RENEWABLE ENERGY ADVISORY COUNCIL
Notes from meeting on January 12, 2011

Attending from the Council:
Jason Busch, Oregon Wave Energy Trust
Eric Chung, Pacific Power
Megan Decker, Renewable Northwest Project
Troy Gagliano, enXco
Margie Gardner, Bonneville Environmental Foundation
Ben Henson, Renewable Energy Solutions
Thor Hinckley, Portland General Electric
Suzanne Leta Liou, Res Americas
Glenn Montgomery, OSEIA
Frank Vignola, University of Oregon

Attending from Energy Trust:
Doug Boleyn
Kacia Brockman
Pete Catching
Fred Gordon
Hannah Hacker
Jason Jepsen
Jed Jorgensen
Betsy Kauffman
Dave McClelland
Elaine Prause
Thad Roth
Lizzie Rubado
John Volkman
Peter West

Others attending:
Jeff Bissonnette, CUB (by phone)
Theresa Gibney, Corvallis Sustainability Coalition
John Reynolds, University of Oregon and Energy Trust board of directors
Elizabeth McNannay, Resource Consultants
Heather Laird, Resource Consultants
Mark Pengilly, Oregonians for Renewable Energy
Vijay Satyal, Oregon Department of Energy
Dick Wanderscheid, Bonneville Environmental Foundation

1. Welcome and introductions
Betsy Kauffman called the meeting to order at 9:31 a.m. The meeting immediately launched into item two as Jeff Bissonnette, presenter, was time constrained. After the preview of the 2011 legislative session from Bissonnette, everyone introduced themselves. Betsy welcomed new RAC members, each giving a brief introduction: Ben Henson, Jason Busch and Suzanne Leta Liou. New Energy Trust staff were introduced: Jason Jepsen (residential solar manager) and Lizzie Rubado (transitioned to managing Small Wind program). The minutes from November 2010 were approved and the January agenda was accepted.

2. Preview of the 2011 legislative session
Jeff Bissonnette from Citizens' Utility Board gave an update on the upcoming Oregon legislative session. John Kitzhaber was sworn into office on Monday. The Senate makeup is 16 Democrats to 14 Republicans; Senator Peter Courtney is the Senate president (for his 5th term). The House makeup is split 30-30 between both parties, and for the first time, there are co-speakers: Rep. Bruce Hanna and Rep. Arnie Roblan. Each House committee has co-chairs and equally divided membership between parties. Each co-chair has veto power, unless you have the majority of the committee representing an equal number of Democrats and Republicans supporting a bill. The Senate is expected to follow normal operations, where committees just need a majority. We are unsure how co-speakers in the House will operate among themselves and with the Senate president.

Jeff doesn't expect much renewable energy action. Top of mind is the defense of the public purpose charge during development of the budget (state is facing an approximately $3.5 billion deficit). He has seen attempts to bring public purpose funding into the state budget during past sessions, and expects similar attempts this year. He does not expect those attempts to be successful.

Jeff said the state's tax credit programs have really driven Oregon's reputation as a clean energy leader. It's not clear right now what will happen to these during the session. One key issue is that utility-scale projects will probably not be part of the Business Energy Tax Credit program. There is support for small-scale renewable energy projects.

Jeff noted that the $3.5 billion deficit doesn't include the Business Energy Tax Credit or the Residential Energy Tax Credit past its sunset (July 1, 2012). This means that if the program is extended at all, it would need to get back into the budget. CUB and others are working on messaging and rebranding the program in hopes of a sensible outcome involving dedicating some portion of state finances to the program.

We're likely to see the feed-in-tariff pilot being allowed to be continued. It has been going on for six months with only two sign-up periods. The general consensus is to let the pilot run for a while.

Energy efficiency will have more activity; in particular, energy efficiency retrofits at schools.

Betsy asked about a proposal circulating to divide the Oregon Department of Energy and send its varying functions to different state agencies. Jeff said there are a number of wide ranging proposed "fixes" to the Oregon Department of Energy. Rep. Bailey's proposal would move the tax credit portion to Business Oregon, facility siting to Land Use, policy/regulatory to the Oregon Public Utility Commission and any remaining functions to the Governor's office. Senator Dingfelder's proposal is for an energy commission to oversee the department. Senator Beyer proposes to expand the Oregon Public Utility Commission to take on Oregon Department of Energy duties. Jeff expects a middle of the road fix will pass rather than the extreme measures on both sides It all comes down to cost and what the new governor wants to do. Stay tuned.

Troy Gagliano asked about the odds of ending the Business Energy Tax Credit earlier than 2012. Jeff said that would be unlikely.

3. Hydro resource assessments

Jed Jorgensen presented. He gave a brief overview of the history of the program. The first resource assessment was conducted in 2008 and published January 26, 2009. Project owners typically approached Energy Trust and we had supported two irrigation conduit projects (Swalley and Central Oregon), a municipal water project (Albany) and a backyard project (Bugni). The assessment by Summit Blue identified the following challenges: lack of internal expertise on the part of project proponents around energy production, complex permitting processes and the interconnection process. Projects that were easier to identify: pressure reduction valves (typically in municipal water systems), canal pressurization (irrigation districts), water storage facilities, aquifer storage and recovery and expansion at existing facilities. After the assessment, we developed guidebooks to the permitting process which dramatically reduced the permitting time for the last three projects we have helped.

Current program offerings:

- Project incentives based on an above market cost analysis
- Project development assistance of 50 percent of cost up to $40,000 reimbursed for grant writing, feasibility studies, design, interconnection and permitting

The program completed two additional assessments in November 2010 to spur greater action. A mapping and resource assessment identified hydro project possibilities at 22 locations in Wallowa County with opportunities for patrons of irrigation ditches, and a larger assessment

looked at hydro potential for irrigation districts across Oregon. Both assessments used water rights and GIS data.

Hydropower Potential and Energy Savings Evaluation of Irrigation Water Providers of Oregon, by Black Rock Consulting. All projects need head and flow. With irrigation districts, the way to get at the potential was screening people for their water rights, and then we looked at those water resources to see if there's enough head for a project. Fourteen overall locations were identified with 29 sites total, and potential capacity of 21,440 kilowatts. Jed displayed a table of those sites. He reminded the council that this isn't the entire state (excluded some districts, such as Klamath). Each site was detailed in the report, including water provider, level of interest at the district, interconnection utility, resource estimates, power potential estimates, project development and cost estimates, and potential flaws. Projects would mostly be qualifying facilities needing interconnection.

Scoping Study of Hydropower Potential in Wallowa County, Oregon by Renewable Energy Solutions, LLC. Twenty-two locations identified ranging from about six kW to about 400 kW, with potential total capacity of just over one megawatt. Individual information for each site is detailed in the report. The majority would be net metered. A meeting with some landowners in December showed high levels of interest and we discussed next steps with them. There is potential for a different process with these projects than traditional projects. John Reynolds asked how many projects are already piped and which ones could be piped for potential water savings in addition to energy generation. The program has not yet started conversations with the U.S. Department of Agriculture, but will look into this soon. There's one system to come on-line in the county in the next few months and this could be a demonstration project for the community to see how the process works. Vijay brought up considerations with water rights. Jed said it is easier when the water rights are secured. Ben said water rights are an important discussion topic and some projects take negotiation with the ditch companies. Department of Interior's WaterSmart project was brought up. Thor asked whether these projects are considered renewable. Jed said the program understands the RPS to allow new hydro projects to be considered a renewable resource. Only existing projects (pre 1995) need to be certified and are regulated under different requirements. Betsy clarified that we are mainly interested in securing new projects, new generation.

Margie Gardner: Seems interconnection costs are relatively high and maybe expected to come down but where does this cost rank in terms of the project?
Jed said the report's results are useful from a high level, but each site will need to go through individual analysis to determine real costs, such as interconnection.

Suzanne: What is the statewide potential capacity for hydro?
Jed: Hesitate to throw out a number because the studies we have completed do not address all the resources that are out there.

Next steps are to look at what can we learn from this and apply to the next study, talk to the U.S. Departments of Agriculture and Energy and to get the word out.

4. Outline for revision to performance benchmarks

Elaine Prause presented. As part of our realignment of activities toward more early stage projects and market assistance, we need a revision of our Oregon Public Utility Commission performance benchmarks to measure the value of what we are bringing to the table. Elaine reviewed the history of this ongoing discussion. Elaine said the Oregon Public Utility Commission is interested in this development and willing to work with Energy Trust in the short term on these goals. Both efficiency and renewable performance benchmarks will be revisited

this quarter. Draft timeline: Work with the Oregon Public Utility Commission through quarter one 2011, update RAC March 9 and draft benchmarks to Board of Directors March 30.

The goal of this discussion is to share our proposed methodology to defining benchmarks and to gather feedback from the RAC to help prepare for upcoming Oregon Public Utility Commission workshop activity. Because of our more focused emphasis on early stage project and market development, we need to expand our benchmarks to include measurement of the value this work brings. RAC briefing paper provides background and proposal description.

Consider measuring activity we influence at different points along the development timeline. Propose to track the following (setting benchmarks for each major category):

1. Installed generation
    a. Projects which received our incentives post completion
        i. Set a range of installed generation instead of one number, considering the uncertainty of some funding mechanisms (state tax credits, federal grants)
    b. Projects which received early stage assistance only
        i. Track projects that received early stage development assistance but were able to complete without a project incentive from Energy Trust. Limited data exists for this class of projects but we expect to see more of these over time as we have less money for project incentives. An evaluation component would apply where we'd look to answer "Was our help influential to the project's success?"
2. In progress
    a. Actions reducing barriers
        i. Five general barriers: Lack of Awareness, Cost, Delivery Market Health, Regulatory, Time and Interest
        ii. For each barrier, what actions do we take to lessen that barrier
        iii. How can our influence be measured?
    b. Example table for small renewables in general, would need to look technology specific
    c. What are the appropriate time spans for measurements?
    d. Is there flexibility in the measurement
    e. Define baseline and evaluation plan

Following this analysis of barriers and impacts results in a mix of quantitative and qualitative measures for development progress. The baseline determination would be critical and similar to defining the "state of the state" for each market.

Margie: The vast majority of your budget is spent on project incentives; what percent of the budget is shifting away from incentives in this proposal?
Elaine: Today about 10-15 percent of program budgets go to early stage assistance work. We're expecting that to double or triple by 2012 leaving less money available for project incentives.
Margie: Big shift in your focus for the program, away from "we provide cash" to "we develop stronger markets."

Margie: It's worth also researching and comparing Oregon to other comparable markets (maybe Washington) to see what were the common and differing factors contributing to successes and failures. The research done over time could be very informative.

Suzanne: Structure your evaluation by looking at the stages of projects for each technology. Are they continuing to progress?

Theresa: There's a point that the quantitative data needed ($/kW) shifts to qualitative (interconnection costs declining or interconnection knowledge among project owners increasing – leading to quicker utility approval).

Frank: Look at where you started and what you've been able to invest throughout the years, you are a major influence among many. Track over time the improvements in projects: timeline decreasing between proposal to completion, change in costs. Look statewide and analyze Energy Trust's influence on those changes, and most importantly, look at jobs impact.

Vijay: Caution that though trend analysis is interesting and informative, you have different regulatory processes over time affecting each technology in dissimilar ways that may be absent in the analysis.

Fred: These issues are similar to what we face with energy efficiency. The difference being renewable energy doesn't see the high volume of projects efficiency does. What we're interested in seeing is our influence: would projects or market changes have happened without Energy Trust? You do this largely by asking the key players.

Eric: This is a circular process we're talking about. Need to be open to modifying the process, evaluation methods and benchmark setting.

Fred: The category of costs can be useful short term but we cannot forecast for long term.

Suzanne: Be cautious with tying Energy Trust to driving market activity and change, many players with various levels of influence, difficult to attribute benefits.

Elaine: The proposal benchmarks would need to have considerations allowing us to remain flexible in our approach as external forces influence the market. Focusing on trends versus forecasting or expecting absolute numbers, being aware of the interaction of barriers complicating measurement of progress, and keeping the evaluation targeted and not overly complex.

Megan: Recommend working on the completed projects and case studies before the Oregon Public Utility Commission workshops.

Mark: Also recommend to measure jobs creation. This an increasingly important metric showing value received for public/ratepayer funds.

Frank: Recommend going back and re-surveying those initially surveyed as Energy Trust programs came on-line.

Eric: Recommend not setting a range for installed generation but resetting the floor and leaving it at that.

Thor: Look nationally at what's used and reported on by other organizations that do similar types of work.

5. Program updates

The programs are awaiting the Business Energy Tax Credit announcement: The Oregon Department of Energy has not yet released the latest Tier 2 announcements. We have several projects awaiting the announcement. Our goal is to commit as much as money, and get as

many projects going, as we can. We had hoped to bring you an update today but it looks like we'll do that at the next RAC.

Interconnection: AR 521 rules put in place about 18 months ago. As people have worked with them it's become evident that there are kinks to work out. We convened a meeting with utilities, developers and the Oregon Public Utility Commission to discuss.

Are the standards strict enough for this particular situation? The developers and utilities have different views of the rules and what is necessary in terms of studies. The developers want things to be easy. The utilities don't think things are so easy. It was resolved to look at the standards. Energy Trust will also try to help projects on a specific basis. The cost variation between the facility study and what is installed is large. Utilities understand this but developers don't. Utilities generally don't send engineers to the sites during studies, but if they did they might get a tighter cost range. This would increase the cost of the studies.

Troy noted that a lot of folks assume that when they get a utility one line drawing that the utility actually knows what the infrastructure is. But it could be that the utility hasn't visited the pole and seen the equipment in 15 years. That was a wake-up call. Getting people out to look at the infrastructure is key.

6. Public comment

Energy Trust is considering moving the April RAC meeting to accommodate the Northwest Environmental Business Council conference, which is scheduled for the same day.

7. Meeting adjournment

Betsy thanked all council members for their participation and adjourned the meeting at 11:55 a.m. The next meeting is March 9, 2011.