

Renewable Energy Advisory Council Meeting Notes

July 23, 2014

Attending from the council:

Brittany Andrus for Juliet Johnson, Oregon Public Utility Commission
Robert Grott, Northwest Environmental Business Council
Kari Greer, Pacific Power
Suzanne Leta-Liou, Atkins
Matt Mylet, One Pacific Coast Bank
Elizabeth McNannay, Oregon Solar Energy Industries Association
Michael O'Brien, Renewable Northwest
Rebecca O'Neil for Matt Krumenauer,
Oregon Department of Energy
Peter Weisberg, The Climate Trust

Attending from Energy Trust:

Chris Dearth Matt Getchell Fred Gordon Hannah Hacker Jed Jorgensen Betsy Kauffman Debbie Menashe Elaine Prause Gayle Roughton Thad Roth Lizzie Rubado Julianne Thacher

Others attending:

John Charles, Cascade Policy Institute Bill Eddie, OneEnergy Todd Gregory, Obsidian Renewables Laurie Hutchinson, Obsidian Renewables Alan Meyer, Energy Trust board John Reynolds, Energy Trust board Imogen Taylor, Obsidian Renewables Sean Foster, Portland General Electric

Welcome and introductions

Betsy Kauffman called the meeting to order at 9:00 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.

1. Energy Trust Strategic Plan update

Elaine Prause gave a presentation on the Energy Trust draft 2015-2019 Strategic Plan. The public comment period opens July 25 and closes August 26, and the draft plan will be posted at www.energytrust.org/strategicplan for review and comment through an online form. The Renewable Energy Advisory Council last saw the plan in March. Since then, the board of directors reviewed a proposed draft plan at its June workshop and then again at a recent board Strategic Planning Committee meeting. The current draft includes proposed long-term energy efficiency and renewable energy goals, and five-year energy efficiency, renewable energy and operations goals and strategies.

Elaine explained the purpose of setting a five-year goal, which pushes the organization to stretch beyond what is required to meet Integrated Resource Planning targets with cost-effective energy efficiency and to help Oregon in meeting 8 percent of retail electric load with small-scale renewable energy projects. On the renewable energy side, the most visible change in the plan is the order of goals: the market and project development assistance goal is first, followed by a 10 average megawatt generation goal. The plan lists specific renewable energy strategies as well as cross-cutting strategies that apply to all energy programs.

Staff asked for council feedback on the overall draft plan. Rebecca O'Neil commended Energy Trust staff for the pace of the plan development and for keeping it on schedule.

Betsy Kauffman provided further details on how the draft plan's four renewable energy strategies may be implemented for various technologies, as well as the renewable energy sector's individual strategic plan. For the strategy on using a portfolio approach, Betsy explained that Energy Trust will support all eligible technologies, but in individual annual budgets and action plans, allocation of staff time and dollars may emphasize one technology over another as markets shift. The next strategy, project and market development, will receive more focus than in prior years. Staff will support the project and marketing development strategy by reducing project cost, collaborating with other organizations and engagement with the market. For the third strategy, the sector will maintain a competitive approach to identify and fund new Other Renewables and large solar projects, a strategy that has proven effective in recent years. Rebecca offered to help coordinate promotion of Energy Trust competitive selection processes with the Oregon Department of Energy's Renewable Energy Development Grants. The final strategy is to pursue strategic partnerships that leverage non-energy benefits, for example, biopower projects helping manage waste.

Rebecca asked about how the strategic plan leverages other Energy Trust resources, such as communications and planning departments. Lizzie Rubado responded that a solar marketing plan is in development, building on other communications efforts. Currently, Solar is included in Energy Trust's program awareness campaign and efficiency programs cross-promote renewable energy opportunities. In addition, an upcoming study on soft costs of solar leverages Planning group resources.

Robert Grott noted that one of Energy Trust's important roles is to document and disseminate institutional knowledge about renewable energy, including information about market needs and barriers. Other members agreed. Matt Mylet mentioned that he looks to Energy Trust for recommendations on what projects merit investment.

Suzanne Leta-Liou asked about the relative value of helping markets versus simply paying more and larger incentives. She also requested an update on the state's progress to meeting 8 percent of retail electrical load from small-scale renewable energy projects. Thad Roth responded that the Oregon Department of Energy is assessing progress to the goal; he estimates about 2 percent of retail load is currently from small-scale renewable energy projects.

Michael O'Brien asked what percent of the public purpose charge goes to renewable energy. Thad responded that, by statute, about 17 percent of the public purpose charge that comes to Energy Trust is designated for renewable energy efforts.

Bill Eddie of OneEnergy stated that a goal of 10 aMW of generation is too low. Solar activity is expected to increase in 2016. Bill suggested that Energy Trust consider asking applicants for renewable support to submit a deposit. This would help ensure that applicants are serious and generate revenue. Thad responded that Energy Trust needs to balance this with the need to avoid adding additional financial burden to developers.

Rebecca asked if Energy Trust plans to support community solar funding models and enabling technologies, such as smart inverters or batteries, that improve the value of the power system. Energy Trust can play an educational role, if not a funding role, in these efforts. Thad responded that Energy Trust considers enabling technologies as included in energy benefits. Regarding community solar, standard solar projects are the priority as directed by the Oregon Public Utility Commission. Large solar, such as community solar, is a lower priority. Jed Jorgensen noted that

staff is exploring how the community ownership model could apply to other technologies, such as hydropower.

Elizabeth McNannay applauded the emphasis on coordinating resources, such as coordinating Energy Trust's requests for proposals with the Oregon Department of Energy's Renewable Energy Development Grants.

Debbie Menashe invited additional feedback on the draft strategic plan through an online form or by phone by August 26, 2014.

2. Quarter two dashboard and results

Thad presented information on generation and accomplishments for the second quarter. Meeting the sector's annual generation goal is chiefly driven by large projects. The sector installed just under 3 million kWh through Quarter 2. The sector expects to achieve about half of the budgeted generation goal of 4.49 aMW in 2014. Committed projects expected to complete in 2014 include the Oregon Tech geothermal project and Three Sisters Irrigation District hydropower project, both of which were delayed from Quarter 2 to Quarter 3 of 2014. Three projects, including two Solar Capacity Standard projects in Pacific Power service territory and the City of Gresham wastewater treatment project in PGE territory, will shift from 2014 to 2015 and make up the bulk of the generation shortfall for 2014. One biogas project was canceled due to poor market financials.

Thad described the project pipeline for the remainder of 2014. Staff saw strong residential solar activity, especially in third-party owned installations. Solar created a separate incentive for third-party owned installations. Staff implemented small incentive reductions in reaction to this high demand. The non-residential market continues to be challenged with the absence of the state Business Energy Tax Credit. The program received many new non-residential reservations for project funding in response to increased incentives implemented in late 2013, but project installations lag. More non-residential solar installations are expected in the latter half of the year. In response to a question from Suzanne, Lizzie confirmed that market engagement has decreased in absence of Business Energy Tax Credits.

The pipeline for Other Renewables projects is weak, with few responses to RFPs received in Q2. Staff expect to have unallocated incentive funds in 2014. These unallocated non-solar incentives will be moved to the Solar budget with the funding priority to be supporting standard solar programs first, cover the shortfall in demand from the PGE Solar RFP, and to consider large-scale solar projects for any remaining funding. As a result of shifting funds, staff expect to fully allocate the 2014 activity budget.

3. Solar competitive solicitation

Thad provided an update on the results of a recent competitive solicitation for larger solar projects, which announced \$1 million in funding available with a funding cap of \$499,000 per project. Eligible projects must be non-residential, net-metered facilities with a capacity between 250 to 2,000 kW. The project must also have a system host commitment. Staff streamlined the application process by requesting less detail up front, and requested additional information from projects with winning bids. Four applications were submitted, and projects were ranked based on system cost, dollars/watt_{DC}. System costs for the four submitted projects were between \$2.60 and \$3.05/watt_{DC}, which is notably less than the average \$4/watt_{DC} system costs for projects less than 250 kW completed in 2013.

The program offered preliminary reservations to the two top bidders, and offered the remaining bids preliminary reservations based on funds that were made available from Other Renewables

unallocated funds. This requires moving about \$700,000 of Other Renewables unallocated funds to Solar. Bidders will submit additional information by September 15, at which point Energy Trust will engage in contracts with projects.

Suzanne noted that Energy Trust provides incentives about 30 percent of project costs, compared to about 50 percent from Business Energy Tax Credits.

4. Presentation of solar project proposed for funding

Thad presented the 6.21 MW_{DC} (5.0 MW_{AC}) Old Mill Solar project proposed for an incentive of \$490,000. This project would help Pacific Power meet its Solar Capacity Standard requirement. The Old Mill Solar project is recommended to replace the Stone House Solar project that was selected in 2013 and subsequently terminated. The project is expected to achieve commercial operation by December 2015, with a project cost of \$14.6 million and expected generation of 11,400 MWh. The site is located in southern Oregon between Klamath Falls and Lakeview. The capacity factor is 21 percent based on DC rating. The developer and site owner is Obsidian Renewables, which has completed 22 projects in Oregon to date including two Solar Capacity Standard projects. Swinerton Builders will perform construction and operations and maintenance services.

Old Mill Solar is located within the Pacific Power control area, and the utility is conducting a System Impact Study to be completed in August 2014. Because Old Mill Solar was previously an industrial site, system infrastructure is present. The project is zoned industrial, has a conditional use permit, completed its Wetlands Delineation and does not require an archeological study.

This project is a negotiated Power Purchase Agreement and Energy Trust is focused on helping reduce the final PPA price paid by Pacific Power. The project has received a Renewable Energy Development Grant and an Oregon New Market Tax Credit. The project will also benefit from System Upgrade Credits and consolidated tax benefits. The 25-year PPA is currently under negotiation. Dollars-per-watt system cost is about \$2.35/watt_{DC}.

The total revenue is approximately \$15.5 million, and the total expense is approximately \$17 million, including \$14.6 million for construction. Above-market cost increased for tax impact is \$2.6 million, based on standard avoided-cost rates. Energy Trust must demonstrate that a project has above-market cost, and can only pay incentives up to the amount of above-market cost. A \$490,000 incentive is well under above-market cost, and is under Energy Trust's threshold requiring board approval for incentives \$500,000 or greater.

Pacific Power plans to complete the project by the end of 2015 to receive two-for-one Renewable Energy Certificates. Pacific Power will receive 100 percent of the Renewable Energy Certificates for 25 years. The Energy Trust incentive lowers the PPA rate by \$3 to \$6.

John Reynolds asked about hydropower projects in the pipeline. Jed responded that there are no open applications in Pacific Power territory, and staff is working on building the pipeline.

5. Public comment

No public comment.

6. Meeting adjournment

Betsy thanked the council members for their participation and adjourned the meeting at 11:25 a.m. The next full council meeting is scheduled for September 3, 2014.