

RENEWABLE ENERGY ADVISORY COUNCIL

Notes from meeting on May 18, 2011

Attending from the council:

Megan Decker, Renewable Northwest Project
Troy Gagliano, enXco
Robert Grott, NW Environmental Business Council
Ben Henson, Renewable Energy Solutions
Thor Hinckley, Portland General Electric
Juliet Johnson, Oregon Public Utility Commission
Rebecca Sherman (on behalf of Vijay Satyal), Oregon Department of Energy
Dick Wanderscheid, Bonneville Environmental Foundation
Tashiana Wangler, Pacific Power

Attending from Energy Trust:

Amber Cole
Sue Fletcher

Fred Gordon
Jed Jorgensen
Betsy Kauffman
Sue Meyer Sample
Elaine Prause
Thad Roth
Lizzie Rubado
John Volkman
Peter West

Others attending:

Jeff Bissonnette, Citizens' Utility Board
Joe Eberhardt, Portland General Electric
Matt Hale, Oregon Department of Energy
Justin Hovland, member of the public
Teri Ikeda, Pacific Power

1. Welcome and introductions

Betsy Kauffman called the meeting to order at 9:00 a.m. The minutes from April were approved and the May agenda was accepted.

2. Small Wind program update (Lizzie Rubado)

Lizzie Rubado provided an update on activities in the Small Wind program. She explained it is a relatively new program and now that we have a few years of experience with projects we are taking stock and refining. Lizzie described several elements of program strategy underway:

- 1) Improving accuracy of wind speeds at hub heights
 - a) Lizzie explained that the program uses a wind map because small project sizes make it cost prohibitive to install an anemometer or perform a major study to determine wind resource for project sites. The wind map is a predictive tool and is fairly accurate, but could be improved.
 - b) Energy Trust provided basic guidelines for contractors evaluating a site. The program has determined that more rigor is needed. We are now asking the contractors to show the methodology they are using, and are providing more guidance.
- 2) Refining estimations for generation
 - a) In addition, we are now more conservative in estimating the generation of the turbines. The program had allowed contractors to use manufacturers' estimates for generation, which tend to run higher than the actual generation experienced by projects.
 - b) Wind speed monitoring for installed systems was offered as an option via a bonus incentive. This will become a mandatory requirement on systems later this year, and additional funding will be provided to help offset the costs
- 3) Revising and improving standards
The program completed a major overhaul of installation standards, creating new sections on foundations and towers. This will be reviewed annually.

- a) Our inspectors have begun doing an inspection shadowing approach as the volume of the program is so low that it's hard to get enough systems to review to generate expertise. This allows for more learning.
 - b) The national electric code had previously been mute on small wind so it has been hard to develop inspection expertise among county inspectors. Now there is a code and inspectors are receiving code update training.
- 4) We are getting more particular about systems we will support with incentives. Independent third-party certification of systems will become a requirement starting in 2012. There is now a national certification body to evaluate systems and their performance claims. Currently 16 turbines are eligible for our incentives.
 - 5) Outreach to contractors and other programs in the nation to build understanding of performance and the market
 - a) We are reaching out to contractors and other state programs to gather more data for learning purposes. Lizzie said that because the small wind market is so contractor driven, and we have a limited number of data points, we need to draw as much knowledge as possible from other sources.
 - 6) Developing strategies for addressing emerging small wind products coming onto the market
 - a) Lizzie explained that there isn't much certification out there for small wind equipment, and many emerging products don't currently fit within our standard program requirements. She noted the program is considering an idea for creating a pathway for different types of products in the form of a performance-based incentive. This could support some learning and minimize risk to the program if these products don't deliver the generation as expected.
 - 7) Identifying good customers for wind
 - a) Lizzie said the program is working to identify good project candidates and engage with them. She explained that small wind only works for a segment of customers and we'd like to market to those that we know are a better fit. Generally speaking, these are rural homeowners or farmers with a lot of property, they have interest in energy solutions or wind in particular, and they have finances to invest.

The council asked questions about the number of systems that have been installed and received funding, about the approach to adding anemometer measurements to the program requirements, about plans to change incentives and the relative size of the Small Wind program in the Renewables budget.

Lizzie reported that approximately 35 systems have received Energy Trust incentives. Lizzie compared this to the 10,000 systems installed nationally, according to the American Small Wind Association, and said that only 10 percent receive state or third-party program support. She concluded that there are many hundreds of wind systems that are installed without participating in a state program. These are likely the folks who are very interested in wind and proceed even if their projects will not qualify for a program incentive. There was a general comment that those may be off-grid systems as well.

Lizzie said the program has learned more about small system anemometers and we will be specifying a set of features as part of our requirements revisions this year.

The program will be looking at changing incentives once the future of state tax credits is better understood. Lizzie noted that Energy Trust incentives have not been able to cover 100 percent

of above-market costs. Budget-wise, and in terms of numbers of projects, the Small Wind program is very small.

Robert Grott commented that at the end of the day, Energy Trust's Small Wind program is doing a good service for the state and interested parties by monitoring and validating generation from small wind.

Thor commented that zoning issues and noise issues in areas like Portland can be a problem. He said small wind needs the perfect confluence of rural characteristics, and separation of homes, to be successful.

Matt Hale said Oregon Department of Energy is in the early stages of planning a wind working group at Oregon Institute of Technology and that it will be synchronized with a geothermal working group.

3. Renewable activity update (Elaine Prause)

Elaine reminded the council of the budget process for 2011, where staff presented some key themes and expectations for the year. Elaine said at that time, staff was expecting the state tax credit awards to drive program commitments at a very fast pace early in the year. She also noted that the program expected increased activity due to ARRA stimulus funding in 2011. She offered the following update:

Solar:

Three rounds of Business Energy Tax Credit awards has greatly influenced the commercial solar program:

- Seven out of eight of Tier One recipients were solar projects
- We haven't seen any solar projects go through Tier 2 or 3; so it is just smaller scale
- We are right on track to meet goals for Pacific Power
- PGE we still see some room in the budget
- What's to come July 1st for the Business Energy Tax Credit: if \$150 million is still available on July 1 is yet to be determined. If that does open up, and projects need to complete by April 2012, there will probably be a large number of solar projects.
- Solar residential has been very active.
- Third-party systems have been active as well

Custom renewable projects in Biopower, Small Hydro and Wind:

- We saw some projects move through the Business Energy Tax Credit awards
- For Tier 2 and 3 we saw some unexpected results. We saw some turn down a certification because they couldn't meet the April 2012 deadline; one project may no longer need our funds
- Pipeline going forward:
 - Pacific Power pipeline looks strong
 - City of Medford project is moving forward
 - Three biomass projects
 - Two digesters
 - One woody biomass
 - One geothermal
 - Five hydro – three large scale, two mid scale
 - Community scale wind; one received a Business Energy Tax Credit
 - PGE pipeline – less activity here; forecasting carryover
 - Biodigester

- Two wastewater treatment plans
- Two small municipal hydro projects

Council members asked if we publish or report on the projects in our pipeline, the time horizon for commitments and the interaction between Energy Trust incentives and the Business Energy Tax Credit.

Elaine said we do not publish projects in our pipeline. When money is committed at a level requiring board action that becomes public information. She described the process of making a commitment with a project over a long period of time, noting that the process includes many conversations, program reviews, council and board approval, and then contracting.

Matt said Oregon Department of Energy takes into account other awards and financial incentives related to a project. He then said he is interested to know how many projects move forward without a Business Energy Tax Credit. Energy Trust knows of only one project that is trying to move forward with it. Elaine said there are also some projects in Tier 2 where our incentive may not be needed for the project to move forward. She noted that Energy Trust assumes our incentives are the last step in the financial process to determine what the above-market cost is. Joe noted that most projects won't work without a Business Energy Tax Credit.

4. RECs/WREGIS proposal (Betsy Kauffman)

Energy Trust staff presented the following findings from two years of research into the issue:

- Compliance RECs must be created in WREGIS. The process is complicated and costly.
- Energy Trust's current contractual RECs fall into three categories:
 - 92 percent—Utility-owned projects
 - Already in WREGIS, no further work necessary
 - 6 percent—Qualifying Facilities (seven biomass, hydro and geothermal projects)
 - Approximately \$190,000 in costs through 2025, yielding RECs for \$0.34
 - Energy Trust staff suggest considering paying the costs for the utilities and project owners to work with WREGIS to transfer RECs to the utilities
 - 2 percent—Net metered facilities (>2,700 solar, hydro and small wind projects)
 - \$6.25 million in costs through 2025, yielding RECs for about \$20
 - Energy Trust staff suggest finding an alternate method outside of WREGIS to account for these RECs

Council members discussed the issues and options and came to the following opinions:

- Qualifying Facilities (QFs)
 - The council generally, but not unanimously, supports working through WREGIS to have the RECs from these projects count toward the RPS. Two members disagreed, saying it's not worth the effort at this point.
 - Members support the idea of asking the OPUC who should pay the costs (both administrative and fee-based). OPUC staff commented that the costs might be considered recoverable costs of RPS compliance.
 - No one disagreed with the idea of having the utilities handle the administrative effort involved in working with WREGIS and registering RECs.
- Net-metered projects
 - There was unanimous opinion that the net-metered projects are too expensive to consider counting through WREGIS at present.
 - Oregon Department of Energy opposes any system for counting RECs outside of WREGIS.
 - OPUC staff indicated an outside system would require both OPUC and Oregon Department of Energy approval.

- RNP and the utilities are willing to have a separate system but recognize the role of Oregon Department of Energy and the OPUC in determining what meets RPS requirements.
- Oregon Department of Energy is willing to convene an effort to attempt to find a creative solution within WREGIS. OPUC and utility staff agreed with this suggestion.

Next steps:

1. In light of the costs involved in registering our net-metered projects and Oregon Department of Energy's willingness to work toward finding a more cost-effective solution within WREGIS, our next step is to work with Oregon Department of Energy on this problem-solving effort. This would defer disposition of these RECs to some later date.
2. For QF projects, staff will bring the issues, costs and council opinions to the Policy Committee, which will decide between two options:
 - a. Wait to have these RECs count toward the RPS until working with WREGIS is less costly and difficult for all; or
 - b. Move forward with having the utilities work with WREGIS to register these projects and count the RECs toward the RPS. Energy Trust would be willing to cover the costs and compensate the utilities for their efforts, pending a determination by the OPUC as to whether these costs are recoverable as part of RPS compliance.

5. Legislative update (Jeff Bissonnette, CUB)

Jeff Bissonnette provided an update on three main legislative topics—the public purpose charge, Renewable Portfolio Standard and the state energy tax credits.

On public purposes: No significant legislation has moved.

On the RPS: There were some bills on the RPS, the most significant of which was/is an attempt by Umatilla Electric Coop to exempt itself from RPS if its load grows. This does not appear to be moving forward. One bill is going to give PGE some clarity around transfer of Boardman from coal to biomass or another renewable resource to count to RPS. This is moving forward. It doesn't appear that any RPS bills will move forward beyond these.

Tax credits: The Business Energy Tax Credit and Residential Energy Tax Credit seem to still be alive as policy concepts, and going forward we have some viable policy frameworks to work with. There is a transition to separate the Business Energy Tax Credit into three different tax credits for manufacturing ("Mannie"), conservation ("Connie") and renewable generation ("Gennie").

Less good news is that the total money allotted for all tax credits is \$10 million. That is for all tax credits for the state for the biennium. The Business Energy Tax Credit (or its offspring) will have an extended sunset, until 2018. Where we sit today is that we have a policy framework but very little funding. We have an extended sunset date, and come back February at the next revenue forecast we can see if there is more money for tax credits.

Money that is currently allocated in this biennium and money allocated for pre-certifications lasting through July 1, 2012, is still available. Some projects will not be able to finish in that timeframe and it is unclear if the sunset extension will provide relief in this regard. There is approximately \$100 million to \$150 million for those projects. This is good for shorter-term projects but still difficult for longer-term projects to take advantage. The good news is that they didn't take the money back and conversations may evolve to discuss how to overlap the old Business Energy Tax Credit with the new "Connie" and "Gennie".

The revenue forecast was up but not as much as some expected. It didn't come close to closing the revenue holes and emphasis will still be on cuts. New revenue will fill human service needs. This means that the reduced figure of \$10 million for tax credits may stick. The pace of the session is also picking up and could mean a mid-June close.

6. Public comment

There was no public comment.

7. Meeting adjournment

Betsy thanked all council members for their participation and adjourned the meeting at 12:05 p.m. There will be a one-hour conference call June 22 to review a 4.8 MW biopower project in the Pacific Power service territory proposed to receive an incentive of \$2.5 million. The next full council meeting is July 20, 2011.