

Renewable Energy Advisory Council Meeting Notes

March 11, 2015

Attending from the council:

Jason Busch, Oregon Wave Energy Trust
Elizabeth McNannay, Oregon Solar Energy Industries Association
Michael O'Brien, Renewable Northwest
Dick Wanderscheid, Bonneville Environmental Foundation
Peter Weisberg, The Climate Trust

Attending from Energy Trust:

Justin Buttles
Chris Dearth
Matt Getchell
Hannah Hacker
Jennifer Hall
Betsy Kauffman
Dave McClelland
Dave Moldal
Gayle Roughton
Lizzie Rubado
Jay Ward

Peter West

Others attending:

Hillary Barbour, Renewable Northwest
Rob Del Mar, Oregon Department of Energy
Cindy Dolezel, Oregon Public Utility Commission
Shawn Foster, Portland General Electric
Matt Hale, Oregon Department of Energy
Diane Henkels, Henkels Law, LLC
Linda Irvine, Northwest Sustainable Energy for Economic Development, SEED
Wendy Koelfgen, Clean Energy Works
Nick Lawton, Green Energy Institute at Lewis & Clark Law School
Alan Meyer, Energy Trust board
Kathleen Newman, Oregonians for Renewable Energy Progress
John Reynolds, Energy Trust board
Matt Shane, Portland State University student

1. Welcome and introductions

Betsy Kauffman convened the meeting at 9:30 a.m. The agenda, notes and presentation materials are available on Energy Trust's website at: www.energytrust.org/About/public-meetings/REACouncil.aspx.

Betsy announced that the University of Oregon Department of Architecture will host the John Reynolds Sustainability Symposium on Sunday, May 17 in Eugene. In addition, the Oregon Future of Energy Conference, organized by the Northwest Environmental Business Council, will be held on Wednesday, April 16 in Portland.

2. Northwest Solar Communities Solar Ready Toolkit

Rob Del Mar and Matt Hale of the Oregon Department of Energy, and Linda Irvine of Northwest Sustainable Energy for Economic Development, SEED, discussed efforts to develop standardized tools for making solar installations simple, fast and cost-effective for customers, jurisdictions and utilities. This effort is part of the U.S. Department of Energy SunShot Initiative.

Rob Del Mark, Matt Hale and Linda Irvine: A 2.5-year Northwest Solar Communities Solar Ready Toolkit effort managed by NW SEED, with 16 partners including the Oregon Department of Energy, is underway with funding from the Washington Department of Commerce. The approach is to review what is happening at a national level, and apply what makes sense locally in Oregon and Washington. The goal is to provide a solar-friendly corridor for more than 2

million customers in Oregon and Washington, continue growth of solar installations and recognize successes.

The effort has created a more streamlined incentive process for the Oregon Department of Energy, resulting from the Oregon Department of Energy adopting PowerClerk for tax rebate applications, the same system as Energy Trust. The Oregon Department of Energy is also planning to move utility interconnection applications into PowerClerk. Additionally, a standardized permitting toolkit for residential rooftops has been created. Support will be provided for adoption of the new process and recognition of contractor progress.

The Northwest Solar Communities Solar Ready Toolkit effort is focused on spreading solarize to Washington and Idaho through mini-grants and training. An interconnection best practices guide for utilities, which includes a combination of engineering and administration procedures, is now available. There are also free interconnection workshops for utility engineers.

Michael O'Brien: How have interconnection support meetings been received?

Rob Del Mar: Generally speaking, attendees have been very engaged. The content provided is very technical and the training style is interactive.

Shawn Foster: The trainings have high value, especially for municipalities and smaller utilities that are concerned with how solar affects total load.

John Reynolds: Will permitting jurisdictions align their processes with one another?

Linda Irvine: Jurisdictions do want to maintain control, but they're willing to look at the time- and money-saving potential of aligning processes, and are moving toward a template process.

Kathleen Newman: Has there been any development in solar access rules, such as in regards to a complaint about a neighbor planting trees that block a solar installation and reduce solar potential?

Cindy Dolezel: There are laws regarding solar access at the local government level.

Linda Irvine: We have no concrete answers at this time. This is a hot topic that will be addressed by the planning group.

3. Solar soft cost survey

Jennifer Hall provided an update on soft cost survey analysis and Energy Trust's upcoming efforts to reduce the soft costs of installing solar systems.

Jennifer Hall: The goal of Energy Trust's 2014 solar soft cost survey was to compare local numbers with national trends captured most notably in the National Renewable Energy Laboratory Solar Soft Cost Reduction Roadmap. Energy Trust's survey instrument was modeled off of the National Renewable Energy Laboratory surveys used to create its solar soft cost roadmap.

Comparing Energy Trust's survey results with the National Renewable Energy Laboratory forecast for 2014 indicates that Oregon is ahead of the curve. The findings from the "other" soft costs portion of the report led to the realization that the "other" soft costs category is not well understood by contractors. Additionally, results indicate that individual cost metrics may not be the best possible way to measure success, and other ways to gauge success are being considered.

Energy Trust is working with the Green Energy Institute at Lewis & Clark Law School to compare the Oregon solar market to other states. Once the Green Energy Institute comparison and the soft costs survey analysis are published, we will conduct a request for proposals for a contractor to create an Oregon solar soft costs road map. Energy Trust plans to publish the final Energy Trust soft costs survey analysis in May 2015.

John: In other states, sales tax may be part of the “other” costs category. Does the absence of sales tax in Oregon mean Oregon contractors have lower “other” costs than contractors in other states?

Jennifer: This is certainly not the driving factor. There are several components to the “other” costs category.

Nick Lawton: It’s worth noting that many states now exclude taxes on solar installations.

Alan Meyer: Does cost mean what was charged to the consumer?

Jennifer: The cost reflects the median cost per watt charged to the customer as reported by survey respondents.

David McClelland: Costs to the contractor were captured in the “hardware” category. Markup or profit should have been captured in the “other” costs category, not the “hardware” category.

Kathleen Newman: Does the report take system size into account?

Jennifer: Yes, for Energy Trust, the median system size closely matched National Renewable Energy Laboratory modeled system size at 5 kilowatts.

Michael: Is it possible to measure the cost of parts constructed in U.S. compared to parts manufactured in other countries?

Dave McClelland: The analysis accounted for this by looking at the exact manufacturer and models of modules and inverters installed to create a weighted average model price which was used to adjust the surveyed data.

Dave McClelland: Do Renewable Energy Advisory Council members have any feedback on the cost categories? Our perception is that the “other” category is not well defined, and the remaining categories are getting buried.

Alan Meyer: Including profit as a soft cost may be an issue. For example, if a contractor has very low equipment costs, they’ll have a higher percentage of soft costs by comparison.

Dave McClelland: The main intent is to reduce costs for the contractors. By reducing Energy Trust incentives, we’re hoping to provide pressure for contractors to decrease their price for their customers.

Elizabeth McNannay: Are there contractors who really understand their customer acquisition costs and others who don’t?

Jennifer: Defining and attributing customer acquisition costs was a challenge for contractors. For some, it was their first time considering such costs. Customer acquisition costs are hard to pin down.

Dave McClelland: Additionally, some contractors should probably be spending more on customer acquisition.

4. Update on 2015 legislative session

Hillary Barbour from Renewable Northwest updated the council on what’s happening in Oregon’s 2015 legislative session that may affect the renewable energy market.

Hilary Barbour: There are several relevant bills addressed in the 2015 legislative session. SB 324 relates to reducing greenhouse gas emissions from transportation fuels. SB 324 would

repeal a sunset on provisions related to low carbon fuel standards. HB 2941 would establish qualifications for community solar projects such as community gardens. HB 2745 would extend the feed-in tariff-pilot program. HB 2632 would direct Oregon Department of Administrative Services to establish a program to incentivize generation of electricity derived from utility-scale solar projects. HB 2447 would extend the sunset date for residential energy tax credit for alternative energy devices. This didn't pass initially and has been rescheduled. HB 2729 would require electric companies to reduce allocation of electricity from coal-derived generating resources to zero by January 1, 2025. This involves a 10-year transition to replace 90 percent of current coal load with cleaner energy, emphasizing renewables developed in Oregon.

Jason Busch: SB 319 is a wave energy bill. It requires proprietary authorization from Department of State Lands to construct or operate ocean renewable energy facilities in Oregon's territorial sea.

Jason Busch: Regardless of HB 2729, what percentage of coal will come offline through 111d?
Michael: Pacific Power is required to comply with 111d by closing existing coal.

Betsy: Are there any updates for the Biomass Producer or Collector Tax Credits?

Dave Moldal: HB 2449 would extend the sunset for tax credits for biomass collection or production. There's been little opposition to this proposal.

Bonneville Environmental Foundation's community solar work

Dick Wanderscheid shared an update on a Washington state law that created incentives for community solar projects. The law is aimed at utilities with a higher feed in tariff. All projects are utility owned, utility net metered and provide opportunity for ratepayer investment.

Dick: Projects supported through Bonneville Environmental Foundation's community solar efforts include two 75-kW systems installed by Seattle City Light; a 75-kW system in Vancouver, Washington; three 10-kW systems installed on San Juan Island schools by Orcas Power and Light; a 50-kW system installed through Peninsula Light on a museum in Gig Harbor, Washington; a 200-kW system in Redmond, Oregon through Central Electric Cooperative, Inc.; a 25-kW system in Eugene through Lane Electric; one 200-kW system and one small system through Flathead Electric Cooperative, Inc.; a 50-kW system through Missoula Electric Cooperative, Inc.; and a 3-MW project in Portland through PNGC Power. In addition, the city of Jackson, Wyoming has raised \$2 million for renewable energy through self-instated taxes.

Michael: Are these projects virtually net metered at retail rates?

Dick: Yes, but we advised the utilities to provide customers with credits annually rather than monthly using an annual true up process.

John: Has Central Oregon opened the option for investment?

Dick: Not yet, but they will soon.

Betsy Kauffman: Are these projects focused on doing anything to enhance the non-energy benefits for people who invest in community solar, such as public recognition?

Dick: Not yet. They're still working to sell the investments, and will later focus on rewards. This is a test, as there are low electric rates and the economics aren't great. These projects are attempting to replicate the net-metered systems. Additionally, people have been found to agree to purchase for reasons other than the investment.

Michael: What are utilities doing with Renewable Energy Certificates?

Dick: We've advised retiring the credits to the investors. The utilities tend to agree.

5. Public comment

There was no additional public comment.

6. Meeting adjournment

The meeting adjourned at 11:40 a.m. The next Renewable Energy Advisory Council meeting is scheduled on April 29, 2015.