



## Renewable Energy Advisory Council Meeting Notes

September 3, 2014

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### Attending from the council:

Jason Busch, Oregon Wave Energy Trust  
Shawn Foster (for Bruce Barney), Portland  
General Electric  
Robert Grott, Northwest Environmental  
Business Council  
Juliet Johnson, Oregon Public Utility  
Commission  
Suzanne Leta-Liou, Atkins  
Elizabeth McNannay, Oregon Solar Energy  
Industries Association  
Matt Mylet, Beneficial State Bank  
Michael O'Brien, Renewable Northwest Dick  
Wanderscheid, Bonneville Environmental  
Foundation  
Frank Vignola, Solar Monitoring, University  
of Oregon  
Peter Weisberg, The Climate Trust

### Attending from Energy Trust:

Karen Chase

Chris Dearth  
Matt Getchell  
Jenny Hall  
Jed Jorgensen  
Betsy Kauffman  
Dave McClelland  
Debbie Menashe  
Dave Moldal  
Elaine Prause  
Thad Roth  
Lizzie Rubado  
Courtney Wilton

### Others attending:

Diane Broad, Oregon Department of Energy  
Bill Eddie, OneEnergy  
Kari Greer, Pacific Power  
Wendy Koelfgen, Clean Energy Works  
Alan Meyer, Energy Trust board  
John Reynolds, Energy Trust board

### 1. Welcome and introductions

Betsy Kauffman called the meeting to order at 9:30 a.m. and reviewed the agenda. The agenda, notes and presented materials are available on Energy Trust's website at [www.energytrust.org/About/public:meetings/REACouncil.aspx](http://www.energytrust.org/About/public:meetings/REACouncil.aspx).

### 2. Strategic Plan update

Elaine Prause thanked the council for comments on the Energy Trust draft 2015-2019 Strategic Plan and provided an update.

Elaine: We received wide-ranging comments from a broad spectrum of stakeholders. We're currently reviewing comments related to plan implementation and effectiveness and making sure that staff will see those ideas. The proposed final 2015-2019 Strategic Plan will go to the board of directors for review and potential approval on October 1.

### 3. Solar Water Heating

Thad: Oregon Public Utility Commission stated in July that Energy Trust can no longer support solar water heating measures for electrically heated homes. OPUC may make a ruling in October that we can also no longer support solar water heating for natural gas-heated homes. As we know more, we will update you, trade ally contractors and customers.

Frank Vignola: How was cost-effectiveness calculated? What happens if the price of solar water heating comes down?

Juliet Johnson: The commission's policy is to look at Total Resource Cost. The benefit-cost ratio for solar water heating is about 0.1, and cost-effective measures have a benefit-cost ratio of 1.0 or higher. The price would have to change significantly to make solar water heating cost-effective, unless the calculations were to change.

Jason Busch: What mechanism allows the OPUC to decide what measures Energy Trust will fund?

Elaine: Investment discussions for renewables are about above-market costs. On the efficiency side, the benefit-cost ratio is the regulatory framework.

Alan Meyer: Energy Trust is a creature of the OPUC. We were created to do what the OPUC has been charged with doing.

Elaine: The OPUC decided that non-energy benefits couldn't get the ratio even close to 1.0.

Juliet: The OPUC serves as a regulator of investor-owned utilities that essentially have monopoly power. The commissioners watch over the work of Energy Trust in the same way to ensure that ratepayers are being looked after properly.

Jason: Does someone have to contest a measure for the OPUC to investigate?

Juliet: Avoided costs change as utilities do their planning. When Energy Trust notices benefit-cost ratios for some measures change significantly based on new costs, Energy Trust brings them to the OPUC. In some cases there are grounds to make exceptions. We could not make an exception in this case

Thad: There will be more discussion of this at the Conservation Advisory Council meeting this afternoon. You are invited to attend. We are committed to coming up with a transition plan for this, and we'll keep you apprised.

#### **4. Request for proposals for Other Renewables**

Betsy: Energy Trust received three applications for project installations and none for project development assistance. Two of those project installation applications were rejected. The third, a biopower project in Pacific Power territory, is still being evaluated. Thad will talk more about the remaining funds in Portland General Electric territory.

#### **5. Competitive solicitation for large solar projects**

Dave McClelland: Energy Trust received four applications for large solar projects, all requesting less than \$500,000 in incentives. Funds will be held for all projects through a three-month preliminary reservation period until September 15.

As funds become available from Other Renewables, the sector plans to use these funds for large solar projects. We still have \$2 million available for large solar projects. We will conduct a competitive selection process, and applicants will have six weeks to submit applications.

Thad: Energy Trust's funding priorities support project development assistance, the standard Solar program and the Other Renewables program. These funding priorities have been approved by the board, OPUC and Renewable Energy Advisory Council. If there is unallocated funding once these programs receive support, we will consider moving funds to large scale or custom solar projects. That is what we are doing in this circumstance.

#### **6. Budget themes for Other Renewables and Solar programs**

Thad: Staff will present on themes and activities in the 2015 budget for the Solar and Other Renewables programs. Market conditions are challenging for renewable energy projects. The

low cost of natural gas has a significant effect on non-solar projects because it creates low avoided cost rates. Tax incentives are limited. Themes in the 2015 budget include supporting a portfolio of technologies, improving project performance and having flexibility to shift incentives to address new opportunities.

Betsy presented budget themes for the Other Renewables program, beginning with an update on 2014.

Betsy: Two biopower projects were cancelled due to the low wholesale price of power and the fact that the projects didn't get Business Energy Tax Credits. These projects were led by national developers, and project potential looked better in other states.

There are two biopower projects under construction that are focused on fats, oil and grease.

In 2015, we will focus on pipeline development, using current project owners as mentors and collaboration with other groups that can bring expertise and funding to projects. We will continue to use competitive solicitation processes in PGE and Pacific Power territories for project development assistance incentives more than \$40,000 and installation incentives more than \$150,000. Projects requesting funding below these incentive caps can apply anytime.

Dick: Given the lull, can we hold the money in surplus until we have a better opportunity to spend it?

Thad: In Energy Trust's early days, we were in our early phase of program operations: developing programs to deliver resources and developing market understanding. In that phase, we had unallocated funds. Starting in 2009, we spent down those funds to capture other benefits in the market that worked well with our incentives. We're close to having spent down all of these previously unallocated funds. It's possible we'll accumulate funds again, but we are inclined to move dollars to projects that are feasible now.

Alan: At the board retreat, we discussed bundling benefits. I didn't see that mentioned here. I  
Betsy: Bundling benefits is implicit in our strategy. It's part of finding synergistic opportunities for collaboration in biopower and hydropower efforts. We hope to work with groups that can contribute staff time and dollars.

Elizabeth McNannay: Of the 19 projects currently receiving project development assistance, how many do you think will turn into projects?

Betsy: We estimate that 20-25 percent of these projects will come to fruition.

Thad: That's over a period of time—not necessarily now.

Betsy: We need to create a wide funnel.

Matt Mylett: What is the plan for sharing funding opportunities with the market? Given the long lead time, you need to assure applicants that there will be funds available.

Betsy: We do a lot of outreach to let people know we have money available and our budget is stable. We have a consistent allocation of funds every year.

Jed: We have done a good job of communicating about available funds through prior requests for proposals. We only reallocate Other Renewables funds to Solar when there is not uptake.

Betsy: We are often in discussion with those who are planning projects. If there are channels where we're not present, we would like to know about that.

Juliet: What are you thinking about 111(d)?

Thad: It's preliminary, but we're focused on the next year or two.

Jed: Rebecca O'Neil at the Oregon Department of Energy and I have been talking about how hydropower, geothermal and other technologies may have a role to play.

Dave presented on 2015 budget themes for the Solar program.

Dave: Commercial solar sales are up. Increased incentives in 2013 helped to create activity in the commercial solar market. Our incentives, without a state tax credit, are enough to move the market, based on the lower cost of systems. The residential market is up as well, and our incentive rates seem to be enough to keep things moving.

We are on track to exceed the standard program goal and OPUC benchmark in 2014. However, cancellation of a large custom project in Pacific Power territory makes it unlikely to the program will meet our budget goals for custom and standard solar.

Equipment prices decreased by about one-half in the last four years. Soft costs remain high, including customer acquisition and administrative costs. Our plan is to focus efforts on soft cost reduction, beginning with our own internal process improvements. We know there's opportunity to impact soft costs because we see such a wide range of pricing from different contractors.

Robert Grott: Have you communicated with Washington about their plan to reduce soft costs?

Dave: Yes, we're involved in the Northwest solar community's effort. A lot of the work has been done to get Washington caught up with Oregon. We have to figure out what we can do next.

Dick: What do you see in the residential market with third-party leasing?

David: Third-party leasing had taken over the market, especially in PGE territory. Nearly 80 percent of systems installed in PGE territory and 30 percent of systems in Pacific Power territory used third-party leasing. We increased incentives in Pacific Power territory to help direct owners of systems. The market for direct-owned systems has increased by about 50 percent, and the market for third-party leased systems is up by 45 percent.

Juliet: Why is there a discrepancy between the two utilities?

Dave: We have one third-party leasing trade ally that is focused on the Portland metro area.

Dick: It has to do with incentive rates, too. Pacific Power has lower rates.

Matt: Contractors will take the margin of savings as revenue if you only focus on decreasing their costs. Are you going to talk to customers as well to ensure they look at multiple bids?

Dave: We apply pressure by decreasing incentives. We find that solar projects are either on or off. When they're on, we have to step down incentives.

Robert: Have community solarize programs run their course?

Dave: Yes, but there are still some opportunities, such as Rogue solar.

Chris: How much of soft costs are permitting and review by local authorities?

David: It's a small portion, but the City of Portland just dropped their permit costs by about 50 percent and we know that makes a difference.

## **7. Hydropower strategic plan**

Jed presented on a draft strategic plan for hydropower, including the current state of the market and strategies for the coming five years. Parallel to the organization-wide strategic planning

process, renewable energy staff have been developing technology-specific plans. Feedback from Renewable Energy Advisory Council members is requested.

Jed: In 2008, Energy Trust started to focus on hydropower opportunities. Our resource assessment told us that some opportunities were better than others. Permitting was a barrier. The bulk of our work has been with irrigation districts. That will remain the focus as listed in the draft plan.

Future hydropower costs are likely to be impacted by the cost of natural gas, the availability of outside funds and tax credits. These factors may change.

There are three strategies in the plan, and all are interrelated. Hydropower can be a way to save water, which is a big focus of other organizations right now. There are multiple opportunities for water savings, especially for irrigators. Revenues from hydropower systems can be leveraged to pay for future water conservation projects. There may also be multiple potential projects in a given district. We've done four projects over the last six years with Farmers Irrigation District. We will also do outreach to individual irrigators. We are working on a way to develop those projects with no out-of-pocket costs to the owner.

Suzanne: Are there enough developers to support the work with small irrigators?

Jed: No, but there are organizations that are interested in helping out. This won't be a Solar City type of model and there aren't that many projects, but we can increase the number of projects with this strategy.

Alan: I like the creative approach you're taking.

Suzanne: I noticed a lot of emphasis on dollar-per-kilowatt, rather than kilowatt-hour. It is best to use kilowatt-hour.

Thad: We are in the process of focusing on the levelized cost of energy as a way to value the cost of these projects on a kilowatt-hour basis.

Jed: Water conservation will benefit other organizations. Energy Trust can only value the energy savings.

Suzanne: From a customer perspective, it would be helpful to see the holistic value of water and energy savings.

Jed: Good point. Hood River County recently did a study for water savings that provides a good example of how to do that.

Robert: This approach is intelligent and aligns with the strategic plan. You're trying to change the market with engagement and outreach.

Matt: It makes sense to take the perspective of the customer.

Peter Weisberg: Do you know the potential for water savings versus energy generation?

Jed: It varies, but it's got to make sense for the customer. It is determined by what the customer values.

Thad: We're learning how to make the case for a project based on what we expect will be the customer's leading driver.

Diane Broad: I appreciate the overall approach. Overall comments from the Oregon Department of Energy, primarily Rebecca, are that we agree on district opportunities, market size and challenges. We would like to see Energy Trust remain open about water infrastructure

and water storage opportunities. There could be a big regional opportunity around aquifer storage and recovery, so we would like to keep the conversation open on items that could gain momentum quickly.

Jed: I'm pleased to hear that the aquifer storage could move more quickly. We're not sure these systems will have above-market costs. Pendleton's system paid for itself in two years and had no above-market costs.

Diane: Related to your goal, is there a minimum program size that makes sense for your team? Looks like hydropower could be the largest of renewables.

Thad: That's challenging to determine because it's based on other market conditions. We're looking at balancing market interest and market cost. We also know we have budget limitations, and need to achieve balance between the two utilities.

Betsy: From a staffing perspective, we realize that there is opportunity and we'll be pulling others into the effort.

Peter: We heard a bit about innovative financing. Is that third-party financing?

Jed: No, the system would be owned by the irrigator, but the other entity would receive some benefit until it's paid off. This is much more like an energy services company approach.

Betsy: Are the categories in the document appropriate? We would like feedback.

Diane: Risk would be good to address.

Suzanne: Not just risk but risk implication.

Betsy: In terms of staff implications?

Diane: Yes, opportunity cost.

#### **8. Public comment**

No public comment.

#### **9. Meeting adjournment**

Betsy thanked the council members for their participation and adjourned the meeting at 11:40 a.m. The next full council meeting is scheduled for October 22, 2014.