

Board Meeting Minutes – 114th Meeting

August 22, 2012

Board members present: Rick Applegate, Joe Benetti, Julie Brandis, Ken Canon, Dan Enloe, Roger Hamilton, Mark Kendall, Jeff King, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Dave Slavensky, Bob Repine (ODOE special advisor), John Savage (OPUC ex officio-by telephone)

Board members absent: None

Staff attending: Margie Harris, Ana Morel, Nancy Klass, Fred Gordon, Jessica Rose, John Volkman, Steve Lacey, Diane Ferington, Sue Meyer Sample, Cheryle Easton, Hannah Hacker, Thad Roth, Peter West, Ted Light, Scott Clark, Debbie Menashe, Spencer Moersfelder, Rob Del Mar, Elaine Prause, Marshall Johnson, Alan Bartini, Sarah Castor, Phil Degens, Aaron Zahler, Lakin Garth, Sue Fletcher, Dan Rubado, Erika Kociolek, Kacia Brockman

Others attending: Jim Abrahamson (Cascade Natural Gas), Juliet Johnson (OPUC), Steve Cowell (CSG), Phil Damiano (PECI), Lauren Shapton (PGE), Brian Simmons (Fluid Market Strategies), Jack Hruska (J. HRUSKA GLOBAL), Mabel Paine (ICF) Kendall Youngblood (PECI), Bruce Griswold (Pacific Power), Bill Edmonds (NW Natural), Roger Spring (Evergreen Consulting Group), Sheryle Bunn (Fluid Market Strategies), Clark Fisher (Nexant), Tashiana Wangler (Pacific Power)

Business Meeting

President John Reynolds called the meeting to order at 12:09 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

Consent agenda included:

- 1) *May 23 meeting minutes*
- 2) *June 8-9 workshop notes*
- 3) *Resolution 638 to amend the board policy on process for open solicitation projects*

**RESOLUTION 638
AMENDING BOARD POLICY ON OPEN SOLICITATION PROGRAM**

WHEREAS:

1. In 2002, the board adopted an Open Solicitation policy to deal with unusual technologies or applications. Because of their novelty, these projects undergo more extensive review than established technologies and applications.
2. In 2009, the board created two tracks for Open Solicitation projects:
One for “mature technologies” involving less than \$500,000 in incentives, which the executive director could approve; and
One for projects not included in other Energy Trust renewable programs, for which the current Open Solicitation process is followed: RAC review and board approval of \$50,000 or more in incentives.
3. Initially, only traditional hydropower projects were included in the “mature technologies” track. The board later included wind projects.
4. “Open Solicitation” no longer describes what the policy entails. Staff suggests changing the name to the “Other Renewables” policy to reflect the policy’s dual functions: for renewable technologies the board finds to be well-established, and for other projects.
5. The policy should also reflect the fact that wind is also a “mature technology.”
6. The Board Policy Committee reviewed and endorsed these recommendations.

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

Moved by: Debbie Kitchin

Seconded by: Alan Meyer

Vote: In favor: 12

Abstained: 0

Opposed: 0

Nominating Committee

Resolution 637, electing Mark Kendall to the Energy Trust Board

Alan Meyer introduced the resolution. Jason Eisdorfer was a founding member of the Energy Trust board of directors and brought a wealth of knowledge on energy issues in the Pacific Northwest. Jason resigned after he took a position at the Oregon Public Utility Commission (OPUC). Alan indicated the search for Jason’s replacement was taken even more seriously than the typical comprehensive process. The Nominating Committee engaged OPUC Commissioner John Savage and searched for a nominee with significant knowledge of energy issues in the

Pacific Northwest, who will work hard on assigned committees and has experience working with the OPUC, the Northwest Power and Conservation Council and others. With that in mind, the committee nominated Mark Kendall.

Alan described Mark's in-depth experience in energy issues in the Pacific Northwest, and his positions at the Eugene Water and Electric Board and the Oregon Department of Energy. Currently, Mark leads his own consultancy and works part-time as technical staff to the Northwest Power and Conservation Council's Regional Technical Forum. Also, he was previously on the Northwest Energy Efficiency Alliance (NEEA) board of directors and was chair of that board for one year.

Roger: This is a great recommendation for an Energy Trust board member.

Ken: I have worked with Mark for years and he will be a great addition to the board.

**RESOLUTION 637
ELECTING MARK KENDALL TO THE ENERGY TRUST BOARD OF DIRECTORS**

WHEREAS:

- 1. In May, 2012, Jason Eisdorfer resigned from his seat on the Energy Trust board to assume a position at the Oregon Public Utility Commission.**
- 2. The board nominating committee has reviewed candidates for the open board seat and nominates Mark Kendall to this seat.**

It is therefore RESOLVED:

That the Energy Trust of Oregon, Inc., Board of Directors elects Mark Kendall to the Energy Trust Board of Directors to the remainder of Jason Eisdorfer's term, which expires February 2015.

Moved by: Alan Meyer

Seconded by: Ken Canon

Vote: In favor: 12

Abstained: 0

Opposed: 0

Mark: I'm looking forward to a collegial relationship with everyone as well as furthering the purposes of Energy Trust. I hope to contribute.

John R: We look forward to your help.

President's Report

Before John R's President's Report, Margie led a celebration of the retirement of Nancy Klass, Energy Trust executive assistant. Margie said this is Nancy's last board meeting after having worked for Energy Trust for nine years.

Margie: Nancy and I have had time to celebrate her starting this next phase of life and we will remain friends. Today is an opportunity for all of us to join in on that celebration.

Alan: You'll be missed.

Roger: Nancy comes from a part of Oregon dear to my heart, east of the Cascades. Thank you for all the help and keeping us informed.

Rick: We're going to miss you.

Debbie: I really appreciate the support you give; it's been great working with you. You're always cheerful.

John R: You are not only cheerful but unflappable.

Nancy: You're a great board and I appreciate working with you.

Dave Bamford of SoundView Recording, A/V: Nancy gave me my start in audio/video recording at TriMet, and also work with PGE and others. I created a video for you of staff, board members, friends and colleagues commenting on the great work you have done and lasting impressions you've left us with.

President's Report

John Reynolds made a presentation on the water footprint of electricity generation, especially now in light of severe drought in other areas of the country. The report "Burning Our Rivers: The Water Footprint of Electricity" was published by River Network from Portland. The report uses data from 2009, the latest year for full and reliable data, and indicates that the water footprint of U.S. electricity was approximately 42 gallons per kilowatt hour (kWh) produced. John indicated this was a surprisingly large number. The average U.S. household monthly energy use in 2009 was 950 kWh and water use was 7,300 gallons. The monthly electricity used by households requires about 40,000 gallons of water, more than five times the amount of water used directly. John said this gives us an idea of the role water plays in our daily lives.

John showed a graph of the water footprint of the sources supplying household electricity and the sources of electricity. He explained the report groups water footprints into three categories, green water consumption, blue water consumption and gray water consumption. A table in the report compared the life-cycle water footprint of electricity by source. Coal, nuclear and non-fracking natural gas use the greatest amount of water for electricity generation, while wind and solar use the least amount and geothermal and solar thermal are between the high and low ends.

Jeff King: For solar thermal, dry cooling is now used more often than water cooling, reducing water use by 10 percent.

John showed a series of tables of water footprints for electricity generated from geothermal, solar electric, wind, concentrating solar thermal and biomass sources.

The board discussed how water is used across these technologies and changes that have been made to decrease water consumption. Water use also depends on temperature of the water before it is used. The board noted fracking is not included in the report. It was also unclear if pump storage was included.

The three primary recommendations of the report are to focus on renewable energy sources and low-water technologies as a nation, the need for better measurements of water use and stronger regulation of the water impact of energy development, and utilizing watershed-level conservation programs and community-based collaboration to save both energy and water.

Resolution 636A: Committee Assignments

John Reynolds introduced Resolution 636, revised as Resolution 636A. The board reviewed the committee assignments.

Dan: Shirley Cyr isn't a board member; when was she assigned to the Audit Committee if not at a board meeting?

John: She was assigned by the Audit Committee.

**RESOLUTION 636A
COMMITTEE ASSIGNMENTS**

WHEREAS:

1. The Energy Trust of Oregon, Inc. Board of Directors is authorized to appoint by resolution committees to carry out the Board's business.
2. The Board President has nominated new directors to serve on the following committees.

It is therefore RESOLVED:

1. This resolution supersedes Resolution 611, adopted by the board at its December 16, 2011, meeting.
2. That the Board of Directors hereby appoints the following directors to the following committees for terms that will continue until a subsequent resolution changing committee appointments is adopted:

| | |
|---|---------------------------------------|
| Audit Committee | |
| | Ken Canon, Chair |
| | Joe Benetti |
| | Julie Brandis |
| | Shirley Cyr, CEWO |
| | Dave Slavensky |
| | John Reynolds (ex officio) |
| Board Nominating Committee | |
| | Alan Meyer, Chair |
| | Rick Applegate |
| | Roger Hamilton |
| | John Savage, OPUC (ex officio) |
| | John Reynolds (ex officio) |
| Compensation Committee (formerly 401(k) Committee) | |
| | Dan Enloe, Chair |
| | Joe Benetti |

| | |
|--|---|
| | Mark Kendall |
| | Jeff King |
| | John Reynolds (ex officio) |
| Executive Director Review Committee | |
| | Roger Hamilton, Chair |
| | Julie Brandis |
| | Jeff King |
| | John Reynolds (ex officio) |
| Finance Committee | |
| | Dan Enloe, Chair |
| | Debbie Kitchin |
| | Anne Root |
| | John Reynolds (ex officio) |
| Policy Committee | |
| | Roger Hamilton, Chair |
| | Rick Applegate |
| | Ken Canon |
| | Alan Meyer |
| | John Reynolds (ex officio) |
| Program Evaluation Committee | |
| | Debbie Kitchin, Chair |
| | Tom Eckman, NWPCC |
| | Ken Keating, expert outside reviewer |
| | Mark Kendall |
| | Alan Meyer |
| | Anne Root |
| | Dave Slavensky |
| | John Reynolds (ex officio) |
| Strategic Planning Committee | |
| | Rick Applegate, Chair |
| | Ken Canon |
| | Mark Kendall |
| | Jeff King |
| | Bob Repine, ODOE |
| | John Savage, OPUC |
| | John Reynolds (ex officio) |

3. The executive director and general counsel are authorized to sign routine 401(k) administrative documents on behalf of the board, or other documents if authorized by the Compensation Committee.

Moved by: Ken Canon

Seconded by: Anne Root

Vote: In favor: 13

Abstained: 0

Opposed: 0

Energy Programs

Resolution 641: Existing Homes Program Management Contract

Steve Cowell, CSG Chairman and CEO, thanked Energy Trust for six years of working as the PMC for the Existing Homes program. He said his team worked very hard and hopefully effectively to accomplish a great deal of savings and to serve customers. CSG appreciates the opportunity to be a part of the Energy Trust team. Steve discussed the difficulty surrounding transitions and that he is spending time with his staff to answer questions and support them. He pledged to have a smooth transition and indicated CSG is already working with the proposed new PMC for the Existing Homes program. He indicated his dedication to having a transition with the least amount of disruption for customers and one that minimizes impact on his staff.

John Reynolds thanked Steve and said he appreciates the help with the transition.

Margie Harris thanked Mr. Cowell. She noted that the Energy Trust model is a competitive model that rebids major programs as contracts reach expiration dates. Energy Trust has had a long run with both CSG for the Existing Homes program and with Lockheed Martin on the Existing Buildings program. These transitions are the result of the competitive process, and it's something Energy Trust and contractors understand as a part of our business model. Energy Trust is grateful to Steve for being here and grateful for the years of service. The part that needs highlighting is the human part, which is hard. We've grown close to the staff at CSG through the years. Energy Trust's decision will affect professional livelihoods and the lives of people we have come to know. She thanked CSG and Lockheed Martin for their years of service.

Peter West introduced Resolutions 641 and 642. Peter added to Margie's sentiments. Energy Trust has a board policy born out of best practices, which is to open up primary program management contracts and program delivery contracts on a periodic basis. The policy is that no one contract will be longer than five years without competitively rebidding the contract. Peter indicated that all of the bidders participate in such competitive processes nationally. Peter gave credit to CSG and Lockheed Martin for being very professional, which is no different than how Energy Trust has known them to be in the past five years. Peter said these transitions are difficult especially as you build relationships. He said the upside of this transition is what will be presented today by Diane Ferington and Spencer Moersfelder.

Peter described the RFP process. It started in February 2012 with the design and deployment of two competitive RFPs, one for the Existing Homes program (Resolution 641) and the other for the Existing Buildings program (Resolution 642). Over a dozen staff contributed from across the organization. Peter acknowledged two staff members in particular, Marshall Johnson for leading the Existing Homes RFP process. Marshall had to perform as a program manager, running the program while at the same time running the RFP. He pulled all the pieces together, led it and drove it forward. Spencer Moersfelder was equal to the requirements on the Existing Buildings program and RFP process. Peter expressed his appreciation of their performance.

Peter introduced Diane Ferington, Residential Sector Lead, to continue the discussion on Resolution 641. Diane described the Existing Homes RFP process, which was split into five scopes of work. The program received 24 intents to respond, and of those, nine distinct bidders

submitted proposals for one or more scopes. Any proposal for the Oregon Prime PMC services scope had to also submit for the NW Natural Washington residential services and Quality Control (QC)/Quality Assurance (QA) scopes. The review team consisted of Energy Trust staff, and one staff member each from Bonneville Power Administration and the Northwest Power and Conservation Council. The review team reviewed all proposals, conducted interviews and scored proposals weighted for the strength of the proposal, the strength of the program management team and cost and savings. After evaluating all proposals, three prime proposers were interviewed. The review team unanimously selected Fluid Market Strategies (Fluid) for the Oregon Prime PMC services as well as the QC, product fulfillment and NW Natural Washington services. Fluid will deliver all those scopes in 2013 if approved today by the board.

Diane indicated the program is also looking for ways to improve service to schools. An internal cross-functional team reviewed the schools proposals. A recommendation is likely to come in September 2012.

Fluid has a strong plan to transition Energy Trust from reliance on instant savings measures, to reduce costs, enhance call center options and to deliver an innovative approach to prioritizing energy-saving measures in homes using housing characterization and customer segmentation. Clean Energy Works Oregon (CEWO) is a subcontractor for Fluid, working within the Home Performance program track. Fluid also has existing relationships with public-owned utilities that it can leverage. Advanced Energy is a second subcontractor for Fluid. They bring the QC approach and the concept of house-characterization to identifying likely improvements for a home.

Ken: I'm curious about the phrase "Demonstrated flexibility in approaches to address potential cost-effectiveness challenges for some efficiency measures." What is it we're trying to address and what did they specifically bring forward?

Diane: Fluid proposes to deliver a more cost-effective approach to duct sealing. Oregon homes are the leakiest in the Pacific Northwest, according to a recent NEEA study. Fluid's Advanced Energy team has ideas and pictorial guides for contractors to use.

Peter: Fred briefed you in May and June on gas avoided costs, which are dropping by as much as 45 percent. Each of the RFP respondents was asked to say how they would address this. Fluid provided a longer and deeper list of alternatives. We want to be able to address our costs, project costs and the customer's costs.

Diane: Fluid is also the delivery contractor for NEEA's heat pump water heater and ductless heat pump initiatives, and has people in the field they can leverage.

Debbie: Who else are subcontractors?

Diane: CEWO and Advanced Energy are the main subcontractors. Fluid has a relationship with Niagara Conservation, a fulfillment entity, to provide the instant savings measure products. Fluid is looking at approaching the QC services in remote areas by coordinating with Community Action Partnership of Oregon (CAPO).

Alan: What is Fluid's background?

Diane: Fluid is a CLEAResult company, a national group. Fluid started, and is headquartered, in the Pacific Northwest but will draw on expertise from other parts of the U.S.

Brian Simmons, Fluid President and Founder: First, he thanked CSG, noting that CSG set a very high bar. CSG is among the elite in providing these services. Fluid was founded in 2005 in Portland, and was primarily a Pacific Northwest based organization. CLEAResult acquired us last year, is based in Texas and has a national focus. Fluid primarily serves the residential sector, and has implemented programs for BPA, NEEA and others in the Pacific Northwest. The majority of our work has been with small public-owned utilities.

Alan: Will this require a major staff-up for Fluid?

Brian: It will require about 30 more staff. We currently have 75 in Portland, four in Seattle and 13 located remotely throughout the Northwest.

Peter: Fluid is also working with our Multifamily initiatives in the Commercial Sector.

Diane: There is one entity proposed separate from Fluid to provide QA services. QA is where a third party comes in to observe activities of the PMC, and it is natural to have the contract held separately from the prime PMC. We chose Jack Hruska of j. HRUSKA GLOBAL. Jack started with weatherization across the state and has great background, wisdom and experience in QA. He has delivered for us in the past.

Bob Repine: Interesting how our lives are intertwined. I worked with Jack at Oregon Housing and Community Services.

Diane: The transition contract will be \$300,000 for Oregon services and \$25,000 for Washington services, and is not expected to exceed \$500,000. The anticipated first year contract budget is proposed at \$21.5 million for Oregon services with savings of 48.8 million kWh and 1.4 million therms at levelized costs of \$0.025 per kWh and \$0.42 per therm. The gas savings and costs do not include any new avoided cost gas assumptions and the gas side may be a different story in November when we approach the board for 2013 budget approval.

Roger: What are the incentives for the contractor to perform? I understand the cost side of the budget, but what is included in terms of performance incentives? Besides the fact that you will consider a one-year renewal if performance hits targets, are there any other incentives?

Peter: In any contract for Program Management Contractor (PMCs) or Program Deliver Contractors (PDCs), there are two forms of incentives. The first is a retainage, where we hold 3 to 5 percent of any billable and return it to the PMC or PDC if they meet the conservative goal for all utilities at the end of the year. The second is performance bonuses as the PMC moves toward achieving higher stretch goals. Those increase up to a limit. There are also procedural bonuses that deal with record keeping, auditing and fiduciary controls.

Diane: They can be referred to as milestone payments tied to those types of activities.

Roger: Can you flesh out the difference between management services and delivery services?

Peter: Program management contractors play a big role, including implementation, the full range of management services, IT support, data input, check auditing and QC. This entails some management of the incentive budget, although Energy Trust actually retains key controls. The Industrial Sector is managed by ETO staff. We design and manage the program, enter data, control incentives, provide QA and deliver services through program delivery and technical contractors.

Roger: Program management service may include delivery services but a delivery contract will not include management services?

Peter: Correct.

Margie: In the financial glossary on page 5, under Tab 6 in the board packet, you will find detailed definitions of program delivery expenses and program management expenses.

**Resolution 641
AUTHORIZING A PROGRAM MANAGEMENT CONTRACT
FOR THE EXISTING HOMES PROGRAM**

WHEREAS:

1. With assistance from a selection committee including outside parties, staff has conducted a fair and open procurement process to select a contractor to manage Existing Homes program services: 1) for Oregon PMC services, and 2) to NW Natural Washington services for the next 2-5 years.
2. Fluid Market Strategies was selected and contract terms are being negotiated.
3. Staff has assumed a total first-year program management contractor budget for 2013, including first-year incentives, contracted delivery, performance compensation and program transition contingency funds of approximately:
 - a. Up to \$21,500,000 for Oregon services, and
 - b. Up to \$677,000 for NW Natural Washington services.
4. Program management contract savings and costs will be reviewed by the Energy Trust board as part of the annual budget and action plan process. For purposes of the current resolution, staff projects the following program savings and fully-loaded costs in 2013:

Oregon

| | Electric | Gas |
|---------------------------|-----------------|------------------|
| Savings (stretch) | 48,800,000 kWh | 1,436,000 therms |
| \$/Unit Savings (stretch) | \$2,270,000/aMW | \$6.02/therm |
| Levelized Cost (stretch) | \$0.025/kWh | \$0.42/therm |

NW Natural Washington

| | Gas |
|---------------------------|----------------|
| Savings (stretch) | 119,000 therms |
| \$/Unit Savings (stretch) | \$5.71/therm |
| Levelized Cost (stretch) | \$0.43/therm |

It is therefore RESOLVED:

1. Subject to determination of a final contract amount based on the board-approved 2013 budget, the executive director is authorized to enter into contract(s) with Fluid Market Strategies to manage the Existing Homes program services: 1) for Oregon and 2) to gas customers in NW Natural Washington from January 1, 2013 ending not later than December 31, 2015.
2. First-year contract costs and savings goals included in the contracts shall be consistent with the board-approved 2013 budget and two-year action plan. Thereafter, the contract(s)

may be amended annually consistent with the board's annual budget and action plan decisions and the executive director is authorized to sign any such contract amendments.

- 3. The final contract(s) may include a provision allowing staff to offer one-year extensions beyond the initial term if the program management contractor meets certain established performance criteria. In no event would the total term of the contract plus any extension periods exceed five years.**
- 4. Before extending these contracts beyond the initial term, staff will report to the board on the program management contractor's progress and staff's recommendation for any additional extension time periods. If the board does not object to extension, contract terms would remain as approved in the most recent action plans, budgets and contract at the time of extension, and the executive director is authorized to sign any such contract extensions.**

Moved by: Debbie Kitchin

Seconded by: Julie Brandis

Vote: In favor: 12

Abstained: 0

Opposed: 0

Ken Canon was not in the room during the vote.

Resolution 642: Existing Buildings Program Management Contract

Peter introduced Spencer Moersfelder, Existing Buildings program manager. Spencer described the Existing Buildings RFP process. 2012 marks the end of a five-year contract cycle with the incumbent PMC. The program started this year with an RFP process to rebid the contract for 2013. The RFP was opened in April and respondents could bid on one or more of the scopes of work: Oregon Lighting, Oregon Non-Lighting and NW Natural Washington services. Bidders were required to bid on the NW Natural Washington scope if they bid on the Oregon Non-Lighting scope. Several contractors teamed up. Ultimately, six proposals were received. A review team was comprised of Energy Trust staff and a Northwest Power and Conservation Council staff member. In addition, internal support staff served in an advisory capacity. The review team scored all proposals and interviewed 3 bidders. After the interviews, the proposals were rescored and the review team unanimously selected ICF International (ICF) as the strongest proposal for Oregon Lighting, Oregon Non-Lighting and NW Natural Washington services. ICF's primary subcontractor is Evergreen Consulting for Oregon Lighting.

Spencer said ICF's proposal demonstrated competitive costs, strong technical depth, a comprehensive approach across the full scope of the program, a track record of impressive marketing experience, proactive and effective program management and innovative ideas for the maturing market and the challenges the program will face over the next years. ICF also brings data management skills, data security and a quick-start team. The full selection process is outlined in Appendix 1 and is similar to the Existing Homes RFP.

Spencer said, provided the board agrees, the program expects a transition contract starting in September with a budget of \$482,000. No savings are included in the transition contract and it allows for overlap between ICF and the incumbent PMC, Lockheed Martin. Staff is working to outline the elements needed for a successful transition. The estimated first-year budget, which will be revised and go to the board for consideration in December, is \$31.6 million for Oregon services and \$491,000 for Washington services. Forecasted savings are 99.4 million kWh and

1.24 million annual therms in Oregon, and 150,000 annual therms in Washington. Like Existing Homes, annual therms estimates do not yet include any new gas avoided cost assumptions. The program will do more analysis on how reduced avoided gas costs will affect gas savings potential.

Julie: Do you suggest to those who submit-intents-to-respond that they work with others to strengthen their proposal?

Spencer: We ask them if they are interested in teaming. For those who are, we post their contact information online.

Margie: Beyond that, we don't facilitate.

Debbie: For this resolution and the other, when there's a primary contractor and subcontractors, do they have flexibility around their subcontractors? Do we hold a contract with the subcontractor or does the prime contractor?

Peter: Our contracts are with the prime contractor, the PMC. Any contract the PMC holds, the subcontractors are required to assume requirements that apply to the prime contractor. Also, we're hiring the prime based on their proposal, which may include subcontractors. We have options to end any contract early. At the same time, we give the PMC flexibility to move. It's not unique for a PMC to shift strategies.

Debbie: It's good for the prime PMC to have flexibility to change. On the other hand, if inclusion of a subcontractor might have been a factor in selecting or not selecting that primary, that could be problematic.

Peter: Yes, in cases where there are major, critical subs, changing those would be considered a material difference in the contract and could involve us. We've had only a very limited occurrence of this in my tenure, and Steve has had a longer experience in this area.

Steve: Historically and typically in the consulting industry, the prime would not remove a subcontractor without conferring with the client. We have provisions in the contract to avoid this.

Alan: Looking at the cost of savings, electricity is more and gas is less. Why? How do the cost of savings relate to the contract in Existing Homes? Also, please tell us more about ICF.

Peter: On the gas side, there are fewer yet larger measures for Existing Buildings, like boilers, which makes gas look comparatively cheaper to get in most commercial buildings than in homes. The dollars of delivery or manpower needed per therm saved gets spread much further because projects are larger than residential. On the electric side for Existing Buildings, it's the measure mix that drives the difference between homes and commercial buildings.

Spencer: Overall, there are savings of about one-half million dollars a year in delivery through ICF than we face today. ICF is \$1 million better than the other bidders, they were very competitive.

Margie: It's really about scale. When working with household after household with labor intensive interactions, we're putting more in and get less out in terms of residential savings. On the commercial side, we're going up the cost curve and getting more out of each interaction. You go even further on the industrial side and this sector is where you really come to scale. There is a difference in the ingredients that go into the mix and the strategies and costs that are associated with how we get results.

Mabel Paine, ICF Principal: Mike Koszalka is vice president and based in Portland. He was unable to join us today. He will also serve as program director for the Existing Buildings contract. ICF is nationally recognized as an energy-efficiency consulting firm. We have several practices and areas of expertise. I'll focus on energy efficiency here. ICF has 130 demand-side management programs nationwide. Investments we make in our technologies and infrastructure set us apart. We have the tools in place for program managers to analyze and serve the market.

Peter: Previously, ICF did the technical analysis supporting Energy Trust at Oregon State University's Combined Heat and Power (CHP) project. We are familiar with them and their engineering and technical ability.

Alan: How many employees do you have now and do you need to staff up?

Mabel: ICF is not new to Portland; we have been here since 1972, while also offering national resources and environmental consulting. For the Existing Buildings contract, we will staff up significantly and expect to hire 15 new staff.

Mark: ICF had a comprehensive and integrated approach and were cost competitive. How would you characterize the innovations around integration of lighting, non-lighting and Washington services? More efficient and how?

Spencer: As the program expands, we need to continue to develop services to go deeper with existing customers and do a better job of reaching small- and mid-size customers. ICF brings to the table a system that will allow us to integrate lighting and non-lighting services more actively to help customers better understand their opportunities. For smaller-size customers, we will be using a more integrated trade ally approach to bring lighting and mechanical trade allies together and leverage opportunities.

Resolution 642
AUTHORIZING A PROGRAM MANAGEMENT CONTRACT
FOR THE EXISTING BUILDINGS PROGRAM

WHEREAS:

- 1. With assistance from a selection committee including an outside party, staff has conducted a fair and open procurement process to select a contractor to manage Existing Buildings program services for the next 2-5 years for: 1) Oregon Non-lighting and Oregon Lighting, and 2) NW Natural Washington services.**
- 2. ICF Resources, LLC was selected and contract terms are being negotiated.**
- 3. Program energy savings and costs will be reviewed by the Energy Trust board as part of the annual budget and action plan process. For purposes of the current resolution, staff has assumed a total first-year program management contractor budget for 2013, including first-year incentives, contracted delivery, performance compensation and program transition contingency funds as follows:**

- a. Up to \$31.6 million for Oregon Non-lighting and Oregon Lighting, and
- b. Approximately \$491,000 for NW Natural Washington services.
- c. Based on these cost and other assumptions, staff projects the following program savings and fully-loaded costs in 2013:

Oregon Non-lighting and Oregon Lighting

| | Electric | Gas |
|---------------------------|----------------|------------------|
| Savings (stretch) | 99,400,000 kWh | 1,240,000 therms |
| \$/Unit Savings (stretch) | \$0.270/kWh | \$3.83/therm |
| Levelized Cost (stretch) | \$0.029/kWh | \$0.33/therm |

NW Natural Washington

| | Gas |
|---------------------------|----------------|
| Savings (stretch) | 150,000 therms |
| \$/Unit Savings (stretch) | \$3.28/therm |
| Levelized Cost (stretch) | \$0.25/therm |

It is therefore **RESOLVED**:

1. Subject to determination of a final contract(s) amount based on the board-approved 2013 budget, the executive director is authorized to enter into contract(s) with ICF Resources, LLC to manage the Existing Buildings program services: 1) for Oregon Non-lighting and Oregon Lighting and 2) to NW Natural Washington gas customers from January 1, 2013 and ending not later than December 31, 2015.
2. First-year contract costs and savings goals included in the contracts shall be consistent with the board-approved 2013 budget and two-year action plan. Thereafter, the contract(s) may be amended annually consistent with the board's annual budget and action plan decisions and the executive director is authorized to sign any such contract amendments.
3. The final contract(s) may include a provision allowing staff to offer one-year extensions beyond the initial term if the program management contractor meets certain established performance criteria. In no event would the total term of the contract plus extension periods exceed five years.
4. Before extending these contract(s) beyond the initial term, staff will report to the board on the program management contractor's progress and staff's recommendation for any additional extension time-periods. If the board does not object to extension, contract terms would remain as approved in the most recent action plans, budgets and contract(s) at the time of extension, and the executive director is authorized to sign any such contract extensions.

Moved by: Roger Hamilton

Seconded by: Ken Canon

Vote: In favor: 13

Abstained: 0

Opposed: 0

Margie acknowledged the work Peter, Debbie and Tara also put into the RFP process, and thanked the numerous other individuals involved. She indicated two such time-intensive RFP processes will not be run in parallel again; the board will see a different schedule than in the

past. Margie stated for the record that she was not engaged in either RFP process. She is a board member of CEWO, which is a subcontractor to Fluid. She recused herself from meetings at Energy Trust and during any CEWO board discussion of the RFPs.

Dave: It looks like these contracts are about 35 percent of the total budget. That is significant. I appreciate the comment on not doing that again at the same time.

Jeff: I noticed there is a background on the RFP but it didn't give me a great idea on the scope of a particular activity, how it fits with the organization and future objectives. For me, I would like to see an expansion of these providing more background. Also, I frequently see large numbers here, but no comparison to other savings, generation or cost figures. I would like to see more context and comparisons.

Ken: I couldn't find in the packet the next steps. We have good documentation in the packet. But it would be helpful to go to the next step and cover "how." For example, the Existing Homes section says Fluid "demonstrated ability and flexibility in approaches to address potential cost-effectiveness challenges." How are they doing this?

John R: The additions don't have to be extensive, just a few examples.

Alan: I also think this would be helpful.

Margie: I appreciate that feedback and will take that back and incorporate it for future materials.

Revised Resolution 639: Black Cap Solar Project

John Reynolds notified the board about the revised Resolution 639.

Kacia Brockman, renewable energy senior program manager, introduced the resolution. The program is asking the board to approve a \$600,000 incentive for a large-scale, 2.5 MW solar project in Lakeview, Oregon. The project would be the third largest solar project Energy Trust has supported. It's half the size of the 5 MW project at Christmas Valley approved by the board in December 2011. The Pacific Power project will be the first large-scale solar electric project Energy Trust has supported in that utility's territory. Pacific Power will count the project output toward its mandate under the Oregon Solar Capacity Standard passed in 2009. In 2010, the Oregon legislature clarified that Energy Trust public purpose funds could be used to support utilities in meeting this mandate.

Pacific Power issued a competitive RFP in late 2010 for the project, and approached Energy Trust in Quarter 1 2012 for potential funding. At that time, Energy Trust had no remaining funds for any large-scale solar projects. The program had not anticipated or budgeted for the project. In Quarter 2, two renewable energy projects were cancelled or postponed, one hydropower and one biopower project. This made available \$3.4 million in Pacific Power renewable funding. Staff looked at what was in the pipeline and concluded that even after a robust competitive RFP, \$600,000 in funds could be applied to the Black Cap solar project.

The project is well under construction now, and is expected to be completed in October 2012. The utility approached the OPUC and applied for full cost recovery of the total cost as part of a general rate case. Pacific Power and the OPUC will ensure that the Energy Trust incentive is credited back to ratepayers in a rate deferral or rate adjustment.

At a Renewable Energy Advisory Council meeting, there was discussion of the value of Energy Trust support for this project given the solar mandate Pacific Power must meet, and that the

project is well down the road to completion. In the past, large-scale solar projects supported by Energy Trust were in PGE territory and funding was available. Because this is Pacific Power's first large-scale solar project, there is a learning curve. Supporting the utilities in this learning aligns with Energy Trust's market development strategy for solar. This project also allows Energy Trust immediately to utilize remaining funds.

Kacia showed photos of the project during construction and said the panels are on single-axis trackers.

Margie: What is the total land area?

Bruce Griswold, Pacific Power: 20 acres.

Kacia said Pacific Power will own the land and be the long-term project owner and operator. Pacific Power is working with a bank that will capitalize on the 50 percent Business Energy Tax Credit pass through, one of the last Business Energy Tax Credits remaining. Pacific Power will lease the equipment back from the bank for up to 15 years with optional buyout at year 5 and year 10. Energy Trust evaluated the project based on a 25-year life. The lease rate Pacific Power is paying takes into consideration that the bank is receiving the tax benefits as well as the Energy Trust incentive.

The incentive amount is significantly less than the amount Pacific Power requested, due in part to above-market cost analysis where staff compared this project to similar projects of this scale. Staff made adjustments to developer and interconnection fees and the value of the energy generated. The incentive is also less than requested because the program has limited funds available. These factors all make this incentive offer atypical. This project is the lowest of any solar project on a cost-per-watt basis. 100 percent of the Renewable Energy Certificates (RECs) will be retired by Pacific Power on behalf of Oregon ratepayers. This is consistent with Energy Trust policy.

Energy Trust and Pacific Power staff discussed the process for this type of project. Typically, projects are brought to Energy Trust by Pacific Power or PGE through the Master Agreement process, which requires sufficient advance notice so Energy Trust can consider them in the annual budget. The Black Cap project came to Energy Trust without this notice. Going forward, any Pacific Power project will seek to follow the traditional Energy Trust Master Agreement process.

A revision to the resolution was made to clarify a slight ambiguity in program approval policy on whether staff is authorized to move funds between renewable energy programs. The policy gives clear authority to staff in the energy efficiency sectors, but it is not clear for the renewable energy sector. The Policy Committee will take up this ambiguity at the next committee meeting.

John R: At the Renewable Energy Advisory Council, Juliet focused on ratepayers benefitting from the project. Juliet, do you have anything to add today?

Juliet: The OPUC is satisfied. In the rate case, a certain lease payment was incorporated into rates. Now that we know about the Energy Trust incentive amount, the lease payment will be adjusted and money will go back to the ratepayers.

Alan: Black Cap shows a capacity factor of greater than 20 percent, why is that?

Bruce Griswold: We had this validated with an outside solar consulting firm. We are comfortable this is accurate, and we have a performance guarantee in the contract.

Ken: Any additional capacity because of tracking?

Bruce: Yes, this is single axis tracking system that has an algorithm built into it that is based on location.

Kacia: The single axis tracker will add 20 percent to the total energy production.

Dan: If you look at how our incentive is being used, it's like buying an annuity for the ratepayers of Pacific Power because we're going to give \$600,000 and reduce a lease payment. What percent over 15 years is that payment?

Kacia: The Energy Trust incentive is going to the bank in exchange for a reduced lease payment for Pacific Power. This is part of an agreement between Pacific Power and the OPUC so ratepayers receive the best benefit.

Juliet: Are you asking a time value of money question?

Dan: Yes.

Juliet: We considered time value of money issues here.

Dan: I want to make sure we're getting at least as good of a rate of return (ROR) as if the money was put in an annuity. I want to make sure we are using Pacific Power ratepayer money in the best manner.

Bruce: I don't have the exact rate in front of me. The difference in the rate between the old and new lease resulted in more than \$600,000 over the term of the lease, about \$630,000.

Dan: That's a very low ROR. In looking at resolutions, we need to decide what is an acceptable ROR. Otherwise, the bank is just going to make the money.

Alan: This may be more complex given utility accounting.

Dan: I want assured value to the ratepayer. It's not clear right now.

Bruce: If you did the full lease, \$651,000 is the difference. The lease has two buyout options, at year 5 or 10. At year 5, there is a reduction in the buyout rate, resulting in \$648,000. Buyout at year 10 is \$643,000.

Roger: Where are the panels from?

Bruce: Yingli from China. These are first class panels. The company provided technical specifications all bidders had to meet. Yingli is a Chinese company with a U.S. distribution arm.

Roger: Where is the project located, in Lakeview?

Bruce: Within city limits, the project is directly connected to a distribution line going to the Mile High Substation in Lakeview.

Roger: One of the reasons why the capacity factor is high may be that production is more efficient at colder temperatures. Is that the case here?

Bruce: Certainly the case. Lakeview is one of the higher solar radiation locations in Oregon.

Roger: I always thought Eastern Oregon had good wind and solar resources.

Dave: It seems like this project is moving forward either way. Are there other projects that would be moved forward if the funds were used elsewhere?

Kacia: If there were, we would have made a different decision.

Thad: We are in the process of planning another RFP for other renewable energy technologies in Pacific Power territory. It is critical to us that we are balancing the interest of all technologies to support our portfolio approach.

Ken: I support the project. But it does trouble me that we're going to commit \$600,000 for a project that looks like it's already done. This sounds like a classic case of a free rider. I hope in future we don't see a whole lot more of these.

Mark: In the resolution it says there is no transmission or power purchase agreement (PPA), and the energy is calculated at the system's avoided cost rate. Avoided costs are headed down. What does the pro forma show for this out in the future and what assurances are there?

Kacia: That statement, I apologize, is very unclear. Pacific Power evaluated the project with a certain energy value. Energy Trust made a different assumption about the energy value based on what we have seen from PPA prices for other large-scale projects for this solar mandate. To make this project comparison more apples to apples, we made a change to the pro forma in our analysis.

Bruce: We did this through an RFP. In this process, we compare to market value, which sets the baseline for all projects whether it's renewable or not. Therefore there is a difference between our analysis and Energy Trust's; our analysis was lower.

Jeff: Can you give me a clarification on the mandate. The mandate applies to investor-owned utilities in Oregon. What's not clear to me is if the 20 MW is for all three utilities?

Kacia: Yes, and Pacific Power's share is 8.7 MW. The 5 MW project you approved funding for is a PGE project and would get that utility to its mandate. This Pacific Power project gets it to about 31% of their mandate.

Jeff: Will Pacific Power come back for the balance of their mandate? I'm troubled about this. A mandate is going to be met no matter what.

Kacia: We are only doing this in cases where there are no alternatives for our funds.

Jeff: But our funds don't vanish.

Kacia: Right, they could be carried forward into following years.. Right now, we are looking at whether we could be getting different kinds of projects if we stockpiled the funds and did a larger RFP.

Jeff: Like a geothermal project.

Thad: New projects can walk in the door at any time, but our understanding of the market is pretty current. You can see this through the most recent RFP where we were not surprised by the projects that responded. We do have a limited budget and are constantly trying to manage that to reflect the market.

Jeff: That's another concern. Saying we have a limited budget but trying to get this money out the door.

Peter: In this project and the two PGE projects that we supported, the question is what would happen without us. In this case and the other two PGE projects, it's clear we are moving the

projects to happen much earlier. We expect that by moving these earlier the utilities will gain significant experience and we won't have to support subsequent installations for them. The legislature did address in the last session the question of whether Energy Trust funding can go toward aiding the utilities to meet mandates, including the Solar Capacity Standards and the Renewable Portfolio Standards. The legislature clarified that we can.

Peter addressed the process used for this project: Pacific Power did not come to us early as contemplated in the Master Agreement and outside of the regular RAC and project processes and forums. This created confusion and mistiming. But at the same time, Pacific Power did an RFP to look broadly to fulfill their requirements. This is a great project, competitively selected and, it brings together leveraged funds as one of the last to receive a Business Energy Tax Credit. The Master Agreement was designed to work with utility RFPs. It's clear we need to help ensure that the Master Agreement procedures are better known at Pacific Power and are streamlined where we can. Energy Trust is very aware of the awkwardness of the process followed here. However, we asked ourselves if they came to us earlier, would we have supported the project? And the answer is yes. Walking away from this project would mean that the next project would be more expensive for the ratepayer overall. The timing and the process should not weigh down this good project.

Margie: We do look carefully at above-market cost. To reinforce, we offered to pay considerably less than Pacific's request. Also, we have renewable energy goals and this is helping us meet our goals. We do have a process concern, and there was learning on both sides.

Alan: There are different ways to look at this. These are ratepayer dollars and must benefit ratepayers. If this is the most cost-effective use of funds, why not support the project? This is a good project, the process wasn't perfect but it's cost-effective, it benefits the customer, and if Pacific had followed the process the project would have been approved.

Dan proposed another revision to the resolution. As a sub bullet to item 2 under the Resolved section: Contingent upon Pacific Power showing rate of return value to their ratepayers and Energy Trust of the incentive, transparently, when the deal is concluded.

Peter: If I'm to report back what the OPUC reports to us, I'm comfortable doing that. This should not be read to mean we are opining on the OPUC rate-setting process.

Ken: Dan, I would offer a compromise. I would be interested in seeing the motion left as-is and make an informal request of Pacific Power. This could result in a good dialogue between Pacific Power and Energy Trust.

Alan: Was there an official proceeding? Is this public?

Bruce: No.

Dan: I will follow Ken's recommendation, withdraw my motion. My concerns aren't abated, but I prefer Ken's tactics.

Debbie: The withdrawn motion would raise the question that we haven't used this as criteria for other projects we've evaluated. We would need more discussion around it to understand it

better. Also I feel a little uncomfortable making a decision that is the purview of the OPUC. We have a method of how to calculate above-market cost; I am uncomfortable inserting ourselves in a discussion happening in another venue.

Roger: I'm inspired by what Peter said. When it comes to public policy goals, it's a softer issue. Dan, I think you were right in raising the question and I agree with how we are approaching it. Also, on this project it is interesting how we are approaching the avoided cost conundrum.

**RESOLUTION 639
AUTHORIZING FUNDS FOR BLACK CAP SOLAR PV PROJECT**

Whereas:

- 1. PacifiCorp (dba Pacific Power) is acquiring 2.56 megawatts (MW_{DC}) of solar photovoltaic generating capability near Lakeview, Oregon, to count toward its state Renewable Energy Standard and Solar Capacity Standard mandates.**
- 2. This project has already secured Business Energy Tax Credit precertification, a major barrier to renewable energy projects in Oregon.**
- 3. The above-market cost on a net-present value basis over 25 years has been estimated by Energy Trust staff to be \$1,001,335.**
- 4. Staff recommends an Energy Trust incentive of \$600,000, representing approximately 60% of the above-market cost. Pacific Power supports this incentive level.**
- 5. Pacific Power will retire 100% of the Renewable Energy Certificates (RECs) from the project for the benefit of its customers.**

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

- 1. An incentive of up to \$600,000 for a 2.56 MW_{DC}, ground-mounted solar photovoltaic facility near Lakeview, Oregon.**
- 2. An agreement that Pacific Power will retire the RECs from this project for the benefit of its ratepayers and for compliance with Pacific Power's renewable energy generation and solar capacity obligations to the state.**
- 3. Staff to move funds from the Other Renewables program budget to the Solar program budget.**

3-4. The executive director to negotiate and sign an agreement consistent with this resolution.

Moved by: Alan Meyer

Seconded by: Ken Canon

Vote: In favor: 12

Abstained: Dan Enloe

Opposed: 0

Break

The board took a break at 2:30 p.m. and reconvened at 2:45 p.m.

Bob Repine left the meeting.

Committee Reports

Evaluation Committee (Debbie Kitchin)

The last Evaluation Committee meeting was in May. Debbie covered highlights from the Home Energy Review follow-through analysis, NW Natural Washington process evaluation and Fast Feedback summary report.

Debbie said the results from the Home Energy Review follow-through analysis were interesting in terms of what Energy Trust gets from offering the free review. Tables in the report show that after a period of time, there are measures taken in up to 55 percent of homes receiving a review, but it is a dilemma. In the past, we've had times where the program emphasized Home Energy Reviews to prompt people to take actions. It may be that it just takes time; it may not be a point to emphasize just by itself.

Debbie summarized the Fast Feedback findings. The executive summary is included as the report is final. Fast Feedback has become a tool to ask some of the questions relating to participant satisfaction and free ridership and it's done soon after people take action. Typically, evaluations are one to two years after participation so there is better data, but that is a significant lag time for participants. Free riders are those that participate in the program but would have completed the project without information or an incentive from Energy Trust. There are a number of ways to measure free ridership.

Phil clarified the method for determining free ridership as evaluating the effectiveness and influence of the program. It also is used as an input when evaluating reportable savings from working savings.

Alan referenced the spillover effect, pointing out that even though free ridership results are used in determining program savings estimates, spillover is not.

Debbie discussed another method to analyze free riders would be to have a control group, which is hard to have given how much the program is out in the market, with media, marketing and general awareness.

Jeff: Is there a time limit to free ridership?

Sarah: On the question about how the project would have changed without the program, one of the response options is that the participant would have postponed the project for more than a year. If they answered yes, then they are not treated as a free rider.

John R: It's impressive that a little more than half of those that took action did so after a year.

Debbie: There are also different options being promoted out in the market by the program.

Phil: Also, we're not tracking people in the house taking action, we are tracking what is happening in the house.

Debbie: Note the fluctuation in those receiving a Home Energy Review through the years.

Phil: What's interesting with the follow-through rate is how consistent the rates are through the years, especially considering how the program offerings have evolved. People seem to find something to do with our programs over time.

Margie: Do we look at economic impacts?

Phil: We could, but we run into a time constraint with the number of analyses people want to see. We ask the programs their interests and try to prioritize based on that.

Dave: In board meetings during the committee reports, do you report or do we give recommendations?

Debbie: Typically, just reporting out. At committee meetings themselves, staff presents the evaluation and there's often a staff response. Many evaluations are done by independent, outside evaluators. Committee members then add their perspectives at the meeting.

Dave: It seems like we're getting a diminishing return on our Home Energy Reviews.

Debbie: Program evaluators are starting to look at Home Energy Reviews in a different way, providing other options and also providing phone or online reviews.

Margie: In addition to measure mixes changing over time, so does our strategy for engaging with customers. For example, we added to the in-home Home Energy Review by offering Home Performance with ENERGY STAR®, then online and then phone Home Energy Reviews. This gives people participation choices matched better to their situation.

Finance and Compensation Committees (Dan Enloe)

Dan summarized the Finance Committee August meeting, including evaluating tools to keep cash and investment portfolios performing well. The committee is leaning toward a CD Ladder comprised of brokered CDs for risk assurance. Energy Trust would utilize laddered CD's that mature and become liquid over various timeframes. Dan said that for the environment we are in, that's probably the best combination of low-risk options. CDs wouldn't be co-mingled with any Umpqua Bank funds. Instead, they are separately managed which keeps risks down. In the future, the committee may look at investing in a county or city or Oregon bond because they are usually customers and interest rates aren't bad. Dan asked that board members seek ideas around this, especially for those out and about in the community.

John R: This is money from our reserves?

Sue MS: This money is the interest reserves. We would start this gradually. There will be a briefing paper in your next board packet.

Dan: In the June financials, on page 5, the non-capitalized equipment line is the write off amount from ISIP deliverables.

Margie: ISIP is the Integrated Solutions Implementation Project.

Dan: The 2013 budget preparation has begun. The next Finance Committee meeting will go over those details. Highlights this year are that we do many projects and Energy Trust is executing very well.

Margie: Special thanks to Sue Meyer Sample and Umpqua Investments for preparing those investment options.

Dan said the last Compensation Committee meeting was around confirming performance of funds in staff 401(k) accounts and there is nothing to add at this time on Compensation Committee activities.

Alan: According to the dashboard, it looks like we are 30 percent committed on incentives at this time?

Margie: Yes. We used a kick-start bonus to attract activity during the first half of the year. From that, we are on track to meet many of our savings goals.

Dan: In a 0.5 percent interest environment, energy efficiency is one of the best, low-risk things to do.

Policy Committee (Roger Hamilton)

The Policy Committee met twice since the last board meeting. Roger focused on the July meeting. The above-market cost policy was reviewed, especially regarding the provisions on utility-scale projects, which are out of date now that Energy Trust only supports 20 MW or less projects.

Margie: The change in the size of project Energy Trust can support was derived from SB 838, passed in 2007. Energy Trust would only be engaged in smaller projects of 20MW or less, and the utilities would pursue larger projects.

Roger: Staff will bring a policy revision to the next meeting.

Roger reviewed the development of a new process for how Energy Trust staff interacts with OPUC staff. The committee reviewed guidelines and principles for such interactions, including Energy Trust participation in OPUC dockets, Energy Trust responding to Governor and Legislature information requests, and regular meetings between Energy Trust and the OPUC to discuss general policy and coordination issues. Roger explained the oversight role the OPUC plays for Energy Trust and the need to have solid relationships with the OPUC and the OPUC liaison to Energy Trust, Juliet Johnson.

The meeting also discussed cost-effectiveness of residential gas measures, and staff reported on discussions with the OPUC and utilities on this subject. The societal test is below 1 for certain gas weatherization measures. Staff is developing a proposal to allow a temporary exception for societal tests on these measures until Energy Trust has a better understanding of the persistence of this issue and time to develop a better way to evaluate the societal benefits. The OPUC may open a docket on this topic.

Juliet: UM 1622 will go to the October 9 public OPUC meeting. All interested parties will have a chance to comment, and the Conservation Advisory Council was supportive of this approach. All party comments are needed by September 19.

Roger: Will this be in time for the 2013 budget process?

Margie: We may have to make assumptions on how to accommodate this, especially for the Existing Homes program. We are paying a lot of attention to how to drive overall program costs down.

Roger: At the suggestion of one of the parties, the OPUC has put the fuel-switching docket on hold for a few months.

Juliet: The hold will be released in September.

Roger: This allows time for input from the Conservation Advisory Council; in particular, to solicit reaction to ideas to only allow Energy Trust heat pump incentives for electrically heated homes. Ductless heat pumps would be the exception.

John R: The Conservation Advisory Council meeting on this was held and it was quite contentious as you can see from the notes.

Roger: The issue here from a traditional policy perspective is Energy Trust has a policy of being fuel-neutral. We are very careful about this.

Staff Report

Program Feature Presentation

Jessica Rose, New Building program manager, presented the Path to Net Zero pilot. The program has been running a Path to Net Zero pilot since 2009. Central goals of the pilot are to understand opportunities and motivations of customers and barriers to building net zero energy buildings. Goals also include the ability to understand design decisions being made, equipment included and strategies utilized to make these types of buildings possible. The program then uses this information to see how to scale the offering.

At the launch, the pilot was met with great market interest and approximately 12 projects were enrolled within a few months. For those projects, the pilot provided increased support and incentives for the project to achieve exceptional energy performance, defined as 50 to 60 percent more efficient than Oregon energy code, with the remainder relying on renewable energy strategies to reach net zero. The pilot made energy efficiency the first priority. To do this, the pilot focused on design charrettes, then enhanced technical support such as advanced energy modeling and other design techniques and computational fluid dynamic modeling, then enhanced incentives and commissioning. The final stage of the pilot is monitoring and reporting to provide almost instant feedback on the performance of the building. At that point, the building is occupied and staff check-in with the owner quarterly to discuss performance and help troubleshoot.

Since 2009, 12 projects enrolled, and six completed. The rest are in various stages of completion. Energy Trust produced videos on three of the completed projects to increase market awareness.

Ken: What was the range of the size of the buildings?

Jessica: Overall, there is a good cross section between public and private buildings of all different sizes. Some high rise, downtown buildings, and others are in more rural areas. Hood River Middle School was an addition to an existing school and is approximately 5,000 sq. ft. Others in the pilot are much larger.

Ken: Of what you have seen so far, what is the closest any one building has gotten to net zero?
Jessica: Hood River Middle School is really close to hitting the mark. Other projects focused on how to make it work within their business case, which is a really effective learning point for us.

John Reynolds: Do you have a list of the projects?

Jessica: We do. I can get you the pilot case study featuring a few buildings.

Mark: You mention the program provides early measure verification. How far do you go?

Jessica: In addition to initial measure verification, it's ongoing whole building metering and reporting at the sub meter level that they specify. We developed a metering and reporting guide to help customers with this process.

Jessica showed the recently completed Energy Trust Path to Net Zero: Hood River Middle School video.

John R: This school is exporting generation from their solar electric system in the summer and importing energy in the winter, meaning net zero is the average over the year.

Roger: Do you evaluate the life cycles of the construction or equipment?

Ken: It's netting out bills over the course of the year.

Roger: It's a question that comes up in renewables, the embedded energy of the materials.

John R: You certainly reduce transmission costs by generating on-site. I would like to see a list of projects and the size of them.

Dave: How will you use these videos for marketing purposes?

Jessica: We are beginning to build that strategy. This is the first time we've ever used the video format.

Ken: Also, since you have a diverse set of buildings, you can get these into the hands of other schools or types of buildings and be proactive.

Dan: How do we look relative to the rest of the country?

Jessica: At a conference I attended last week, many people said they may have one building. I think we have a great start. We began the pilot three years ago and we have a lot of insights to help make net zero a reality.

Dave: Another marketing tactic would be social media.

Jessica: Yes, I agree.

Roger: Does it benefit a school in this case to have minimal occupancy at night?

Jessica: We haven't analyzed that. I assume it balances out with the energy intensiveness of the classrooms during the day.

Executive Director Staff Report to the Board

Margie described a recently completed project at the Native American Youth and Family Center, NAYA, which serves Native American and Hispanic populations in Portland. They purchased the Whitaker Middle School in 2006 and made a number of critical renovations, including lighting, a 102-kilowatt solar electric system, and energy-efficient freezers, hot food cabinets, water heaters and a boiler. The projects are saving 44,374 kWh, 8,641 annual therms and generating 104,625 kWh. NAYA helps Energy Trust reach a part of the community that the programs need to engage.

Margie highlighted cumulative, 10-year Energy Trust results, including 426 aMW saved and generated, which led to a 7 percent reduction in electric load, plus 23.2 million annual therms saved. The energy savings equal enough energy to power 320,000 homes and heat 45,700 homes with natural gas. Energy Trust has served 438,000 sites, the majority of which are residential; 13,000 are commercial, 2,700 are industrial and 3,800 are in Washington. The Trade Ally Network consists of 2,400 contractors and other professionals providing services statewide. These businesses range in size from one to 200 or more employees and 75 percent employ 10 or fewer employees, meaning most are small businesses. This is an infrastructure and capacity Energy Trust is helping to build across the state.

Ken: The map on the slide could be misleading. It sounds like we are powering those counties. I'm particularly sensitive to this as these counties also have public-owned utilities serving residents.

Margie agreed and said she had made the same comment. The map will be changed before the annual report is published. She continued with the highlights, emphasizing cumulative participant bill savings of \$1 billion, efficiency investments that will save \$1.57 billion in deferred investment and an independent study showing Energy Trust has cumulatively added \$2.1 billion to the economy. The economic benefits were calculated by a third party.

Mark: Are the benefits disaggregated?

Margie: Yes, we do that.

Debbie: Are the deferred investments net?

Margie: They are net of our costs and we are looking at the return on investment over the coming years.

Margie described upcoming plans for regional events and a Portland event to recognize Energy Trust's 10-year anniversary. At the Portland event, customer and trade ally speakers are planned, as well as a fair amount of networking.

Alan: Going back to the deferred utility investment, what was the cost?

Margie: I can get that for you.

Board members commented on the wording around deferred cost and how it might change to deferred utility cost or deferred infrastructure cost to be clearer.

Margie described the addition of lending allies to Energy Trust. Financing is becoming much more a part of the fabric that Energy Trust weaves and of what programs offer. Energy Trust

programs are getting into new roles and strategies that capture financing within what is available.

Existing Homes recently launched a pilot for the Energy Performance Score (EPS) in existing homes. The goal is 500 to 1,000 homes and Home Performance trade allies will offer the EPS during a Home Performance audit. The pilot is very dependent on engagement with contractors and Energy Trust held a stakeholder meeting in January to receive their feedback.

Margie briefly recapped dockets at the OPUC, including a data transfer docket and fuel switching docket, as well as an energy efficiency power purchase agreement (EEPPA) concept being discussed at the OPUC. It's expected the OPUC will move the EEPPA concept forward as a pilot concept. The concept would identify "negawatts" in a building where improvements are made and resulting savings valued and sold to the utilities under a power purchase agreement. The building owner would benefit by the upgrades made and by having a fixed or frozen energy rate for a specified time period.

John: Will a building owner want a frozen rate as avoided costs fall?

Margie: That's a good question. It will be challenging to find a building that will fit the pilot. There is considerable intrigue around this concept as a way to complete deep retrofits all at one time.

Mark: It will also be interesting on the transferability to the industrial sector.

Margie said more than 2,000 responses were submitted on the Governor's draft 10-Year Energy Plan, 800 of which were around coal transport and LNG facilities. Margi Hoffmann, energy policy advisor to the Governor, is going through the comments and a final plan will be made public around year-end. Margi is focusing in on what aspects would be implemented and Energy Trust expects to be involved in those discussions.

Margie gave an update on the IT Integrated Solutions Implementation Project, which is deep into Phase 1, the focus for 2012. Phase 1 has five work streams, and three of the five are complete. Currently staff is focused on the Contact Relationship Management (CRM) work stream where the existing CRM is being replaced. Staff is very excited about having new features, an easier to use system and improvements to customer experience. The Planning, Budgeting and Forecasting work stream is moving along, with new budget workbooks being used right now. Phase 2 is on the project tracking to either upgrade or replace the current FastTrack system.

Margie reviewed Quarter 2 highlights. Kick-Start bonus incentives helped build the commercial and industrial pipeline. The Commercial Sector is ahead of historic Quarter 2 savings for all utilities, and the sector continues to coordinate with the Oregon Department of Energy on Cool Schools. New Buildings launched data center and small commercial offerings. The Industrial Sector is seeing increased activity over Quarter 1. Margie highlighted an irrigation trade ally, J.W. Kerns. In Residential, results are trending favorably for New Homes and weatherization. EPS for New Homes is expected to exceed goal for the year' 450 homes received an EPS in Quarter 2 and 2,000 homes since the offering became available.

Mark: How is EPS being accepted by the real estate community?

Margie: We work closely with the real estate community and they are an important audience to reach.

Kendall Youngblood, PEI: The real estate community likes it as long as it remains voluntary.
Margie: It is reflected in their outreach and sales tactics. We are also seeing consumer demand increasing.

Margie continued the Quarter 2 highlights for renewables, including the continued growth in solar.

John R: Does Quarter 1 and Quarter 2 activity mean the workload is spreading out and there will be less of a heightened end-of-year in terms of activity?

Margie: That remains to be seen and it is an improvement to see a pipeline like this in Quarter 2. This does raise the question around what were the impacts stemming from the changes to the Business Energy Tax Credit and the now competitive Energy Incentive Programs from the Oregon Department of Energy?

Margie gave customer service highlights, including a typically lower call volume in the summer. Fast Feedback results were displayed. Margie indicated staff is evaluating New Buildings satisfaction using standard evaluations other than Fast Feedback given the long-lead times for these projects.

Alan: It is interesting that Production Efficiency, an in-house program, has the highest satisfaction rate.

Margie recapped the annual staff BBQ and showed a photo of the staff.

Additional Items

John R: On August 14, Ana emailed a proposed schedule of meetings for 2013. Board members, please get back to Ana with any conflicts.

Julie: When I first started at OSU, PGE noted they were having a difficult time recruiting students into engineering, which is especially important given the aging staff at utilities. PGE started a program to engage students so students would better understand what utilities do. Through this, PGE learned students didn't want to work for a utility because they only knew it as a company they wrote a check to; they didn't know what the utility business was about. PGE brought in the executive level team of PGE employees and students shared their impressions. The result was recommendations students made to PGE on how to make the connection on what PGE is doing by being more innovative and appealing to a younger audience, including considering sending younger representatives.

Adjourn

The meeting adjourned at 4:27pm.

Next meeting. The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, September 19, 2012 at 12:00pm at Energy Trust of Oregon, Inc., 421 SW Oak Street, 3rd Floor, Portland, Oregon.

/s/ John Reynolds

John Reynolds, President