

Board Meeting Minutes – 109th Meeting

November 9, 2011

Board members present: Rick Applegate, Joe Benetti (elected to board, 1st meeting), Julie Brandis, Ken Canon (elected to board, 1st meeting), Jason Eisdorfer, Dan Enloe, Roger Hamilton, Julie Hammond, Debbie Kitchin, Alan Meyer, Bob Repine (ODOE special advisor), John Reynolds, John Savage (OPUC ex officio)

Board members absent: Jeff King

Staff attending: Adam Bartini, Matt Braman, Pete Catching, Scott Clark, Amber Cole, Tara Crookshank, Kim, Crossman, Diane Ferington, Lakin Garth, Fred Gordon, Hannah Hacker, Margie Harris, Marshall Johnson, Susan Jowaiszas, Oliver Kesting, Nancy Klass, Debbie Goldberg Menashe, Spencer Moersfelder, Elaine Prause, Pati Presnail, Thad Roth, Steve Lacey, Sue Meyer Sample, Rachael Singer, Scott Swearingen, John Volkman, Peter West

Others attending: Jim Abrahamson (Cascade Natural Gas), Juliet Johnson (OPUC), Don Jones, Jr. (Pacific Power), Joe Prats (ieSolutions), Kendall Youngblood (PECI), Lauren Shapton (PGE), Craig Johanson (Hitachi), Murali Varahasamy (Lockheed Martin)

Business Meeting

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

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

Seconded by: Julie Hammond

Vote: In favor: 8

Abstained: 0

Opposed: 0

Consent agenda approved included two items;

- 1) *October 5 board meeting minutes*
- 2) *October 6 Utility Strategic Roundtable minutes*

R601, R606, R604 and R605 were moved to the regular agenda:

Consent items moved to the regular agenda

Removed from the consent agenda and discussed were the following:

Electing Treasurer (R601)

Dan Enloe spoke on his nomination to Treasurer. He said he appreciates the opportunity and will endeavor to gain more knowledge and carry forward fiscal responsibility. Debbie said she thinks Dan will fit the role nicely.

RESOLUTION 601 ELECTING TREASURER 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 elected the following officers at its annual meeting February 9, 2011:**
 - **John Reynolds, President**
 - **Debbie Kitchin, Vice President**
 - **Caddy McKeown, Secretary**
 - **John Klosterman, Treasurer**
- 3. John Klosterman resigned from the board effective October 14, 2011.**
- 4. The Board of Directors nominating committee has nominated Dan Enloe to serve as Treasurer until the next annual meeting of the board of directors.**

It is therefore RESOLVED:

- 1. That the Board of Directors hereby elects Dan Enloe as Treasurer until the next annual meeting of the board of directors.**

Moved by: Debbie Kitchin

Seconded by: Roger Hamilton

Vote: In favor: 8

Abstained: 0

Opposed: 0

Electing Secretary (R606)

Rick Applegate spoke on his nomination to Secretary. He said he now has more time to dedicate to Energy Trust and looks forward to filling the role.

**RESOLUTION 606
APPOINTING RICK APPLGATE SECRETARY OF
THE ENERGY TRUST BOARD OF DIRECTORS**

WHEREAS:

Caddy McKeown, Secretary of the Energy Trust board of directors, has resigned her position on the Energy Trust board. Her term expires in February 2013.

It is therefore RESOLVED:

That the Energy Trust of Oregon, Inc., Board of Directors appoints Rick Applegate Secretary of the Board until the board elects a new slate of officers at its annual meeting in 2012.

Moved by: Julie Hammond

Seconded by: Dan Enloe

Vote: In favor: 8

Abstained: 0

Opposed: 0

Appointing Ken Canon to Board (R604)

John Reynolds read the resolution. Alan, as chair of the board nominating committee, said he feels fortunate to fill this vacant seat with someone with Ken's experience. Alan said Ken is currently involved with a variety of organizations and was part of the group that worked on the passage of SB 1149.

Ken addressed the board and said his activity with energy efficiency in Oregon goes back to the 1970s, working on lobbying the Business Energy Tax Credit. He said he has a strong belief in energy efficiency; he also built the first ENERGY STAR[®] home in Douglas County. Ken said he understands the broad range of opportunities for energy efficiency in Oregon and region wide. He said he looks forward to serving on the board.

**RESOLUTION 604
ELECTING KEN CANON TO THE ENERGY TRUST BOARD OF DIRECTORS**

WHEREAS:

- 1. John Klosterman has resigned his position on the Energy Trust board. His term expires in February 2014.**
- 2. The board nominating committee has reviewed candidates for the open board seat and nominates Ken Canon, an attorney in private practice and**

Energy Programs

Thad Roth and Peter West presented. Thad requested to start with the Revolution Energy Solutions biopower project and then proceed with the Green Lane Energy biopower project.

John Savage joined the meeting.

Revolution Energy Solutions Multi-Site Biogas Plant Project, resolution 602.

Thad said the program is asking for board authorization for a \$2 million incentive paid over four years for Revolution Energy Solutions Agriculture, RES, to develop a 1 megawatt project. The project is made up of two projects, each with a 500-kW capacity. Previously, the board approved funding for four sites (0.795 MW) in April 2010. The project before the board today will add onto a significant investment RES will make in Oregon. Thad referenced a map of all RES projects (operating and for approval) to provide clarity. Konyn Dairy and Coleman Dairy are the two sites for consideration today. RES has been working in Oregon for nearly three years to develop a group of biogas plants. Lockmead Dairy was the first project, has been in operation since the first of the year and is operating in Emerald PUD territory with a power purchase agreement with Emerald. The four dairies previously approved by the board are: Forest Glen Oaks, Oak Lee Dairy, DeJager Dairy and Hesse and Sons Dairy. Overall RES has projects at seven sites.

With a 1 MW capacity, the two sites are qualifying facilities and expected to operate at 85% capacity. All projects, including Konyn Dairy and Coleman Dairy, are constructed and operated by RES and are third-party owned. RES has lease agreements with each individual dairy to secure feedstock and they will use the same digester design that has been shown successful at the Lockmead project. Thad described that a biogas plant essentially takes organic materials, runs them through a biologic process, anaerobic digestion in this case, and creates electricity and biosolids.

Thad said RES will follow the same business model for the two sites before the board as they do for the other sites. He said success at Lockmead Dairy and final construction of Oak Lee Dairy gives good context and experience for staff to reference. The Konyn Dairy project is in Emerald PUD territory; due to existing contracts with Bonneville Power Administration, Emerald did not take the output of Konyn. As a result, Emerald is wheeling the power to an Emerald-owned substation served by Pacific Power. Consumer-owned utilities receive most energy from BPA but often transmission services are provided by general transfer agreements.

Thad reviewed the basic financial information, which is available in the board packet. The program enlisted a third-party reviewer, who understands the technology and systems involved. The program staff is comfortable with the reasonableness of the review and financials, which includes \$7 million in capital costs and a net present value of \$2.3 million for above-market costs over a 15-year period. The project was unable to secure a Business Energy Tax Credit. Thad said three of the four biopower projects approved by the Oregon Department of Energy in 2010 had Business Energy Tax Credits. The capital costs of the two sites are about 25 percent

less on a capacity basis than the original five sites. Thad said this is an indication of improvements over time and a good sign of the long-term success for the projects.

The program staff requests authorization of \$2 million for incentives at the two project sites. The incentives will be dispersed as \$250,000 upon commissioning and then additional payments contingent on production. While considered as one project, the incentive is broken into four payments.

Compared to other projects, this project is \$2.4 million per aMW, which is less expensive than the first four sites Energy Trust funded. Those first four sites also received Business Energy Tax Credits.

Dan: Are you generating baseload energy?

Thad: Yes.

Thad said the program is securing a minimum of 69 percent of the Renewable Energy Certificates, RECs.

Alan: On finances, what is the tax benefits line item?

Thad: Primarily accelerated depreciation. The projects receive about 63 percent in depreciation.

Alan: On finances, why is the net above-market cost not the above-market cost?

Thad: Energy Trust incentives are taxable; to get the full effect of the incentive, the program identifies it as gross. Thad further clarified Energy Trust did not fund any part of the Lockmead project, it was shown on the map just to give the full picture of RES projects.

Julie H: In terms of wheeling, Pacific Power had concerns at the last board meeting on a project wheeling power. What has happened since the last meeting where we went from objection to affirmation?

Thad: What we heard from the utilities on off-system projects is they would like to know earlier and understand the project better. For this project, we agreed to give them early notification. We met with both PGE and Pacific Power, and had phone calls with a number of Pacific Power representatives to discuss the interconnection in detail. I'd say they do prefer in-system projects and they did not object to this project. Peter: We've also set up a standard protocol for Energy Trust staff to be more proactive with the numerous staff at each utility that is ultimately involved.

Thad: These projects are not driven by the utility service territory, they are driven by the location of dairies that meet the developer's qualifications, such as financial viability, long term commitment to dairy operation and the motivation to have a biogas plant at their dairy.

John R.: With the Energy Trust service territory map, you'll see we don't serve over half of the state of Oregon.

Julie H: I want us to have good communication, and if we need to look at a policy or standards, we should do that.

Thad: As a program manager, I find the communication very helpful and am excited about utility interest. For whatever purpose the interest is, it creates a better working relationship.

Ken: When looking at projects like these, does Energy Trust look at the industry, dairy in this case, in total?

Thad: You can look at the industry in two ways: they are driven, and hardened, because of the economy, and they have specific agreements between the dairy and RES, which minimizes risk to Energy Trust.

Roger: Is there a greenhouse gas effect?

Thad: Yes. Environmental benefits to this project include capture and destruction of methane that would have been emitted in the dairy's standard manure management procedures. We are working with the Climate Trust on monetizing those environmental benefits. The electricity and biosolids are the other byproducts that deliver monetary benefit.

RESOLUTION 602

APPROVING FUNDS FOR THE RES AGRICULTURE, LLC GENERATION PROJECT

WHEREAS:

- 1. The board previously authorized funds for RES Agriculture, LLC (RES) to build, own, and operate biogas plants at four dairies in Oregon.**
- 2. RES now seeks funding to develop one megawatt of generation capacity at two additional sites. The facilities would be fueled by methane from anaerobic digestion of manure.**
- 3. For this project, RES proposes to use the same process design, development and construction teams, and business model.**
- 4. 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.**
- 5. The project would seek QF treatment for sale of its energy to PGE and Pacific Power.**
- 6. Staff proposes up to \$2 million in incentives. At the proposed payment, the project's energy would cost Energy Trust about \$2.4 million per average megawatt (aMW), compared to Stahlbush Island Farms (\$600,000/aMW), the City of Medford (\$960,000/aMW), and the City of Pendleton (\$2.6 million/aMW).**
- 7. Energy Trust would take at least 69% of the project's renewable energy certificates, which Pacific Power can use to meet its renewable energy portfolio requirements.**
- 8. Energy Trust's Biomass Program portfolio is currently 4.9 MW, with 1.84 MW preparing for construction. At 1 MW, the RES project would be a significant increase.**

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

- 1. Payment of up to \$2 million into escrow to be paid to RES over time to offset the above-market costs of the project;**
- 2. Energy Trust will take ownership of at least 69% of the Renewable Energy Certificates produced annually; and**
- 3. The executive director to enter into contracts consistent with this resolution.**

Moved by: Julie Hammond

Seconded by: Debbie Kitchin

Vote: In favor: 10 Abstained: 0

Opposed: 0

Green Lane Energy Biogas Plant Project, resolution 603

Thad said a biogas plant uses anaerobic digestion, which has been utilized for a long time to treat waste streams, in particular, water. He said we're seeing people using the technology as straight energy production versus a waste stream containment process in other regions worldwide. Green Lane is more aligned with the straight energy production method. These projects take some materials that otherwise incur a disposal cost, called a tipping fee.

Thad said the program staff is requesting board authorization of a \$2 million incentive paid over four years, for a 1.6-MW biogas plant utilizing anaerobic digestion using animal manure, food processing waste and other agricultural waste. The project has an above-market cost of \$2.7 million net present value. Green Lane will have contracts with feedstock providers to generate methane and sell the coproducts of electricity, fiber and liquid nutrients.

Thad said the design considerations are similar to Stahlbush Island Farms. The Green Lane project will produce 11,900 MWh, and is a baseload project like the other dairy projects previously presented. Thad clarified "horticultural media" is compost additive.

Thad said Green Lane found an ideal location for the facility, close to a dairy that will provide manure solids and co-located to a composting facility to take the solid co-products. The site is also close to the other two key feedstock providers.

Thad said the anaerobic digester is from EnTec, Austria, which has 40 facilities worldwide. There is not an EnTec digester presently operating in the U.S., and this will be the first project to use one. The project has a long-term, 30-year lease at the site and Green Lane will have complete control of the site. The feedstock agreements, which are difficult to execute, are medium-term contracts to lock in the feedstock supply. Thad says this increases the level of confidence about the project.

Thad said the project will be an off-system qualifying facility and it is in Lane County's Blachly-Lane Electric Coop service territory. BPA will be involved for firm point-to-point transmission access. The project is within a week of having a power purchase agreement with PGE. Thad said Green Lane has done a good job of managing the complex parts of this project.

Thad reviewed the financials, including capital costs of \$9 million, a Business Energy Tax Credit and \$1.75 million in ARRA funding via the Oregon Department of Energy. The project will benefit from accelerated and bonus depreciation. The project has an above-market cost of \$2.7 million over 20 years. The net present value of the incentive is \$1.519 million which represents 56% of the above-market costs. This project comes in at \$1.47 million per aMW compared to \$1.64 million per aMW at Rough and Ready. The program will take 56 percent of the RECs.

Thad said the program has heard from project developers that they struggle with construction financing; once they reach commercial operation, it is easier to secure the funding. Staff heard

from developers and lenders that if Energy Trust shifted its incentives from when the project is commercially operating to the construction phase, that would be valuable. With this project, staff can take the standard approach of four payments upon commercial operation or provide some of the funding as a commercial loan; in effect, piggybacking Energy Trust funds with the other construction funding. If Green Lane would like to pursue this second option, staff will return to the board for approval.

Alan: If PGE is buying the power, is it PGE dollars applied? And will the RECs go to them?

Thad: Yes on both.

Peter: If we receive the RECs sooner, Oregon allows you to bank them, which is a benefit that ensures ratepayer value .

Julie H: How are we mitigating loan risks, especially as banks that are hesitant to loan?

Thad: First, we don't have all the details worked out and we will come back to the board if we pursue this option. We would essentially forgive the loan using the incentive dollars, like a loan forgiveness or an advance.

Julie H: With construction loans, the system is not built and if there is no generation at the end, how do we get our money back?

Thad: It is more risky. When the board gave us approval to test this method, we discussed the risk involved. One way to mitigate risk is to secure a portion of the investment tax credit to ensure we get some of the payment back.

Ken: When would the dollars flow to the project in the construction option?

Thad: We would provide funding in stages as milestones are reached. Energy Trust funding is a small piece of the total construction amount, and it is valuable. This is what we are trying to test with this pilot approach.

Debbie: With using mixed feedstock, is the project capable of responding to various blends of the feedstock?

Thad: The goal is to not shift the blend too much. Green Lane has contractual agreements with feedstock providers representing 70% of the energy needs of the project. It has process guarantees with the digester company that the feedstock mix will work with the system. The project does want to lock in on the core mixture. They do have flexibility with the other 30 percent to "play the market" to find the materials to benefit the process the most. Dairy manure is the best base feedstock, and then the project will be building in other materials that have higher energy content so they can meet their electricity production goals.

Julie H: Have we thought about requiring a performance bond, especially if there is variability on hitting generation targets?

Thad: In normal program operations, we give an initial payment at project completion, then additional payments are made based on performance.

Peter: These performance minimums are throughout the contract.

Thad: It's similar to power purchase agreements with utilities.

John R: I like that we are willing to try new approaches based on changing conditions and I like seeing the flexibility we are showing.

Roger: Who is receiving the thermal energy?

Thad: There is to be a new state psychiatric hospital built in 2013. Green Lane has a contract with the state to purchase the thermal energy, and a few other options. In our review of the project, we were conservative regarding revenues from the thermal energy and do not account for it for a few years into project operation.

Roger: Using the heat is a good benefit, and something I'd like to see more of. This project will be a good project for our portfolio.

RESOLUTION 603

APPROVING FUNDS FOR THE GREEN LANE ENERGY BIOGAS PLANT PROJECT

WHEREAS:

- 1. Green Lane Energy, Inc. (GLE) proposes to develop a 1.6 megawatt biogas facility fueled by methane from anaerobic digestion of agriculture and food processing waste.**
- 2. The proposed plant will be co-located with a composting facility that will purchase horticultural media, sell thermal energy and liquid fertilizer to adjacent facilities and farms.**
- 3. The project is of strategic interest to Energy Trust because it would integrate energy production into existing waste management systems and divert organic materials from landfills.**
- 4. 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.**
- 5. The project would seek QF treatment for sale of energy to PGE.**
- 6. Staff proposes a \$2 million incentive, representing 56% of the project's above-market costs.**
- 7. Energy Trust would take at least 56% of the project's renewable energy certificates, which PGE can use to meet its renewable energy portfolio requirements.**
- 8. At the proposed payment, the project's energy would cost Energy Trust about \$1.47 million per average megawatt (aMW), which is in the range of other Energy Trust biomass projects.**
- 9. The incentive will be distributed either by the standard approach, in which a first payment would be made on commissioning and subsequent payments based on performance; or by a construction loan. Staff would seek board approval before proceeding with a loan option.**
- 10. Energy Trust's biomass generation portfolio is currently 4.9 MW, with 1.84 MW preparing for construction. At 1.6 MW, the GLE project would be a significant increase.**

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

- 1. Payment of up to \$2 million into escrow to offset the above-market costs of the GLE generating project;**
- 2. Energy Trust will take ownership of at least 56% of the renewable energy certificates produced annually; and**
- 3. The executive director to enter into contracts consistent with this resolution.**

Moved by: Roger Hamilton

Seconded by: Dan Enloe

Vote: In favor: 10

Abstained: 0

Opposed: 0

ISI quarterly report and project update

Margie and Scott Clark presented the update on the Integrated Solutions Implementation Project, ISIP. Scott is Energy Trust's new IT director. ISIP is a major IT improvement project to migrate three separate systems into one system, also called an enterprise system project.

Margie said Scott has been working with Craig Johanson, the new project manager for ISIP. Steve Lacey is overseeing the project and Margie is on the steering committee. Everyone has upped their engagement with the project. There is a new team and new set of skills. Margie has a high level of confidence on the project as we move forward. The update today focuses on the lag in the project timeline.

Margie said when Epicor was selected from the RFP process to provide the software solution, staff was optimistic with them that this would be a standard Epicor approach to implementation. However, moving through the project, staff and Epicor are now seeing how distinct and challenging Energy Trust data and information needs are. Both Epicor and Energy Trust have also experienced staffing transitions, including our new IT director, Scott, and new project manager, Craig. Margie said we now have the right skill set and functional team in place. Scott and Craig bring familiarity with enterprise projects and with the Epicor software.

Margie said the implementation strategy has been modified. Instead of using Epicor software as the solution for all data needs, Energy Trust staff will also look at our own approach to our business and work processes more comprehensively across the organization to address needs with software as one solution. The ISIP steering committee is also linking the project to specific business objectives and priorities to make sure the right measures of success are in place. The prioritization strategy is to complete first the tasks that have the greatest benefit for the organization.

Margie said these changes have delayed the project timeline. The project is now divided into two manageable phases, providing the opportunity to focus, better manage the effort and reduce risk. Right now, the ISIP steering committee is identifying the business objectives and priorities. In Phase 1, the highest priority objectives will be addressed. We are targeting completion of Phase 1 in Q3 2012. The unspent portion of the board-approved budget for the project will be carried over into 2012 to complete phase 1 with no additional dollars being sought. Phase 2 will cover the remaining business objectives, and will cost less than Phase 1. Specific costs for Phase 2 will be identified as part of the 2013 draft budget.

Margie reiterated that the right people, structure and planning and implementation tools are now in place. Project leads have greater clarity on their roles and responsibilities. The ISIP steering

committee has engaged with Epicor at all levels and they are clear they need to work with this project in a different manner than their typical projects. The ISIP steering committee also meets more frequently and Margie and Scott have weekly updates and check-ins. Margie said we have completed the work we needed to do at a slower pace than expected.

Margie introduced Joe Prats, an outside member of the ISIP steering committee. Joe is the co-owner of ieSolutions, an IT consulting firm and has been involved with Energy Trust since 2002. He has seen the current systems evolve over eight years and was brought to the steering committee to provide perspective on the complexity of the challenge.

Joe said the current systems need to be replaced; when first implemented, the process took more than three years to install the systems. Joe said this perspective echoes his endorsement that the ISIP will need a phased approach. In his 25 years in the industry, Joe told the board we are gaining the proper appreciation for the complexity of the project, and he is confident in the team and the structure. He said this is a complicated project, one where standard software cannot be used without modifications.

Alan: How much did we think it would cost and how much do we think it will now cost? And what was the original timeline?

Margie: We originally thought we could go live in February 2012; we are moving that to Q3 2012. The timeline is extended to also account for busy fourth quarters, plus a move this year. The \$3.6 million project budget originally approved by the board will get us partway. What we don't yet know is what Phase 2 will cost and it will cost less than Phase 1.

Alan: Will that cost include cost of using internal resources?

Margie: Yes, that is included, and is part of the backfilling for the project.

Margie said she is grateful we have identified the needs and put fixes in place before we faced a large problem.

Ken: What percentage of the three current systems are off-the-shelf versus customized and how is that compared with the integrated system?

Joe P: The three current systems are financial management (Great Plains), customer relationship management (CRM; GoldMine) and energy management/project tracking (FastTrack). Financial and CRM will align well with Epicor. The wild card is the energy management and project tracking piece, which is so unique to Energy Trust. FastTrack was customized when originally brought to Energy Trust. We still need to answer how much it will be customized with Epicor.

Dan: We had a tremendous amount of diligence and transparency on the RFQ; yet, here we are. What is the consequence to Epicor for the current situation we are in and what was missed at the beginning in the review?

Joe P: In regards to the diligence, Epicor is the right tool for Energy Trust. The question now is how to implement. There is more emphasis that this isn't just a technology solution, but a process solution partly implemented by the Epicor technology. The hard part of these projects is how do we use the tool and implement it once it's selected?

Margie: Epicor has had its eyes opened to the issues and they have attended to those issues. This complexity was a surprise to Epicor. The pitches are made by the salespeople of each software company, and even though they demonstrated how their software could work for us, I would now probe deeper from the technical point of view on how they would satisfy our requirements.

Scott: There is a software selection and an implementation process; Epicor has a good software solution, but was unprepared for the implementation.

Debbie: Are you thinking the 2013 request will be up to \$3.6 million or up to \$1.9 million?

Margie: Phase 2 will cost equal to or less than the remaining portion of Phase 1, and we've spent about \$1.7 million and have \$1.9 million remaining. This is an estimate.

Scott: As we move along, we will give you updates as we have them.

Margie: We will continue providing quarterly updates to you. These assumptions are built into the proposed 2012-2013 budget and action plan.

Break

Break at 1:39 p.m. The meeting reconvened at 1:48 p.m.

Draft 2012-2013 Action Plan and Draft 2012 Budget

Margie and Sue Meyer Sample presented. Margie acknowledged the work by staff. She described the budget is built from our organization strategic plan and sector and program plans focused on reaching individual utility IRP goals.

Margie said in the past 10 years, we have gained a lot of experience and expertise in our areas; we have also become more strategic in how we understand markets and develop our approaches. The ground we are working on is unstable. We have a bad economy, limited capital, changing state energy tax credits and new state energy tax credits that are being developed. We remain conscious of any rate increase and its impact on customers, especially during this time when budgets are tight and unemployment high. These factors are reflected in our 2012 program strategies.

Margie described 2011 challenges impacting results. When the 2011 budget was developed, staff carried forward assumptions for the year; however, those assumptions did not always hold true as is the case of lower new residential and commercial construction than predicted. Project volume remains high while both project size and corresponding savings are smaller. With the Oregon Department of Energy Business Energy Tax Credit changes, the retroactive program sunset affected about 300 projects in Energy Trust service territory. With the board's approval, staff put bonus incentives in place, and we were able to move some projects forward that would otherwise have dropped off. Some projects reacted with a wait-and-see attitude, especially in PGE service territory. Also, Cascade Natural Gas is particularly hard hit by the economy, experiencing higher unemployment than statewide, 16 percent and 9 percent respectively.

Margie showed a chart of the result of the fall bonus incentives. As of October 29, we have helped 59 projects that were denied a Business Energy Tax Credit. Many are lighting projects, and some were capital projects. At this time, we have a total of 607 bonus projects, plus another 100 lighting projects that are not yet reflected on the chart. We are hoping the bonus incentives will help Energy Trust meet PGE and Cascade Natural Gas goals. A majority of our work is completed in Q4 of each year, this year is no exception.

Margie showed a chart of the bonus incentives by sector and type of project. She said there is an 80-20 split in the commercial sector between lighting and custom projects, and a 60-40 split in the industrial sector between lighting and custom projects. Energy Trust has offered about \$1.9 million in bonus incentives and so far paid \$32,000. What is not spent will be carried forward into 2012.

Margie showed a chart of the status on utility tariff filings. At the strategic roundtable, 2012 funding anticipated some mitigation but not sufficient mitigation to reach stretch goals.

- PGE: 1.1 percent incremental ratepayer impact with no rate adjustment for mitigation; pending with the OPUC and expected to take effect January 1, 2012.
- Pacific Power: 0.3 percent incremental ratepayer impact with some rate adjustment for mitigation. This tariff has not yet been filed. What is reflected in the budget presentation, is higher than the anticipated tariff filing. Both the budget and the corresponding savings are expected to be adjusted downward.
- Cascade Natural Gas: 0.9 percent incremental ratepayer impact with some rate adjustment for mitigation; will go into effect November 1 using a deferral mechanism.
- NW Natural: 0.1 percent incremental ratepayer impact with some rate adjustment for mitigation; will go into effect November 1 using a deferral mechanism for up to an additional \$1 million.

Debbie: With the carryover, will the increased goal offset that sum?

Margie: Yes. Also, in the future, we would like to have more information about our carryover estimates preferably before tariff filings are made. This is especially so during times when any change in rates is even more acute.

Dan: Mitigation is extra expense to close the Business Energy Tax Credit gap?

Margie: Yes, and we are only attempting to close a portion of the gap.

Margie showed a slide on the 2011 forecasted savings and generation. We predict to land between conservative goal and stretch goal. Conservative goal is 15 percent less than stretch; the range allows us flexibility as we do not always know how we will do or what the market will do. For energy efficiency, we forecast saving 40.1 aMW and 4.7 million annual therms. We are still growing and not as steeply as predicted, mainly due to the economy and the tax credit changes. For renewable energy, at 4.7 aMW predicted, we will almost reach the stretch goal of 6.0 aMW. The real impact on the Renewable Energy sector will be felt in 2013.

Margie showed a chart of electric efficiency savings since 2006 by sector. She mentioned these will change for 2011 as it is a forecast. She described the OSU CHP mega-project as contributing to the large commercial savings in 2010.

Margie showed a chart of gas efficiency savings since 2006 by sector. Growth is most evident starting in 2010 as we began serving more customers, including large industrial and large commercial customers. We are not growing as robustly in gas.

Juliet Johnson asked for clarification on the graph showing Energy Trust potentially not meeting IRP for PGE.

Margie: We may not reach IRP for PGE because the assumed load growth was not as large as predicted in the PGE IRP. (Note: as mentioned earlier, there is also considerable drop-off of BETC projects in PGE service territory and this also impacts goal achievement this year.)

Margie described 2012 budget and action plan working assumptions, including a sluggish economy, tax credit uncertainty, lower capital investment, NEEA rebuilding its portfolio from compact fluorescent light bulb savings to a more diversified portfolio, and transition to higher codes and standards.

Margie reviewed the 2012 budget and action plan themes and outlined corresponding strategies to address the themes:

1. Remain flexible, including specific flexibility regarding state tax credit changes
2. Effectively manage resources through earlier and more frequent monitoring of the pipeline
3. Leverage networks and partnerships to make the case to the customer
4. Streamline processes and gain internal work and process efficiencies
5. Create and maintain a diversified portfolio

The strategies Margie reviewed for each theme are specifically outlined in the budget materials [posted online](#).

The following discussion ensued throughout Margie's review of the budget and action plan themes and strategies.

Ken: What incentives are available for renters?

Margie: Mainly appliances and direct install measures. We also work with owners of rental property to install upgraded HVAC systems, weatherization and efficient windows. We have had good success working with housing authorities building high efficiency new low income housing and with retrofits to serve renters.

Julie B: With the change in state energy tax credits, you are assuming it is Energy Trust's role to mitigate. What is Energy Trust's role in making up for a change made at the state level?

Margie: 2012 mitigation will be less generous than 2011 and it will be spread to new construction and multifamily, which were not included in 2011. Still this is closing only a portion of the gap left by tax credit changes. We will continue to share results of this in our quarterly

reports, and in our activity summaries for each utility. We will pay close attention to how the market responds and engage with one another to reach customers. The policy issue raised by utilities very much remains and those who work in this arena may choose to raise it to the legislature.

Julie H: Should we just be thinking of our world as one without a Business Energy Tax Credit?

Margie: In a way that is what we are doing; the Business Energy Tax Credit is only \$28 million over two years, one-tenth of what it once was.

Debbie: But the budget issues won't go away even if the economy gets better because there is a systemic gap with the change in the tax credits.

Julie H: Do we need to be changing our mindset on how we approach the problem and what our message is? That the world has changed and there is no longer a Business Energy Tax Credit.

Margie: We have been changing and diversifying our acquisition strategies over the past several years, focusing more and more on operations and maintenance, behavior change, training and education. The growth we've seen in savings, costs per project and what we pay to acquire savings are all impacted by the economy and tax credit changes. Right now we are in a transition period to see how the market responds and what we can do. I predict there will be a severe drop off in projects and a slow recovery and that it will probably take years to establish a new normal.

Bob: My hope is the Business Energy Tax Credit is not abandoned, and with the change in the way Energy Trust works, we will have greater focus on how the dollars are spent. The original legislative underlying principle was how much energy will be saved or generated. With the economic situation we are facing now, the department needs to look at more aspects of each project.

Margie: Also, last year, the region saved more energy than ever before, over 250 aMW. People are paying attention to managing costs where they can.

Dan: From the facility manager point of view, whether industrial, commercial or residential, they are looking at return on investment. If we can be clever in structuring our incentives to remove these risks, we will be better off.

Alan: Also, IRP goals were set with a full Business Energy Tax Credit in effect. We can't expect to extract ratepayer dollars when the assumptions have changed.

Bob: In addition to revised strategies, Energy Trust and the Oregon Department of Energy are working on the Cool Schools program. We have an opportunity, through a loan program, to implement weatherization measures. We are working on who will get the credit for the savings.

Ken: What expectations do you have of trade allies working with residential customers to not only complete proper measure installation, but raise general awareness of other strategies to undertake?

Margie: Energy Trust educates homeowners upfront with Home Energy Reviews and we provide a list of prioritized recommendations. On the follow-up side, we plan to do more to circle back to customers and encourage them to move forward with recommended actions.

Julie H: And community approaches should be considered.

Debbie: It might be worth getting more feedback from trade allies on how we set up bonus offers so they are developed in a way that the trade allies can participate.

Julie H: You might also consider a referral bonus to increase project activity.

Margie showed a chart of the proposed budget at a high level: \$117.6 million for electric efficiency programs, \$28.6 million for gas efficiency programs, \$22.7 million for renewable energy programs and \$6 million for administration and outreach. The total proposed budget is \$174.9 million.

Alan: Can you describe the bump in administration costs in 2012 yet it drops in 2013?

Margie: In 2012, we will be creating a succession plan, which is housed in this part of the budget. We are also facing two retirements from the Management Team and transition costs are reflected in this line item. The budget for more efficiency gains through process improvements is a third element of the increase for next year.

Margie highlighted parts of the electric efficiency program budgets. There is more emphasis on Existing Buildings and Production Efficiency. The budgets for Existing Homes and New Homes and Products dropped.

Margie described the gas efficiency program budgets, which includes NW Natural's Washington customers. The bulk of savings remains in Existing Homes, there is a slight increase for Existing Buildings and Production Efficiency; expectations for New Buildings dropped further, and New Homes and Products remains about the same, with the emphasis more on Products.

Julie H: What is the percentage for Washington?

Sue: We will get you that. (For the draft 2012 budget, Washington represents 5% of the total gas budget.)

Margie displayed a table of consolidated information by utility, showing budget, savings and goals. Ultimately, we expect to exceed IRP goal while still shooting for stretch goal.

Alan: Are we confident in these numbers? Especially looking at the percentage change in savings for PGE and NW Natural firm and interruptible.

Margie: There is significant growth in Existing Buildings, 40 percent growth, and Production Efficiency, 51 percent growth, and growth in both New Buildings and New Homes and Products.

Peter: NW Natural firm and interruptible is a big percentage change as it's going off a small number. It is a risk and we predict with mitigation in the market for a full year we will have a better chance to capture savings. In addition, we are shifting the mix in PGE as we go after less capital intensive projects, like O&M and lighting.

Margie: This table shows where the increased dollars are going in terms of increased savings. The variation by utility is there because each utility derives savings from a different mix of sector activity.

Margie showed a chart of Renewable Energy program budgets. Solar electric will continue to bring in the majority of generation. The program will maintain an open door policy on biopower projects and other renewable energy projects through the open solicitation approach.

Margie said she expects the OPUC performance metrics to change as the Energy Trust budget is approved.

Margie outlined Energy Trust initiatives for Communications and Customer Service, Planning and Evaluation, IT and Management and General.

Margie reviewed Human Resources and staffing. More changes are anticipated next year stemming from the employment audit findings. In response, we are proposing to convert five current contractor positions to full-time staff positions. In addition, we are proposing five new full-time positions driven largely by growth in activity volume within programs and by strategic needs and priorities related to IT and trade ally training and mobilization.

In summary, this is a transition year where we expect to see 25 percent growth over 2011.

John R: We have proceeded since the beginning, in good faith, to contract out what we can instead of growing internal staff. In spite of this, we were criticized by the state for proposing more staff. However, some of these contracted roles were seen by the state as being treated as internal staff.

Margie: With the conversion, costs remain largely the same.

Ken: It would be interesting to see staff employed per energy saved.

Margie: As we move further "up the tree" and incur greater costs on the savings side, we are keeping an eye toward keeping other costs low.

Julie H: And if there are other subcontractor costs; do we need to relook at our (PMC) model?

Margie: The proposed converted positions are not Program Management Contractors, they are independent contractor positions viewed by the state as more appropriately classified as staff positions.

Alan: Though we made a deviation in the PMC model with the Industrial Sector as we brought those programs in-house.

Debbie: Initially, I was surprised by how much the budget is going up this year, a 25 percent increase. I understand it's being driven by IRP goals, but what is causing those to go up each year?

Peter: It's a combination of bonus incentives for capital projects and lighting in Production Efficiency, Existing Buildings, New Buildings and multifamily, plus growing IRP and going deeper overall on initiatives. An example is Clean Energy Works Oregon, which we support yet it has higher delivery costs.

John S: Your IRP targets are up every year and should go up every year; as well, cost per kWh and cost per therm will go up every year as you move up the supply curve.

John R: How much carryover is expected at the end of 2011?

Sue: About \$54 million, which does not account for what is in escrow.

John R: is some of the increase because we aren't able to spend all of the 2011 budget?

Margie: Yes. This is especially true for PGE.

John S: How much of the 2011 carryover is committed?

Sue: Roughly \$12 million is committed, leaving \$42 million to be carried over for 2012 work.

Roger: Have we done an historical analysis on what it costs to incrementally acquire additional savings.

Peter: We have, and it trends to increasing costs.

Margie: You can see gradual cost increases reflected in the OPUC performance measures over time, too.

Fred: Overtime, it is gradually trending up.

Roger: Is the low-hanging fruit analogy out of date?

Peter: It varies program by program. With the code change, we are seeing greater costs in New Buildings but we are bringing in cheaper savings in other areas as we use different approaches, IEI for instance in industrial programs.

Debbie: It could also be that we have fewer free riders.

Margie described the budget outreach process, including utility specific meetings in November, the OPUC public hearing, public written comments due December 1, and a final proposed budget brought back to the board for consideration on December 16.

Break

Break at 3:18 p.m. The meeting reconvened at 3:30 p.m.

Committee Reports

Evaluation Committee (Debbie Kitchin)

Debbie reported that the last meeting was held September 30, 2011. Topics covered included:

- Residential awareness survey
 - Debbie: We still see gains year over year in awareness of Energy Trust, though there are differences between utilities and regions. There is still opportunity to do better. The results are used by communications staff and program design staff.
 - Ken: On page 3, what is meant by "neighbor comparison seemed least effective but we know it works"?
 - Debbie: There are other studies we are conducting that show the strategy may work.

- Phil: Results for the OPOWER pilot, a behavior change pilot, will be available in 2012, and preliminary results show electric savings of 0.5 percent, gas results will be available once a full heating season has occurred.
- Debbie: OPOWER is also a low-cost initiative

Jason Eisdorfer joined the meeting at 3:33 p.m.

- New Homes process evaluation
 - Debbie: This evaluation measures the process of participating in the program. Based on the results, the program will work with realtors more.
- New Buildings impact evaluation
 - Debbie: This evaluation shows good realization rates for the program, especially during a time period when more buildings were coming in than being completed.

Debbie reminded the board that topics covered in the Evaluation Committee meeting are draft.

Julie H: How do we select who completes the evaluations? The two in the packet were done by Resource Into Action.

Phil: We use RFP's for larger projects, and we also use an RFQ list of 20-30 contractors for smaller projects or projects where a specific skill set is needed.

Finance Committee (Debbie Kitchin)

Debbie reported that the last meeting was held September 24, 2011, and reviewed the financial statements, the proposed 2012 budget and the 2011 year-end estimate. Debbie said we expanded use of the repo account through Umpqua Bank, to keep the uninsured sweep account. We will relook at options in spring 2012.

Policy Committee (Jason Eisdorfer)

- ***Amending cost effectiveness policy, Resolution 596. The OPUC has requested the board postpone action on this policy.***

Jason reported that the last meeting was held October 11, 2011, and the committee revisited a few issues discussed at the board meeting a week earlier.

At the meeting, it was discussed John R, Rick and Jason will formulate and circulate questions on utility strategic roundtables moving forward. Also, the committee reviewed topics at the OPUC to clarify Energy Trust will be a participant in those processes and the OPUC will be the driver. The committee also reviewed Pacific Power's concerns on wheeling power and the concept of having additional criteria on when a system is not in the utilities' service territory.

Julie B: We were caught off guard by Pacific Power coming to the board to announce they were unsupportive of the project. What I heard from the board is we don't want to end up in this situation again, was that discussed?

Jason: We want to make sure the utilities are made aware earlier in the game when a project includes wheeling.

John V: Peter met individually with Pacific Power to iron out process improvements, and they reviewed it with the Renewable Energy Advisory Council.

Margie: We also discussed with Pacific Power that we would alert them earlier, reviewing pipelines at the Renewable Energy Advisory Council for earlier identification of projects, and for the utility internal staff to work more closely with project owners and developers.

Jason: At the meeting with Pacific Power, communication and outreach were emphasized. It's not our responsibility to delegate the communication to the project manager; we also need to be doing the communication.

Don Jones, Pacific Power: The transmission group and retail group are different, there is a structural disconnect. But there is a communication disconnect, make sure you fire the flares at both sides of the house: transmission and access, and retail.

Staff Report

Margie mentioned Governor John Kitzhaber appointed Stephen Bloom to the Oregon Public Utility Council to fill Lee Beyer's seat. Bloom must be confirmed by the State Senate.

Margie said Rocky Mountain Institute completed a case study on Energy Trust's Strategic Energy Management initiative that was quite favorable. Margie will circulate the case study to the board.

Margie reminded the board the next board meeting will be in our new space at 421 SW Oak St, third floor. To accommodate the move, the office will be closed Friday, November 18, 2011, with no email or telephone access for staff.

President's Report

John Reynolds introduced the celebration of Margie's 10 year anniversary as Energy Trust Executive Director. Margie accepted the board's offer to be executive director on November 1, 2001. John reviewed key milestones achieved by Energy Trust since Margie's first day, including program startups, significant projects and the evolution of the board. A slide show was presented.

Adjourn

The meeting adjourned at 4:01 p.m.

***Next meeting.* The next regular meeting of the Energy Trust Board of Directors will be held Friday, December 16, 12:00 p.m. at Energy Trust of Oregon's new office location 421 SW Oak St., Suite 300, Portland, Oregon**

Rick Applegate, Secretary