

## Board Meeting Minutes – 91st Meeting

July 29, 2009

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**Board members present:** Rick Applegate, Jason Eisdorfer (arrived 12:45), Dan Enloe (via web conference, 12:15-3 pm), Julie Hammond, Debbie Kitchin, John Klosterman, Caddy McKeown, Alan Meyer, John Reynolds, John Savage, ex officio

**Board members absent:** Roger Hamilton, Al Jubitz, Preston Michie, Betty Merrill (*ex officio*)

**Staff attending:** Matt Braham, Sarah Castor, Pete Catching, Margie Harris, Erin Johnston, Betsy Kauffman, Nancy Klass, Steve Lacey, Sue Meyer Sample, Kathleen Ortbal, Andres Pirazzoli, Thad Roth, Brien Sipe, Greg Stiles, John Volkman, Peter West

**Others attending:** Jim Abrahamson, Cascade Natural Gas; Bill Edmonds, NW Natural; Claire Fulenwider, Ph.D., NEEA; Theresa Gibney, OPUC; Alisa Kane, City of Portland Bureau of Planning and Sustainability; Jan Schaeffer; Inara Scott, NW Natural

### Business Meeting

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President John Reynolds called the business meeting to order at 12:10 pm.

### Consent Agenda

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*June 13, 2009, meeting minutes*

**MOTION: Approve the consent agenda, which consists solely of the June 13, 2009, meeting minutes.**

Moved by: Debbie Kitchin

Seconded by: Caddy McKeown

Vote:

In favor: 7

Abstained: 0

Opposed: 0

Adopted on July 29, 2009, by Energy Trust Board of Directors.

### General Public Comments

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There were none.

## President's Report

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John Reynolds showed slides of the Intersolar North America trade show in San Francisco. There were 444 exhibits, some very large, on 3 floors at Moscone West Center. He noted that Centrol Solar, a new Chinese PV consortium, has selected Eugene as its US distribution center. He noted roofing companies are edging into the PV market.

## Committee Reports

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*Audit Committee.* Julie Hammond reported the audit committee met today to review candidates for the management audit. Out of five respondents, the field has been narrowed to two. Interviews will be held next week. John R. noted surprise that only five responded.

*Dan Enloe joined the meeting at 12:15 pm via teleconference..*

*Program Evaluation Committee.* Debbie Kitchin noted minutes from the past two meetings are in the packet. The most recent meeting, June 26, covered steam trap verification and the Production Efficiency impact and process evaluation. Caddy noted a reference to eliminating free Home Energy Reviews. Sarah Castor explained that when CFLs are no longer included due to market transformation, Home Energy Reviews will not be cost effective; however, the program is still exploring changes to how we conduct future Home Energy Reviews that would maintain cost effectiveness.

Alan Meyer noted the committee has discussed the merits of using free ridership and spillover to modify savings estimates. Many states are moving away from tracking this. John Klosterman asked what happens when a measure is determined through an evaluation to not be cost effective. Brien Sipe said that measure may go away. Debbie explained those results are used to guide decisions going forward. John Savage responded that the commission would like free ridership to be analyzed but not to excess. He noted the growing importance, as carbon markets develop, of being able to demonstrate that actions would not have been taken without our incentives.

Caddy noted market transformation may occur later in rural areas than in metropolitan areas. She would hate to see services like free Home Energy Reviews taken away from rural homeowners prematurely.

John R. asked for an explanation of why savings from tankless water heaters are coming in so much lower than projected. Brien said average household hot water usage is less than initially assumed.

*Finance Committee.* John K. said the committee has not recently met and will meet soon. Alan expressed his continuing concern about the amount of unspent cash on hand. Rather than earning interest he would like to see the funds used for energy efficiency and renewable energy.

*Policy Committee.* John R. introduced this topic. Alan asked why the self-direct policy continues to reference utility scale projects, as Energy Trust is no longer in this business. John Volkman said that language could be deleted. Margie noted there may be reason to retain it with respect to Energy Trust's ongoing role working with utilities on their smaller scale renewable energy projects through their requests for proposals.

Responding to a question from Caddy, John S. said there is speculation about particular energy-related legislation the governor may veto but no official five-day notices as of yet.

*Strategic Planning Committee.* Rick Applegate drew attention to elements of the draft strategic plan document that had changed since the last meeting. He thinks the draft is a pretty crisp read and ready for review. The plan is to get the document out to OPUC, utilities, advisory councils and others and solicit comments. The goal is to have the final strategic plan approved at the November board meeting.

Alan said he thinks the draft is much improved. He raised three issues. First, the first "activity" – to accelerate energy efficiency and renewable energy investments" – reads like a goal but is not exclusively Energy Trust's responsibility. He also is concerned about the reference to "clean" energy in activity #5, and feels the description of the activity is unclear. Finally, he is concerned that references to current and full funding options looks like a blatant appeal for more dollars. Rick said the committee intended to communicate what can be achieved with full funding. Debbie suggested tying these references to cost-effective funding in the IRP. John S. said we should take the reference to "full" out and reference getting all cost-effective savings. John V. said he will continue looking for another term.

Julie noted that the number in the first paragraph regarding saving ratepayers \$440 million should be clarified, indicating that this amount will continue to grow over time.

John S. asked if the board has discussed its ability to drive down the core cost of renewables? As a caveat, he said he recognizes the board may not be able to affect such costs. Debbie said this would be taking a market transformation approach to renewables. John R. noted you could do volume purchases. Margie said it would entail working with manufacturers and distributors; the closest we've come to doing this took place in conversations with Solar World when they were just locating here.

*Jason arrived at 12:45 pm.*

## **2009-2010 Revised Budget**

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### ***Resolution 522, Authorize Executive Director to Use Reserve Fund to Cover NW Natural Revenue Shortfall, and Resolution 520, Adoption of the Revised 2009 Budget***

Margie Harris presented these related topics. She noted considerable work went into the revised budget. She summarized changes to the adopted 2009 budget, which include:

- Added new program activities, including working with NW Natural industrial customers (+\$705k), services to commercial customers of certain BPA public utilities (+\$20k), preliminary work to serve NW Natural customers in Washington (+\$188k).
- Adjusted for final carryover figures for 2008 (+\$1.4m)
- Reallocation of interest earnings to reserves (+\$1.7m)
- Updates based upon market and program activity

Jason asked if we are allocating interest earnings by utility. Margie said we do not do this. John S. said this may need to be done.

Margie highlighted market indicators supporting the proposed changes, including:

- New construction trends
- Residential and commercial remodeling activity
- Tracking committed incentives
- Employment data for the industrial sector
- General macroeconomic information corroborates decisions

She noted progress toward goals. We are on track to achieve 88% of the revised stretch goal for energy efficiency, down to 38.5 aMW from 41.6 aMW. This is principally because the CHP project at OSU is expected to be completed in 2010 not 2009, accounting for a reduction of 3.5 aMW. She said we continue experiencing growth on the gas side.

Renewable energy activity is on track to reach the conservative case annual goal. We expect to meet the minimum OPUC performance measure of 3 aMW/year on a 3-year rolling average. The Renewable Energy stretch goal is proposed to be reduced from 19.9 aMW to 4.6 aMW (accounting basis) due to a number of factors, including project delays, financial uncertainties, delayed stimulus funds, pending and new legislation and slowing markets.

Proposed budget adjustments, including reductions and increases, were reviewed. Margie noted much of the funding increase in corporate communications and outreach reflects a shift from program budgets for Web related activities and is more appropriately allocated as now proposed.

Sufficient funding exists through year end for Cascade Natural Gas, PGE and Pacific Power projected activities. We are currently in negotiations with NW Natural and OPUC regarding an adjustment in the public purpose charge to address the anticipated shortfall in available revenues for NW Natural activities by year end.

Carryover changes were described, with the major difference stemming from NW Natural. In 2008, Energy Trust and NW Natural agreed to do a major campaign to drive energy efficiency activity in light of the Company's expected unprecedented double digit rate increases. The joint campaign, coupled with "bundled" incentive offers, was highly successful, resulting in higher than anticipated savings of 2.6 million annual therms in 2008, 110% of our goal. The additional

2008 activity was covered with NW Natural reserve funding, resulting in starting the year in 2009 with \$2.5 million less in NW Natural carryover funds than had been forecasted. Jason asked why this could not have been anticipated. Margie said at the time we did the forecast in 2008, we underestimated how successful the NW Natural promotion and campaign would be. In addition, residential activity is particularly difficult to accurately predict.

We expected to start 2009 with \$4.9 in NW Natural carryover funds and once true-up was completed in February, learned actual carryover was \$2.4 million. This information was shared with NW Natural, the board and the OPUC. The rate of spending could not be sustained and a shortfall would be expected by year-end unless expenditures were reduced or revenues were increased. In March 2009, NW Natural and Energy Trust agreed to continue the campaign until June 1<sup>st</sup>, secure additional savings, and discuss options to increase the public purpose charge later in 2009. These discussions are underway. Margie referenced the detailed chronology of these discussions and decisions. In addition, new financial management controls have been put in place to monitor the rate of expenditures more tightly, especially given the erosion of carryover funds. Less marketing activity will also be used as a lever to slow demand. She noted she will require PMC and program staff to use existing early warning system tools such as monthly incentive reporting, enforcing contractual limits on incentive budget and commitments, employ the reservation system for large projects, create budget caps for key vendors installing multiple projects, and performing frequent market analysis.

There is a verbal commitment from NW Natural to backfill the projected \$4.8 million revenue shortfall through an increase in the public purpose charge. This requires OPUC approval. In addition, NW Natural has proposed a 15-20% rate reduction, stemming from lower demand and lower commodity prices. Along with a rate reduction and adjustment in June 2009, this proposal would further reduce available NW Natural public purpose funds in 2009.

To address this matter, Energy Trust drafted several scenarios for discussion with NW Natural and OPUC about the level of activity and corresponding revenue requirements for NW Natural in 2010 and 2011. One of the constructive outcomes of this effort will be to standardize a process for how OPUC, utilities, stakeholder groups and ETO approach IRP goals and determine the appropriate amount of the public purpose charge.

To bridge the anticipated gap between available 2009 funds and when a decision on future NW Natural public purpose funds become available, Margie proposed the board approve use of up to \$5 million in available Energy Trust interest earnings. This is consistent with board adopted guidelines for allocating interest earnings. She noted that twice in the past Energy Trust has reallocated interest to programs where continued savings and generation activity might have resulted in shortfalls. Julie asked whether there is sufficient interest earnings from NW Natural funds. Margie noted pitfalls of allocating interest by utility, which is not something Energy Trust currently does. John S. expressed some concerns about not segregating the reserve funds by utility. Margie noted the interest accumulates from all funding sources and the picture varies greatly depending upon the point in time the amount is calculated. She referred to board

guidance from July 2006 governing the use of the reserve account. This proposal aligns with that directive.

Alan expressed concern and asked for clarification as to whether the funds would be paid back. Margie said the proposal requires repayment with future NW Natural revenues.

Jason discussed options for filling the gap. We can borrow from ourselves, use a line of credit, obtain a rate adjustment, or use a deferred account. Margie explained the latter would borrow from NW Natural's stockholder account for retroactive repayment through rates, if approved by OPUC. This would carry a significantly higher interest rate. The line of credit would entail \$100,000 in cost and the line would need to be increased. Alan added an option, some form of rationing. He's not advocating this. He asked what our contingency plan is if the new funds are not available. Margie said we developed a scenario that would terminate all gas-only activities and do not support doing this. Alan restated this worst case option, which would stop funding new gas measures until we had collected enough new gas revenues to cover the shortfall. Board members discussed the disadvantages of doing this.

Julie asked for clarification of how the \$4.8M projected shortfall was derived. Margie and Sue explained the components, which included a combination of expenditures to achieve high savings and revenue shortfalls resulting from a reduction in demand and a downward adjustment in NW Natural rates in June, reducing July revenues by \$500k.

Dan Enloe noted the proposed financial risk-taking saves lots of natural gas per dollar. Margie noted as time goes on we pay more per unit of saving, as we go "farther up the tree," having "picked" the low-hanging fruit.

Bill Edmonds, NW Natural, spoke at Margie's invitation. He said that this is a good news, bad news story. NW Natural and Energy Trust worked hard to heat up a market that was already heated up by rumors of a 40 percent rate hike. He said it's hoped that the new tariff will be filed in August and in effect by November 1, 2009. He explained this has not happened before, so there has been no clear process for how to do this. For so many years we were focused on spending down large reserves. Now the paradigm has shifted. Going forward, he contemplates joint planning on an annual basis, linking projected savings to the IRP process and linking it to the next year's budget. He noted NW Natural management is concerned about its customers now. There never have been more customers needing assistance. The increase will be fairly large.

Jason said he is of two minds about the annual adjustment. On the one hand, it's a useful adaptive management tool. On the other hand, the genesis of the electric public purpose fund was to fix the rate so as to avoid the historical roller coaster. Bill said the charge would generally only go up annually. If there were a year in which large funds remained unspent, then it might go down. Inara Scott, NW Natural, said the annual review would flatten the money collected, as it could account for rate increases and decreases. John S. noted OPUC's interest in capturing

all cost effective efficiency. Margie said she sees the annual process and adjustments as advantageous to Energy Trust.

Julie asked why we aren't seeing issues with Cascade Natural Gas. Margie noted we receive less than \$1M annually from Cascade, so swings in revenue and spending have less impact.

There was discussion between Inara, Theresa Gibney and John S. about retroactive rate recovery. John S. noted the tariff will cover future spending, so the rate recovery will not be retroactive. The shortfall has not occurred yet.

Jason asked about 2010, and whether we will have enough funding. Margie said we do not want to have this situation ever again, which is why we are talking about the annual planning process with NW Natural to look forward two years, establish funding requirements and revisit the rate of spending and activity on an annual basis. Margie said the tariff is designed to address what's needed for 2010 as well as covering all of the projected 2009 shortfall.

Alan asked where the interest money is coming from. Sue said the reserve is being replenished with funds allocated to PGE industrial projects in 2005 but not spent. Julie asked what we will do if the shortfall doesn't happen. Margie said she thinks the indicators are clear that the shortfall will happen. Julie asked whether management paid attention to the indicators of the coming shortfall. Margie said we went into this with eyes wide open. John R. noted factors helping this along include the national focus on energy efficiency that's at a higher level than he has seen in 30 years.

## **RESOLUTION 522**

### **AUTHORIZE EXECUTIVE DIRECTOR TO USE RESERVE FUND AS NEEDED TO FUND REVENUE SHORTFALL**

#### **WHEREAS:**

- 1. A reserve fund has been approved by the Board to provide for revenue shortfalls.**
- 2. It is currently anticipated that such a revenue shortfall will begin at the end of the third quarter of 2009 for NW Natural funds.**
- 3. The shortfall stems from unexpected program activity in commercial and residential gas programs, combined with a reduction in anticipated revenue from NW Natural.**
- 4. There are reasonable grounds to expect the reserve fund to be repaid within one year from additional NW Natural public purpose revenues, beginning by November 1, 2009.**

**It is therefore RESOLVED:**

**The Executive Director is hereby granted authority to redirect up to \$5 million of the reserve fund as needed to fund NW Natural revenue shortfalls, to be repaid within one year of the time it is advanced.**

Moved by: Rick Applegate

Seconded by: John Klosterman

Vote:            In favor:            9            Abstained:            0

                  Opposed: 0

Adopted on July 29, 2009, by Energy Trust Board of Directors.

The board then considered the revised budget and action plan. Debbie questioned increases in delivery costs in some programs, like New Homes and New Buildings. She prefers to see incentive amounts and percentages go up. Peter West said the changes were aimed at getting more savings per dollar spent. He noted at this point in the year a lot of the overhead costs for new building programs are to create activity in the year to come. He noted the impact of moving the savings from the OSU CHP project to 2010, which had low service costs, has the impact of changing the ratio between service costs and incentives.

Jason asked if there are delivery costs in the new buildings program that can be set aside until the economy recovers or do you have to continue all the activities. Peter said we could stop two initiatives, Path to Net Zero and one other, that involve dialogues with other states and EPA. If we stop the activities, we defer the savings until future years. Jason referenced the New Homes program. Peter said it's a matter of forecasting when the economy begins to recover so we are ready when the market is. Debbie said she thinks we're going to get more often into constrained budget circumstances, as interest in efficiency continues to grow. We will need to focus more attention on holding delivery costs down.

### **RESOLUTION 520**

#### **ADOPTION OF REVISED 2009 BUDGET**

**BE IT RESOLVED that the Energy Trust of Oregon, Inc., Board of Directors:**

- 1. Approves changes to the 2009 budget as presented in the board packet**
- 2. Authorizes the executive director to negotiate and sign contract amendments required to implement these budget changes.**
- 3. Authorizes the reallocation of previously allocated interest income back into the reserve fund.**

Moved by: Caddy McKeown

Seconded by: Rick Applegate

Vote:            In favor:            9            Abstained:            0

                  Opposed:            0

Adopted on July 29, 2009, by Energy Trust Board of Directors.

## Break

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The board took a 20 minute break at 2:20.

## Renewable Energy Program

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**Resolution 519, Approving funds for the PáTu Wind Farm Generation project.** Peter West introduced Ormand Hilderbrand, sponsor of the project, and Erin Johnston, manager of the wind program. Erin described Mr. Ormand Hilderbrand's 9 MW community wind project, located in Wasco, Sherman County. She noted that whereas in previous years community wind projects were stymied by lack of turbines, the downturn in the economy has made wind turbines available. The project has acquired six 1.5 MW capacity GE turbines. Electricity will be sold to PGE, transported on BPA lines. The project is expected to be completed in early 2010. The facility will be constructed by Oregon Trail Wind Farm LLC on land owned by the Hilderbrand family. All lease agreements, distribution agreements and permits are in hand. The proposed incentive of \$1,203,557 is 58 percent of the above market cost and would be paid over five years.

Mr. Hilderbrand provided history of why his family got into the wind business. His family has been farming in the Wasco area since the 1880s. Some of their land was developed by PPM Energy's Klondike wind farms. Initially they thought developing their own project would be straightforward. But there were hurdles, including lack of turbines and the uncertainty around the interaction between BETC and the Oregon "kicker" refund. Federal Recovery Act tax provisions provided the impetus to the family to develop the project this year. He noted Energy Trust incentives are vital to the project.

Alan asked what PáTu means. Ormand said it's the local Native American name for the volcano we call Mt. Adams, and it means "source of all energy." He asked what "additional tax benefits" are included in the pro forma; Erin said those costs are related to depreciation. Julie asked the size of the development; he said only about 5 acres will be lost to production. Jason asked why the per-megawatt cost was so much lower than we had expected. Erin said those costs were based on small wind projects; the PáTu project is much larger.

Margie asked Mr. Hilderbrand if he had any suggestions for how Energy Trust could get more projects like this. He noted his major hurdle was assembling funding. So much is available only after completion of the project, and none is available to back construction loans. He thinks Energy Trust might be able to collaborate with funders like SBA to evaluate proposed projects seeking funding.

Theresa asked if utility avoided cost rates had proven to be an issue for him. He noted the lower gas rates hurt for the first two or three years, but then they swing back up.

**RESOLUTION 519  
APPROVING FUNDS FOR THE PÁTU WIND FARM GENERATION PROJECT**

**WHEREAS:**

1. Oregon Trail Wind Farm LLC will develop a 9 megawatt wind facility (expected to generate 2.98 average megawatts)
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. Staff proposes a \$1,203,557 incentive payment for above-market costs, paid over five years, which has a net-present value to the project of \$865,509 over a 20-year operating lifetime.
4. At the proposed payment, the project’s energy would cost Energy Trust about \$0.404 million per average megawatt (aMW), which is low in comparison to other Energy Trust wind projects.
5. Energy Trust’s wind generation portfolio is currently 0.1 MW. At 9 MW, the PáTu Wind Farm project would be a dramatic increase.

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

1. Payment of up to \$1,203,557 into escrow, to be paid to Oregon Trail Wind Farm LLC over five years to offset the above-market costs of the Douglas PáTu Wind Farm generating project;
2. Energy Trust will take ownership of 58% of the green tags produced annually; and
3. The executive director to enter into contracts consistent with this resolution.

Moved by: Alan Meyer

Seconded by: Julie Hammond

Vote: In favor: 9

Abstained: 0

Opposed: 0

Adopted on July 29, 2009, by Energy Trust Board of Directors.

*Dan Enloe left the meeting at 2:55 pm.*

## NEEA Funding Agreement

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**Resolution 521, authorizing a 2010-2014 funding commitment to the Northwest Energy Efficiency Alliance.** Margie introduced Claire Fulenwider, executive director of NEEA. Margie explained her role on NEEA's board and in developing NEEA's strategic plan. She noted the resolution states that the funding amount Energy Trust will provide NEEA is contingent on knowing how much 838 funding we will receive from Pacific Power and PGE.

Claire said NEEA values their partnership with Energy Trust and looks forward to doing this work with us. Their new business plan allows for more closely reporting on activities done in concert with Energy Trust. They will also be looking at rural-focused activities.

Alan Meyer said he understands Energy Trust is effectively a conduit for passing funds from the utilities to NEEA but noted \$40 million is a lot of money. Claire said it is, but noted the cost of efficiency is much lower than a new wind farm, or a new power plant. So it saves money in comparison to not funding it. Debbie said she sees great value in market transformation efforts achieved through NEEA and the regional pooling and focusing of funds it enables.

Jason said he is excited. This is part of the energy efficiency boom many of us have been waiting to see for years. He raised a question about the wording of the second "resolved" clause in the resolution, and sought assurance that the amount we pay NEEA would be negotiated if the 838 funding is less than Energy Trust requests.

Rick said the numbers are large and he's glad they are, as the savings the dollars support are large and important.

Margie said she had failed to mention in her introduction that many initiatives coming out of the NW Energy Efficiency Task Force (NEET) work are landing at NEEA to fulfill. This is a new regional collaboration.

Alan suggested rewording the second "resolved" clause to make the NEEA funds contingent on *receiving adequate assurance* of supplemental efficiency funds but, rather, to make the funds provided to NEEA *contingent on receiving* the funds. There was discussion about the fact that the 838 funds and NEEA payments are made over five years. Margie noted we determine the amount paid to NEEA in the annual budget and provide a true-up provision in the NEEA contract. Caddy wondered if "assurance" is a strong enough term.

John R. noted the title of the resolution referencing 2010-2014 actually covers a five-year funding period.

**RESOLUTION 521  
AUTHORIZING A 2010-2014 FUNDING COMMITMENT TO THE NORTHWEST ENERGY  
EFFICIENCY ALLIANCE**

**WHEREAS:**

1. The Northwest Energy Efficiency Alliance (NEEA) has been Energy Trust's primary market transformation program delivery contractor since Energy Trust's inception.
2. Through 2008, 53 aMW of NEEA savings were attributed to Energy Trust funding – about 25% of total Energy Trust savings for that period.
3. Historically, Energy Trust has contributed 16.4% of NEEA's budget and derived approximately 20% of NEEA's energy savings.
4. NEEA has developed a Strategic Plan and Business Plan using an extensive process. To implement the Business Plan, NEEA requires funding commitments.
5. The Business Plan promises 100 aMW in regional energy savings over five years at a projected cost of 2-3 cents/kWh. Of this, 20 aMW would be attributable to Energy Trust. This compares favorably to costs projected from other Energy Trust programs and complies with minimum OPUC performance measures.
6. NEEA seeks a five-year, \$39,356,800, commitment from Energy Trust. The requested funding request is for more than twice as much as in the past, due to several factors:

The Business Plan proposes to align funding with customers and energy loads, which would bring Energy Trust funding to about 20% of the NEEA budget from 16.4%;

NEEA programs and activities would expand considerably in response to growing demand; and

NEEA savings over the past few years have been a particular bargain because of its success with compact fluorescent light bulbs. Future costs are expected to be higher.

7. Staff considers the proposed work to be critical in achieving Energy Trust savings goals over the next few years, and in helping ensure a full pipeline of efficiency projects over the longer term.
8. Energy Trust will require supplemental electric utility funding through the SB 838 funding mechanism to fund NEEA at this level.

**It is therefore RESOLVED:**

1. The Executive Director is authorized to sign a letter supporting the NEEA 2010-2014 Business Plan, and committing in principle up to \$39,356,800 for 20 aMW of electric savings.
2. Funds shall be contingent on receiving adequate assurance of supplemental efficiency funding from utilities, and negotiation of a contract consistent with this resolution.

Moved by: Rick Applegate

Seconded by: Jason Eisdorfer

Vote:           In favor:       8           Abstained:    0

                  Opposed: 0

Adopted on July 29, 2009, by Energy Trust Board of Directors.

## Staff Report

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**Feature presentation: Green Investment Fund (Jessica Rose, Business Sector Project Manager).** Jessica introduced Alisa Kane, Bureau of Planning and Sustainability. She explained Energy Trust has collaborated with the city bureaus of Planning and Sustainability, Environmental Services and Water on Green Investment Fund (GIF) since 2005. The fund supports innovative applications of technologies across the spectrum of sustainable building. Its goals are whole building integration, energy innovation and on-site generation, material use reduction, water efficiency, rain and stormwater management and improving watershed health, and community connectivity. She noted the GIF has allowed breaking down some policy barriers that have inhibited sustainable building practices, such as structural insulated panels and grey water reuse.

Jessica noted Energy Trust has contributed about \$150,000 per year for five years. Projects are selected through a competitive process that starts with an RFP, review by a technical panel, and negotiated with grantees. For selected projects, funds are paid in three stages – design, construction, operation. GIF has a website where each project is featured, with all its sustainable measures. She noted that projects can take years to reach construction completion, and one year of post-occupancy data is collected to monitor and verify (M+V) the systems and potential resource savings related to energy and water and other features. We are beginning to receive the M+V reports.

She reviewed several projects. Kerby Street townhomes are pre-wired for solar hot water and PV. All four homeowners went ahead and purchased solar water heating panels, and one owner has purchased PV in addition to the solar hot water panels. The developer built a subsequent development in which he went ahead and installed solar water heating systems, knowing the market would support this.

Jessica described an infill project called Watershed at Hillsdale, an affordable housing project. The building was crafted to avoid the need for air conditioning through using a thermally sound envelope.

Next she discussed the Burnside Rocket. It's a mixed use building with a ground source heat pump. While starting with a plan to do 21 bore holes 20 feet deep to reach water, they hit rock in a number of locations and therefore redesigned the system to be a closed loop, requiring two deep shafts and permits from many agencies to be able to withdraw and then inject the water back into the ground. The system compares dramatically with traditional HVAC systems that would require a boiler and a chiller system, possibly in conjunction with the ground source system. The owner eliminated the need for a large HVAC system by installing the highly efficient

ground source heat pump and the program is working to capture all benefits related to installing these systems, such as increasing leasable space and leveraging efficiency in a triple net lease.

Next, she described the first LEED net-zero free standing classroom that GIF collaborators are aware of, the daVinci Arts classroom. It uses natural ventilation, advanced daylighting techniques and PV shingles and provides a supreme learning environment for children.

She showed the Kenton Living Building, under development, which contemplates being a net-zero building that treats wastewater on site.

Finally, Jessica showed a rendering of the Mercy Corps building that is nearly complete near Skidmore Fountain. It uses a variable refrigerant volume HVAC system that is a technology identified as possibly cost effective if we had better savings and cost data; we will monitor it to see what actual costs and savings are. The eco-roof integrates PV with some shading. The HVAC system is about 50 percent above code.

She reviewed benefits of GIF to project owners, including project management support to hurdle through policy barriers, support for code amendments and permitting, Oregon code appeals and support for contractors. Benefits to policymakers include building demand for sustainable technologies and design, learning how to make projects pencil out, and how to integrate systems.

Alan asked if we are examining spillover effects of GIF. Jessica said this is happening.

***True-up 2009: Tracking estimate corrections and true-up of 2002-2008 savings and generation (Matt Braman, Planning Program Manager).*** Matt said true-up is done annually between the fourth quarter report and the annual report, January-March. We may find and correct errors, apply new savings estimates, and adjust savings based on evaluations. Overall, 2002-2008, true-up found a 2.9 percent decrease (5.5 aMW) in electric efficiency, 1.3% decrease (about 120,000 therms) in gas efficiency, and no change in renewables.

He reviewed the 2006-2007 Existing Buildings evaluation, which found:

- Engineering estimates of savings were 98% of savings
- 42% free riders
- 1% participant spillover (went on to do more measures)
- 7% non-participant spillover (influenced by us)
- Together, these added an evaluation factor of 65%

Debbie said the evaluation methodology we use is applied by PUCs all over the country and is the best we can do. The Evaluation Committee spends more time discussing free-riders than any other topic. They realize that the closer we get to market transformation, the more free riders there are. Another consideration is that if you reduce incentives to such a small amount that they don't convince any one to do anything, then you have free riders.

Alan offered the analogy of a retail store offering coupons. You may research the effectiveness of the coupons but you still get to keep all the sales. Our model effectively disallows us from counting all our "sales."

Matt noted our means for counting savings pre-true-up use an anticipated evaluation factor. This moderates the impact of the actual evaluation factor in doing true up.

He reviewed the 2006 New Buildings true-up. The anticipated factor for electric was .79; actual was .61. On the gas side we were right on at .7

He presented NEEA adjustments 2005-2007. Rolled up change was +3 percent; by sector the changes were -25 percent commercial, -61 percent industrial and +14 percent residential.

He covered technology-specific evaluations. The deemed savings for tankless water heaters was reduced from 102 therms to 65 therms, which reduced residential savings by about 50,000 therms 2007-2008. The evaluation of heat pump commissioning found no savings, which removed about 280,000 kWh (.03 aMW) of savings in 2007.

Debbie suggested doing something to recognize non-board members of board committees. She mentioned Ken Keating and Tom Eckman, who sit on the Evaluation Committee and suggested they be included in our annual summer and winter staff/board gatherings.

**Highlights (Margie Harris).** Margie noted there are a couple of mandates included in new state legislation. The Clean Energy Works: Portland pilot (CEWP) will become a pilot of the HB 2626 EEAST legislation. We will do another residential and also commercial pilots. She noted the CEWP pilot incorporates on-bill repayment of up-front financing and the role of energy advocate.

Margie noted she had the opportunity to travel across the northern part of the state. She stopped in at Enterprise, Pendleton and Hood River to visit with folks who had installed Energy Trust irrigation, small hydro and solar projects in these locations. She noted Energy Trust also recently collaborated with Pacific Power on a series of workshops in communities in Southern Oregon, including Coos Bay, Medford and Klamath Falls. Caddy said she was impressed with the large turnout and quality of the presentations in Coos Bay. Margie noted we have recruited 26 new trade allies in Klamath Falls, have established office hours in a small, free space and are conducting home energy reviews in the area.

Tomorrow she and Steve leave for the fifth annual gathering of representatives from Wisconsin and Vermont's programs, which have much in common with ours.

Looking ahead, she said she will be doing outreach on the draft strategic plan, soliciting input and responses from utilities and other stakeholders. She has asked for a presentation at the next board meeting on the draft NWPPC 6<sup>th</sup> Power Plan. She will provide an update on the organization design changes at that meeting.

**Other.** Caddy McKeown noted the City of Coos Bay is soon to break ground on the first LEED public building on the coast. She noted Energy Trust staff has provided great assistance.

## **Adjourn**

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The meeting adjourned at 4:15 pm.

**Next meeting.** The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, September 2, 2009, 12:00 noon at the Energy Trust of Oregon, Inc., 851 SW Sixth Avenue, Suite 1200, Portland, Oregon.

John Reynolds, President