RENEWABLE RESOURCE ADVISORY COUNCIL
Notes from meeting on March 19, 2008

Attending from the Council:
Thor Hinckley, PGE
Robert Grott, Northwest Environmental Business Council
Lori Koho, OPUC
Frank Vingola, UOSRML
Doug Boleyn, Cascade Solar Consulting
Carel DeWinkle, ODOE

Attending from the Trust:
Lizzie Giles
Peter West
Betsy Kauffman
Erin Johnston
Brian Thornton
Tara Crookshank
Alan Cowan

Attending from the Board:
John Reynolds, University of Oregon

Others attending:
Kip Pheil, ODOE
Alan Hickenbottom, Tanner Creek Energy
Kyle Kobel, Tanner Creek Energy
Craig Stewart, Tanner Creek Energy
Dan Dettmer, Advanced Energy Systems
Joe Reinhart, OSEIA

1. Welcome and Introductions

Peter convened the meeting at 9:40 am. The January notes were adopted without change.

2. Renewable Energy Credits Eligibility and Reporting

Kip Pheil of Oregon Department of Energy (ODOE) presented the final rules for the Renewable Portfolio Standard (RPS). SB 838 created different obligation for utilities based on retail sales. Large utilities have obligations beginning in 2011. If a utility changes categories (for example, Umatilla may become a large utility in the next two years), they will need to comply with the higher obligation.

Eligible resources have split into four categories. BPA designated an environmentally-preferred product. The second category is facilities that began operation before Jan 1, 1995. Utility owned, certified low-impact hydro sites can be credited with up to 50 aMW each year. ODOE is responsible for designating what qualifies as low-impact. In addition, facilities with incremental output due to efficiency upgrades after Jan 1, 1995 can also be used.

The third category is other renewables (geothermal, solar PV and thermal, wave, tidal, ocean thermal, biopower and wind) in operation of Jan 1, 1995 qualify. There are restrictions on biopower.

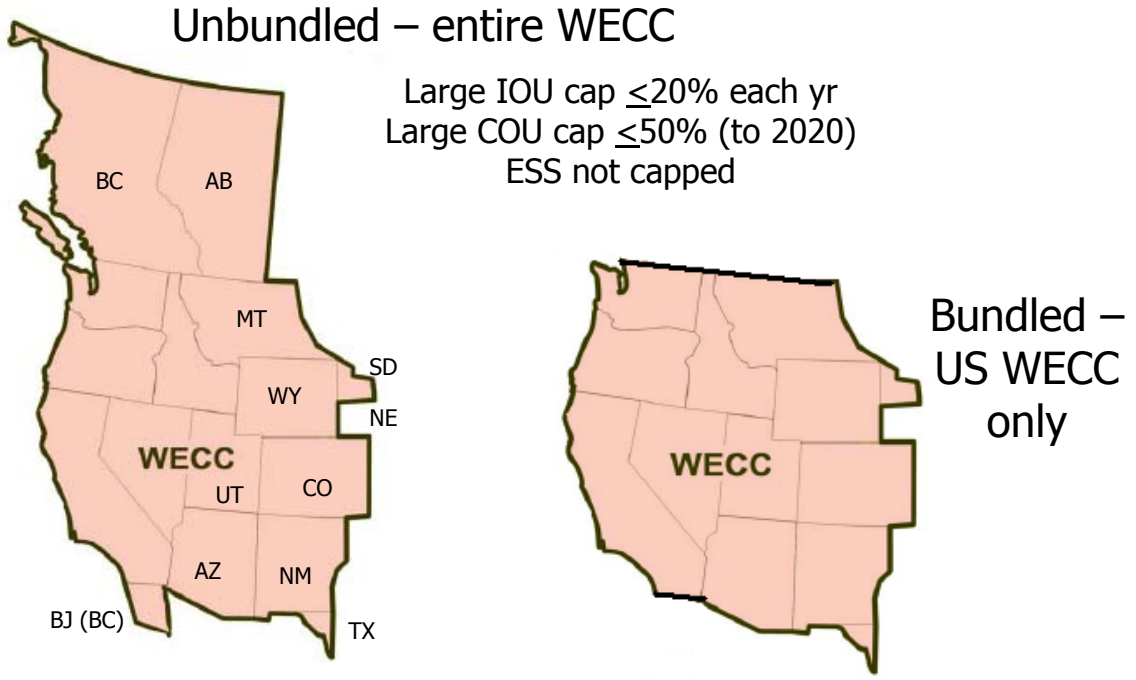
Electricity from hydrogen qualifies if the hydrogen is derived from any of the approved renewable resources.

Utilities will meet obligations using Renewable Energy Credits (RECs). January 2007 was established as the oldest REC creation date that can be used to comply. Old RECs must be used

before new RECs. Western Renewable Energy Generation Information System (WREGIS) is a group effort to provide a seamless way to track who has made and claimed RECs.

Bundled RECs are a transaction in which the energy and the RECs are transferred together. Unbundled RECs are transactions in which the REC is disassociated from the energy. If you have 1 MWh of qualified production you achieve one REC. The vintage of a REC is determined by the month and the year in which it is created.

In the Oregon RPS, unbundled RECs can come from anywhere within the Western Electricity Coordinating Council (WECC). Large IOUs cannot meet more than 20% of their annual obligation with unbundled RECs, and large COUs cannot meet more than 50%.



WREGIS was created primarily to meet the needs of California's RPS obligations. In Oregon, the certificate needs to be Oregon certified. If a utility has non-Oregon certified RECs can be used for voluntary programs, but they cannot be used to meet the RPS obligation.

TO obtain Oregon-certified RECS, the organization must become an account holder (which Energy Trust cannot be). Next, you register the generating unit (GU) and have it certified for Oregon. Lastly, you report the generation in MWh.

Peter added that Energy Trust cannot register the RECs because the system is designed for the power generator or an assigned agent (which can be the utility) to be the registrar. Kip said that the most inexpensive classification for a registered REC producer is $200. If you have a small system (ie a small photovoltaic system) it might cost more to register the RECs than the the value of the RECs produced. For Energy Trust, this ultimately means that RECs from small projects cannot count towards the RPS obligation.

WREGIS came online in June 2007, which means that there is no generation in the system that predates this time. Frank asked if net-metered systems count for RECs. Kip said that the problem is that you must have a physical meter reading to qualify. If program participants do not

report their production annually, the RECs won't count. Peter added that you need a separate meter to record the generation and an annual reading to comply.

Essentially, every residential facility cannot count because it is overly burdensome to do so. Each customer would need to sign an agreement assigning the utility as their agent, and then allow access to their home to read the meter. Peter said that Energy Trust is requesting that WREGIS accept a rigorously tested sample of production.

Doug asked is self-read metering would count. Peter replied that it is unclear if self-read metering qualifies for smaller projects. Kip added that California has not registered with WREGIS yet for a number of these issues. Ideally, other entities will raise these concerns.

Carel said that for small systems, unless RECs become outrageously valuable, it will never be cost-effective to capture the production. Peter replied that it is the belief of some stakeholders that if we don't have registered green tags, the energy produced and projects do not count.

Frank said that if the rules moved forward as stated, the small solar program would cease to exist. Peter replied that the program would persist, but the production from the installed systems wouldn't count. Staff will continue to work with WREGIS to resolve the problem in the future.

Lori said that the OPUC would be satisfied with not registering/metering small system RECs as long as the RECs are not resold to meet the RPS. It doesn't really matter whether Energy Trust retires them, the homeowner retires them, or they just can be qualified and are effectively retired.

In the short term, there will be work to determine the process and cost for registering retro RECs with WREGIS. Qualifying post-1995 upgrades, developing a national certification of low-impact hydro and evaluating other renewable resources are also on the near-term agenda.

3. OPUC Update

Lori explained the status on interconnection rules. The issue has been sitting with the ALJ for several months. The ALJ has rearranged and rewritten the rules, and they plan to reopen the docket for comment. The OPUS has not had time to review the new material.

Questions of whether large solar financers working with numerous projects under the same business would have to register as an ESS have been raised. Doug B. said that his readings indicated that any provider of solar is not considered a regulated utility. Lori replied that an ESS is regulated differently. This is an unintended consequence. EOJ will ask the commission for a declaratory ruling. ESS should not be applied because these users are not accessing the distribution system. Peter added that some entities have avoided this by creating individual LLCs for each project.

4. Program Updates

Wind

Alan reported that the community wind program is actively working with three projects, and is providing two 50 meter and a 60 meter anemometer. One is in conjunction with OECDD as part of Energy Trust's cost-share matching offer. The program is also working to develop criteria for working with reconditioned turbines. Several of these projects are proposing to work with reconditioned turbines.

The small wind program was launched in October of 2007. There have been four trade ally trainings, with 11 enrollments. The program is preparing to hold several wind workshops, and has several demonstration projects in the works in Hood River at the IBEW in Portland. The program approved its first application last week.

Biopower

The 1.2 MW Rough and Ready wood waste project was commissioned and operational as of February 2008. The Columbia Boulevard Wastewater Treatment plant will be online in April. The Gresham Wastewater Treatment plant gas treatment system is performing better than anticipated with lower maintenance costs. Warm Springs has been delayed due to the expiration of the ITC.

Twelve feasibility studies have been completed, with one underway. Last fall, the program launched the dairy initiative with outreach support from OSU and the Oregon Dairy Farmers Association. 30 dairies have been contacted, with 9 feasible farms. A standard offer has been developed, with an online calculator tool to determine the estimated incentive.

Open Solicitation

The Open Solicitation Program (OSP) is focusing on hydropower, geothermal, and emerging technologies. New proposals for solar projects are now being reviewed and funded in the solar program. The biggest challenge for the program is the long time-frame involved in bringing projects to fruition. Generally, it is a two to three year cycle for a project to go from idea to feasibility study to construction to completion.

Four projects are slated for completion in 2008: East Portland Community Center (87 kW), Portland Habilitation Center (870 kW), Albany Hydropower (500 kW), and Bugni microhydro(4.4 kW). With the exception of the Albany project, these projects were approved in 2007.

There are two projects that have been approved by the board, Swalley Irrigation District Hydropower and Central Oregon Irrigation District, but construction is not yet underway.

To keep the pipeline filled, there has been making a big effort to fund feasibility studies. The program recently completed three studies with City of Astoria Hydro and Wind (Astoria is about to issue an RFP looking for a developer for a wind and hydro project), Town of Lakeview Geothermal and Hood River County Hydro.

Three other hydropower studies are in process. The two water district studies are of great interest to us because they're looking at a new market – projects within city water systems: Talent Irrigation District (Spring, 2008), Tualatin Valley Water District (Summer, 2008), and Crystal Springs Water District (Summer, 2008).

As a step toward a full feasibility study, the program has also completed several small scoping studies that delve into an idea enough to determine if there is sufficient project potential to warrant a feasibility study.

Two project proposals have required a higher-than-usual degree of hand-holding. As a result, the program is providing some technical assistance to the City of West Linn municipal hydro and OIT Geothermal electric project.

In the area of emerging technologies, the program is exploring roles we can play in encouraging or somehow being involved in the development of wave power. Other than monitoring developments, Energy Trust has not yet played a financial, advisory, or other role in the wave power industry. The program has contracted with a consultant to explore the wave power industry and to suggest possible roles we might play. Staff has also begun attending meetings of the Oregon Wave Energy Trust to more closely monitor progress.

Solar

The residential solar program is taking action on the recommendations from the Smart Power market research performed in 2007. CSG is incorporating solar into their outreach and marketing, with an emphasis on solar water heating. Solar is now recommended by Home Energy Reviewers to homeowners with good solar access. In April, the program will begin offering free residential solar site assessments (called Solar Energy Reviews) through a pilot in the Portland-metro area.

To target the new construction market, staff is working with the Home Builder's Association to educate builders and subcontractors about the benefits of incorporating solar on new homes. Over a dozen reservations for adding solar to ENERGY STAR® new homes have been made. The solar program is collaborating with the ENERGY STAR® New Homes program, Earth Advantage and ODOE to promote the new High Performance Home (HPH) standard. HPH require on-site generation, which will be met by solar in most cases. Builders who achieve this high benchmark will be eligible for several additional tax credits and more generous Energy Trust incentives.

The commercial solar program is working to manage the demand for large commercial solar electric installations, and multiple site installations for the same host or participant organization. Applications for numerous third-party owned projects have been received by the program and are undergoing review by staff. The failure of the Investment Tax Credit (ITC) renewal to date is driving an early surge of applications that will likely level off in the next couple of months, if the ITC is not renewed. Vendors are seeking to lock up agreements early enough to allow completion of projects by the end of 2008. The program has created some new limited incentives to understand the market and provide some opportunity for multiple site projects for the same host or participant, and to reduce the incentive cost per Watt. We are also setting limits and adjusting incentive rates, including lowering the nonprofit/government rate to the same rate as for commercial.

The biggest challenge for the program is managing this unprecedented demand within the boundaries of the allocated budget for these types of projects.

5. Public Comment

Peter adjourned the meeting at 11:50am.