219,491	1/1/12	12/31/12
Northwest Power & Conservation Council	Annual Work Plan		874,652	258,652	616,000	3/20/12	12/31/14
NEXANT, INC.	PDC - PE 2012	San Francisco	837,000	676,354	160,646	1/1/12	12/31/12
Evergreen Consulting Group, LLC	PE Lighting PDC 2012	Tigard	834,860	602,613	232,247	1/1/12	12/31/12
Evoworx Inc.	EnergySavvy Online Audit Tool	Seattle	495,000	126,730	368,270	1/1/12	12/31/12
Navigant Consulting Inc	PE Program Impact Evaluation	Boulder	490,000	469,753	20,247	12/15/11	6/30/13
Ecova Inc	80 Plus Initiative - 2012	Portland	487,995	315,956	172,040	1/1/12	12/31/12
ICF Resources, LLC	BE PMC Transition Agreement	Fairfax	482,000	113,721	368,279	9/4/12	12/31/12
Fluid Market Strategies LLC	HES PMC Transition	Portland	449,000	298,795	150,205	8/23/12	12/31/12
Clean Energy Works Oregon Inc	Clean Energy Works	Portland	448,500	300,000	148,500	1/1/10	12/31/12
SBW Consulting, Inc.	BE Program Impact Evaluation	Bellevue	400,000	245,878	154,122	1/15/12	6/30/13
The Cadmus Group Inc.	NB Impact Eval 2010-2011	Watertown	295,000	149,215	145,785	1/13/12	12/31/13
Cascade Energy Engineering, Inc.	Technical Service Provider	Portland	284,483	277,989	6,494	8/1/09	7/31/12
Research Into Action, Inc.	EB Evaluation	Portland	210,000	205,100	4,900	1/1/12	12/31/12
Lockheed Martin Services Inc.	NWN WA BE 2012	Portland	202,200	126,467	75,733	1/1/12	12/31/12
Conservation Services Group Inc	2012 HES WA PMC	Westborough	193,726	147,221	46,505	1/1/12	12/31/12
Research Into Action, Inc.	PE Evaluation	Portland	170,000	95,528	74,472	2/1/12	5/30/13
PacifiCorp	Consumer Info Transfer	Portland	137,500	60,228	77,272	8/15/03	8/15/12
Opinion Dynamics Corporation	Evaluate OPOWER Pilot	Waltham	128,000	118,370	9,630	4/1/11	8/31/12
J. Hruska Global	Quality Assurance Services	Columbia City	125,000	109,353	15,647	1/18/12	12/31/12
ICF Resources, LLC	CHP Performance	Fairfax	116,320	67,810	48,510	8/5/09	6/30/13
Lockheed Martin Services, Inc.	NWN DSM Initiative 2012	Cherry Hill	110,000	35,391	74,609	1/1/12	12/31/12
PWP, Inc.	NBE Process Evaluation	Gaithersburg	100,000	52,666	47,334	1/6/12	12/31/13

*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
Skumatz Economic Research Associates Inc	Existing Homes Study	Superior	100,000	86,179	13,821	7/15/11	12/31/12
Vitesse LLC	Vitesse Data Center	Menlo Park	100,000	0	100,000	10/18/12	10/30/13
Heschong, Mahone Group, Inc.	QA Consultant Services	Fair Oaks	88,500	88,500	0	3/15/11	12/31/12
Johnson Consulting Group LLC	CEWO Process Evaluation	Frederick	80,000	59,184	20,816	12/12/11	11/30/12
Energy Efficiency Funding Group Inc	Training Classes/Workshops	San Francisco	75,000	67,590	7,410	6/1/11	5/31/13
Hitachi Consulting Corporation	SOW #14 PMC Transition Support	Dallas	70,000	8,265	61,735	9/10/12	1/21/13
Portland Energy Conservation, Inc.	PECI NWN WA 2012	Portland	65,026	50,134	14,892	1/1/12	12/31/12
Glumac Inc	Data Center Analysis	Portland	64,525	50,254	14,271	6/7/12	10/31/12
Pollinate Inc	Web Application Development	Portland	58,500	56,974	1,526	1/1/12	12/31/12
Portland Energy Conservation, Inc.	EE Consultant Services	Portland	54,170	47,273	6,897	6/1/11	12/31/13
Home Performance Contractors Guild of Oregon	Existing Homes Program Support	Portland	52,000	43,133	8,867	1/1/12	12/31/12
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	50,000	28,548	21,453	7/1/11	11/30/12
The Cadmus Group Inc.	Path to Net-Zero Pilot	Watertown	49,000	15,006	33,994	11/1/09	12/31/12
PWP, Inc.	Comm SEM Initiative Evaluation	Gaithersburg	45,000	11,103	33,897	7/1/12	6/30/14
KEMA Incorporated	Shelf Space Survey	Oakland	42,750	0	42,750	12/1/12	9/30/13
Fluid Market Strategies LLC	New Homes QA Assurance	Portland	42,250	6,225	36,025	3/1/12	12/31/12
Portland General Electric	Utility Data Payment - OPOWER	Portland	40,000	19,928	20,072	8/1/10	2/28/12
Research Into Action, Inc.	Eval SB 838 2010 & 2011 Funds	Portland	40,000	25,934	14,066	6/15/11	6/30/12
NW Natural	Info Transfer & Reimbursement	Portland	35,000	21,263	13,737	7/12/10	2/28/12
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	0	35,000	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	3,284	30,716	9/1/12	8/30/14
Stellar Processes, Inc.	EPS Modeling Comparison	Portland	33,000	26,659	6,341	1/15/11	6/30/12
Navigant Consulting Inc	Sustainable Energy Syst Pilot	Boulder	30,000	14,921	15,079	2/15/11	11/30/12
Pollinate Inc	Energy Savings Estimate	Portland	25,000	0	25,000	11/1/12	3/1/13
Triple Point Energy Inc.	Breakfast Workshops	Portland	23,585	12,350	11,235	4/12/12	1/15/13
Forrest Marketing	New Buildings Market Research	Portland	23,000	22,375	625	8/22/12	1/31/13
MetaResource Group	Intel D1X Megaproject	Portland	20,000	4,650	15,350	10/10/11	12/31/12
Michael Blasnick & Associated	Billing Analysis Process	Boston	20,000	3,938	16,063	1/1/10	12/31/12
Northwest Food Processors Association	NW Industrial EE Summit 2013	Portland	17,500	7,500	10,000	12/10/12	12/31/13
Oregon Department of Energy	Oregon Leaders Project	Salem	15,000	15,000	0	9/19/11	1/31/14
Watershed Sciences Inc	Thermal Imaging Data Analysis	Corvallis	11,000	2,475	8,525	7/1/11	12/31/12
Portland State University Foundation	Green Modular Classroom Proj	Portland	10,500	0	10,500	6/13/12	7/31/14
Future Energy Conference	Future Energy Conference 2012	Portland	6,500	0	6,500	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
MetaResource Group	Home Performance Focus Group	Portland	5,000	2,982	2,018	8/10/12	9/30/12

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
	Energy Efficiency Programs Total:		**91,157,595**	**65,714,298**	**25,443,297**		
Joint Programs							
Gilmore Research	Fast Feedback Survey	Seattle	104,000	6,500	97,500	10/1/12	6/30/14
ICF Resources, LLC	Planning Consultant Services	Fairfax	64,700	63,840	860	6/16/11	5/31/13
Skumatz Economic Research Associates Inc	Evaluation Consultant	Superior	30,000	3,480	26,520	3/1/11	12/31/12
Portland State University	Technology Forecasting		29,097	19,193	9,904	11/7/11	12/31/13
Navigant Consulting Inc	P&E Consultant Services	Boulder	22,040	7,925	14,115	6/30/11	7/1/13
Glumac Inc	Planning Technical Analysis	Portland	15,000	0	15,000	10/17/12	10/17/14
CoStar Realty Information Inc	Property Data	Baltimore	12,668	8,511	4,158	6/1/11	2/28/13
Gilmore Research	Customer Engagement Survey	Seattle	12,500	2,500	10,000	10/1/12	12/31/13
	Joint Programs Total:		**290,005**	**111,948**	**178,057**		
Renewable Energy Program							
Outback Solar LLC	Outback Solar	Portland	5,000,000	0	5,000,000	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
enXco Asset Holdings Inc	Bellevue Solar Facility	San Diego	2,012,500	1,912,680	99,820	7/23/10	7/23/35
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	1,603,105	81,983	7/21/06	7/21/26
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	0	1,550,000	9/11/12	9/11/32
enXco Asset Holdings Inc	Yamhill Solar Facility	San Diego	1,437,500	1,366,200	71,300	7/23/10	7/23/35
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	110,415	772,905	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	0	600,000	10/1/12	10/1/37
Tioga Solar VI, LLC	Photovoltaic Project Agreement	San Mateo	570,760	368,942	201,818	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	0	450,000	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	141,996	88,004	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	4,260	95,740	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

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Construct Inc	RE Consultant Services	Portland	64,000	32,170	31,830	1/1/11	12/31/12
Bloomberg LP	Insight Services	San Francisco	45,600	33,300	12,300	4/1/11	1/1/14
University of Oregon	UO SRML Contribution	Eugene	45,000	45,000	0	3/9/12	3/9/13
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	22,000	2,000	1/1/12	12/31/12
Wind Products Inc	Web Portal Tool	Brooklyn	24,000	25,000	-1,000	6/25/12	9/20/13
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
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
	Renewable Energy Program Total:		**27,347,032**	**13,583,161**	**13,763,871**		
	Grand Totals:		**129,537,065**	**84,395,152**	**45,141,914**		

*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

Policy Committee of the Energy Trust Board of Directors

December 11, 2012

Attendees

Roger Hamilton, Ken Canon (telephone), Alan Meyer (telephone), John Reynolds, Margie Harris, Fred Gordon, Jed Jorgensen, Betsy Kauffman, Oliver Kesting, Steve Lacey, Debbie Menashe, Sue Meyer Sample, John Volkman and Peter West

1. Urban small hydro project. Jed Jorgensen sought the committee's reaction to a small hydro project (172 kw) on a City of Portland water main, which seeks a $700,000 incentive. The project is tied to other construction work that the Water Bureau is doing beginning in January 2013, and is being developed on an extremely short time. While staff had reservations about the project, the proponents are addressing the issues staff raised, and the project is of interest. It is a relatively large urban hydro project in PGE territory and would likely have a high profile. It will use new technology developed by a local firm. At the same time, with a $700,000 incentive its cost would be close to commercial solar, higher than other hydro we have funded. By the time of the February board meeting the project would be about 80% constructed. The project needs an Energy Trust incentive to make its finances work. In response to the committee's questions, staff reviewed what is known about the developer; the fact that the technology has been tested but doesn't have much operating history; and we know little about the size of the market for this technology in Oregon. The City is supportive of the project, and if the equipment had to be replaced or adjusted, the project would require the City's cooperation. Committee members expressed a number of reservations: the high cost, undemonstrated technology, and the fact that by the time the project would get to the board it would be largely completed. At the same time, the technology is intriguing, and another project at a later stage of development with more time to explore concerns would be of interest.

2. Co-funding energy efficiency projects at Portland State University with an entity that claims all carbon credit. The Existing Buildings program is enrolling PSU in Strategic Energy Management for 2013. General Motors, working through the Bonneville Environmental Foundation (BEF), is interested in buying carbon offsets as part of its Environmental Stewardship effort. While no specific PSU efficiency projects have been identified, BEF has talked to PSU about helping to fund efficiency projects in 2014, provided GM can take title to the carbon offsets. Because GM funding could help PSU reach deeper savings than with Existing Buildings funds alone, the program would like to provide this assurance to GM, via a letter saying that Energy Trust does not and will not claim title to carbon offsets associated with any such efficiency projects. The Existing Buildings program would claim all energy savings associated with the PSU projects.

The committee has explored the merits of claiming energy-efficiency carbon credits in the past, including a meeting with OPUC, utility, ODOE and Climate Trust representatives. There was no consensus at the meeting, although several participants, including OPUC

representatives, did not think there was enough at stake to warrant Energy Trust retaining carbon offsets, and the State of Oregon's Business Energy Tax Credit program did not at that time claim offsets. On the other hand, other meeting participants worried that if ratepayers had no right to claim offsets, they might have to pay twice, once for an efficiency project, and again for carbon reduction. The committee ultimately decided not to develop a policy on this subject, given the prospect that Congress or the Oregon legislature were expected adopt to climate legislation that could clarify whether Energy Trust projects are implicated. Since then, no such legislation has been adopted.

Oliver Kesting's proposal is to send a letter to PSU that would represent a case-by-case judgment rather than a formal Energy Trust policy position. The letter would assure PSU (and, indirectly, GM) that Energy Trust will not claim carbon offsets associated with Energy Trust energy efficiency projects at PSU in a defined time period (2014-2015), and work with GM and BEF to get comparable utility assurances.

The committee agreed, and wants to emphasize that this would not set a precedent for other projects. A committee member observed that our job is energy efficiency, not carbon reduction and so we are not giving up anything relating to our current mandate. Staff observed that Energy Trust had co-funded an earlier project (Blue Heron) while disclaiming ownership of carbon credits. The committee suggested edits to the letter so it applies to projects in 2014.

3. Status reports:

a. Utility data-sharing agreements. Staff completed negotiations on the Cascade Natural Gas, PGE, PacifiCorp and NW Natural data-sharing agreements. Next steps are to work through a range of IT and communications issues, and begin sharing information under the new rules by May 1, 2013.

b. Funding negotiations. We have concluded negotiations with the utilities for 2013 funding. Steve Lacey reviewed prospective rate adjustments and funding for each of the utilities. A committee member asked how we could have so much money in the bank and yet have a revenue shortfall. Sue said the shortfall is in relation to the revenue forecast. Alan Meyer asked how we are working with IRP, conservative-case and stretch goals. Steve said that IRP and conservative-case line up closely, and we are funded to the stretch goal. Margie said in the coming year we expect to discuss with the utilities how funding to stretch goals interacts with our various reserves.

c. Budget. Sue briefed the committee on issues associated with a final budget. We updated our year-end forecast and revenue receipts, and it shows a $2.7 million gap. Margie briefed the committee on comments received on the budget. Sue said the Finance Committee has endorsed a different way to calculate "interest reserves," moving from a two-year to a one-year basis for reserves to cushion revenue fluctuations caused by weather or forecasting errors.

d. Cost-effectiveness issues. The OPUC has granted exemptions from cost-effectiveness requirements for Energy Trust residential gas programs. The Washington Utilities

and Transportation Commission has begun an investigation into cost-effectiveness standards; we are participating as a contractor to NW Natural. Staff will talk next week with the OPUC staff about longer-term changes in cost-effectiveness.

4. Outreach. As the 2013 legislative session approaches, Margie solicited ideas for legislators to brief about Energy Trust, its structure and accomplishments. She also said we just received a legislator request, via the OPUC, into Energy Trust salaries, board membership and other issues. We plan to respond with salary ranges by position, not individual salaries except those we already make public in tax filings. A committee member endorsed the idea of being forthcoming with information while protecting individuals' confidentiality. The committee discussed the timing of the Governor's energy plan, and how it might affect the legislative session. The OPUC's final report on the concept of energy-efficiency power purchase agreements, which is a very well done, has been completed. Margie reported that Idaho Power says it will pull out of NEEA at the next funding cycle; the Idaho Commission is requiring Idaho Power to justify this.

Policy Committee of the Energy Trust Board of Directors

January 29, 2013

Attendees

Roger Hamilton, Alan Meyer, Ken Canon, John Reynolds, Amber Cole, Fred Gordon, Peter West, Steve Lacey and Debbie Menashe

Preliminary Results for 2012. Peter West presented the preliminary results for 2012 annual savings and generation results, and progress towards stretch, conservative and IRP goals.

Caveats: Further review as part of Energy Trust's comprehensive annual reporting process is planned, and the results presented to the Policy Committee may be revised. The Energy Trust 2012 Annual Report to the Oregon PUC will contain the most accurate and comprehensive Energy Trust data, and will be available in April.

Preliminary results are excellent, with electric and gas efficiency savings exceeding Energy Trust's 2012 stretch and conservative goals, as well as the utilities' IRP goals. Preliminary results indicate that Energy Trust also exceeded goals for 2012.

Committee members requested that the preliminary results include forecasted savings results for programs as well as utility. The Committee also discussed the implications of exceeding IRP goal at the levels reflected in the 2012 preliminary results. Energy Trust's objective and funding are intended to accomplish the achievable potential for savings plus an additional 15% of market potential. Committee members requested time at a future Policy Committee meeting to discuss funding expectations and how to characterize and manage expectations around savings goals. These items will be included on a future Policy Committee agenda.

Update on Fuel Switching Docket UM 1565. In early 2012, the OPUC opened an investigation into NW Natural's concerns that certain portions of Energy Trust's energy efficiency programs cause fuel switching. In particular, NW Natural expressed particular concerns that since Energy Trust no longer offers incentives for efficient gas furnaces, but continues to offer incentives for high efficiency heat pumps, gas heating customers have an incentive to switch to electric heat. In May 2012, the presiding Administrative Law Judge, Lisa Hardie adopted the following issues to be addressed in the investigation:

1. What are the Energy Trust's policies and practices regarding residential fuel switching related to space conditioning? What outreach and messaging does Energy Trust engage in related to this type of fuel switching?
2. Is fuel switching actually occurring?
3. Do the answers to Issues 1 and 2 indicate a need to modify the Energy Trust's policies or practices or ratepayer-funded messaging?

In November, NW Natural filed its opening testimony in UM 1565, and Cascade Natural Gas filed testimony indicating that it adopted NW Natural's position and arguments. Responses to NW Natural's opening testimony were due on January 17, 2013. Energy Trust, OPUC Staff, Pacificorp, CUB, NW Energy Coalition, PGE and Avista each filed responses. Energy Trust's position is summarized as follows:

- We offer incentives to consumers to reduce consumption of electricity or natural gas. We do not contend that customers who take incentives do not switch fuels, but rather that fuel choice is the customer's decision. It is not Energy Trust's role to anticipate or determine if customers switch fuels.
- If we have to limit heat-pump incentives to people who don't currently heat with gas, it would have modest effects—mostly customer confusion; however, if we are required to consider our incentives' effects on fuel-choice generally, it would significantly impact management of programs.
- We have taken steps, and will continue to take steps, to ensure that our promotional material and website do not encourage gas-heated customers to take heat-pump incentives.

NW Natural and other parties may provide responses and counter-answers by February 19, 2013, and Energy Trust has prepared a draft counter-answer that it is currently reviewing with PUC staff.

Committee members expressed some concern that fuel-switching messaging is complicated for customers, and that it will be difficult for Energy Trust to provide information and guidance in our promotional materials and website that avoids encouraging customers to switch from one fuel from another. Amber and Steve acknowledged the complexity, but explained how some of this work is already underway and that there are ways to be more explicit that Energy Trust incentives are not intended to drive a decision to switch fuels, only to drive a decision to go to install the most efficient measure.

Once the PUC makes a final ruling on UM 1565, staff will return to the Policy Committee with recommendations on amending the Board's 4.03.000-P Fuel-switching policy to reflect results and requirements of the proceeding.

Update on Cost-Effectiveness Exception Requests. Fred Gordon updated the Committee on current discussions with PUC staff regarding cost-effectiveness exceptions for certain energy efficiency measures. In 2012, Energy Trust staff submitted two proposals for exceptions to the PUC's UM 551 cost-effectiveness rules for energy efficiency measures. The PUC formally approved the first request providing a waiver for two years for certain gas weatherization measures during which time Energy Trust will undertake review and analysis to determine whether they can become cost-effective or qualify for a UM-551 exception. Additional program measures were the subject of a second request for a similar two year waiver, but PUC Staff expressed concern at the length and breadth of the waiver request, so, in collaboration with PUC Staff, a revised request has been filed that does three things: (1) offers up an accelerated timeframe for the review measures for cost-effectiveness, (2) proposes a streamlined process for exception review with tracks for small exceptions with minimal program impact and another

for more significant exceptions, and (3) provides some detail on how Energy Trust analyzes and applies UM-551 exception criteria. Fred also reported that Energy Trust staff built the 2013 budget on a measure mix that assumes that exceptions requested would be granted. PUC Staff has informally indicated that this is appropriate.

Report on Legislative Tracking and Outreach. Amber Cole updated the Committee on how Energy Trust staff is approaching the current legislative session. Energy Trust's Grant Agreement prohibits lobbying, but staff does track relevant bills and legislation, and provides information upon request by legislators, the PUC, utilities, advocacy groups and other stakeholders when asked. In addition, staff briefs individual legislators about Energy Trust work throughout the state and in their legislative districts. Margie and other senior staff have reached out already to legislators with whom they have regular contact, and broader legislative outreach will begin in February.

The full board will receive an updated legislative briefing at the February 20th board meeting.

RENEWABLE ENERGY ADVISORY COUNCIL
Notes from meeting on November 28, 2012

Attending from the council:
Suzanne Leta Liou, Akins North America
Juliet Johnson, OPUC
Bruce Barney, PGE
Tashiana Wangler, Pacific Power
Dick Wanderscheid, BEF
Robert Grott, NEBC
Joe Eberhardt, PGE

Attending from Energy Trust:
Kacia Brockman
Betsy Kauffman
Peter West
Sue Meyer Sample
Jed Jorgensen
Sue Fletcher
Thad Roth
Fred Gordon
Elaine Prause
Pete Gibson
Lizzie Rubado
Chris Dearth
Rob Del Mar
Dave McClelland
John Volkman
Hannah Hacker

Others attending:
Terrance Meyer, ODOE
Matt Hale, ODOE
Paul Zollner, ODOE
Eric Anderson, Pacific Power
Jeff Bissonnette, CUB

1. Welcome and introductions

Betsy Kauffman called the meeting to order at 9:30 a.m. No adjustments to the notes from October were suggested. The notes were approved. The meeting agenda and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public-meetings/REACouncil.aspx.

Betsy announced that the position that was vacated by Thad Roth has been filled. Dave Moldal will be filling that position and has experience in wind development. He will be working primarily on biopower and will be able to work across all technologies.

Betsy explained Energy Trust had an Request for Proposals, RFP, this fall in Pacific Power territory for $2.8 million. The response to the RFP was low and no funds were awarded. The status of the Production Tax Credit, PTC, and Investment Tax Credit, ITC, were a factor, with applicants deciding to wait for both to sort out. The applicant that did apply did not meet a requirement of the RFP, which was to begin construction within 12 months. These funds will roll into next year.

Matt: How low was the response?
Thad: We received one application. Applicants that we expected to apply did not apply. We expect better preparedness from the market in Quarter 1 of 2013 and a better understanding of the PTC. This RFP was limited to non-solar. We also required that the projects be under construction within one year.

Robert: This RFP allowed you to develop a model for moving forward.
Thad: Yes, there were benefits to undertaking this RFP.

Matt: Do you anticipate competitive RFPs for PGE and Pacific Power next year?

Thad: Right now we only have one planned for Pacific Power. We expect a competitive process for PGE by the end of 2013. We do expect an RFP for solar projects that fall outside our standard process.

Suzanne: Will solar be part of the RFP next time?
Thad: We haven't made that decision yet. Our priority is that we fund all technologies through the budget. On the solar side our approach is to fund through our standard program unless we are unable to fund other technologies. We want to give the non-solar technologies the opportunity to respond to these funding opportunities.

2. Final 2013-2014 budget presentation

Thad Roth presented. Between round one and round two of the budget process, the total renewable energy budget for 2013 increased $300,000. The main themes for the 2013 budget are challenging energy markets, transitioning to two program tracks: custom and standard, continuing a portfolio management approach, implementing an expanded development assistance program and implementing a solar RFP for PGE projects.

> The 2012 budget is wrapping up and the sector expects to bring on-line 5.88 average megawatts, aMW. There is one project that isn't commercially operational yet but it is expected to come on-line in the next few weeks.
>
> The 2013 budget is $19.1 million. This results in $10.8 million for PGE and $8.3 million for Pacific Power. The budget is split equally between funding custom projects and solar projects. This budget will yield between 2 to 3.5 aMW in generation.
>
> As compared to 2012, The Solar program's portion of the budget is decreasing from $13.5 million to $9.3 million. The solar incentives have been reduced and we are getting the same amount of resource at a lower cost, driven by the lower cost of equipment. The declining budget availability is contributing to the decline in spending on the solar side.
>
> For PGE customers this is a $10.8 million budget for 2013. The budget is weighted to solar and includes funding for custom projects. Three projects will submit funding applications in the next quarter and we have budgeted for those projects. There will be a $1 million solar RFP and dollars are included for competitive development assistance.
>
> For Pacific Power customers this amounts to an $8.3 million budget for 2013. This budget continues the competitive process for custom projects. It includes dollars for competitive project development assistance and maintains a viable solar budget. This budget anticipates another competitive RFP in the first quarter of 2013.

Terrance: How do you allocate resources; what are the metrics or factors?
Thad: Our portfolio management approach has been endorsed by the Renewable Energy Advisory Council and the board of Directors. This is the first metric I would point to. This approach allows us to support a range of generation technologies through the budget. Then we look at what resources are available for each utility.

Tashiana: Jed presented in the past on the barriers to small hydropower related to fish passage. What is the status of this barrier?
Jed: The Governor's office had a working group assigned to this issue. The group hasn't yet arrived at a viable solution. Work is continuing on this issue. There may be some different legislative ideas that come up in the next session. It impacts some of our pipeline but not all. Some systems can work around this issue. It is an issue and it blocks some projects.

Thad: All projects have to deal with fish passage. For some projects this issue is bigger. This is why we support a range of technologies because issues do come up.

Suzanne: Are there other technologies that have similar challenges?
Thad: Woody biomass is similar. The air quality permitting is more challenging today than it was 10 years ago. The rules have changed and new permitting challenges arise. It may or may not impact the development costs.
Betsy: Geothermal projects have run into water resource challenges. Agency staff need to review the projects and that can take time.

Juliet: Is the RFP dissuading potential applicants from proposing projects? How much effort does it take to do the RFP? Is it the right concept? Are we gaining anything from the RFP?
Thad: We have a first-come, first-served approach with PGE so we can compare. In Pacific Power territory we are always prospecting. We encourage potential applicants to apply and give us as much information as they are willing to share. We take applications at any time, but the funds are based on a competitive process. The challenge to filling out the application is the same regardless of the process. Our challenge is finding the projects and getting enough information to evaluate. The benefit of the RFP is sending a message to the market that we are looking for good projects. It is a signal to the market.

Thad: Next year we are going to spend $19 million because we have some carryover funds but we are only expecting $13 million in new revenue. The question for us is how best to allocate dollars and expand impact given declining resources.

Robert: Can you clarify the difference between budget and actual?
Thad: Each year we get between $13 million and $14 million. In the early years we had carry-over dollars. Going forward, in 2014, we will be relying on annual revenue without any accumulated resources.

Suzanne: There is a big difference in generation between 2012 and 2013. What are our goals currently?
Thad: Due to the reduction in the Business Energy Tax Credit, we did some analysis and it became clear that we would need to invest more to move projects forward. The OPUC eliminated generation as a performance measure for 2012. We have new draft performance measures that will hopefully come to the council at the next meeting. The performance metric had been a rolling average of 3 aMW over a three-year period.
Juliet: That is correct. The 3 aMW metric was created when there were utility-scale projects. The Business Energy Tax Credit changes prompted us to re-examine this metric.

Suzanne: This budget is tied to the 3 aMW metric. Will it need to change?
Juliet: No.

Tashiana: Did the Pacific Power budget include the $2.8 million roll over from the last RFP?
Thad: Yes.

3. Early stage project assistance

Betsy presented. A briefing paper was provided to council members on the results of early stage project assistance. Over the last five years, 107 projects have received early stage project assistance from Energy Trust. This does not include more than 50 small wind and small solar projects that received help with grant writing or other similar efforts. We chose not to include those because the dollar amount was so small and the volume high. It would have skewed the results.

The results of the 107 projects were examined and each was classified as being a completed project, a project still in the development pipeline, a project found as technically or financially infeasible, or other, such as a regional feedstock analysis not tied to a specific project. Financially infeasible means that the payback period was determined to be too long. All of these studies are cost-shared with the participant.

Suzanne: Does in the pipeline mean that they have passed the technical and financial feasibility hurdle?
Betsy: Yes.

Betsy continued. The breakdown was 17 percent classified as completed projects, 33 percent in pipeline, 40 percent infeasible and the remainder as "other." Of the dollars spent, projects in the pipeline received the most, followed by the infeasible classification, then completed projects, then other.

Paul: Did you break out the technically and financially infeasible groups?
Betsy: No, that is not really possible to do in many cases.

Betsy continued. We talked to Business Oregon to get a comparison of its results to Energy Trust's results. Business Oregon's results were similar with the greatest percentage, 45 percent, going to the similar category for infeasible.

Robert: I know the goal is to drive your pipeline, but I would say that there is value in the infeasible projects.
Betsy: Yes. They have learned that they can't move forward and as a result those dollars can be moved somewhere else. All of these help us learn. We have spent $1.8 million, or 2 percent of our budget, over this five-year period on project development assistance.

Matt: Would you be interested in Community Renewable Energy Feasibility Fund, CREFF, results?
Betsy: Yes, and I have talked with Rebecca O'Neil about those results.
Suzanne: Is CREFF still in existence?
Terrance: Yes, but not funded currently.

Bruce: Are these studies in the public domain?
Betsy: Yes and no, depending on who we did the study with. If it was a public entity it may be available. There are some confidentiality issues. When we fund a study Energy Trust requires that we be able to see it. Sometimes we cannot share the findings because it would harm the developer's ability to proceed. What we learn helps us in program design.
Thad: Sometimes a summary of the results can be distributed.

Peter: Do you have a list of what you could make available?
Betsy: We would have to check contracts for each one. If there is interest we could figure it out.

Juliet: How can we best share what is learned? Making this information available could have benefit. The OPUC likes to leverage ratepayer dollars.
Thad: Almost all of the work that we do in the public sector is publicly available. We typically send interested parties to the project owners. I like the idea of posting annual results with summaries.

Betsy: At least half are done with public agencies and could be accessible to the public.

Bruce: If I was a developer, I think that I would find value in seeing an abstract of the study.
Betsy: This is an interesting thought.
Suzanne: I agree and see value to Energy Trust in the long-term.

Bruce: I am concerned about the in the pipeline category. I am concerned that these are really infeasible. Will these really move forward?
Terrance: We have been having these discussions with the Department of Energy.
Peter: This is a snap shot at one time. Pipeline projects may change categories. Projects move in and out of the pipeline category.

Joe Eberhardt: The information that we share should be slanted toward completed projects.

Suzanne: I like the idea of summary results being shared, particularly for the infeasible results.

Fred: I am trying to understand this. Are you looking for lessons learned? Does this information get conveyed through these abstracts or summaries?
Bruce: I think that there are a lot of common elements that would carry over from one project to another.

Jed: I want to clarify that not everything we are talking about with development assistance funds is a feasibility study. We also help projects with permitting, interconnection assistance and other development tasks. Those things wouldn't make sense to share.

Betsy: In the future, as we move forward with a competitive development assistance offer, we will be applying these funds after a feasibility screen. Much of what we will be funding will not be studies.

Betsy continued the presentation. 2013 is an increase in project development assistance over previous years. For 2013 it will account for 13 percent of the total incentive budget. As a percentage of the renewable energy total budget it is 6 percent.

Thad: The dollars that we have allocated to provide this comprehensive development assistance, if there isn't market demand, will go back to incentives. We will make these dollars available early in the year so that we can reapply the funds if there isn't interest.

Matt: You didn't spend all of this year's funds, do you expect to next year?
Betsy: We are capped currently on the amount of assistance. We are proposing removing the cap next year for this group of competitive funds. This is part of the reason why we are competing the funds; we also want to get the best projects.

Suzanne: You are reserving a portion for projects that aren't competing?
Betsy: Yes, these are for the small financial requests.
Suzanne: Do you have standards for this group?
Thad: Yes. We are creating a new group of competitive project development assistance funds, the other group remains with standards in place. In this environment we are hoping to participate in the development of more projects than a single incentive could allow. We are focusing our dollars to get more projects moving toward potential financing.

Suzanne: Can you provide the breakdown between the two groups?
Betsy: There is $1 million total, $800,000 for the larger competitive funds. We can move dollars around.

Dick: Can a project approach you twice? Non-competitively and competitively?
Betsy: Yes that is the plan. It is unlikely that we would be committing larger dollars to projects that haven't done a feasibility study. These dollars might also have a milestone requirement for funding. Both groups still need to be cost-shared.

Bruce: What are the caps on these new funds?
Thad: For the competitive funds it is $150,000 right now.

4. Preview of 2013 legislative session

John Audley from Renewable Northwest Project, RNP, and Jeff Bissonette from the Citizens' Utility Board of Oregon were scheduled to give a preview of the session. John was unable to attend the meeting and deliver his presentation. Council members and guests held an open discussion about the 2013 legislative session until Jeff Bissonette arrived partway through the discussion.

Terrance: RNP and Oregon Solar Energy Industries Association are working on a concept to improve net metering. This is seen as a starting place and will address current issues with net metering including the current cap, roll-over issues and other clean up items, like disconnect switches. There is a community net-metering bill in the works. The legislative concept is to allow people in a local area to share the output of a community net-metering facility. They would pool resources and receive benefit. We see this as a way to allow the 70 percent of Oregonians who can't take advantage of solar to participate in net metering. It will also address security issues that have challenged communities. Participants would be more or less fed by the same substation. The size would be the same as net metering. The intention is for it to apply to all large utilities and be optional for the rest. PGE, Pacific Power and Eugene Water and Electric Board would be involved.

Jed: Does the generation have to be sited within the same substation distribution system as the participants?
Terrance: Yes.

Robert: Have we heard about the status of the Governor's 10-Year Energy Plan?
Matt: The latest that we have heard is that it will be out shortly.

Jeff Bissonnette: The community net-metering bill will be challenging. The general approach is that the rules that the investor-owned utilities, IOU, operate under are good and that the IOU rules should be statewide policy so that all Oregonians have access.

Jeff continued. There is an effort underway to find some sort of small suite of bills about solar. This is coming from concern about what happens after the feed-in tariff runs out. Net metering will be a part of that.

> Oregonians for Renewable Energy Policy has an enhanced feed-in tariff concept that would result in 500 MW by some point in the future.
>
> There is going to be siting related concepts coming out of the Governor's 10-year plan. These concepts will be carried by Rep. Huffman from Hood River.
>
> As a result of the elections the senate has a slightly more republican conservative caucus and the house is now majority democrats. Rep. Bailey will likely continue to chair

the energy committee. Sen. Dingfelder will chair the energy and environment committee on the senate side.

Tashiana: The siting concept came out of the Governor's 10-Year Energy Plan. There are two big pictures ideas. One is that the state would map the areas of the state that are better suited for energy development. It would likely be a mapping east of the Cascades to start. The second idea is a mitigation banking idea that would allow a project facing difficulty in development to mitigate in other areas. They had a legislative concept out a month ago that still needed work. A second legislative concept proposed a study on how to make the siting process more efficient. There is some discussion of merging the concepts, and whether there needs to be a study.

Bruce: PGE is looking at community solar. We believe that we have found a way to offer benefits to other customers from a large solar installation. We need approvals from senior management in the next month or two. We are also looking at an alternative for when the feed-in tariff expires. This feed-in tariff would be a little different. We are gathering feedback now. We want something that works a little better for us.

Jeff: The session starts in early February. There are legislative days in Salem December 10, 11 and 12.

5. Public comment
There was no public comment.

6. Meeting adjournment
Betsy thanked all council members for their participation and adjourned the meeting at 11:35 a.m. The next full council meeting is March 13, 2013.

CONSERVATION ADVISORY COUNCIL
Notes from meeting on November 28, 2012

Attending from the Council:
Scott Inman, Oregon Remodelers Association
Don Jones, Jr., Pacific Power
Don MacOdrum, Home Performance Contractors Guild of Oregon
Charlie Grist, Northwest Power and Conservation Council
Stan Price, Northwest Energy Efficiency Council
Anne Snyder-Grassman, Portland General Electric
Juliet Johnson, Oregon Public Utility Commission
Wendy Gerlitz, Northwest Energy Coalition
Holly Meyer, NW Natural
Theresa Gibney, Oregon Department of Energy
Andria Jacob, City of Portland

Attending from Energy Trust:
Peter West
Sue Meyer Sample
Oliver Kesting
Marshall Johnson
Tom Beverly
Diane Ferington
Fred Gordon
Jessica Rose
Taylor Bixby
Scott Swearingen
Lakin Garth
Ashley Jackson
Jackie Goss
Rob Del Mar

Others attending:
Jeremy Anderson, WISE
Kari Greer, Pacific Power
Kendall Youngblood, PECI
Marilyn Morfitt, NW Natural
Tim Davis, CSG
Casey Maharg, CSG
Phil Damiano, PECI
Sara Brockmeier, Fluid
Kyle Barton, CSG
Becky Walker, PECI

1. Welcome and announcements
Oliver convened the meeting with introductions and reviewed the agenda. The 2013 meeting schedule was distributed on the back of the agenda. The meeting packet with presentation materials is available on Energy Trust's website at www.energytrust.org/About/public-meetings/CACMeetings.aspx.

2. Final draft 2013 – 2014 budgets
Peter West covered budgets and themes for 2013 and 2014.

Peter: There haven't been many changes from the earlier draft, which got solid support from stakeholders. The largest change is for Pacific Power and it amounts to a 3 percent reduction, so 97 percent of this one budget is unchanged.

This round incorporates all the latest revenue forecasts from 2012. When you have lower loads, a downturn in the economy and less robust weather, you collect less. We are impacted by all of this and will face tighter revenues in 2013.

This also includes the latest rate filings for all utilities, and revenue reductions in 2013 for Pacific Power. For Cascade Natural Gas, it assumes a shift in collections, and we will use reserves to

carry that shift until about March. The budget for Cascade Natural Gas is relatively unchanged, and the utility will make up any shortfall we have over time. This also includes all the measures that received exemptions to the cost-effectiveness tests for natural gas allowed by the Oregon Public Utility Commission, OPUC.

Overall for the electric utilities, spending is down 0.8 percent, and savings are down 0.7 percent from the last draft. Overall gas spending increased 2.5 percent and savings increased 2.7 percent from the last draft.

The delta by utility is what matters. Cascade Natural Gas is very slight. Savings are up slightly as are costs. Primarily, what's going on a project in Sunriver shifted from 2012 into 2013. The therm savings and incentives also shifted. There are cheap therm savings with this project.

NW Natural has an upward revision of 135,000 therms. For all programs but Existing Buildings we originally anticipated the cost-effectiveness exception to be approved by the OPUC. The upward revision in this version results from now including the measures that received OPUC cost-effectiveness exceptions in this program. There is also a slight decrease in New Homes. We originally estimated near the top-end of the forecast for the new construction rebound. We chose to hedge that. If projects do show up, we have reserves to cover it. We didn't want to budget for it and give it back at the end of the year. It's still a substantial increase for New Homes over 2012.

(The data and one pagers are all revised and will be posted on the web after this meeting. Email Peter West at peter.west@energytrust.org if there's a table or data you need to see.)

Pacific Power is adjusted down the most. The stretch case is 15 percent greater than the Integrated Resource Plan, IRP, goal. We guarantee IRP, since utilities need to meet it. We went beyond that 15 percent for Pacific Power in the earlier draft, but it was a little bit robust. After further discussions with Pacific Power, we revised savings down. Existing Buildings and Production Efficiency are both down by 4.5 percent. We probably would have proposed this for Production Efficiency anyway. It's the opposite case from Cascade Natural Gas and Sunriver; some Production Efficiency projects will close in 2012 instead of 2013. Existing Buildings may be at risk of not having enough budget if current trends continue. As a final piece to meet the lower spending and savings target for Pacific Power, we cut back New Homes and Products for fridge recycling by 40 percent. We did this keeping in mind the initiative can be restarted quickly. We're getting newer and newer fridges for less and less savings, so cutting back sooner doesn't harm savings over time. If we're wrong about market penetration, it can be ramped up very quickly.

Costs come down $1.5 million for Pacific Power. The forecast for the rest of the year from Pacific Power indicates we'll also be down that much in revenues. Loads and sales are down. That means what we counted on carrying over as part of the percent reserves won't be there. Reserves normally would be $2.1 million, which is sufficient to cover anything that doesn't align with our progjections for program demand. We'll have only $600,000, so we'll need to manage Pacific Power tightly and address any large projects with Pacific Power if they show up. June is the interim filing time for new rates, and we can deal with it then.

Don Jones: Pacific Power did a tight forecast for 2012, and things showed up that we didn't expect. So we're committed to pursuing everything that's cost effective. Our 2013 IRP is in progress. We turned around all that's cost effective, divided by Energy Trust, and funded to the

stretch and above, but we're at the margin of the IRP. If you can't get it with the funding you've got, we'll address it then.

Juliet Johnson: The stretch is still 15 percent above IRP?
Don: Yes.

Peter: PGE has minor revisions. We are 0.6 percent up in kWh savings. We had some conservative appliance realization rates, based on what we thought the Regional Technical Forum, RTF, would do. That's a jointly supported group between the Oregon Department of Energy, Northwest Energy Efficiency Alliance, Northwest Energy Efficiency Council, Bonneville Power Administration and others. The RTF has the task of determining what savings should be, so we all have a common platform to work from for the Pacific Northwest. We jumped ahead of some things the RTF wasn't ready to act on, which brought up some savings when we revised back to our older estimates. There is also a new opportunity with PGE for LED specialty lights, and we want to experiment with them. If it works in the metro market, we'll add more retail outfits. It's a $400,000 change in total.

Theresa Gibney: Are savings estimates and realization rates the same thing?
Peter: Yes. Realization rates are the estimated savings we claim by measure. They're basically the same thing.

Peter thanked everyone for the time and input they gave on the budget.

3. Second appeal on natural gas avoided cost
Fred Gordon presented an update since the discussion at the last council meeting in October.

Fred: To recap, the residential solar water heating and weatherization exception request from the OPUC was approved. The second discussion was about all other programs from the gas side. An exception request was filed, which was largely in line with what we discussed a month ago. The status is the request has been filed, and OPUC staff will probably set up a comment period, develop a staff recommendation and forward for decision at a OPUC meeting. We're looking at the individual measures that don't pass the societal test. We'll review the measures based on the new avoided costs, and see what gas measures should be justified as market transformation. For Building Efficiency we will only review gas measures with a societal benefit/cost ratio of greater than 0.7, and we will sunset the rest as proposed.

Right now, we are running the budget as if the OPUC agrees with the request, and we will adjust if they come up with something else. So far, it sounds pretty good, but the decision makers haven't been consulted in detail.

4. Planned residential incentive changes
Marshall Johnson presented planned Existing Homes incentive changes going into effect on January 1, 2013.

Marshall: We did an overview of our plans at the last council meeting in October, and since then have taken a look at additional measures and today will clarify the previous information and look more closely at duct sealing.

We have three primary program tracks for Existing Homes: mobile homes, Home Performance and the single-family standard track. We believe that most trade ally stakeholders understood the last presentation, but others may benefit from more clarification. Mobile home duct sealing

measures will not be impacted by the changes in the single-family and Home Performance tracks. Air sealing and air leakage test incentives, which are paid directly to the contractor as a design component of the moderate-income Savings Within Reach initiative, will be maintained because as they're integrated into Savings Within Reach.

Bonus incentives will end at the end of this year. In water heating, solar water heating has changed slightly since the last presentation. We have increased the maximum incentives for Zone 1. As a reminder, Energy Trust zones are not the same as gardening climate zones. We identified a justification for the slight increase in the solar water heating incentive since last time.

Holly Meyer: I thought they decreased because they weren't passing the utility test; not because of funding?
Marshall: Our Planning Group found a justification for an incentive increase, based upon aggregating the savings per measure across a climate zone.
Fred Gordon: When the Planning Group looked more closely at savings by climate zone we found we could use fixed incentives to give a little more, based on what we saw in savings by climate zone. The Solar team wanted to make it simpler and clearer; to treat it like a commodity.

Marshall: The handout shows lower numbers than the slides, so the slides are the most up-to-date for solar water heating

Fred: Zone 1 is the Willamette Valley.

Marshall: Heat pump water heaters will be in full measure mode instead of a pilot.

Holly: Did we have a review of the pilot?
Marshall: We have been working with NEEA introduce this technology and oversee the pilot, so we didn't do our own evaluation. We have increased our confidence in the savings from this technology, based on what NEEA has learned. We've been very conservative compared to some utilities, who have treated it as a full measure. We restricted marketing and promotion as a pilot.

Holly: Will it still only be promoted to electric water heating customers?
Marshall: Yes, heat pump water heater incentives are only available when replacing an electric tank water heater.

Marshall: Advanced controls for heat pumps have been added for trained and qualified trade allies. Ductless heat pump eligibility will expand to mobile homes, and gas fireplace specifications have been expanded to include more qualifying units.

Duct sealing was covered in October, and we talked about the challenges. The group concluded it was difficult to maintain the incentive for gas. We recognized the cost of the measure makes it difficult to achieve the total resource cost test, but wanted to know if there were ways, or areas of the state, where duct sealing was viable on the electric side. Stakeholders at the last council meeting suggested we work with the Oregon Department of Energy to encourage a process to maintain the tax credit. It would be difficult for the Oregon Department of Energy to maintain it if we eliminated our incentives since the Oregon Department of Energy leverages our administrative incentive processing for qualification support.

We have a goal to complete a duct sealing pilot on the gas side to bring down the cost of installing duct sealing. The average cost for gas duct sealing is $955 and it's $1,017 for electric-

heated homes. We can allow up to $351 for gas heat and $783 for electric heat and comply with our total resource cost thresholds. On the gas side, it's a stretch to support it. We looked by county and program track on the electric side, and felt the best way to portray it was through number of electric duct sealing projects that came in below the maximum allowable amount. On the electric side, 18 percent of our projects with over 12 months of data fell within the cost ceiling. That's a very small amount of the volume for the single-family track. In the Savings Within Reach track, 39 percent came in below the allowable cost ceiling. Sixty-one percent exceeded the allowable cost.

Holly: Are Savings Within Reach projects cheaper to do, or is more cost allowable because you're claiming more savings?
Marshall: The incentive is larger, but the qualifications are not different. The prices are lower because it's less of a sales process and more of a package deal.

Marshall: For electric we would need costs to come down by 23 percent. There are markets where we hit it with Savings Within Reach, but the demographic is the one where it's most necessary to get the most dollar savings for what they are buying. It's our position to move forward with the changes to duct sealing implemented for electric, in addition to gas.

Wendy Gerlitz: When you say cost effectiveness to the customer it means something different than the societal test. Did you look at it by participant?
Fred: We look at it from a utility and societal perspective. When we first saw duct sealing problems, we saw that payback exceeded measure life. On average it looks like you can't get your money back over the life of the measure at current prices.

Juliet: Even the participants can't get their money back?
Fred: On average, that's what we saw by looking at bill savings over a single year and multiplying over the full measure life.

Wendy: The electric looks more marginal.
Fred: The analysis I described above was for gas. For electric you've got double or triple the value for rate savings.

Marshall: A blower door and duct blaster combination is set up for the tests. There isn't necessarily any savings from that part of it. We want to be careful of stopping completely, because a lot of training has gone into it; contractors have put a lot of effort and money into it. It may include multiple trips to the house, including sales appointments, project work and a test out. It appears to be an expensive approach for the savings achieved.

Scott Inman: So what is the approach for this?
Marshall: We intend to expand the duct sealing prescriptive pilot, which does not require testing to be completed along with duct repair and sealing.

Scott: All the testing before and after is what brings up the cost; not the work.

Holly: I know they are different tests, but they are done at the same time. Is there a way to give an incentive if the whole house approach is being done? More of a bonus?
Marshall: We do have the Home Performance assessment incentive.

Holly: You're not incenting for sealing the ducts, and the incentive is why customers do it. It seems like a shame not to seal the ducts only because there's no incentive. If it makes a

difference to include the incentive where they are doing other things already, it would be a shame to miss it.

Marshall: The cost for duct sealing in Home Performance was even greater than single-family and Savings Within Reach track costs. If it could be separated to bring down the cost of the measure it might make a difference. It's what we're trying to do through the pilot. We proposed a process to the OPUC to support the administration of the tax credit. They are in rule making mode, so they can't discuss it now. We will be at the rule making hearing on December 4. We will propose that contractors can self-adminsister projects into the PTCS database, and the state will pull 10 percent for us to QC. The state can use the database for forms.

Holly: Can you claim any savings from it?
Marshall: No. We have a low free ridership rate, and we believe people do it because we've incented it. We've heard that trade allies will be severely impacted without us, so working with the Oregon Department of Energy on the tax credit is one way to help.

Holly: If you are doing the 10 percent check, and there are no free riders, why not claim the savings?
Theresa Gibney: It depends on the situation, but we'll be looking at it after the rule making.
Don Jones: Attribution of savings is a big deal.
Fred: If the state is reporting it, we don't want to double count. Normally, if we think we were critical to savings happening, we claim it, and then when we report jointly with the state we remove double-counting. For this measure, it's more of a support to the industry, so whether we claim it is a complex question.

Holly: Are you both claiming it now?
Marshall: Yes, because we assumed that our incentive influenced the customer to act. We're no longer going to administer the application process and track details, so it makes it more difficult to justify it.

Holly: If it wasn't for your QC process, the Oregon Department of Energy wouldn't do it, so you do still have an impact and influence on people going forward.
Peter: You make a good point. We need to have a discussion with our Planning Group and talk about attribution and the like. It's a fair point.

Theresa: The Oregon Department of Energy can't comment outside the hearing, because this is part of the public comment period. This is the time to send those comments to the hearing, and they'll be discussed there.

5. 2012 true up results

Lakin Garth presented on the 2012 true up results, the evaluation of which is very detailed and staff intensive.

Lakin: At Energy Trust, we are often involved in large projects with one person presenting results and many others behind the scences. This involves heavy analysis and hundreds of thousands of transactions. Our IT group did an amazing job with this.

Previous true ups were done prior to the OPUC annual report due every mid-April. Last year's was in March; the annual report had those results. We completed this year's true-up in August.

The deviations are shown as before and after in these slides. They are relative to the 2011 annual report. They aren't savings in the current year, only the past year's.

True-up allows us to better integrate our evaluation results into our reporting and forecasting of savings for the programs. It's a big effort to evaluate our five major programs, but it helps us accurately reflect past results and plan for the future. We also use these results to predict how we will perform in future years.

Doing it later allows us to wait for NEEA's annual results, so we get additional time to do QC of our database. We literally have a couple hundred thousand transactions to look at each year.

True up only changes reportable savings. Changes are based on a variety of inputs like evaluation results, in the commercial and industrial sectors we are using engineering calculations, and anticipated evaluation results. 2012 will be included in the 2013 true-up. We use a savings weighted average for results of certain measures in certain programs.

There's new data on measure performance. The RTF or others may decide that our assumptions aren't correct, or we have new information we didn't before, and we can make changes based on that. For example, we had new information on compact fluorescent light bulb measures this time. We had corrections to transactional errors in our database. We also correct for spillover and free riders.

Energy Trust program offerings in NW Natural's Washington territory are unaffected by true up because of how we report to the Washington Utilities and Transportation Commission. Renewable energy is generally unaffected by true up.

As for overall results, electric savings decreased by 2.1 percent from 2002 – 2011 or about 6.4 average megawatts, and gas savings decreased by 3.9 percent or 0.9 million therms.

The slides show what we did for the budget, reported savings and trued up savings.

The largest drivers of changes are decreased savings from CFLs in the residential sector, improved NEEA savings, updated free ridership rates in Existing Buildings, improved realization rates for New Buildings, corrections to Production Efficiency free ridership estimates and lower savings from the Personal Energy Report behavior change pilot in 2011.

Charlie Grist: On the CFL side, it's important to note that usage hours changed based on a large study in California. They went down by quite a bit. Nobody up this way has done the same study. Hours didn't seem to vary based on latitude alone. Another thing that went into it was the storage factor. When we measure CFLs by sales data, they were sometimes going into the pantry. Now we've got people replacing CFLs with CFLs instead of incandescent bulbs. Over time, the amount of savings changes because of things like that.

Lakin: Kema did the study.

Charlie: NEEA is doing a data logger study in Montana, also.

Oliver: Do you know how California used this data? Did they true up their data? This is fairly unique to us to look back at our numbers for accuracy.

Fred: We are structured differently, with a board that sets five to 10 year goals. Most regulated utilities want to do the work, get out of it and be done. It's awkward for utilities to look back.

Don Jones: The savings are reflected in the reporting on loads, so the actual savings are accounted for.

Fred: True up is a very difficult process, and we do it because the board asks us to look at things cumulatively. Generally, it shows that our estimates hold up.

Don Jones: Your trade is a saved therm or kWh. Have you gone back and changed levelized costs, and does it cause your other metrics to change year to year?
Lakin: We looked a couple of years back, but the impact on levelized cost isn't that great. Each time we do a true up, the number is always kind of fluctuating; the dollars are same.

Don: Your true up could impact those things. You're not going back and adjusting those other things?
Lakin: No.
Fred: We do the analysis that people will use. That would be a lot of work and as far as I know we don't have an audience that would know what to do with those types of adjustments. Our OPUC performance metrics rely on end-of-year reporting in the annual report.

Lakin: There are lower gas weatherization savings resulting from a 2009 impact analysis on homes; it dropped by 500,000 therms. We would have dropped the 2010 and 2011 savings based on those results. We also trued up 2010 and 2011 based on our findings.

Holly: So the 500,000 is the cumulative result from three years?
Lakin: Yes.

Lakin: There were changes to free ridership numbers for Energy Saver Kits and LivingWise Kits in Existing Homes. There were lower savings from the 2011 Personal Energy Report pilot, and lower New Homes gas market transformation savings. The changes to commercial and industrial gas savings were minor, practically a rounding error. The report is posted online in our library.

Stan Price: This is an impressive amount of work. Is it true from the bullet points that absent a couple of aberations, this is a CFL issue? Most of the movement you found here came from changes to free ridership assumptions?
Lakin: A little. We have a unique process to get real time information on free ridership. Everything in this report about free riders is current.

Stan: What were the major drivers that pushed this number, whether or not free ridership was the most signigicant driver?
Lakin: CFLs were the biggest drivers. When we get an annual free ridership number they are pretty stable from one year to the next; no major changes.

Stan: Any time you make some type of savings estimate, we assume there is a confidence band associatated with it; a normal error range. Did this swing outside that range?
Fred: We've seen other utilities try to analyze efficiency forecasts with confidence bands, but haven't seen anything meaningful. One way to look at it is to look at how far off we've been annually, across all programs. For electric, the CFL adjustment is a bigger adjustment than most, one of the biggest things that has happened. Mega projects had some adjustments. The

weatherization adjustments were the biggest gas adjustment ever. Under the discipline of what we have in place for evaluation accountability, this is as much as we've changed in a year.

Charlie: Big change not driven by gas RTF or CFLs, what's underneath those?
Lakin: We had evaluations done on gas weatherization for 2007 and 2008. We had to change 2009, and savings claimed in 2010 and 2011 were a lot higher than what we found.

Lakin: Through Home Performance, savings are claimed on modeled results, and our analysis showed there wasn't a substantial difference between Home Performance and single-family on a measure by measure basis. Home Performance was claimed based on modeled savings, but there wasn't a basis for it.

Charlie: Are you using those adjustments from the impact evaluations going in?
Lakin: We are claiming the same therms per square foot whether it's Home Performance or single-family based on evaluations. We adjusted this year, and will do so going forward.

Fred: Why did this all happen now? We were getting gas weatherization savings results roughly half of what the rest of the country was telling us we should. We needed three years of statistical billing analysis before, in the face of the information from elsewhere, we had the confidence to make a radical change in the program. The cost-effectiveness issues that led to the first OPUC cost-effectiveness appeal were exacerbated by this analysis. We needed to be sure because no one else was telling us and the implications were large. We had third-party analysis, lots of review,and three years worth of data.

Holly: When Opower did the analysis for us, the numbers realized were only 70 percent of what we thought. This shows a 57 percent realization rate. This is such a dramatic difference, I wonder if there are layers below it? Is this from the original estimate, or on top of the last one?
Lakin: These are from the original estimate.
Fred: There were some data system issues, so the ramp-up got stopped. It affected the rest of the year. We accumulated less. Whatever the curve it's on, the program is delayed a couple of months and that significantly impacted savings.

Fred: I want to tell the group that Lakin is in his last couple of weeks with Energy Trust. He has done a great job presenting difficult information calmly, and boring information in an engaging way. He has done a great job for us.

6. Residential awareness survey overview
Sarah Castor presented the results of the the 2012 residential awareness survey.

Sarah: This is our fifth year of doing this study. OnTarget Research was the third-party contractor who did it this year, and it gives us insight into customer awareness, perceptions of Energy Trust and perceptions of energy efficiency overall. There were many changes to the survey this year, and we made it more actionable for communications staff and less focused on technologies.

The survey sample was 847 customers, and they had to be a customer of at least one of our four utilities. It was a representative sample of the general state population.

More surveys were done by phone than by web. We wanted more web surveys because of better visual elements and convenience, but it turned out that people preferred the phone, or didn't answer by web. We may not put as much effort into the web for future surveys. The

contractor did some weighting to be sure the results weren't overly influenced by one group or another.

Charlie Grist: It seems really high that 44 percent didn't have natural gas service.
Sarah: That's pretty typical for what we see. We made an effort to survey people outside the Portland metro area, also. We are used to homeowners with gas service because they participate with Energy Trust a lot, but many people in the state don't have it.

Sarah: Energy Trust was the most recommended source of energy-efficiency information, with 57 percent of respondents naming Energy Trust as their first choice as an information source. Sixty-one percent of the 847 respondents were aware of Energy Trust, 45 percent would recommend us as a source of information and 25 percent would recommend us first.

Awareness of Energy Trust is up by 1 percent in the Portland metro area, but there was quite a gain over last year in other areas of the state. There was an increase for most utilities but a slight drop for Cascade Natural Gas; however, the drop was not statistically significant, implying awareness is stable there.

Awareness of Energy Trust offerings was highest for appliances and fridge recycling. All residential offerings had at least 46 percent awareness.

For the full set of respondents, 35 percent reported they had received services from us, including Home Energy REviews, kits, weatherization or heating measures, appliances or fridge recycling.

Scott Inman: How does that 35 percent number match with what Energy Trust estimates it has done?
Sarah: The last time we analyzed overall participation rates a year or two ago we found about 20 percent participation among residential households over all program years. Thirty-five percent seems reasonable considering we have distributed a lot of kits since that analysis was done.

Sarah: Most respondents learned about us first from contractors, retailers and utilities if they had used our services. Those who hadn't used our services most likely learned about Energy Trust from media stories.

Out of those who were aware of us about 70 percent believed we are a credible source of information. There were similar positive numbers for the other questions about Energy Trust's reputation.

The survey was set up to be about energy efficiency; not just Energy Trust. We wanted to know how interested respondents were in energy efficiency, and compare their interest to others. People who reported using our services thought they were more interested than other people. Very few respondents said their interest in energy efficiency had decreased over the last year or two; most were more interested in energy efficiency.

"You can save energy and money" was the most popular message we explored for motivating respondents to take action to save energy. A comfortable and energy-efficient home was second most popular and a message about saving the planet was third. We do best with "save energy and money" as it resonates with both past participants and non participants.

Installing CFLs was the most common action taken in the last year to save energy in the home. Many people also replaced appliances. Conducting an energy audit of some kind and installing CFLs were the two most common actions respondents reported they planned to take in the next 12 months.

Both participants and non participants could use more rebate information and general tips on how to save energy in their home.

We got a better response from renters wanting to learn more about us than homeowners. They were comfortable getting information from us directly or from the utilities.

Don MacOdrum: Did the question about "additional ways to learn more" mention contractors as a possibility?
Sarah: No, but it's something we can add next time. Good point.

Sarah: Overall awareness has increased or remained stable for all utilities. We seem well respected by residents in all four regions. Past users of our services reported a solid understanding of our services.

Don MacOdrum: What is that based on?
Sarah: It's based on the question about awareness of services we offer.

Scott: Do you send a survey out with the incentive checks?
Sarah: We don't, but we do follow up surveys by phone.

Juliet: Is that Fast Feedback?
Sarah: Fast Feedback is one way, and standard evaluations are another.

7. New Buildings Impact Evaluation overview
Sarah Castor presented on the New Buildings Impact Evalution.

Sarah: We do impact and process evaluations separately. We look more recently at processes, and impact goes back a couple of years. These impact results are for the 2010 program year, and it's because it's new construction since buildings take a while to be completed and fully occupied after we pay the incentive.

Cadmus Group did the evalution, and also did the last couple of reports for us. They did site visits and analysis, and the work was conducted from March through August of 2012. Cadmus will do a 2011 impact analysis starting in 2013.

The sample represents 56 percent of electric and 62 percent of gas savings for the New Buildings program in 2010. They reached out to our 26 largest projects and 15 smaller ones. The evaluation has good confidence and precision levels. Thirty-nine were in the final sample. They evaluated a variety of project tracks.

Cadmus reviewed documents, project files and calculation workbooks. They also reviewed energy simulation models if the site had one. Site visits checked on operating conditions. They looked at engineering analyses, also. The engineering firms are sometimes reluctant to give up their engineering analysis. We now require them to do it if they want incentives.

Don Jones: Were these mostly on public domain software like DOE-2, eQuest, etc.? They weren't so much proprietary models as proprietary inputs?
Sarah: That's correct.

Sarah: We had realization rates of 95 percent for electric measures and 98 percent for gas measures.

Charlie Grist: Where do the evaluated savings come from? What did they do to make up that number? Input assumption verifications?
Sarah: They used full load calculations, observed conditions and verification of input assumptions.
Fred Gordon: We don't look at billing data because we have nothing previous to look at since there was no building.

Charlie: We're comparing model to model, then.

Holly Meyer: So, the realization rate is applied to savings. It verifies the deemed savings?
Sarah: The realization rate is used to true up our working savings and turn them into our reportable savings.

Holly: Lakin's numbers were for all programs, then?
Sarah: Right. This evaluation's results are part of true up, specifically for New Buildings.

Sarah: For measures in the foodservice track, all program savings estimates were found to be reasonable. In HVAC, the savings for boiler measures varied considerably based on whether the boiler usage was primary or secondary. The new demand control ventilation calculator is better at predicting savings than the one used in 2008 and 2009. Lighting had higher than assumed operating hours, resulting in higher than assumed savings.

Charlie: How did they evaluate a measure on the lighting hours? Did they do a separate interview of the operator?
Sarah: It's from interviews with the operators or building energy management system data, if available. There may have been a few lighting loggers, but not many.

Sarah: On motors, only one was in an application where the efficiency level was required by code. That was a bigger issue in past evaluation years.

Sarah: There was only one ENERGY STAR® project. Those project are being incorporated into the custom track, rather than having a separate track. LEED® projects have become a larger part of savings over the last several years. The ENERGY STAR project that was evaluated had a high realization rate. LEED projects had an average realization rate of 75 percent on the electric side and 98 percent for gas measures. This is partially due to the way LEED certification is awarded. No big themes were identified for savings variation.

(See slides for recommendations.)

Sarah: Many recommendations have already been implemented. We ended up with one project where there wasn't enough documentation on an exceptional calculation, and Cadmus recommended taking extra care to ensure documentation on future projects with exceptional calculations.

The 2010 overall realization rates were close to 100 percent, and comparable to 2009 and 2008. 2011 should confirm the adoption and success of most of the recommendations.

Charlie: You had 50 LEED measures out of 1,200 measures?
Sarah: That's correct.

Stan Price: Is that information on LEED realization rates getting back to the U.S. Green Building Council?
Fred: Not that we know of.
Charlie: That would be a helpful thing to work on.
Fred: It's still useful to them, because they're on their own improvement program.

8. New Buildings Process Evaluation 2010-2011 overview
Sarah Castor presented on the New Buildings Process Evalution.

Sarah: The contractor was PWP, Inc, and this evaluation was structured like the Path to Net Zero evaluation, occurring in stages and tracking participants as they progress through the program. We found the Path to Net Zero evaluation really helpful because it talked to people as they completed things instead of after they were finished.

Don Jones: Typically these gather free ridership information. Do you have it here?
Sarah: We will be gathering that information in this project. Fast Feedback was supposed to be the mechanism, but it wasn't working as well. So we will be doing it through these process evaluations. We should note, though, that New Buildings is a market transformation effort and free ridership is not being applied to program savings, it is only being used to track the influence of the program.

(See slides for methodology.)

Sarah: The program met and exceeded stretch goals in 2011, despite the lagging economy. Sixty percent of projects were still subject to 2007 code in 2011. There was a great fluctuation in percent of savings by measure type and building type from 2010 to 2011, due to large projects. Projects may want to do bundled measures where the individual measures don't do as much as the total package together. It may include measures that aren't cost effective, but the overall project is.

Charlie Grist: So you'll propose this later? From the council's point of view this tends to make sense. We can use these situations to carve out projects.
Fred: We've developed a program set of rules about when to bundle measures, and the reasoning for doing it. The measure may be part of a pilot test, or it may be close enough that it will be cost effective with market transformation over time, measures might be interdependent and so on. The first cost-effectiveness appeal to the OPUC included a few measures from small New Buildings projects that were close but not quite cost effective. The OPUC approved them based on having a need to do A in order to do B.

Charlie: UM551 had a series of exceptions, and that seems to be working as you follow it?
Fred: It's frustrating for the program, but we're doing bundles and it's working.
Jessica: Customers seem to like it, and we had to go through some additional approval processes but it's served the program and customers well to go through with it.

Theresa: We have the same thing with the schools program at the Oregon Department of Energy. Some things have to be done at the same time, but they are called out as different measures. It led to Secretary of State comments that not all measures passed cost-effectiveness values. Some didn't need to be broken down as they aren't separate measures. We looked at it as a bundle and it was fine per customer. We need to watch that going forward, to look like we are doing smart things with our investments.

(See slides for recommendations.)

Sarah: The evaluators encourage early design assistance. They recommend we strengthen the Outreach Manager and participant connections. Customers need more information on the new tax credit program. The New Buildings program is reluctant to make promises about tax credit availability when it is difficult for projects to receive the credit. It's tricky for us to walk that line of providing information, but not promising the money.

Theresa: Would it be possible to do it as an upsell? We needed that with schools when we had a fixed number of tax credits. Either people could not get it at all, or the amount could change. With districts that had less money, we found it worked by positioning it as an upside. It pays even if you don't get the tax credit. It's good enough on it's own, and better with tax credits. It gives you tool in your toolbox for projects that won't quite make it without the tax credit, now.
Jessica: In general we point customers to the Oregon Department of Energy to get that information. Typically the customer is looking for a specific piece of tax credit information or dollar figure and we can't provide that but we do point them to the department.

Theresa: Districts and cities don't have time to do more than check boxes, and they have responded very well to an upsell. I don't know if you have tried that, but it worked much better than expected.
Sarah: Some customers are better than others with ambiguity around incentives and tax credits. Some customers are very unhappy if they don't get the money they are expecting.

Scott Inman: Part of this is that you can't start the project unless you've been approved already for the tax credit.

Theresa: The purpose is not to withhold it if you were going to do it anyway, it should be a competitive process of like technologies. The deduction for standard equipment doesn't require competition and is easy to use. There is a strong acknowledgement that the legislative requirements make it tough to use, and we need to connect with folks on messaging to make it easier.

9. Public comment
Juliet: The OPUC has job openings right now, so please send good referrals our way. They are RPS and climate change compliance openings.

Charlie: The RTF has openings as well.

10. Meeting adjournment
Oliver thanked all council members for their participation and adjourned the meeting at 4:30 p.m.

The next council meeting is February 13, 2013.

Briefing Paper
Legislation Update

February 20, 2013

Summary

This paper summarizes bills introduced in the 2013 legislature.

Background

- The legislative session began in January and is expected to adjourn in June.
- Pursuant to our grant agreement with the OPUC, Energy Trust does not take positions on legislation or engage in political issues. We do routinely brief legislators on Energy Trust and its accomplishments.
- During legislative sessions, we also monitor legislation that could impact Energy Trust and respond to legislative requests for information. We coordinate these activities with the OPUC.

Discussion

- The attached report summarizes the energy-related bills that we are tracking. The "bill number" column in the report links to the actual bills.
- Only a fraction of these bills are likely to be enacted, and so in the early stages of the session we do not parse these bills in great detail.
- However, the bills' "relating" clauses (reflected in the "summary" column) give notice of the purpose with which a bill is concerned, and because it is not unusual for a bill with a broad "relating" clause to be used as a vehicle for more extensive legislation that may not have been introduced early in the session, we monitor virtually everything that touches on energy.
- Highlights of this year's crop:
    - **Public-purpose charge: SB 427** would change the allocation of the three-percent public-purpose charge that funds a large portion of Energy Trust efficiency and all of our renewable energy programs. Currently, 63% of the three-percent charge must be used for energy conservation and market transformation, and 19% of the charge goes to renewable energy. SB 427 would redirect the 63% share to energy conservation in schools; other energy conservation, market transformation, and renewable energy programs would share the 19% portion. The bill is sponsored by Senator George, who has sponsored similar bills in the past.
    - **State renewable energy lab: HB 2220** would require the State Department of Energy (ODOE) to develop a plan for an energy conservation and efficiency innovation laboratory, one of the priorities in the Governor's 10-year energy plan.
    - **Residential energy efficiency tax credit: HB 2437** would allow a tax credit for purchase of an energy-efficient home (with an HERS index rating of 50 or lower).

- **Green energy in public buildings: HB 2343** would make technical changes in an existing law requiring state agencies to include active or passive solar, ground-source heat systems, wave energy, hydro or wind in building contracts.
- **EEAST: HB 2436** would make technical amendments in the Energy Efficiency and Sustainable Technology Act adopted in 2009.
- **Renewable portfolio requirement:** the renewable energy portfolio requirements adopted by the legislature in 2007 would be amended by several bills: **HB 2108** (for small utilities, remove sales to single large loads in calculating who is subject to renewable requirement), **SB 121** (remove restrictions on qualifying hydropower); **HB 2713** (allowing hydropower from Columbia River facilities in adjacent states).
- **Energy resource mapping: HB 2106** would require ODOE to develop a map of appropriate renewable energy areas in eastern Oregon. **HB 2291** would require ODOE and Business Oregon to study rural renewable energy development zones to see if tax exemptions in those zones are sufficient to encourage renewable development. **HB 5011** would require ODOE to develop a landscape-level plan for energy development, a priority in the Governor's energy plan. **HB 2694** would direct the Department of State lands to collect data and map ocean energy resources.
- **Emissions limits, clean-fuels and carbon:**
  - In 2009, Oregon adopted an emissions performance standard for Oregon electric utilities using new or upgraded coal plants to meet load, and the OPUC to review any investment in a coal facility before a utility makes such an investment. **SB 242** would amend the law to ensure that out-of-state resources are covered by these requirements.
  - Also in 2009, the legislature adopted a low-carbon fuels standard for transportation fuels. **HB 2237** would extend the law's sunset date.
  - **HB 2497** would impose a tax on fuels based on carbon content.

Report Date: February 4, 2013

Bill Number	Summary	Sponsor
HB 2105	Requires State Department of Energy to study issues related to Energy Facility Siting Council and to report to certain interim legislative committees on or before November 1, 2013.	Rep. HUFFMAN Presession filed.
HB 2106	Requires Director of State Department of Energy, after consultation with other state agencies and parties, to develop map that identifies areas east of summit of Cascade Mountains that are appropriate for siting of energy facilities and any related or supporting facilities.	Rep. HUFFMAN Presession filed.
HB 2108	Modifies renewable portfolio standard for small electric utilities to exclude certain sales to single large consumer from calculation of percentage of sales to all retail electricity consumers.	Rep. GILLIAM Presession filed.
HB 2203	Prohibits person from constructing electricity transmission line unless person is public utility or person that has entered into contract with public utility, and construction takes place in public utility's service area.	Rep. SMITH at request of Umatilla Electric Cooperative Presession filed.
HB 2220	Requires State Department of Energy, after consultation with other state agencies, to develop strategic plan related to creation of energy conservation and efficiency innovation laboratory.	Governor John A. Kitzhaber, M.D.
HB 2224	Extends sunset for tax credit for renewable energy resource equipment manufacturing facilities.	Governor John A. Kitzhaber, M.D., for Oregon Business Development Department
HB 2237	Repeals sunset on provisions related to low carbon fuel standards.	Governor John A. Kitzhaber, M.D., for Department of Environmental Quality
HB 2266	Authorizes Public Utility Commission to prescribe by rule filing date for public utility budgetary and accounting documents.	Governor John A. Kitzhaber, M.D., for Public Utility Commission
HB 2274	Modifies, for purpose of gathering information related to greenhouse gas emissions, information that Environmental Quality Commission may require to be reported.	Rep. GILLIAM, Sen. OLSEN, Reps. BENTZ; BOONE, ESQUIVEL, HUFFMAN, MATTHEWS, OLSON, THOMPSON, WITT, Sens. BOQUIST, JOHNSON Presession filed.
HB 2287	Requires State Department of Energy and Public Utility Commission to jointly conduct study of issues related to feasibility of electric companies implementing and maintaining electricity storage systems.	Rep. READ Presession filed.
HB 2291	Requires Oregon Business Development Department to conduct study of rural renewable energy development zones for purpose of determining whether property tax exemptions available in those zones are sufficient to encourage development of renewable energy resources.	Rep. READ Presession filed.
HB 2292	Requires Oregon Department of Administrative Services to study certain issues related to State Department of Energy.	Rep. READ Presession filed.

Bill Number	Summary	Sponsor
HB 2300	Requires Director of the State Department of Energy to promote use of compressed natural gas.	Reps. READ, GARRETT Presession filed.
HB 2321	Requires agencies of executive department to take certain actions to protect environment.	Rep. BUCKLEY Presession filed.
HB 2343	Revises requirement that contracting agency dedicate certain amount of contract price toward including green energy technology in public building.	Governor John A. Kitzhaber, M.D., for State Department of Energy
HB 2344	Allows Director of State Department of Energy to enter into certain agreements related to small scale local energy projects with other state agencies, local governments, federal government and private organizations and entities.	Governor John A. Kitzhaber, M.D., for State Department of Energy
HB 2373	Creates Sunset Advisory Committee.	Reps. THATCHER; WEIDNER, Senator GEORGE Presession filed.
HB 2436	Modifies provisions of energy efficiency and sustainable technology loan program.	House Interim Committee on Energy, Environment and Water
HB 2437	Allows credit against income taxes for purchase of energy efficient home.	House Interim Committee on Energy, Environment and Water
HB 2439	Transfers certain duties, functions and powers related to renewable energy from State Department of Energy to Public Utility Commission.	House Interim Committee on Energy, Environment and Water
HB 2440	Requires Department of Land Conservation and Development, in cooperation with State Department of Energy, State Department of Agriculture and State Department of Fish and Wildlife, to review laws and rules regulating siting of solar energy projects in areas zoned for exclusive farm use and to make recommendations to legislative interim committees.	House Interim Committee on Energy, Environment and Water
HB 2472	Extends sunset for tax credit for renewable energy resource equipment manufacturing facilities.	House Interim Committee on Revenue
HB 2497	Imposes tax on each fuel supplier and utility based on amount of carbon in carbon-based fuel that is sold by fuel supplier to consumers in state or that is used to produce carbon-generated electricity supplied by utility to consumers in state.	House Interim Committee on Revenue
HB 2620	Directs Governor to develop reorganization plan for economic development agencies, community development and services agencies and natural resource agencies necessary to implement regional and community based governance.	Reps. CLEM, GILLIAM, Sen. EDWARDS; Reps. CAMERON, GARRETT, HOYLE, Sen. ROBLAN Presession filed.
HB 2651	Includes in definition of "lobbying" proposing uniform, model, suggested or recommended legislation for consideration by Legislative Assembly.	Reps. DOHERTY Presession filed.
HB 2694	Requires Department of State Lands to study certain issues related to development of energy resources in Oregon's territorial sea.	Rep. BOONE

Bill Number	Summary	Sponsor
HB 2698	Eliminates sunset on provisions for training, qualifying and certifying specialized building inspectors.	Rep. NATHANSON at the request of Association of Oregon Counties
HB 2704	Directs State Department of Energy to conduct study of issues related to siting and construction of electric transmission lines by certain entities.	Representative SMITH
HB 2713	Specifies that electricity from hydroelectric facility located on those portions of Columbia River that abut Oregon qualifies for renewable portfolio standard to extent that electricity generated is attributable to Oregon's share of electricity.	Reps. SMITH; BERGER, ESQUIVEL, HUFFMAN, JOHNSON
HB 5011	Appropriates moneys from General Fund to State Department of Energy for landscape level planning in facility siting.	Oregon Department of Administrative Services
HB 5012	Approves certain new or increased fees adopted by State Department of Energy.	Oregon Department of Administrative Services
HB 5043	Limits certain biennial expenditures from fees, moneys or other revenues, including Miscellaneous Receipts, but excluding lottery funds and federal funds, collected or received by Public Utility Commission.	Oregon Department of Administrative Services
SB 121	Removes restrictions on hydroelectric electricity, including restriction that hydroelectric electricity be generated by facility that became operational on or after January 1, 1995, for purpose of qualifying for renewable portfolio standard.	Sens. OLSEN; THOMSEN Presession filed.
SB 229	Requires Oregon Department of Administrative Services to study certain issues related to State Department of Energy.	Sen. HASS, Rep. READ Presession filed.
SB 242	Requires electric companies to develop and submit to Public Utility Commission strategy for analyzing and planning for investments in facility that uses coal to generate electricity.	Senate Interim Committee on Business, Transportation and Economic Development
SB 261	Exempts from property taxation certain property leased to United States in connection with electricity transmission in Pacific Northwest.	Senate Interim Committee on Business, Transportation and Economic Development
SB 299	Creates Sunset Advisory Committee.	Sen. STARR Presession filed.
SB 321	Extends sunset for tax credit for renewable energy resource equipment manufacturing facilities.	Senate Interim Committee on Finance and Revenue
SB 354	Authorizes State Treasurer to issue Article XI-D general obligation bonds for development of transmission capacity for wave energy.	Sen. ROBLAN Presession filed.
SB 358	Directs Joint Legislative Audit Committee to select Legislative Auditor to serve as director of Government Accountability Office.	Sen. GEORGE Presession filed.

Bill Number	Summary	Sponsor
SB 359	Exempts wave energy facility or project in territorial sea from licensing process for hydroelectric facilities if wave energy facility or project is subject to project review and approval by Land Conservation and Development Commission for compliance with Oregon Ocean Resources Management Program and Coastal Zone Management Act of 1972.	Sen. ROBLAN Presession filed.
SB 360	Creates whole or partial exemption from additional requirements for fish screens, by-pass devices or fish passages for hydroelectric projects proposed for construction in preexisting artificial delivery systems partially or entirely within Astoria city limits or partially or entirely on property owned in whole or in part by City of Astoria.	Sen. JOHNSON at the request of City of Astoria. Presession filed.
SB 427	Changes distribution of amounts collected as public purpose charge by electric companies and Oregon Community Power.	Sen GEORGE Presession filed.

Briefing Paper
Market Indicators Quarterly Report

February 20, 2013

The purpose of this report is to track and assess changes in key economic indicators in an attempt to gain a better understanding of how demand for Energy Trust programs will respond to changing market dynamics. By monitoring the behavior of several widely used macro-level indicators we hope to stay closely attuned to any signs of improvement or further worsening of economic conditions, thereby providing Energy Trust program managers with the ability to respond to changes accordingly.

In 2012, Oregon experienced modest improvements in its labor market, with the unemployment rate falling from 8.8 percent to 8.4 percent. Additionally, the number of new single family housing starts in December was 15 percent higher than December 2011. According to realtytrac.com, the number of new US foreclosures in 2012 has decreased 3% since 2011, and was 36% lower than 2010. Oregon also saw a 40% decrease in the number of foreclosure filings from 2011 to 2012[1].

> "House prices nationally have increased for nine consecutive months, residential investment has risen about 15 percent from its low point,… sales of both new and existing homes have edged up… homebuilder sentiment has improved considerably over the past year"
> – Federal Reserve Chairman Ben Bernanke on 11/15/2012

Despite these positive signs in the housing market, there remain many challenges to address;

> "Construction activity, sales, and prices remain much lower than they were before the crisis. About 20 percent of mortgage borrowers remain underwater… although the number of homes in foreclosure has edged down since cresting in 2010, that number remains in excess of 2 million, three times the historical norm."
> – Federal Reserve Chairman Ben Bernanke on 11/15/2012

In early January, Congress acted to extend the both the Renewable Energy production tax credit (PTC) for wind generation, and the existing homes tax credit for energy efficiency for another year, until December 31st, 2013. The investment tax credit remains in effect, but the PTC had officially expired on 12/31/2012. The American Taxpayer Relief Act of 2012 also provided a course of action to avoid to the 'fiscal cliff', which was set to take effect in the beginning of 2013, and which the Congressional Budget Office (CBO) predicted would likely have led to a mild recession in the US economy[2].

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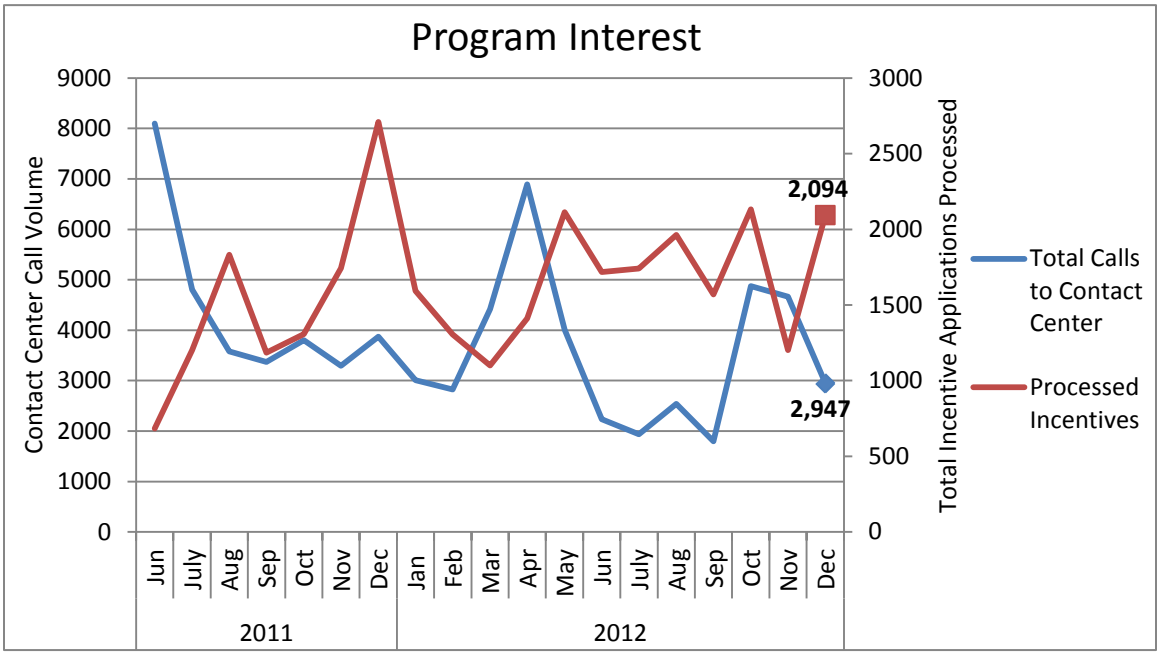
[1] http://www.realtytrac.com/content/foreclosure-market-report/2012-year-end-foreclosure-market-report-7547

[2] Source: Bloomberg New Energy Finance, January 3rd, 2013

1.1 Energy Trust Programmatic Indicators

ETO Contact Center –

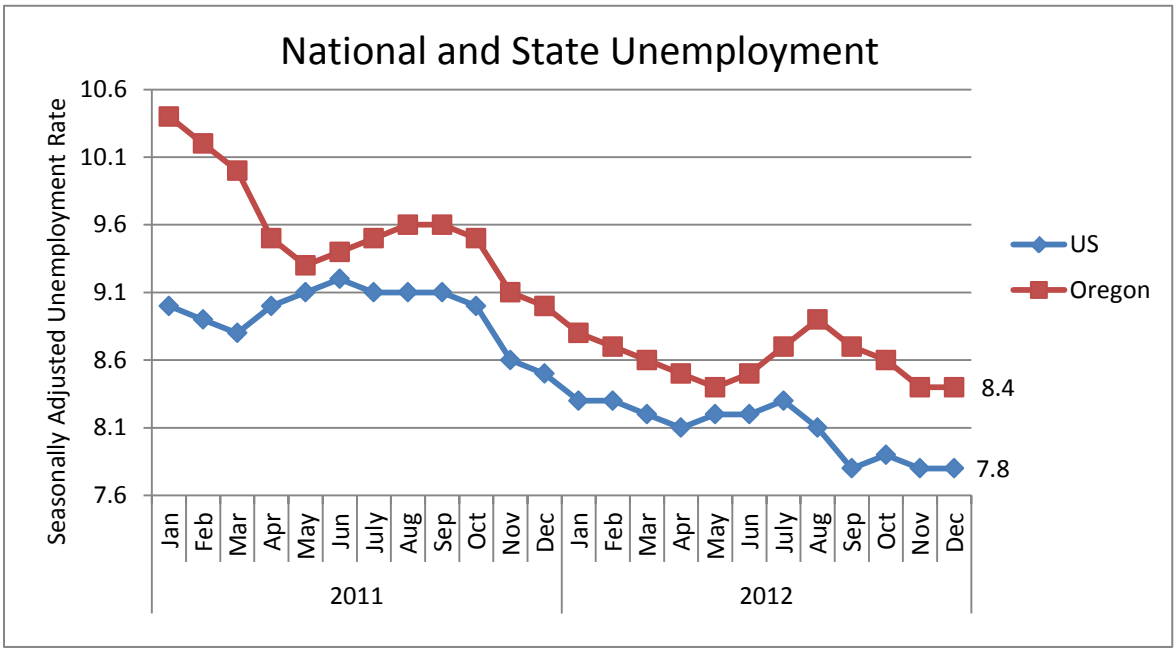
Figure 1.1



A spike in call volume during April 2012 was due to a promotion of Energy Saver Kits, which generated 58% of calls to the contact center, while the December spikes in both 2011 and 2012 were due to end-of-the-year incentive processing.

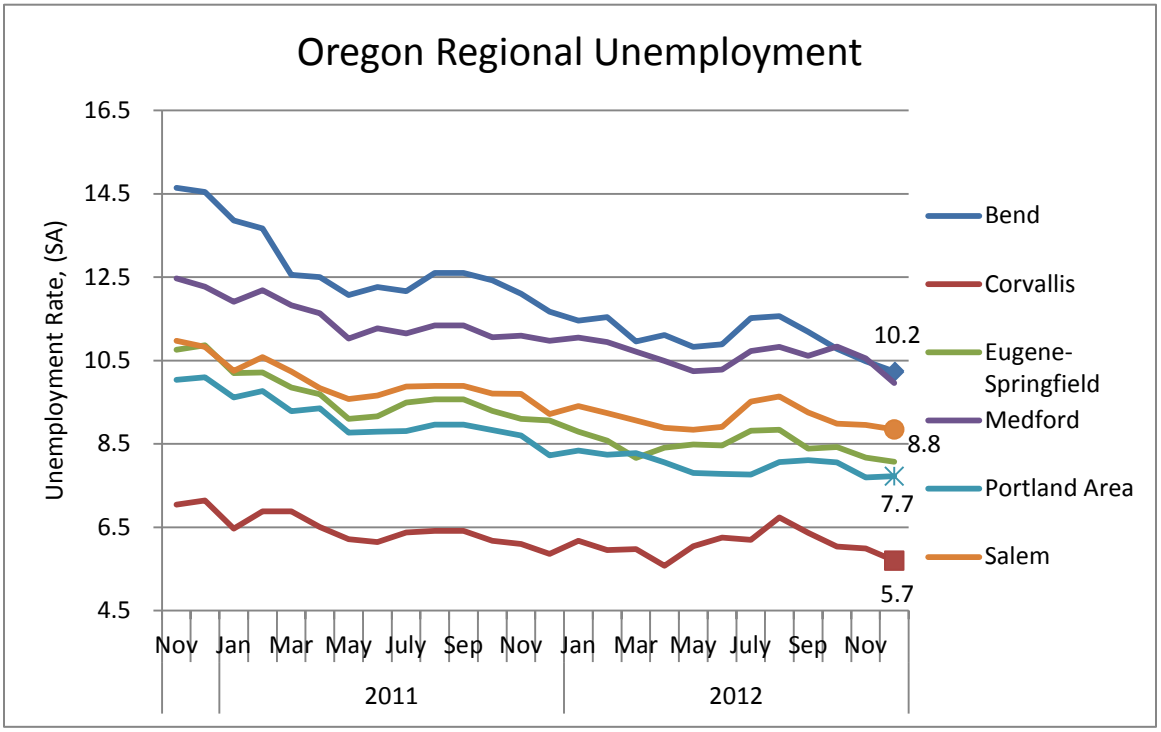
2.1 Macroeconomic Indicators

Figure 2.1



The national unemployment rate peaked in fall of 2009 at 10.1%, and has since come down 2 percentage points to 7.8%. While this is a much needed improvement in the employment situation, the rate of unemployment has not yet fallen to it's a level that that the Federal Reserve Board says will be sustainable after full recovery. Additionally, the health of the labor market remains questionable despite the decreases in the unemployment rate, since we continue to see historically high levels of long-term unemployment, a relatively large number of part-time workers, and declines in the labor force participation rate[3].

Figure 2.2

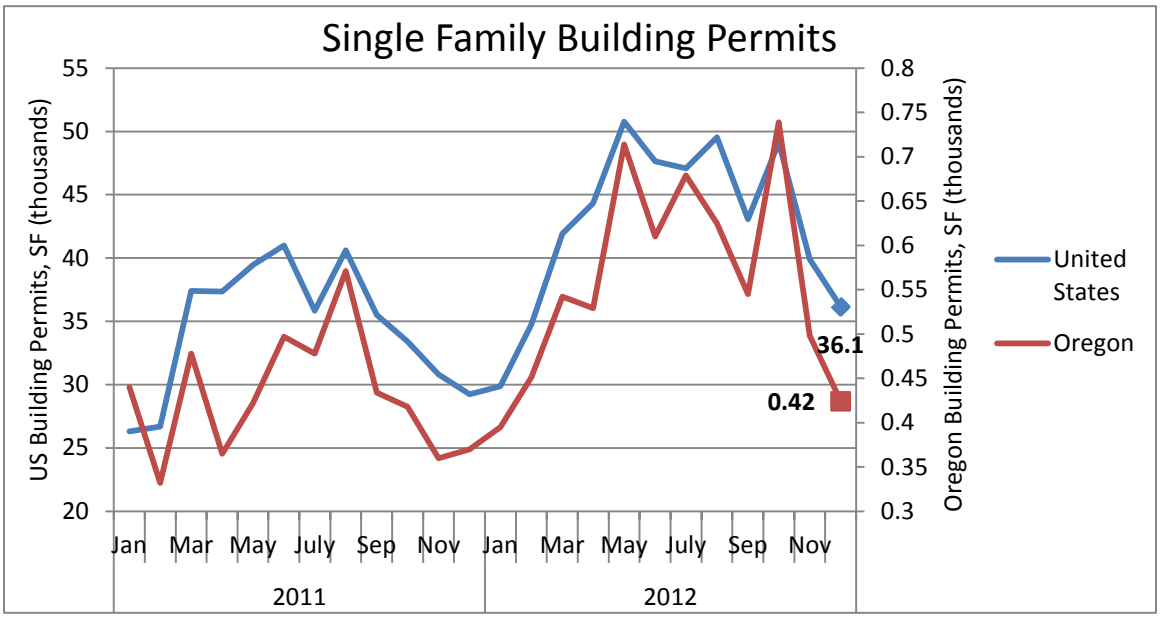


Within the state of Oregon, the percentage of unemployed people has steadily declined over the course of 2012. The statewide unemployment rate fell from an annual high of 8.9 percent in August 2012 to 8.4 percent in December. In local areas, the Bend-Central Oregon area experienced the greatest improvement in its unemployment rate since December of 2011 of all regions in the state, seeing its rate fall from 11.7 percent, the highest in the state, to 10.2 percent. Medford area unemployment fell from 11.0 to 10.0 over the year.

[3] http://www.federalreserve.gov/newsevents/speech/bernanke20121120a.htm

New Homes Report-

Figure 2.3



The number of new single family building permits fell from the previous months in both November and December of 2012, although those months had higher permit activity than the same months in 2011, for both Oregon and the Nation.

Local Area Housing Starts-

Figure 2.4

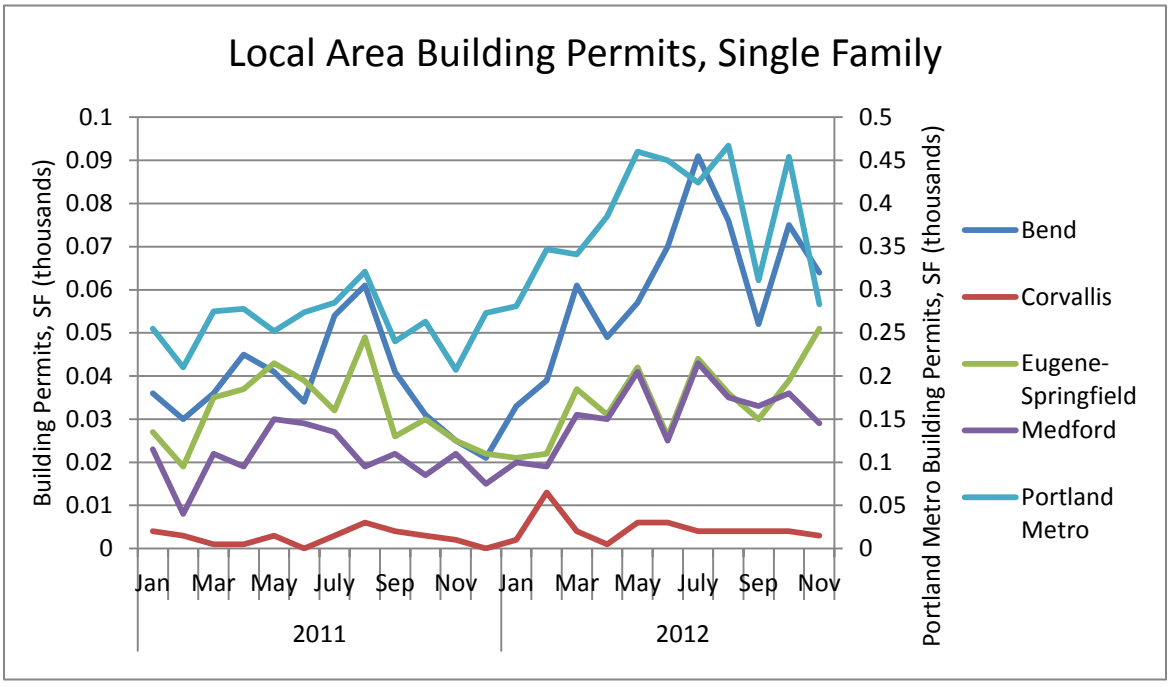
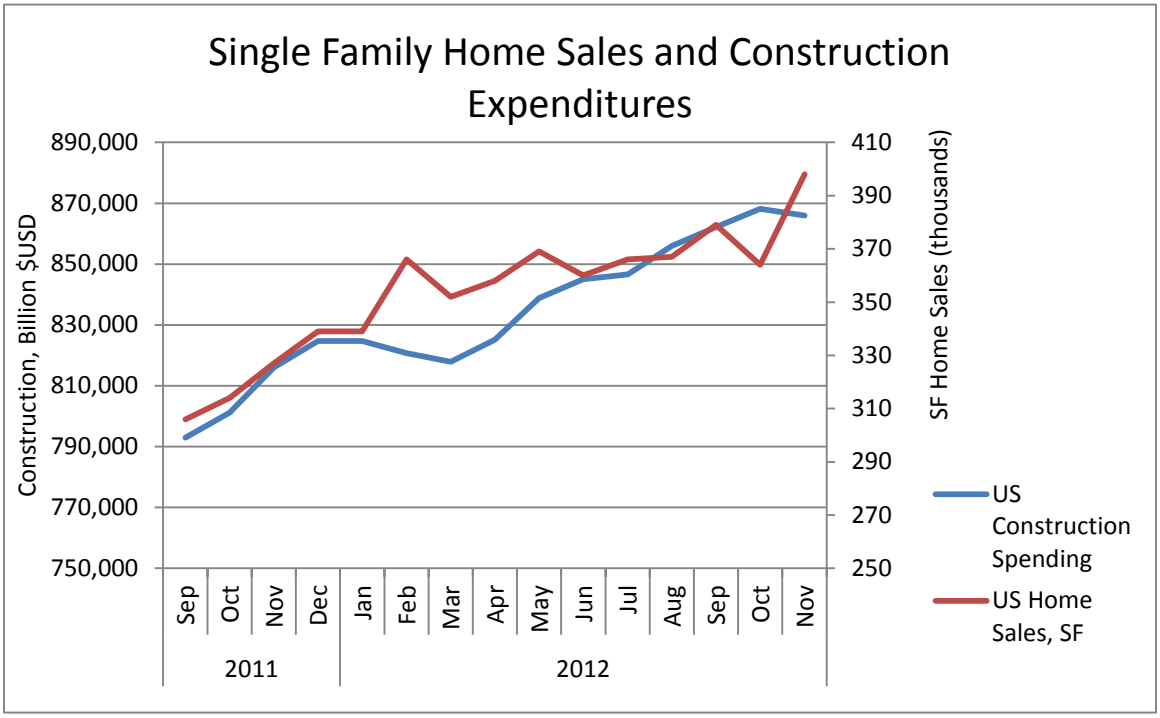
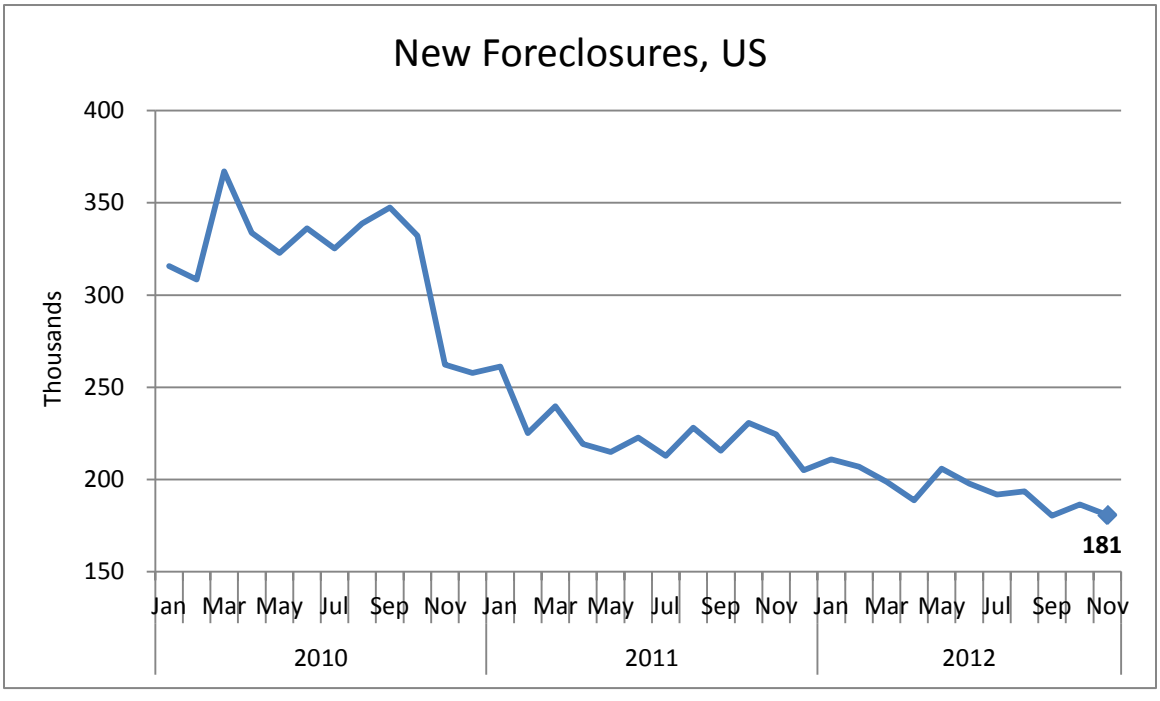


Figure 2.5



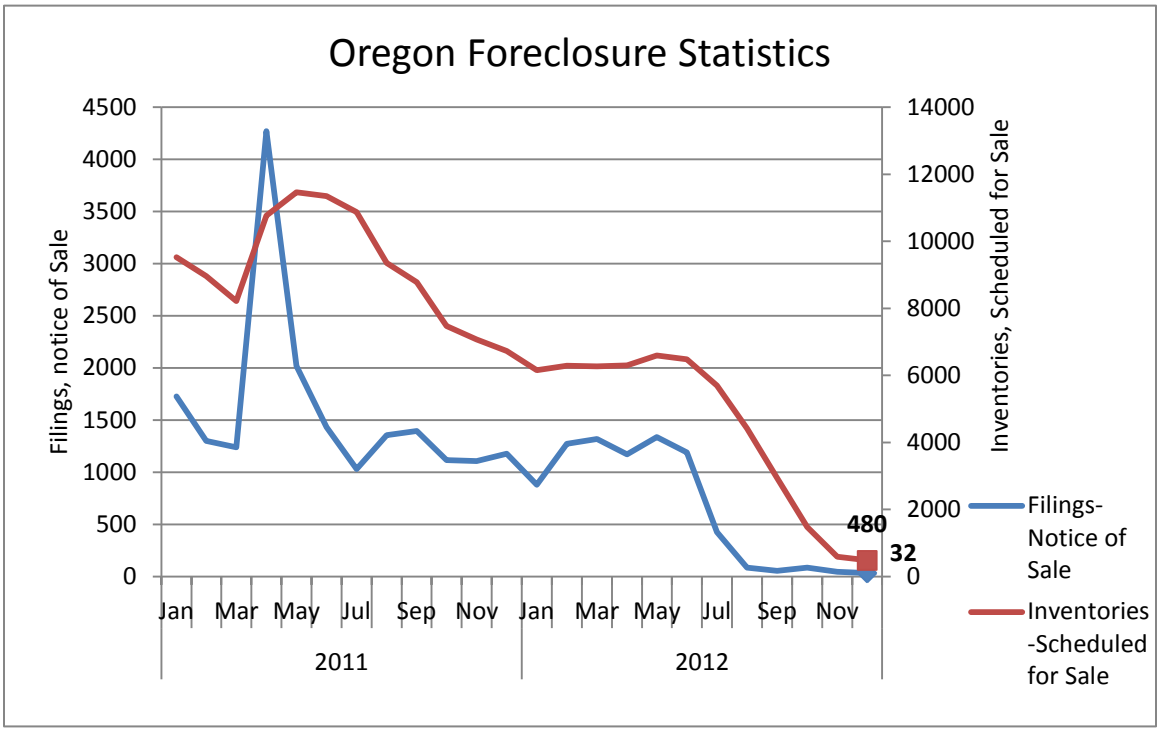
Foreclosures-

Figure 2.6



The number of foreclosures in the US during 2012 was down 3 percent from 2011 according to realtytrac.com's 2012 year-end foreclosure report, and in December, foreclosures across the nation fell to their lowest level since April 2007[4].

Figure 2.7



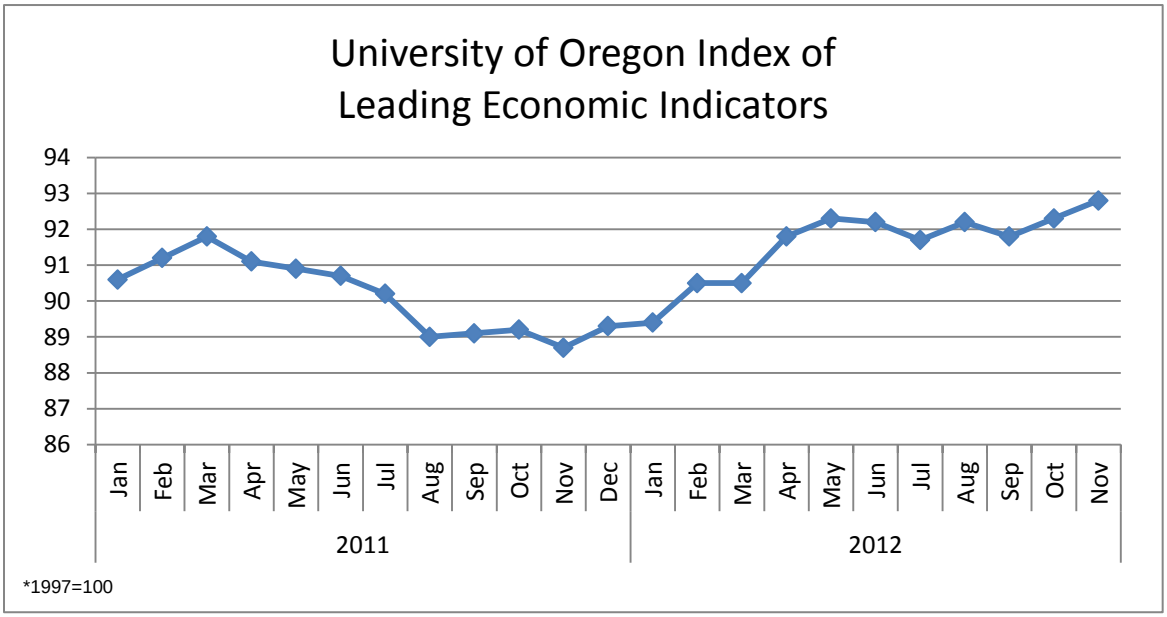
The number of new foreclosure filings in Oregon, including bank repossessions, scheduled auctions, and default notices, fell 40 percent from 2011 levels during 2012. Oregon is a non-judicial foreclosure state.

> "…foreclosure activity continued to decline in 19 of the 24 states that use the more streamlined non-judicial foreclosure process, but there could be a backlog of delayed foreclosures building up in some of those states as well as the result of recent state legislation and court rulings that raise the bar for lenders to foreclose[4]."
> - Daren Bloomquist, Vice President RealtyTrac

[4] http://www.realtytrac.com/content/foreclosure-market-report/2012-year-end-foreclosure-market-report-7547

UO Index-

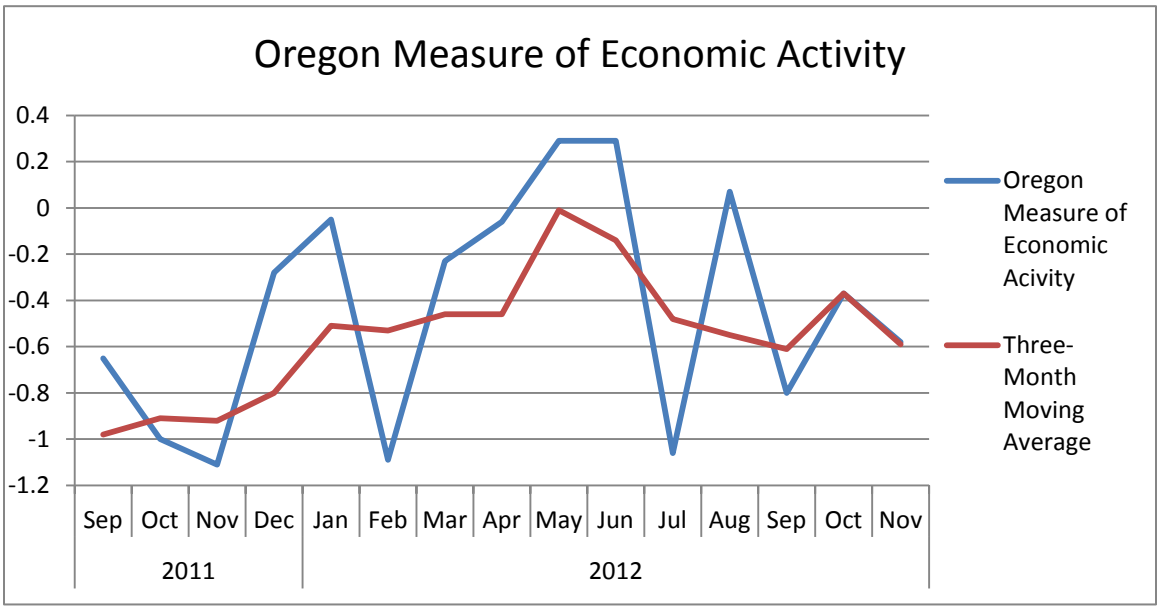
Figure 2.8



The University of Oregon index of Leading Economic Indicators has risen in each of the last two months from the previous month (Oct, Nov).

> "The two indexes suggest the economic expansion in Oregon continues to remain intact… Notably, the housing market continues to improve…. Economic growth, however, is expected to remain muted, in part a consequence of tighter fiscal policy… Although the so-called fiscal cliff was averted, further tax increases and spending cuts remain likely outcomes of the upcoming debt-ceiling debate." [5]

Figure 2.9



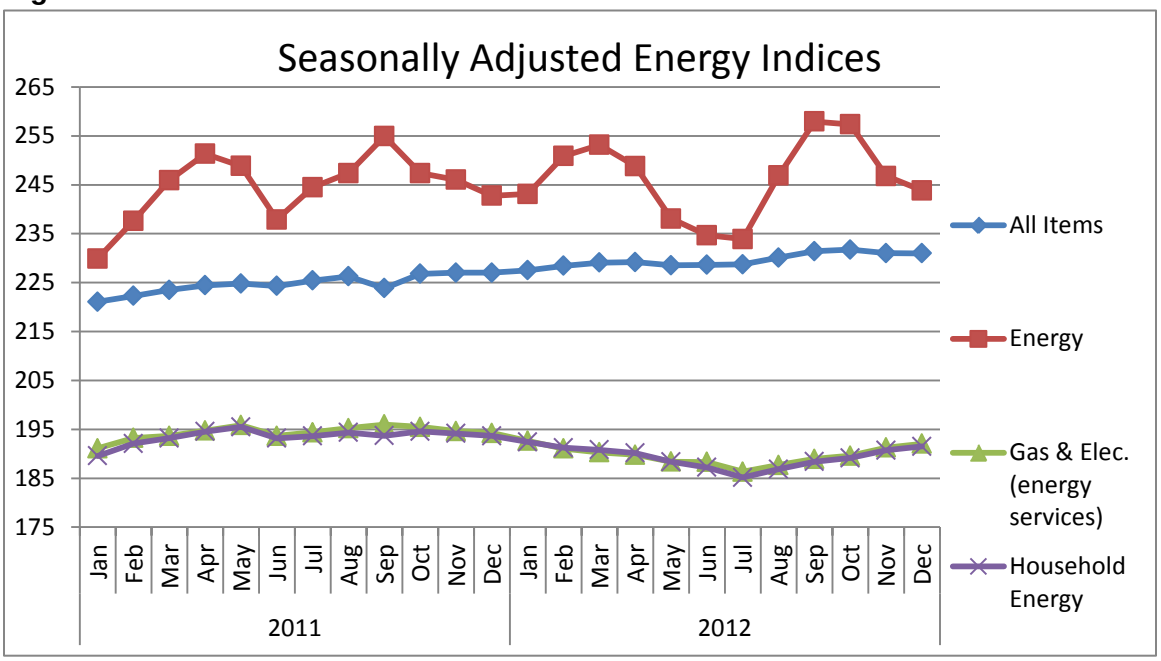
***for this measure, 'zero' indicates the average growth rate over the 1990-present time period.

[5] http://econforum.uoregon.edu/uoindex/nov12newindex.pdf

Price Indies-

Seasonally Adjusted Energy Indices

Figure 2.10



The Energy Information Agency (EIA) released its Short Term Energy Outlook (STEO) in January 2013, which provides a valuable source of energy price forecast information;

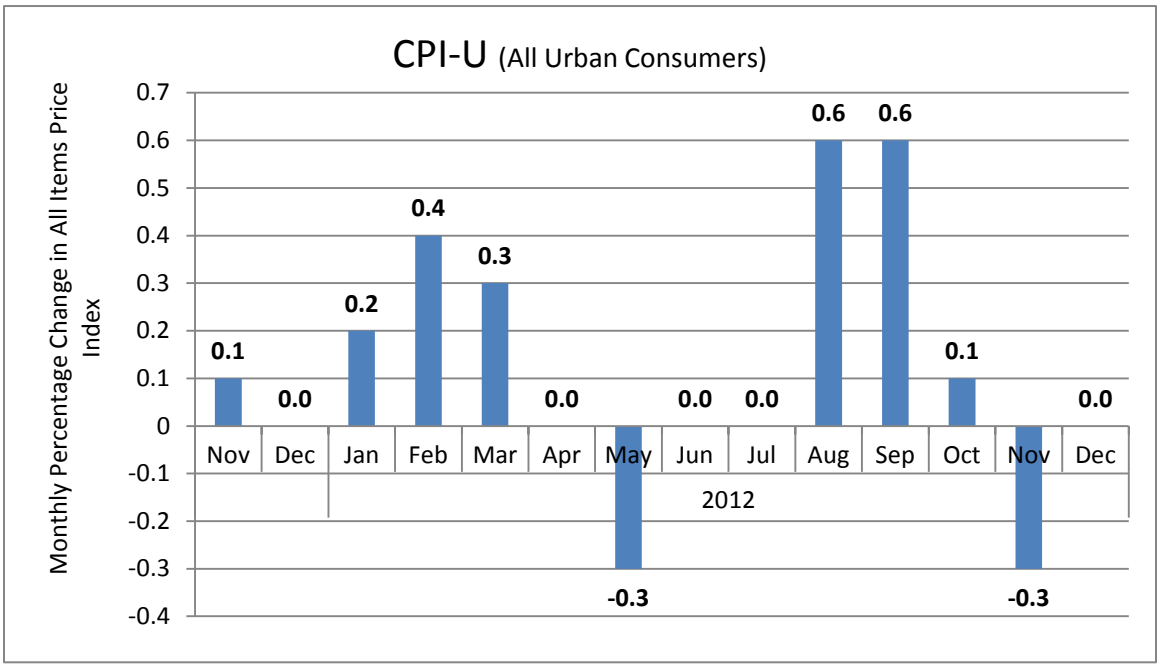
> "EIA expects the Henry Hub natural gas spot price, which averaged $4.00 per million British thermal units (MMBtu) in 2011 and $2.75 per million MMBtu in 2012, will average $3.74 per MMBtu in 2013 and $3.90 per MMBtu in 2014."
>
> "Most regions of the United States experienced temperatures that were much warmer than normal during 2012, in both the winter and the summer. Based on the assumption that temperatures return closer to normal, EIA expects residential electricity sales during the winter months of 2013 will be higher than last year while summer electricity sales will be lower, leading to a projected annual decline of 0.3 percent during 2013."

Additionally, EIAs STEO also predicts that the retail price of gasoline will fall from 2012s average of $3.63/gal to $3.44/gal in 2013 and $3.34/gal in 2014[6].

[6] http://www.eia.gov/forecasts/steo/pdf/steo_full.pdf

CPI-U-

Figure 2.11



In 2012, the all-items Consumer Price Index (CPI) rose 1.7 percent (3.0 percent increase in 2011). The energy index increased only 0.5 percent over the year, after a 6.6 percent increase in 2011, but the household energy index decreased 1.1 percent in 2012. The electricity index fell by 0.5 percent and the natural gas index fell by 2.9 percent during 2012.

Rate Cases-

Early in 2012, PacifCorp filed two rate cases in Oregon, UE 245 and UE 246. Both of these filings were for rate increases, which will take effect January 1st, 2013. UE 246 is for a rate increase of 3.5%, or $41.2 million, while UE 245 described a 0.8% increase to reflect increases in power costs.

Portland General Electric filed rate case UE 250/251 in 2012, which was signed by OPUC commissioners on 12/13/2012. Those approved tariff changes went into effect January 1st, 2013, and as a result, rates for the residential customer class will decrease by approximately 2.2 percent, and rates for the large non-residential customer class will decrease by approximately 2.7 percent.

ISM Report on Business-

According to January's Manufacturing Report on Business from the Institute of Supply Management, economic activity in the US's manufacturing sector expanded for the second month in a row, and the overall economy grew for the 44th month in a row. In

that report, 13 of 18 manufacturing industries reported growth in January, while the computer & electronic producing sector (among others) reported contraction[7].

Around the State-

- Daimler Trucks North America will lay off 250 workers at its Portland factory next month as demand stalls for new trucks. *The Oregonian, 1/30/2013*
- SolarWorld in Hillsboro laid off 50 workers. *The Oregonian, 1/25/2013*
- Pepsi Beverages Co. will close its distribution warehouse in northeast Salem next month. It employs 66 people and many of them may transfer to jobs in Portland or Corvallis. *Statesman Journal, 1/28/2013*
- The Humane Society of Central Oregon purchased a building in southeast Bend that will house a new thrift store and possibly a veterinary office for low-income pet owners. It expects to move into the new building in July. *The Bulletin, 12/28/2012*
- New Seasons Market will open at the Slabtown Marketplace development in northwest Portland in the spring of 2015. *The Oregonian, 1/22/2013*
- Willamette Valley Medical Center in McMinnville invested $1.2 million to create a new 10-bed Senior Behavioral Health Services facility. It will employ 20 people. *News-Register, 1/22/2013*
- Salem Hospital will move its inpatient rehabilitation unit to its main campus and will increase from 15 beds to 24. The unit employs 20 workers and more staff will be added as the patient load grows. Statesman Journal, 1/16/2013.
- Denver-based Spectrum Retirement Communities plans to build Crescent Park Senior Living, a 119-unit assisted care facility in Eugene this spring. It is scheduled for completion in the summer of 2014 and will employ about 40 people. *The Register-Guard, 1/8/2013*
- The Northwest National Marine Renewable Center at Oregon State University chose Newport as the future site for the Pacific Marine Energy Center, a $25-million wave energy research test site. *News-Times, 1/15/2013*
- Construction could begin in March on a four-story, 80-room Fairfield Inn and Suites in The Dalles. When competed in 10 to 12 months, it is expected to employ 25 full-time and four part-time workers. *Columbia River Gorge Business Review, 12/13/2012*
- Columbia Memorial Hospital will open the CMH Primary Care Clinic in Warrenton's North Coast Retail Center in mid-2013. The clinic will offer both primary and urgent care services in the new 3,600-square-foot clinic and will eventually add 10 new employees, including a new primary care physician. *The Daily Astorian, 12/27/2012*
- Boneyard Beer plans to open a new production plant in northeast Bend by May. *The Oregonian,12/3/2012*

[7] http://www.ism.ws/ISMReport/MfgROB.cfm?navItemNumber=12942