

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 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 refrigerator 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.

/S/ John Reynolds
John Reynolds, President