

Annual Board Meeting Minutes – 111th Meeting

March 7, 2012

Board members present: Rick Applegate (by telephone), Joe Benetti (joined the meeting at 2:45 pm), Julie Brandis, Ken Canon, Jason Eisdorfer, Dan Enloe, Roger Hamilton, Julie Hammond, Jeff King, Debbie Kitchin, Alan Meyer, Bob Repine (ODOE special advisor), John Reynolds, John Savage (OPUC ex officio-by telephone)

Staff attending: Scott Clark, Amber Cole, Phil Degens, Fred Gordon, Hannah Hacker, Margie Harris, Nancy Klass, Steve Lacey, Sue Meyer Sample, John Volkman, Jed Jorgensen, Betsy Kauffman, Thad Roth, Chris Dearth, Tara Crookshank, Steven Jonas, Dan Rubado, Cheryle Easton

Others attending: Juliet Johnson (OPUC by phone), Kari Greer (Pacific Power), Jim Abrahamson (Cascade Natural Gas), Don Jones, Jr. (Pacific Power), Roger Spring (Evergreen Consulting Group), Charlie Grist (Northwest Power and Conservation Council), Lauren Shapton (Portland General Electric), Kendall Youngblood (PECI), David Ebsen (OIT), Sarah Reuter (OIT), Toni Boyd (OIT), Andrew Abbott (OIT), Mary Ann Zemke (OIT), Bill Edmonds (NW Natural)

Business Meeting

President John Reynolds called the regular and annual meeting to order at 12:07 p.m. John announced the Policy Committee report would be moved first within the Committee Report agenda item to accommodate Jason Eisdorfer's schedule.

General Public Comments

There were none.

Consent Agenda

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

MOTION: Approve consent agenda

Moved by: Debbie Kitchin
Vote: In favor: 10
Opposed: 0

Seconded by: Ken Canon
Abstained: 0

Consent agenda included three items:

- 1) *December 16 board meeting minutes*
- 2) *Amending program approval policy (Resolution 620)*
- 3) *Incentive payment structure adjustment – 45 Mile Hydro project (Resolution 621)*

Amending program approval policy (Resolution 620)

RESOLUTION 620

AMENDING BOARD POLICY ON PROGRAM APPROVAL

WHEREAS:

1. The current board policy on approval of programs was adopted in 2005 to ensure that programs are operated according to board-approved parameters adopted in annual budgets, with periodic reporting of significant changes in major program parameters, or variances from authorized objectives.
2. The policy, which was amended in 2008 to allow staff flexibility to move budget funds between program budgets within a given sector, has worked effectively.
3. Among other things, the current policy requires staff to report to the board quarterly on variances from levelized cost and cost-effectiveness parameters. This information used to be included in quarterly OPUC reports. OPUC quarterly reports no longer include these specific data.
4. The changes authorized below, which were reviewed and approved by the board policy committee, will support the board's diligent oversight of program performance by addressing whether a program's cost-effectiveness shows a negative trend, and some of the terminology in the current policy has become outdated.

It is therefore **RESOLVED**, that the board of directors of Energy Trust of Oregon, Inc. authorizes the changes in the board's program approval policy shown in Attachment A to this resolution.

Moved by: Debbie Kitchin

Seconded by: Ken Canon

Vote: In favor:10

Abstained: 0

Opposed:0

ATTACHMENT A

4.22.000-P Program Approval Process

Purpose:

1. Historically, the Board has approved programs in resolutions that specify projected energy savings and cost/aMW and estimated budget allocations for such items as incentives, marketing, administration and evaluation. Specific terms of program management have typically been addressed in separate resolutions authorizing program management contracts.

2. Experience has shown that if staff and contractors adhere to the original terms and conditions identified in Board resolutions authorizing programs, the programs may lose momentum while staff seeks approval to change program delivery, and considerable Board and staff time are consumed in complex and confusing adjustments.
3. Energy Trust has enough experience with these programs to warrant revising this process to make it more efficient.

It is therefore RESOLVED:

1. The Energy Trust of Oregon, Inc., Board of Directors hereby authorizes all existing programs to:
 - a. Operate under a not-to-exceed budget cap established by the Board in the annual budget approval process or by special resolution; staff is authorized to manage the program within this budget until the next annual budget review; staff may move budgeted funds from one program to another within the same program sector (residential, commercial and industrial) without board approval.
 - b. Be managed to achieve a best case stretch energy savings and cost/aMW goal, recognizing that actual performance may achieve only a more conservative level below which the program would be reevaluated.
2. The Board will continue to review and approve program management contract terms.
3. Staff will provide the Board with quarterly status reports based on energy savings by program and sector (not individual contract). Reports would identify issues regarding program performance, including such as:
 - a. ~~Where a program's~~ long-term cost-effectiveness is trending in a negative direction (\$/aMW or levelized cost per kWh and therm) compared to the most recent action plan forecast, and ~~or whether~~ the program is apt not expected to be cost-effective once it hits steady-state.
 - b. ~~Whether~~ the program is not expected to achieve significant savings over its life.
 - c. ~~If a quarterly report shows that a program is trending below the conservative end of its authorized \$/aMW range goal~~, the Board may call for an action plan to address the short-fall.
4. Staff will provide an update to the board on any movement of funds from one program to another at the next board meeting following such movement.
5. The Board retains discretion to modify or discontinue a program if it is not meeting expectations.
6. The Board will use the budget and action plan process to review, modify and adjust program goals and budget caps.

Incentive payment structure adjustment – 45 Mile Hydro project (Resolution 621)**RESOLUTION 621****APPROVING A CHANGE IN THE INCENTIVE PAYMENT STRUCTURE FOR THE EBD
HYDRO LLC GENERATION PROJECT****WHEREAS:**

1. EBD Hydro LLC proposes to develop at 3.5 megawatt hydropower facility expected to generate 11,750 megawatt hours annually.
2. In September 2010 Energy Trust's Board of Directors approved Resolution 563, authorizing a \$2,000,000 incentive to be paid in equal amounts (\$400,000) over the course of five years to EBD Hydro, LLC to offset the above-market costs of the hydroelectric plant.
3. EBD Hydro, LLC has requested a change in the structure of the incentive payment schedule to meet the needs of their contractor.
4. Staff proposes to change the incentive payment structure as follows: \$1,000,000 to be paid upon commercial operation and the remainder (\$1,000,000) to be paid annually in equal increments over no less than three years.
5. EBD Hydro, LLC will make this change risk-neutral to Energy Trust by providing \$600,000 security in the form of either: 1) Cash in a reserve account, 2) a Letter of Credit, 3) a repayment guarantee from a credit-worthy party, or 4) another form of security acceptable to Energy Trust.
6. Energy Trust will further secure this change by taking a second position lien on all of the assets of EBD Hydro, LLC.
7. Resolution 563 authorized Energy Trust to take ownership of 48% of the Renewable Energy Certificates (RECs) generated by the project.
8. The new payment structure increases the net present value of Energy Trust's incentive and therefore Energy Trust will take ownership of a larger percentage of the RECs generated by the project.

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

1. Payment of up to \$2,000,000 to be paid to EBD, LLC to offset the above-market costs of the hydroelectric plant, with an initial payment of \$1 million on commercial operation and subsequent payments over no less than three years;
2. Energy Trust to take ownership of at least 51% of the Renewable Energy Certificates produced by the project; and
3. The executive director to enter into a contract(s) consistent with this resolution.

Moved by: Debbie Kitchin

Seconded by: Ken Canon

Vote: In favor: 10

Abstained: 0

Opposed: 0

Nominating Committee

Resolution 618 electing Rick Applegate and Jason Eisdorfer to new terms on the Energy Trust board

Alan Meyer, chair of the Board Nominating Committee, introduced the resolution. The terms of three board members, Rick Applegate, Jason Eisdorfer and Julie Hammond, expire in 2012. Alan said Jason and Rick have expressed interest in being reelected for a new term. Julie H announced she will be unable to continue serving as a board member once her current term expires. John R and the rest of the board acknowledged Julie H's service to the board and thanked her for her contributions and leadership.

Dan Enloe arrived at 12:10 p.m.

RESOLUTION 618 ELECTING RICK APPLGATE AND JASON EISDORFER TO NEW TERMS ON THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

- 1. The terms of incumbent board members Rick Applegate and Jason Eisdorfer expire in 2012.**
- 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 Rick Applegate and Jason Eisdorfer incumbent board members, to new terms of office that end in 2015.**

Moved by: Alan Meyer
Vote: In favor: 11
Opposed: 0

Seconded by: Debbie Kitchin
Abstained: 0

Resolution 619, electing officers of the Energy Trust board

Alan Meyer, chair of the Board Nominating Committee, introduced the resolution. Alan said the nominating committee proposes to reelect the following board members to their same positions as officers on the board of directors: John Reynolds as president, Debbie Kitchin as vice president, Rick Applegate as secretary and Dan Enloe as treasurer.

RESOLUTION 619 ELECTING OFFICERS OF ENERGY TRUST OF OREGON, INC.

WHEREAS:

- 1. Officers of the Energy Trust of Oregon, Inc. (other than the Executive Director and a 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
- Rick Applegate, Secretary
- Dan Enloe, Treasurer

It is therefore RESOLVED:

1. That the Board of Directors hereby elects the following as officers of Energy Trust of Oregon, Inc., for 2012:

- John Reynolds, President
- Debbie Kitchin, Vice President
- Rick Applegate, Secretary
- Dan Enloe, Treasurer

Moved by: Alan Meyer

Seconded by: Roger Hamilton

Vote: In favor: 11

Abstained: 0

Opposed: 0

President's Report

John Reynolds delivered his President's report, a recollection of the start-up of the Energy Trust board in 2001. He said that even though Energy Trust was not yet receiving public purpose funds, the Energy Trust board of directors was meeting to set up the new nonprofit. Acting Executive Director Marc Smiley asked each board member at the July 12, 2001, board meeting to write a "Letter from 2011." The purpose of the letter was to project what Energy Trust will have accomplished in 10 years and provide a look into the future.

John read the letter he wrote, including a few hindsight editorial comments. He described it as a fitting gesture given Energy Trust's recent marking of its 10-year anniversary on March 1, 2012.

John suggested the board be asked to write such a letter again, this time projecting Energy Trust's accomplishments by 2025 and what predictions would be made.

Energy Programs

Resolution 623, Oregon Institute of Technology 1.5 MW Geothermal Project

Jason Eisdorfer introduced the project. Jason modified the resolution to correct a typo mentioning "hydropower facility" and inserting "geothermal electric facility" Instead.

Jason introduced Betsy Kauffman. Betsy manages the Other Renewables program, which includes hydropower, geothermal and wind projects. Betsy introduced Oregon Institute of Technology (OIT) representatives who joined the meeting by phone: David Ebsen, Sarah Reuter, Toni Boyd, Andrew Abbott and Mary Ann Zemke.

Betsy said the program is asking the board to approve a \$1.55 million incentive for a geothermal project at the OIT campus in Klamath Falls. Betsy described this as the second geothermal project at the campus that includes Energy Trust and OIT collaboration. The first

project has been operating for two years. OIT has been operating geothermal wells since the 1960s. Betsy said OIT project owners are very good at operating geothermal systems, and that the first project is doing well and meeting its performance targets.

Betsy described the project before the board today: a 1.5 MW project expected to be completed by the end of 2012. The project will use 196 degree Fahrenheit water from a 5,308 foot well drilled two years ago. The well has 2,500 gallons per minute (gpm) in flow and this project will use 80 percent of that flow. It is expected to generate 7,646 MWh annually, 0.87 aMW. The electricity generated will offset campus electrical load. OIT's current retail rate is approximately \$0.05 per kilowatt hour. Excess production, expected at about 287 MWh per year, will be sold to Pacific Power under a non-firm rate contract.

OIT is partnering with Johnson Controls, who designed the project and generator. OIT's project goals are to cover interest on bonds, break even on the project by year 20 and use the project for educational purposes on campus.

Betsy described the project technology as binary geothermal technology. The geothermal unit will have a closed system with a working fluid that has a boiling point lower than water. The geothermal water will be used to heat the working fluid, creating steam and spinning a turbine. The project will have two units operating in series; the full amount of flow (2,000 gpm) will go to the first unit and with the remaining flow going to the second unit.

Betsy described that electricity production in a geothermal project is a function of the amount of flow and the temperature differential between the hot and cold in the working fluid. With the series arrangement for this project, by using the full amount of flow in each unit, the campus will derive the most heat from the geothermal water before re-injecting it. The design will also run the cooling water in the reverse direction from the hot water to maximize the difference in temperature between the cooling water and the hot geothermal water. Johnson Controls is getting a US Department of Energy grant for the series design.

OIT has had initial meetings with Pacific Power regarding interconnection. OIT owns the two main power lines going into the campus, and has full site control. The permitting process is complete.

John: Why just 7646 MWh in generation when the size of the project is 1.5 MW?

Betsy: There's parasitic load – power produced by the project that is used for pumping and for running the project's machinery.

Jeff: What's the commercial status of the units?

Betsy: Johnson Controls received the US DOE grant for the flow and series arrangement and this is the innovative part of the project. The binary technology is commercially available.

David Ebsen, OIT: To be a commercially viable unit, the project needs to prove the arrangement of the units in series works.

Alan: I'm surprised by the \$0.05 per kWh rate, but astounded by the \$0.02 per kWh they are getting from Pacific Power. I thought avoided cost rates were higher than that.

Betsy: Not for non-firm rates. Non-firm rates are lower than standard avoided cost QF rates. The latest avoided cost rates filed by Pacific Power show the first four years are less than \$0.05 per kWh. OIT could have been a qualifying facility and sold everything at the standard avoided cost rates but that would have carried penalties in the event of underproduction.

Roger: What's the percentage of load the project is supplying for the campus?

David, OIT: On average, 70 percent of the campus electricity needs will be provided by this project.

Ken: I thought the Pacific Power larger retail rate was \$0.062 per kWh. Is the \$0.05 per kWh listed here 2 or 3 years old?

David: \$0.05 is our rate without surcharges.

Betsy described the financials, including revenue primarily from OIT not having to purchase electricity. Net present value (NPV) of the revenue stream is \$6.04 million plus \$7.68 million in grants, totaling NPV \$13.7 million revenue. NPV costs of \$15.3 million are for capitalized cost, operations and maintenance expenses. The above-market cost is \$1.57 million. An independent analysis of the project showed these figures to be standard and reasonable.

Staff proposes an incentive of \$1.55 million, a Net Present Value of \$1.48 million. This amount represents 95 percent of the above-market costs. Energy Trust will take title to 95 percent of the RECs (year 2-20). With this incentive, the project is expected to break even in year 19.

Ken: What happens with the project after year 20?

Betsy: We expect the project to continue operating. Our confidence in the project comes from OIT's long history and experience with geothermal.

Roger: Is there heat loss between unit 1 and unit 2?

Betsy: Yes, and there will be enough left to continue to get more heat and produce steam.

Roger: And you're able to do this at 196 degrees?

Betsy: Yes, the working fluid in the machine boils at a lower temperature than water.

Roger: Is there a combined heat and power potential after the second unit?

Betsy: OIT will use some of the heat for campus heating.

David: After the geothermal fluids are run through the power generation system, we will use it for direct water heating in our existing heating system.

Betsy: By using the water a second time, there are some losses, and the additional flow makes up for that. Remember, that more flow equals more energy value from the water.

Betsy continued describing the financials and the incentive compared to other project incentives. This project is 0.87 aMW, which is \$1.69 million per aMW. The project is within the target range of \$1.4 million to \$4.6 million per aMW. The incentive is less than the \$6.4 million per aMW for the first OIT geothermal project. Across technologies, this project is more expensive than the Klamath irrigation district (\$1.04 per aMW) and less than the RES biopower project (\$2.2 million per aMW) and the Christmas Valley solar project (\$4.36 million per aMW).

The Renewable Energy Advisory Council reviewed and supported the project at its meeting February 15.

Dan: The low cost per aMW is significant, plus knowing this is supplying energy for baseload needs.

Jeff: What capacity factor is the project assumed to be running at?

Betsy: OIT has a guarantee from Johnson Controls to produce 7,646 MWh per year.

Jeff: There's some concern with geothermal projects, especially those with binary technology, having start up problems. Is this accounted for in the financials? And would Energy Trust take any action if the project is not operating at estimated capacity factor?

Betsy: We have payback provisions in the contract that we can exercise if needed. Typically, we allow for a certain amount of time to get things operating as expected. Staff is confident in this system because OIT has experience with running another binary unit on campus.

David, OIT: We have a contract with Johnson Controls that includes penalties for underperformance. We expect a little bit of time for tweaking the unit to get it to its maximum output.

Dan: What is the average annual uptime of the existing operating system?

David, OIT: The first project was down 25 days during the last calendar for repair, maintenance and tweaking of controls to improve output.

Betsy: The first project hit 95 percent of what Energy Trust expected the system to deliver in the last 12 months.

RESOLUTION 623

APPROVING FUNDS FOR THE OREGON INSTITUTE OF TECHNOLOGY 1.5 MW GEOTHERMAL PROJECT

WHEREAS:

- 1. Oregon Institute of Technology proposes to develop a 1.5 megawatt geothermal electric facility expected to generate 7,646 megawatt hours annually.**
- 2. Staff and an independent contractor reviewed the project design and costs and found them to be standard and reasonable for projects of similar type and design.**
- 3. The net-present value of the project's above-market costs is \$1,566,843 over 20 years.**
- 4. Staff proposes a \$1,550,000 incentive, 95% of the above market costs and a net present value of \$1,480,000, to be paid upon project commissioning.**
- 5. At the proposed incentive, the project's energy would cost Energy Trust about \$1.69 million per average megawatt (aMW), which is within the target range for the Other Renewables Program (\$1.39 – \$4.62 million).**
- 6. Funds to support this project are in the 2012 board-approved budget.**

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

- 1. Payment of up to \$1,550,000 to be paid to Oregon Institute of Technology to offset the above-market costs of the geothermal plant;**
- 2. Energy Trust to take ownership of at least 95% of the renewable energy credits produced by the project; and**
- 3. The executive director to enter into a contract(s) consistent with this resolution.**

Moved by: Roger Hamilton
Vote: In favor: 11
Opposed: 0

Seconded by: Dan Enloe
Abstained: 0

Resolution 622, authorizing a three-year funding agreement with the Northwest Power and Conservation Council for co-funding of the Regional Technical Forum.

Jason introduced the resolution, which authorizes the executive director to sign a 3-year

contract totaling \$875,000 with the Northwest Power and Conservation Council (Power Council) to co-fund the Regional Technical Forum (RTF). Fred Gordon presented and introduced Charlie Grist of the Power Council.

Fred described past Energy Trust funding of the RTF. The contract is brought before the board now because it is above the \$500,000 executive director signing threshold. Fred said Energy Trust has moved to increase funding over the past few years. The RTF does analyses of savings, cost, measure life and load shape for prescriptive measures, and provides an expert forum that helps the region develop information on measure elements. Fred said there are hundreds of measures Energy Trust staff would otherwise have to analyze and the RTF helps perform these and other functions on a regional basis, providing economies of scale and other benefits.

Fred said the RTF is now asking for three years of funding to implement regionally agreed upon priorities identified in their business plan and also enable staff stability. This puts Energy Trust's contract in a three-year instead of a year-by-year period. The historic negotiated process of annually securing agreement for funding consumed a major proportion of labor hours for the RTF. The RTF and its funders agreed to a three-year funding period so the RTF can instead focus on its core business.

Ken Canon provided additional background on the RTF, referencing the Northwest Energy Efficiency Taskforce (NEET) identification of the RTF as one of the priorities to look at regionally. This analysis was led by Bill Drummond, who facilitated a work group focused on the RTF. Attention was paid on how to make the RTF more durable and stable. The task force recommended creating a Policy Committee in addition to the Technical Committee and to replace the one year funding cycle. This was supported by NEET and the Policy Committee was formed.

Charlie Grist introduced himself as a staff member at the Power Council who supports the RTF as its vice chair with Tom Eckman as the chair. Charlie described the Pacific Northwest as building a large portfolio of annual energy savings and that we need a way to measure them. The energy-efficiency savings have been cheap but as the region does more, we need to more accurately measure to further improve programs. The RTF has proven valuable in this regard and regional regulators have come to rely on the RTF for this work.

The RTF was conceived of in 1996 when Congress charged the Power Council and BPA to develop consistent standards and protocols for verification and evaluation of energy efficiency. In 1999, the Power Council formed the RTF.

Today, the RTF develops estimates that utilities and regulators can rely on. It provides a centralized and unbiased technical review of energy savings data, assumptions, cost effectiveness, and measurement and verification. The Forum builds on empirical data, and provides an open public setting to vet claims and keep up with changes. The RTF seeks value by being open, having peer review and providing economies of scale. Charlie said utilities, BPA and Energy Trust and other regional utilities rely on the RTF to reduce what would otherwise be higher evaluation costs. Regulators use the RTF to establish standards, and evaluators to convey expectations and describe methods.

Roger: Why can't this be done on a more regional scale, either by including California or on a national scale? Also, if you're getting funding from utilities and Energy Trust, is that double dipping on ratepayer funding?

Fred: Energy Trust funds the RTF on behalf of the Oregon utilities, PGE and Pacific Power.

Charlie: To the first question, it was created by Congress who gave the Power Council authority to create the RTF for the Pacific Northwest. California has its own structure. We sometimes share data and there is collaboration. But there are burdens that can come from the California regulatory structure. In addition, there are several RTF projects where funding is secured from outside organizations.

Fred: There's a fundamental difference in climate and rate structure between the Pacific Northwest and California. California doesn't have the same use of hydro and is focused on different values, like a high summer peak and a heating load that doesn't look like ours.

Roger: But your research can help other parts of the country.

Charlie: You're right and we do collaborate and share information with others when it's applicable.

Charlie described the structure of RTF and how it advises the Power Council:

1. RTF scientific and statistical advisory group: 20-30 voting members, appointed by the Power Council, based on technical expertise, regulatory staff (non-voting), and candidates solicited widely. One member is Energy Trust's Nick O'Neil.
2. RTF policy advisory group: Stakeholder advisory group of funders, regulators and two public interest groups. These members advise on priorities, funding and progress, and are appointed by the Power Council. One member is Energy Trust's Fred Gordon.

Alan: Two public interest groups?

Charlie: Ralph Cavanaugh from the Natural Resources Defense Council and Sara Patton from the NW Energy Coalition.

Jason: Who are the policy advisory members?

Charlie: There is one member for every key funder, and there are 13 key funders.

Jason: How are they appointed?

Charlie: By the Power Council. The RTF has a charter and is exclusively designed to get stakeholder input but to keep the stakeholder input separate from the unbiased research.

Charlie mentioned the RTF has a website, which includes a library with over 90 unit energy savings measures, savings methodologies, calculators, software, tools, data, meeting minutes, meeting agendas and reports. The website provides transparency to the RTF. The RTF has 20 subcommittees and produces quarterly newsletters and an annual report.

Charlie described the Forum's funding, which is just under \$1.4 million for 2011. They are looking for slightly more than \$1.4 million per year for three years starting in 2012. The RTF is funded similarly to how NEEA is funded, largely a load based formula. Energy Trust's co-funding is \$308,000 per year.

Alan: How do public utilities fund?

Charlie: BPA picks up the majority of the public utility funding. If a public utility has self generation, the utility then picks up a share in line with their self generation.

Charlie mentioned that without the RTF, Energy Trust would have to go out and perform similar functions at greater costs.

Dan: I have a question for Debbie Kitchin: What's the value of Energy Trust participating?

Debbie: Very valuable, as each utility doesn't have to do the same work, and we can share the work and leverage it better. Plus, there's better peer review.

John R: See this as valuable to the Conservation Advisory Council, too, in helping resolve any disputes.

Debbie: The RTF helps improve the integrity of our numbers and allows us to do other work.

Fred: We would need more than 1 FTE to replace the work the RTF does. The peer review improves our credibility, especially for those who are not intimate with our work.

RESOLUTION 622

AUTHORIZING A THREE-YEAR FUNDING AGREEMENT WITH THE NORTHWEST POWER AND CONSERVATION COUNCIL FOR CO-FUNDING OF THE REGIONAL TECHNICAL FORUM

WHEREAS:

- 1. The Regional Technical Forum (RTF), has been Energy Trust's most useful external resource for estimates of electric efficiency measure cost, savings, measure life, and load shape.**
- 2. It is in Energy Trust's interest to provide RTF with a stable and predictable source of funding.**
- 3. Staff may negotiate a contract with Northwest Power and Conservation Council to co-fund the RTF. The agreement will include, among others, the following terms:**
 - Energy Trust's funding obligations would be subject to several contingencies relating to changes in law, regulation, the RTF charter, termination of the OPUC grant agreement, or if Energy Trust does not receive adequate assurance of funds from its funding utilities.**
 - Energy Trust may withdraw funding, after appropriate notice and consultation, if the RTF does not make due progress toward its goals or other funders withdraw support such that Energy Trust's funding burden would significantly increase.**
 - Subject to these contingencies, Energy Trust payments would be:**
 - 2012: \$258,652**
 - 2013: up to \$308,000**
 - 2014: up to \$308,000**

It is therefore RESOLVED:

The Executive Director is authorized to sign a contract with the Northwest Power and Conservation Council committing Energy Trust to pay up to \$874,652 over the 2012-2014 period for co-funding of the Regional Technical Forum, subject to the conditions outlined above.

Moved by: Julie Hammond

Vote: In favor: 11

Opposed: 0

Seconded by: Jason Eisdorfer

Abstained: 0

ISI Quarterly Report and Project Update

Margie Harris first thanked Charlie and Tom for their work on the RTF. She said the Power Council and the RTF are unique and are significant to the region and Energy Trust.

Margie presented the quarterly Integrated Solutions Implementation Project (ISIP) update. She said the project has five different major workstreams concurrently underway as part of Phase 1 of the project as outlined to the board last November. Staff is targeting completion of this extensive work by the end of Quarter 3 2012:

1. Process analysis and design workstream
 - a. Matt Chatum is the new team lead on this and works with companies on process documentation
2. Data modeling workstream
 - a. Streamlining on how we gather, analyze and report on data
 - b. Brian Sinclair is the workstream lead, and has a strong understanding of data modeling and data structures
3. Budgeting and forecasting workstream
 - a. To develop new and better capabilities, especially during end of year when we want to compare how we are doing against goals
 - b. Insight was provided by Dan Garrett who conducted an in-depth workshop
 - c. Sue Meyer Sample and Pati Presnail are assuming internal leadership
 - d. The solution will use our existing Excel based system for forecasting
4. Customer relationship management (CRM) workstream
 - a. Will ultimately replace GoldMine, which has limited integration with our project tracking
 - b. Meredith Burkemeyer will facilitate the workshop next week
 - c. Working to define the priorities and scope
 - d. This element will continue into Phase 2 of ISIP
5. Great Plains upgrade (financial system) workstream
 - a. Upgrading our current Great Plains software
 - b. Working with Roger Borek and his technology firm
 - c. Currently testing the system, and expect to go live end of March
 - d. First workstream that will be complete

Margie said she meets weekly with Scott Clark, ISIP project sponsor and IT director, to cover project timeline, progress and budget. Scott brings enthusiasm, expertise and a deep knowledge base to the project.

Julie B: How does today's update relate to earlier conversations on this subject?

Margie: Earlier calls regarded our relationship with Epicor software company. As soon as I have resolution on this, I will update the board.

Break

Meeting break at 1:27 p.m.; meeting reconvened at 1:45 p.m.

Bob Repine said he regretted not being able to make Energy Trust's Open House on March 6. He mentioned an Oregon Department of Energy staff member, Vijay Satyal, who attended in his absence and reported it was a good event.

Bob said the Oregon Department of Energy has historically produced posters of various scenic Cascade Mountain images. He presented Margie with a poster of a Cascade Mountain with the caption "Saving energy saves everything." He said he hopes Margie can find a good spot for it in Energy Trust's office space. He also said the Oregon Department of Energy is looking at relocating and is meeting with the property manager to include energy efficiency.

Committee Reports

Policy Committee (Jason Eisdorfer)

Jason said the Policy Committee met a few weeks ago to discuss the utility roundtable review among other topics. Included under Tab 7 in the board packet is the background and history about the utility roundtables. A few years ago, utility representatives expressed a desire for more direct communication with the board members, with some expressing interest in having a utility representative join the board. Since this is a non-stakeholder board, it was decided that utility representation would not be appropriate. However, the desire of the utilities to have more direct communication with the board was viewed as valuable and the utility roundtables were devised. A few other stakeholders were also invited to the roundtables. In the two-year trial of the roundtables, six meetings were held.

Rick and Jason interviewed roundtable participants on how well the utility roundtable solution is working. Between February 9 and 14, they met with John Audley of Renewables Northwest Project, Bob Jenks of the Citizens Utility Board, Carol Dillin of PGE, Pat Egan of Pacific Power, Bill Edmonds of NW Natural, and Jim Abrahamson, Mike Parvinen and Alison Spector of Cascade Natural Gas.

Jason said people think the roundtable ranges from valuable to very valuable. No one requested the roundtables be stopped. The general sense is this is a working arrangement that helps work through issues collaboratively, for example, on how to fill the gap left by the Business Energy Tax Credit. It provides an opportunity to air grievances. The roundtables enhance communications, allow parties to share data, and foster understanding.

Those interviewed asked whether we should discuss larger energy policy issues. A number of participants were interested in this, while several emphasized the need to focus most on core issues and the Energy Trust/utility working relationship.

Jason and Rick's recommendation is to continue the roundtables. Jason invited board feedback about the roundtables, and whether they should become a long-term part of the board's structure or just for another two-year period.

Jason mentioned feedback from the participants on having the roundtable at the end of the day, allowing participants to have a more informal discussion with board members at the close of the meeting.

Rick said the original proposal for utility representation on the board would have added complexities, and moved the board to an advocacy board instead of a non-stakeholder board. Instead the roundtables give utilities direct communication with the board. In addition to the roundtables, there are very regular and successful meetings between Energy Trust staff and utility staff. Some of those interviewed suggested that Energy Trust may also be a forum

outside a government setting to discuss policy issues. The general suggestion is that those topics could be proposed by various parties in establishing agendas for each roundtable.

Alan: I support this idea. I'm not sure whether it should be formalized for a longer period or be on a two-year basis. Who was looking for an expansion of the discussion into policy issues?

Jason: It was a mix of utilities and others. One utility in particular did not want the roundtables to go in this direction.

Julie B: The meetings have had a certain formality, raising my concern that the utilities feel they are reporting to the board. I want to make sure the roundtable is separated from board activities. Maybe have a utility co-chair, or rotate between utility and Energy Trust. I think we should formalize this. We had the two-year test period and we should build it into our setup. I would keep it to strategic energy issues; we need to be careful about how we work around policies. Active boards like to be forward-thinking. I like how this board has accepted individuals who were formerly from companies that would have originally not been together at the table. As we look at vacancies, let's look for someone who was a former executive at a utility, and bring those talents to the table.

Julie H: Other than the last few meetings, the roundtables weren't very useful to me. At the end, there was more interaction. I would be interested in knowing what the staff thinks. We need the dialogue to be meaningful, and we need to be clear what we are trying to accomplish with each discussion. At the beginning, I wasn't sure what we were doing, and at the end, I felt there was more collaboration.

Jason: The way we create the agenda is to solicit input from the utilities. There are times when Energy Trust seems to dominate the agenda because the utilities want to hear from us on an issue. There are dozens of items we could bring to the roundtables; the difficult part is knowing what to talk about. There were suggestions that the roundtables should be held when there are issues to talk about, and not on a set schedule. I think we've passed the uncomfortable stage, and there is now an understanding that we can carry forward as equals. There was feedback that the Business Energy Tax Credit discussion was particularly helpful.

Roger: I think it's natural to have a tension; the roundtables are a way to break down that tension. It's an important mechanism to engage.

The board discussed the timing of the roundtables in relation to the board meetings, as well as room set up to bring a slightly more informal feel to the roundtables and adding a social opportunity after the meeting.

Feedback from the utility representatives present at the meeting included:

- Bill Edmonds, NW Natural: I appreciated having the opportunity to give feedback. Jason's summary was well done.
- Jim Abrahamson, Cascade Natural Gas: Jason, Rick and John did a good job of summarizing our February meeting reflected in this discussion today.
- Lauren Shapton, PGE: I was not in the meeting with Carol but Carol was grateful for the opportunity to talk with the board members. Carol did suggest that to the extent board members can learn more about how utilities are structured and motivated, we would be happy to give a utility-101.

- Kari Greer, Pacific Power: I was not in the meeting with Pat but we see these meetings as being very valuable. We're looking forward to the next one.

Debbie: I have an interest in either making it permanent or longer than two years, maybe four or five years.

Jason said the next steps are to get together with Jason, Rick, John Reynolds and John Volkman to make sure the operating principles are in place. Jason will bring back a resolution and recommended set of operating principles at the next in-person board meeting.

Jason Eisdorfer left the meeting at 2:15 p.m.

Audit Committee (Julie Hammond)

Julie said the committee is waiting for the financial audit, which will soon be available. Ken Canon will provide the report at the March 28 board meeting.

The Audit Committee is also beginning the RFP process to select a financial auditor for next year. Contracts are typically two years. Perkins & Co. has previously completed the audit for the past few years.

Julie added that since she is stepping down from the board after this meeting, Ken Canon has agreed to fill her role as chairperson of the Audit Committee.

Compensation/Finance Committee (Dan Enloe)

Dan discussed the Quarter 4 financials dashboard. In December, Energy Trust delivered a lot of incentives within the energy efficiency sector. Dan said that this also shows that we employed a lot of people in the economy, and the results are impressive. He mentioned Energy Trust exceeded its goals for electric and gas savings, and is doing very well when compared to the 2014 strategic goals. For the 2014 renewable energy generation goal, Dan said Energy Trust will need new strategies given that the Business Energy Tax Credit is very limited compared to the past.

Dan said the Compensation Committee has been focusing on the benefits package for Energy Trust. He said the investment advisors have been doing a good job replacing underperforming funds while maintaining a range of portfolio choices.

Evaluation Committee (Debbie Kitchin)

The last meeting was December 9, 2011, when the committee reviewed four studies.

IEI and Kaizen Blitz evaluations: The studies reviewed the second year of offering these pilots. They were very innovative in responding to the cash crunch at industrial facilities that didn't have capital to invest. These offerings were offered as pilots and are now going forward as program offerings.

The OPOWER three-month review included survey results and concluded that the program is getting cost-effective savings. The survey questions will be modified to get more useful information in the future.

Phil Degens: We will cover the six-month survey in the Evaluation Committee meeting tomorrow. Also, we are designing the one-year survey, which will go to the 60,000 participants and the control group of 60,000 non-participants. We will also do a bill analysis to verify the savings OPOWER is indicating. We did a cursory look a few months ago, which showed the results OPOWER reported to us are in line with what we saw in our brief billing analysis.

Debbie described the Energy Performance Score (EPS) tool comparison study, the fourth study reviewed at the December committee meeting: The EPS is being used by residential buildings, and has a miles-per-gallon concept. It's used in the New Homes program, and this study was looking at different tools at how to calculate an EPS for existing homes. Results showed potential for some tools, and each test has strengths and weaknesses. It was a valuable study as we continue to look at using EPS as a tool to motivate homeowners to take action.

Phil: The study results were presented at a stakeholder workshop in January for feedback and input.

Debbie: Depending on how you do the measurement, one home heating fuel choice can look more favorable than the other even though the efficiency measures are the same.

Dan: I'd like to clarify my "do nothing" comment in the committee meeting notes. From the purchaser's perspective, there's currently nothing that requires disclosure of the utility bills. The simple act of requiring utility bill disclosure brings a lot of information to the table. From the purchaser point of view, you want to know what house costs less from a utility bill perspective.

Jeff: What is Energy Trust's role relative to the EPS?

Margie: State legislation sought to create an EPS. Energy Trust was already working on this concept. We had retained services through Earth Advantage, who in turn was working with PECL, to develop the first EPS for newly constructed homes. This concept was piloted and evaluated. We went further to look at developing an EPS for existing homes. We've been in a facilitator role. In January, over 100 stakeholders participated in a public meeting to provide further feedback on an EPS for existing homes. We're taking that useful feedback to develop a straw man proposal to be presented to the Conservation Advisory Council this April. The biggest issue is the site vs. source question, a fuel neutrality issue that brings into question how extensive and upstream the model should be used.

Phil: The EPS meeting was very useful; we've been researching EPS for existing homes for the last two years.

Debbie: Will there be meeting notes available from the January stakeholder meeting?

Amber: There are notes and they will be posted online.

Fred: Energy Trust is interested in the EPS as a tool for driving people to invest in energy efficiency, preferably to our programs.

Joe Benetti joined the meeting at 2:45 p.m.

Debbie: The ultimate goal is to get people to recognize the value of energy efficiency and act.

Margie: This is a tool to inform and get people to make energy-efficient purchases.

Roger: How do you take into account different fuel mixes by utility?

Margie: That's the issue; the strawman will likely propose to use a blend.

Staff Report

Margie presented program and operations highlights, including:

- Pacific Natural Foods, a Tualatin-based company, is a long-time program participant that has 13 buildings and implemented 20 improvement projects in the last 6.5 years. This represents the relationship Energy Trust has established with this company on an ongoing basis. The company also received an Oregon Leaders Award at the Northwest Industrial Energy Efficiency Summit in January 2012.
- Preliminary 2011 results. Energy Trust exceeded stretch goals for electric (106 percent) and gas (104 percent), and exceeded stretch goal for Pacific Power and NW Natural. We came close to reaching the stretch goal for PGE (97%) and reached 93% of the Cascade Natural Gas stretch goal. Though the renewable energy program faced challenges related to the absence of the Business Energy Tax Credit, we built a solid pipeline of renewable energy projects for 2012 and installed a record number of solar electric projects in 2011. The OPUC is looking at how we should measure the success of our renewable energy programs given the new and reduced tax credits. Preliminary 2011 results indicate we helped participants save more than \$50 million on their utility bills, leveraged an estimated \$240 million in private investment, and saved 193,000 tons of carbon.
- In terms of the fall bonus incentives for Production Efficiency and Existing Buildings, staff is unlikely to be able to pinpoint exactly where the bonus moved any one single project. We do know that in the aggregate, the effort was effective at delivering savings during uncertain times, brought in 43 million kWh, or 10 percent of electric savings, and 368,000 therms, or 7 percent of gas savings.

Margie also reviewed how Energy Trust delivered on its 2011 budget themes:

- Achieve accelerated goals: Goal met. Energy Trust grew electric savings by 3 percent and gas savings by 17 percent.
- Customer service: Goal met. Energy Trust is benefiting from the Fast Feedback surveys we gather. Satisfaction as high or very high is above 90 percent for four programs.
- Diverse program offerings: Goal met. Customers saw offerings like the OPOWER pilot, collaboration with Clean Energy Works Oregon, and opportunities for behavior and operation changes through strategic energy management for Existing Buildings and Production Efficiency.
- Input to state policy changes: Energy Trust remains tentative here, and we don't insert ourselves into processes but respond when asked. In 2011, staff provided input on Residential Energy Tax Credit and Business Energy Tax Credit revisions, as well as Cool Schools legislation, and provided input into the Governor's 10-Year Energy Plan by participating on the energy efficiency task force and climate/carbon subgroup.
- ISIP: We are on track with a revised schedule

Other highlights included:

- Celebrating Energy Trust's Open House and 10-year anniversary yesterday, March 6.
- Presented, with the OPUC, Oregon Department of Energy, utilities and Power Council, to the Governor's staff on Oregon's energy history and structure.
- The Oregon Leaders Awards were presented to six innovative industrial companies; of which, four are Energy Trust program participants.

- Positive feedback from Production Efficiency participants during the end of the year.
- CSG provided training to Existing Homes trade allies in Spanish for Spanish-speaking technicians. It's important to look at ways to work with harder-to-reach groups.
- Two of our program contractors were listed among the "Best Companies to Work For" by Oregon Business Magazine: Evergreen Consulting and RHT. Both are Program Delivery Contractors for the Production Efficiency program. Roger Spring from Evergreen said the growth at his company is driven by Energy Trust's accelerated goals.
- Energy Trust received an Environmental Protection Agency Sustained Excellence Award for the third time for lowering statewide energy use with Home Performance with ENERGY STAR®. The Home Performance market was spurred largely through our efforts.
- Redesign update: We are still learning and applying outcomes from the redesign in 2008. One is process improvements. We've trained 26 staff on this "mapping" method, intended to gain process efficiencies. We have completed improvements in customer experience, check imports and annual reporting. Time and money are both saved when these process improvements are implemented. IT and CCS continue to work on data quality improvements as well.
- Margie described energy efficiency upgrades made at multifamily properties managed by NFN Investments.

Julie B: Do you engage your executive board with any of the governor meetings related to the 10-year energy plans?

Margie: There are times where we could do more of that. The taskforce membership was chosen by the governor. As far as the deep dive, that can be a venue where board members can be involved.

Julie: For the taskforce, how did you develop your platform?

Margie: Each group was given a charter and participated in a group process. I shared some of the challenges and opportunities to staff and solicited their input. There will be a public process to comment on the draft plan expected in the next month or so.

Adjourn

The meeting adjourned at 3:15 p.m.

Next meeting. The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, March 28, 2012, 12:00 p.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, 3rd Floor, Portland, Oregon

Rick Applegate, Secretary