RENEWABLE RESOURCE ADVISORY COUNCIL
Notes from meeting on October 22, 2008

Attending from the Council:
Doug Boleyn, Cascade Solar Consulting
Carel DeWinkel, Oregon Department of Energy
Kari Greer for Kyle Davis of PacifiCorp
Suzanne Leta Liou, Renewable Northwest Project
Frank Vignola, University of Oregon

Attending from the Trust:
Kacia Brockman
Pete Catching
Fred Gordon
Ben Huntington
Erin Johnston
Jed Jorgensen
Betsy Kauffman
Sue Meyer Sample
Pati Presnail
Thad Roth
Lizzie Rubado
Brian Thornton
John Volkman
Peter West

Attending from the Board:
John Reynolds

Others attending:
Heather Beusse, EnXco
Jon Miller, EnXco
Mark Hughey, Green Energy Management, Inc.

1. Welcome and Introductions

Peter West convened the meeting at 9:40am. Everyone in attendance introduced themselves. The minutes for the previous meeting and the agenda for the current meeting were adopted without change.

2. Renewable Energy Working Group Report

Cylvia Hayes, co-chair of Oregon s Renewable Energy Working Group (REWG), gave a phone presentation on a report the REWG recently submitted to the governor relating to the implementation of Oregon s Renewable Energy Action Plan.

Cylvia explained that the REWG is body appointed by the governor. The REWG had about 35 members when it first met for the 2007 legislative session. The group is now up to about 50 members and it is co-chaired by her and Mike McCarthy. This year the group split into the REWG and an Energy Efficiency Working Group (EEWG). Clark Brockman chairs the EEWG. Cylvia feels that some big concepts for the 2009 legislature are likely to involve efficiency, such as trying to get additional energy efficiency technologies to qualify for the BETC.

Because of the state s fiscal situation she feels it is unlikely any legislative concepts with budget consequences will go through.

The REWG worked in subcommittees to build its list of legislative concepts. Then the group did an informal poll of its members to rank the nine concepts that resulted. The order represents both popularity and lack of controversy.

1. Oregon Green Jobs Initiative. This is still a nebulous proposal. Lots of people want to get on the green jobs bandwagon, but there aren t any specific, substantive proposals at this time. The REWG wasn t sure they were the right group to develop the initiative but saw no one else leading, so they took up the charge. Cylvia is trying to get stakeholders such as Brad Avakian and the governor to meet to get everyone on board and create a substantive proposal with desired outcomes.

2. Renewable Energy Research & Development, Commercialization, and Manufacturing. This concept is focused on supporting the development and improvement of renewable energy technologies in Oregon; above and beyond what is currently available via the Business Energy Tax Credit. The concept would establish a corporate income and excise tax credit for certain facility costs of business firms within the renewable energy sector. It would be to help construct facilities and engage in business operations in which average annual gross payroll and increase in number of employees meet specified requirements.

3. Business Energy Tax Credit (BETC) Transferability. This is essentially a cleanup of the BETC program. It would clarify that a facility tax credit may be transferred to a partnership, corporation, limited liability company, trust or other entity. It would also permit the transferee of a facility tax credit to further transfer the credit to another person or entity, including a shareholder, member or partner of the transferee.

4. Renewable Energy Research & Development, Commercialization, and Manufacturing. This concept is related to Number 2, but was less popular among REWG members. The concept would establish a grant program to incent new investment and job creation for renewable energy firms conducting research, development, commercialization and manufacturing of products used in the generation of renewable energy. This concept requires a whole new pocket of money be found, so it may not get anywhere.

5. Third-Party Ownership of Net Metering Facilities. This concept is a response to the concerns raised by PacifiCorp earlier this year about applicability of certain regulations. The concept supports the OPUC position and makes the law clearer.

Betsy asked why there wasn t universal support for this proposal. Cylvia said that the REWG is not a love fest. It includes a broad spectrum of stakeholders.

Carel asked how this would affect consumer owned utilities. Cylvia said this was a great question, but wasn t sure what the answer was. She said that would have to be asked at the next REWG meeting on October 29th. Frank said that net metering has mainly been dealing with private IOUs and that COUs have been on a different path.

6. Business Energy Tax Credit (BETC) Energy Fund. This concept addresses the concern that companies without a tax liability can t find BETC pass-through partners. This proposal would create a fund to take the place of a pass-though partner. Individuals or corporation would make a contribution to the fund and then projects would withdraw from fund. The concept should be revenue neutral.

Peter said this is modeled after another state program that works well. It should make things easy for small and medium sized projects, lowering transaction costs.

Suzanne said there are obviously limits to corporate tax credit appetite, but there are lots of individuals with taxes that we can t tap into at current time. This is less about corporate taxes and more about expanding the pool to individual tax payers.

7. Insurance for Renewable Energy Projects. This concept could take the form of a government-supported program to assist renewable energy projects that have difficulty obtaining affordable insurance. The concept has lots of support from entrepreneurs on the REWG. Others need more information, especially about potential fiscal impacts.

Peter said this comes out of the growth of the industry. As a projects approach an insurance company, if company doesn t have a risk-pool, all the insurance contracts become one-offs, The insurance companies don t know the risks involved, so they don t know how to price insurance. If the state can step in and get something going, the insurance companies will get to benefit from that experience. This concept is only being explored in solar right now, but could get to biomass and small wind. Robert Grott has been spearheading this for NEBC.

Cylvia said there are questions about costs and risk to the state.

8. Production-Based Incentive Pilot. This concept would authorize the OPUC to establish a pilot production based incentive program for solar. Also known as a feed-in tariff, the ides is to set a price for solar electricity that is high enough to motivate customers to install system and sell the electricity to the utility. Rather ten being paid and incentive up-front, the customer will get paid over time for the amount generated. Cylvia said this was the most controversial concept put forward. The idea is to try a pilot feed-in tariff over five years to see if it produces better effects than the current system.

Peter mentioned that Suzanne proposed a legislative concept on the issue and asked her to describe it.

Suzanne said the legislative concept in the REWG packet is not up to date. The separate concept given to RAC members was the correct document. Her document describes the purpose of the pilot and what the program boundaries would be. There is not much detail yet as a committee is till trying to figure out costs and other issues. The committee started out trying to get a sense of the program scope. That scope was given as 2MW for residential, 5MW for commercial, and 10MW for utility scale projects. If you ran the program until 2025 the peak cost would be $50 million annually. The governor s office supports this, but thinks it will need to be financially supported in part by the state, either through utility bills, through the BETC, or some other mechanism. Suzanne thinks this will be difficult to achieve given the state budget. She doesn t think it is off the table, but it would be difficult to run the program based solely on rates.

Suzanne said she wants to refocus the scope of program to determine final costs. The utilities want to see lots of projects if they are going to ask for rate payer dollars, so they may want to focus on residential installs versus commercial or utility scale. If the program was just residential it would cost more like $20 million annually. But how much of that cost is actually a benefit to rate payers? What are the values of RECs, offsets, the energy value, and the distribution cost savings? They have asked utilities to analyze what the benefits are if the program will be in-part or wholly rate-payer supported. The OPUC and utilities will need to know benefits and there will have to be a new authority to do this in statute. It is unclear where OSEIA is on this bill. If something is going to be moved forward that will have to change.

Frank said the OSEIA board is going to retreat in November and this will be discussed there. There is a new executive director who will be soliciting feedback from members. There is disagreement within the organization between feed-in tariffs and quotas.

Suzanne said she sits on an OSEIA subcommittee which has never expressed concern about this idea, but it is unclear where leadership is. Peter noted the previous executive director of OSEIA supported the concept and a member of the OSEIA board has advocated for it in the REWG subcommittee that was asked to flesh out the details

Peter asked Suzanne why the one sector that needs the least help, residential, is the one that is being explored? Energy Trust can t meet commercial need and demand right now. Why is the group exploring residential? Heather echoed this question. Lizzie said the number one barrier to residential projects is still up-front costs.

Suzanne said the utilities have asked Energy Trust for more data. They are struggling with the limited funding issue. They want to work with something that is getting traction in the legislature.

Suzanne says the pilot incentive would be in addition to other state incentives. If you are a customer you could choose to work with existing Energy Trust and RETC incentives or you could go with the feed-in tariff plus the RETC. If you are a commercial customer the tariff would be high enough that you wouldn t need a BETC. It is difficult to discuss details like this without making decisions about the project s scope.

Carel asked what the goal of the pilot is in the residential sector, where other programs are already working very well? We might find that feed-in doesn t work for this sector where it might work better for other sectors. Some people have talked about increasing the PPC to pay for this. At $20 million that is twice the annual revenue of renewable energy programs at Energy Trust. Energy Trust is not a pilot project, so this is a shocking amount of money.

Frank said the concept is still under development. The level where rates are paid has to be worked out, as well as whether it is a substitute for the RETC, etc.

Jon Miller said he has been dealing with tariffs in Ontario and said he ll contact Suzanne about things that have work and not-worked.

9. Business Energy Tax Credit (BETC) Changes for Fuel Cells. This concept would amend BETC standards to provide for a 50% tax credit for all fuel cell systems. Renewable energy fuels already qualify, but the industry wants all fuel cells to qualify. Cylvia thinks this is more of a conservation issue but the EEWG group didn t want it so it came back to REWG. It is last in terms of current support.

Other REWG Issues. Beyond the above issues, Cylvia said she has been contacted about having the REWG add solar thermal to the RPS, as has been done in other states. There is concern about opening up the RPS, but the idea is being considered. She s also been contacted about difficulties developing renewable energy projects on state lands. There was a bill passed last session that should have addressed this, but perhaps there is more work that needs to be done.

John Reynolds asked if she meant thermal electric. Cylvia replied she was referring to hot water and adding it as a renewable.

Peter noted next REWG meeting is OCT 29th in Cascade Locks.

3. Draft Budgets 2009 - 2010

Peter introduced staff s first crack at the budget. He said the process has been similar the last two years, but the numbers have changed. He asked if anyone sees errors to please point them out.

In 2008 we ll have almost 35 aMW, 31 of which is Goodnoe Hills. It is the most we ve done in any one year. Our cumulative goal is now at 66% of the program s original goal. He recalled many people thinking the original goal was pie in the sky. He is proud of the accomplishments and the work of the staff. We partner with ODEO and they deserve credit as well.

Now the program has refocused on 20MW and less, phasing out the utility scale program. We have provided a lot of feasibility and technical assistance studies, as well as resource assessments, and have helped with applications to the USDA, CREFF, and REFF. A lot has been active work with municipalities.

From 2003-2008 ETO s spending has been fairly balanced in terms of programs, but when you look at resources 45% of the funds have gone to Solar. The reason is that OSP incubated many of tne new elements of the solar program.

Suzanne asked when the 150 MWa was to be achieved. Peter said original mandate was through the end of 2011.

Carel asked what the difference was between the resource and program basis in terms of Open Solicitation. Peter said that OSP has done many kinds of solar, plus hydro, geothermal, and one small wind project. Now OSP is really small hydro, a lot of outreach and feasibility work to municipalities, and preliminary work on geothermal. The resource basis looks at our programs not by what the program paid for, but what resources were acquired regardless of which program paid for it.

2008 was a busy year, launching the small wind program and a small hydro initiative, plus working on three geothermal projects. We increased the size of solar program, created new incentives for multiple sites, and third-party financed system. We began to co-market with the efficiency department on site assessments. We struck a deal with Umpqua Bank to offer loans for residential and small commercial customers for solar and energy efficiency.

We are also doing an extensive market review for biomass. It is not complete, but some results are starting to come in. This has been the best year yet for biomass but we re not seeing results in wood debris or CHP and so we are asking what we can do differently.

There has been extensive work with governments, trying to move folks to projects faster. The dominant number of projects with municipalities is in solar, but the capacity is in everything else. Now that we are out of large wind there will be more small projects in the 3-5 MW capacity that take longer to get. There are 57 solar systems that have been delayed due to resolving the PacifiCorp concern and the current state of the financial system.

John asked if the delayed projects would be eligible for Umpqua financing. Peter said they are mostly large commercial projects and not the targets of the loan program.

Suzanne asked a clarifying question about when the 57 projects would be installed. Peter responded likely in 2009.

For 2009 and 2010 the budget themes have large uncertainties. Financial disruptions have cause credit to tighten, leading to higher standards and higher financing rates. The economic slowdown may have impacts as well but it is not clear yet. The tax credit extensions are positive and substantial for solar and small wind, modest for biomass and hydro, but disappointing for community wind. As projects get canceled due to economics turbines will become available, but community wind projects will have a harder time getting financing. There has never been a year with tax credits where we haven t been uncertain.

We are proposing only modest change for our programs. The main driver is that there is less carryover from year to year. There will be no new program offerings, which would only make budgets tighter. There will be limited support for community wind and slow the expansion of the solar program.

We think we have a good range of successful programs. Biomass, hydro, municipal, solar and small wind efforts are working. There has been a positive reception for niche applications in small geothermal. In 2009 we will provide a deeper reach for dairies and wastewater treatment plants. We will respond in incremental ways to the market in solar. This includes residential loans, 3rd party ownership, Energy Performance Score incentives. We will help to structure small commercial loans, provide a larger cap on the standard incentive, and will examine shorter terms for contracts. We propose to re-structure OSP to focus on small and niche markets, and de-emphasize new technologies. We may even change the name of the program. We will focus innovation on new ways to deploy incentives.

There will be some expansion in project development support, adding financial reviews, interconnection studies, doing more matchmaking, and more cross-promotion with energy efficiency.

Carel asked what the Energy Performance Score is. Lizzie said the EPS comes out of the new homes program. This will provide incentives and support for a spectrum of projects which range from code all the way up to a net-zero home. The idea is to try and drive people to minimize energy consumption. Solar will be a big part of the program.

New revenues will total as follows:

New Revenues for 2009

Pacific Power :	$ 5.2 million
PGE:	$ 8.7 million

Non-contracted funds from prior years

Pacific Power:	$ 5.2 million
PGE:	$ 11.2 million

Total budgets for 2009

Pacific:	$ 8.4 million
PGE:	$ 14.8 million

The PacifiCorp non-contracted funds come from projects that were committed but have timed out. The same is true for PGE but also includes money that was never spent in PGE s utility scale program.

Expenditures will total as follows:

Expenditures as a share of total budgets

Incentives	78 %
Delivery & Management	5 %
Planning & Evaluation	2 %
Other costs	15 %

About half of the 15% Other is actually program delivery.

We are proposing to not spend all that we could in 2009 so that the 2009 and 2010 budgets are similar in size. The carryover would be the following:

Proposed carryover from 2009 to bolster 2010

Pacific:	$ 2.0 million
PGE:	$ 5.1 million

With the rollover, 2010 will be 8% smaller than 2009. If we don t rollover the funds there will be a 38% drop in 2010. Under this scenario the significant fall-off in funding will be postponed to in 2011.

The 2010 budget is as follows:

New Revenues for 2010

Pacific Power : $ 5.4 million
PGE: $ 9.0 million

Non-contracted funds from prior years

Pacific Power: $ 2.0 million
PGE: $ 5.1 million

Total budgets for 2010

Pacific: $ 7.4 million
PGE: $ 14.1 million

2009 Program costs are allocated as follows:

Programs	**Total costs**		**Range in aMW**	
	$ million	% Total	Conservative	Best Case
Biopower	$ 4.9	21 %	5.87	13.65
Open Solicitation	3.6	15 %	.45	.69
Solar Electric	10.2	44 %	.56	.75
Utility Scale	.1	1 %		
Wind	4.4	19 %	.71	1.01
Total Renewable Energy	$ 23.2	100 %	7.58	16.09

The bulk of the average megawatts come from Biopower. We think we will land one large biomass project, which is driving the energy forecasts.

John asked what kind of project it would be. Thad replied that it would be a woody biomass project. Peter said that in downturns wood product manufactures sometimes re-invest in their facilities and we hope to capture such and opportunity.

In 2010, costs in terms of average megawatts will go up if there is no woody biomass project, instead the average megawatts will come from dairies and waste water treatment plants.

Programs	**Total costs**		**Range in aMW**	
	$ million	% Total	Conservative	Best Case
Biopower	$ 4.8	23 %	2.23	6.57
Open Solicitation	3.4	16 %	.68	1.05
Solar Electric	10.9	51 %	.59	.79
Utility Scale		0 %		

Wind	2.3	11 %	.23	.33
Total Renewable Energy	$ 21.4	100 %	3.74	8.74

Between PacifiCorp and PGE, biopower has more opportunities in PacifiCorp territory. In PGE the biggest resource is solar. PacifiCorp has many other resources so the solar program is constrained so we can do those other projects.

We ll have to innovate how we use incentives. Perhaps doing equity investment, perhaps through purchasing equipment, but we can make our budget smarter. We can look to examples from other areas and are having discussions about this at the board level.

We will continue to take a bigger role in project development in biomass, hydro, small wind, and geothermal. In solar, the industry does this effectively, but the other sectors need a more hands on approach to move projects more quickly. The issue is how far down the road do you go? We have defined the need but have to determine how much to help.

This is the first crack at the budget, so we expect questions and revisions. Please send questions and concerns so that we can continue to refine. If you have comments let us know. The RAC s comments will be incorporated and shown to the board on November 12th.

Carel asked about companies working on community wind projects with refurbished machines. If small developers are successful will they be able to get help from Wind Program?

Peter replied that there is room in the budget to help with these kinds of installations. The advantages to this kind of installation are low capital and good energy production, but there are no commissioning standards right now. If we can come up with these standards, then there is a bankable resource, something people can borrow money off of. Energy Trust thinks there is potential and we have left room in the budget for it, but if it explodes we won t be able to handle it all of the market demand.

Fred noted that in terms of project development help, Spencer Moersfelder will start a demonstration program to get a handful of net-zero buildings. Some solar projects may happen through the Efficiency program and the Solar program working together.

Suzanne said the budget makes sense to avoid a sharp drop in 2010, especially since we know what ITC is doing. The question she has is for community scale wind. Does the one year tax extension impact wind program? Peter replied that the program is shrinking in 2010. A one-year extension is not enough to change fortunes for this part of the market.

Carel said everyone is in favor of the PTC but it wasn t packaged properly in federal legislation.

John Reynolds noted that he thinks there is a bright future for community wind from a political perspective. Peter said Energy Trust will need more money in that case. To be clear, Energy Trust will support activities related to helping projects get ready, such as anemometer loans and other project development work, but the budget for actual projects is low.

The RAC was supportive of the overall budget, themes and proposed directions.

The final budget proposal will be presented to the RAC on December third, and for final approval to the board on December 19th.

4. Public Comments

There were no further public comments.

Peter adjourned the meeting at 11:40am.