RENEWABLE ENERGY ADVISORY COUNCIL
Notes from meeting on November 30, 2011

Attending from the council:
Megan Decker, Renewable Northwest Project
Troy Gagliano, enXco
Robert Grott, Northwest Environmental Business Council
Thor Hinckley, Portland General Electric
Juliet Johnson, Oregon Public Utility Commission
Glenn Montgomery, OSEIA
Frank Vignola, University of Oregon
Vijay Satyal, Oregon Department of Energy
Dick Wanderscheid, Bonneville Environmental Foundation
Tashiana Wangler, Pacific Power

Attending from Energy Trust:
Kacia Brockman
Amber Cole
Pete Gibson
Fred Gordon
Jed Jorgensen
Betsy Kauffman
Elaine Prause
Thad Roth
Sue Meyer Sample
John Volkman

Others attending:
David Brown, Obsidian Finance
Sean Bell, RES Americas
Joe Eberhardt, PGE
Todd Gregory, Obsidian Finance
Robert Hall, member of the public
Diane Henkels, member of the public
Ben Hoyne, member of the public
John Reynolds, Energy Trust Board of Directors
Al Wadi, enXco
Adam Schumacher, Renewable Northwest Project

1. Welcome and introductions
Betsy Kauffman called the meeting to order at 9:30 a.m. October minutes were approved.

Betsy displayed the conflict of interest statement in the Renewable Energy Advisory Council charter, and invited members of the council to review it and if appropriate, to retire to the lobby during the Christmas Valley project discussion.

2. Renewable budget update
Elaine provided an update on the budget process. [See slides in the meeting packet.]
No questions or comment.

3. Christmas Valley 5 megawatt solar electric project
Betsy again referenced the conflict of interest statement on the screen and asked any council members that have a potential interest in the project to leave the room.

Frank Vignola offered that the University of Oregon is currently doing some studies regarding long-term solar exposure on a different site in Christmas Valley and asked if that would be considered a conflict of interest. It was briefly discussed and decided that this does not represent a conflict of interest.

Troy Gagliano referenced that he has some knowledge of the project, although no financial interest in the project. He offered that he would abstain from any voting.

Kacia presented the details of the project. [See attached briefing.]

Questions and discussion
Robert Grott asked for clarification about Kacia's statement that the wheeling costs would be outweighed by the additional revenues from power sales in Christmas Valley compared to a site in Portland General Electric territory. Kacia clarified that Christmas Valley gets more sun than the Portland Metro area.

Peter West: Will PGE have step in rights?
Joe: Step in rights are not expected to be required, depending on the developer meeting other credit requirements in the power purchase agreement, PPA. In some cases the utility may have a term in the contract that requires step in rights to keep the project operational. Generally we seek to have collateral in cash or credit.

Robert: Is this on private property?
David: It's on 60-acre parcel that we own. It's zoned agricultural, but has no irrigation rights. It's in good condition. We got a standard use permit from Lake County. There was a LUBA appeal from some neighbors, but that was disposed of some time ago. We own the land.

John: What kind of trackers will the project use?
David: They are single axis, set for morning to afternoon tracking.

John: What are you doing to the land under the system?
David: The land is on an old lake bed. The primary concern of the locals is dust because there is a fine layer of soil on the ground. The plan is to not disturb the vegetation except to mow it so it can be walked on. We would basically leave the land alone. The install strategy is to put posts in the ground and mount on the posts, so there is not much disturbance to the soil. The underbrush will grow up, we're not sure how fast or how high, so we'll have to see when mowing or spraying will be needed.

Thor: What technology is this using?
David: Polycrystalline PV panels. The trackers are made by a company called Array Technologies. The inverters have not been specified yet; we won't operate this project for the long term, so the long-term operators will have some say. The company providing the inverters might provide the operation and maintenance services, too.

Dick: We're interested in the wheeling costs; can you talk about that some more?
David: I'll give you a longer answer involving policy questions. Midstate is one of many electric co-ops that were formed to provide electric service to rural communities as part of a public policy goal in the 1930s. It was hard to persuade PGE and Pacific Power to provide electric service in rural areas without a lot of electric load where there would not be cost benefit. Midstate is a co-op that was developed for this purpose with somewhat special status in the internal revenue code. It's not a government. Not subject to public meeting laws. Co-ops are interested in having the lowest possible price for power. A couple things occurred that benefitted the co-ops in our region. Bonneville Power System turned out to be a bargain. Second, irrigation meant that these co-ops had load where it hadn't been expected. Few rules apply to co-ops, which has made it hard to develop renewable energy in the rural areas.

In general, Midstate has been very good to work with. Helpful, problem solving. But they don't really understand solar and are risk averse. Rather than evaluating the system impact of this one 5 MW project, as is typical, they evaluated the cost of adding 25 MW of solar in bulk and created a sort of system impact charge of $104,000 per MW (AC), whether they incur those costs or not. They don't have any tariffs or a process to review their assumed costs. The number for this project is about $40,000 per year, and is subject to annual adjustment based on actual costs.

John: So those are the wheeling costs?
David: Yes. They don't really call them that, but they are the same charges that would be imbedded in a utility's cost for wheeling.

Dick: There's no charge for volumetric energy use?
David: There is a line loss charge. We believe that our generation in Christmas Valley will actually result in less line losses because it will replace energy currently transmitted into the Christmas Valley area. Midstate has also calculated depreciation for the power lines.

Megan: It's exciting to see Energy Trust involved in such a path breaking project that would result in panels being installed in Christmas Valley. At the same time, there are a lot of new elements here. Is there some incentive amount that is paid before the project is commissioned and if so, what are the safeguards for Energy Trust funds?
Kacia: We would not pay before commissioning.

Juliet: I appreciate your description of the wheeling. What is more typical, or what would you prefer to see?
David: Some sort of mediation process with oversight that allows developers to have a conversation with the utilities about renewable energy. Another thing would be something closer to a standard contract. The co-ops are taking standard FERC agreements and eliminating what they don't like and putting new things in with no public process. The cost in attorney fees and time to bring a co-op all the way to agreement is way out of bounds for the size of the project.

Juliet: Why are you going the route of a negotiated PPA rather than a qualifying facility?
David: The QF price is not high enough, even with the project subsidies. There are two reasons. Natural gas is very low and second, no one knows what a Renewable Energy Certificate, REC, is worth. Outside of a negotiated setting, it's hard to establish a lot of value for the REC.

Joe: In general, the project is a last opportunity because it has a Business Energy Tax Credit pre-certification. I see this as a last opportunity for PGE to have access to a Business Energy Tax Credit on a solar project.

Frank: I was wondering if you could talk about the advantages you saw in pursuing this project in Christmas Valley.
David: I think that when you do your study, you'll conclude that Christmas Valley might be the sunniest place in the state. It is at 4,000 feet so there is little moisture in the atmosphere, and there is no shade. It would only be better if it was a little farther south. Second, solar can't compete with wind for transmission. Christmas Valley is not perceived as having a significant wind resource. The military built a new transmission line through the area, so there is an already built line that can handle up to 100 MW of solar—it's the only place in the state like that.

Robert: Are the panels Chinese?
David: Yes.

Robert: How is that helping you?
David: It has helped a lot in the price of the panels. When we first went out for bids we saw prices around $1.75 a watt. We got bids from SolarWorld and others, and they were more.

About 14 to 16 months ago, bids went down to $1.40-$1.60 a watt. It's hard to know right now what the price is, but it will probably be less than $1.20 per watt. For big California projects, I'm hearing $1.09 a watt. There's a study that says if you can get to $1 per watt, solar makes sense. We're not that far. What hasn't happened is that the balance of system costs hasn't come down a lot. With this project, there are pioneering costs in working with Christmas Valley and with Bonneville Power Administration, BPA.

Joe: I agree with David that solar costs are significantly higher than wind, and will remain so, which makes subsidy a requirement for the project to proceed. Typically, where we've had success, we've been able to get them at market reference price. This is the first project that will get us close to avoided costs but be above a market reference price, and this will be a paradigm shift for PGE. It will be interesting to see what that does.

Dick: If you get this going, will you have a standard model you will go out and develop?
David: We have a contractor who has specified a price and is ready to build at that price. Christmas Valley is significantly distant from PGE that they don't want to own the asset. They want a PPA. One of the requirements for a PPA is the ability to post cash or credit for the project. That's not something we do. There are no other companies in Oregon that do this. We are talking with a number of companies who are interested in this opportunity.

Kacia clarified that we are going forward to the board of directors a little earlier in the project than usual because of the timing of the board meeting schedule. The next board meeting after December 16 is not until March and the project will need to be complete by the end of 2012 to get the Business Energy Tax Credit.

Kacia asked for a show of hands to indicate support or concern regarding the project. Council members indicated general support for the project. There were no objections. Frank, Troy and Megan Decker abstained.

Robert: How long have you been working on the project?
David: Three years.

4. Solar program in 2012

Rob presented Solar program plans to manage a limited budget moving forward. [See slides in meeting packet.]

Summary

Growth in activity means now we have to manage closely to the budget. We've already started committing 2012 funds in November 2011. With the smaller budget for 2012, this is a little concerning. If the trajectory continues, we would exceed budget by mid-year in Pacific Power, so we are in a position of having to look at how the incentives work.

Rob presented tools for managing the budget in Pacific Power territory; in particular, including stepped incentives, reduced project caps and active project limits for trade ally contractors. Stepped incentives are designed to decrease automatically upon allocation of budget blocks. This stepped strategy is designed to preserve flexibility for the future so we can see how the market responds to these changes. The first step of funding maintains the current incentive levels and is funded to support about a month of normal historic program activity. Changes to active project limits are effective upon announcement of program changes (December 1, 2011). Residential incentive rates will be reduced by $0.25 per watt when we reach step 2.

Comments and questions

Juliet: Please reiterate why the 2012 budget is so much less than last year's budget for Pacific Power.
Rob: Up until this year, we had never committed the entire Pacific Power renewable budget in a year and a past surplus was applied to the following year. Now, we're finally in a situation where the market is exceeding our budget. In 2012, we don't have any budget rolling forward from 2011; we will have only the new revenues from Pacific Power.

Robert: There is a mixing of logics here. One is to drive an industry. One is to pay only an appropriate amount. Wouldn't it be appropriate to make the same changes for Pacific Power and PGE?
Rob: There is generally more energy production in Pacific Power territory because of the higher solar resource, and there are lower costs there in general. So there are some real differences between the two territories, but what's not a real market difference is our budget.

Robert: So it's really managing your budget, and not responding to price signals. One of the arguments that people have is why not wait until the price of the panels go down, but when the price of the panels go down, so will the incentives.
Rob: We are following the market and we do intend to drop the incentives in PGE territory when activity goes up. Right now, we have budget to continue pushing the market in PGE. As we implement these tools, we'll see how much impact we really have. We wanted to have a gradual, transparent process for the benefit of the contractors.

Robert: Would it help to have a date certain?
Rob: A date certain creates a spike in project activity that is not budget limited, so we might exhaust our budget before the stated date. It's more transparent and predictable to adjust the incentives down based on budget allocations rather than end dates. We will be providing frequent communications regarding the remaining budget for each step of funding.

Peter: Have you thought about differentiating as you drop price whether you would pay more for an Oregon built panel?
Rob: I'm personally supportive of that, but I don't know that it's in our mission to do that. Massachusetts is doing this with their public purpose charge.
Vijay: We did try to do that. The Department of Justice had some concerns about this in relation to the commerce clause. In Massachusetts, it is a rebate program where there is some flexibility in how this is given out.
Megan: One thing to note with Massachusetts is that states have different risk tolerances.
Fred: The current Energy Trust policy is that it's a tiebreaker. With all other factors on a project equal, we could give preference to in-state products.
John: It's awkward for SolarWorld to sue the Chinese if we would favor an in-state panel producer.
Glenn: SolarWorld would not be in favor of a state-specific incentive policy because they would have an advantage in Oregon, but a disadvantage in all other states. If anything, they would support a national policy to encourage use of domestically produced panels.
Rob: Energy Trust may be able to justify a "made in Oregon" bonus based on the increased above-market cost associated with more expensive domestic products. Though this argument could also be used to justify increased incentives for expensive products from any location, which is counter to market transformation. If we were to do that, it would have to be within a broader mandate for job creation and other benefits. But Energy Trust doesn't have this mandate. This is beyond my experience and history here.
Peter: On the efficiency side, we have supported the high road agreement with Clean Energy Works Oregon.
Rob: There could be a high road argument to be made with domestic over imported panels.

John: How big has the growth been in this last quarter?
Rob: We do tend to see significant growth in Quarter 4, but what we are seeing in 2011 is unprecedented.
Dave: Driving October and November activity this year are multifamily projects in central, southern and eastern Oregon. These are American Recovery and Reinvestment Act, ARRA, projects. Also, third-party residential leases are creating huge growth. Sun Run, Solar City and CitizenRE are now active in the market. In the past, when we've had spikes, it was largely commercial, but this year it's residential.

Diane: Can we get a county by county break down in Pacific Power territory?
Dave: I don't know that off the top of my head.

Doug: The ARRA projects are existing multifamily buildings adding solar. There's about $3 million in ARRA funds driving these.

Frank: What sort of MW are being installed?
Dave: For Pacific Power, we are looking at 1.5 MW of residential generation and 1.36 MW of commercial generation this year. We project that over the next two years we can support another 5 MW of generation, mostly residential. I don't have PGE or totals at hand. This year, we are in the range of 6 to 7 MW, I believe.

Peter: For perspective, it took us five years to get 1 MW installed, so while we are cutting budget, we are talking about funding significantly more generation in one year than it took us five years to get when we set out.

5. Draft proposal for a process to compete projects
Betsy presented a proposal for a competitive process for projects. [See presentation slides in the meeting packet.]

Summary
Similar to the Solar program, as a whole, the Renewable program has to manage budgets closely as carryover funds have been spent down. The team has considered typical competitive processes and Betsy outlined various concerns and objectives in developing a new process.

Betsy outlined a new competitive process that would only be for custom projects in Pacific Power territory because there still remain enough funds to serve demand in PGE territory. The outline of the process includes an invitation to apply, internal staff review with external consultants as needed, and ranking according to five criteria.

Comments and questions
John: Can you provide an example of a type of project that would fall into this large custom category?
Betsy: Most hydropower and biopower projects we have funded would fall into this category. The Three Sisters and Central Oregon Irrigation District projects are examples.

Glenn: What's the threshold on standard small wind?
Betsy: The program supports projects under 100 kW.

Glenn: The $150,000 cutoff. How did you arrive at that figure?
Betsy: It was more art than science. It was a number we felt would be manageable in the budget; it also fits with the larger types of projects we receive.

Elaine: By looking at the range of projects we've had in the past, we found that the types of projects under this amount could be reviewed as they are ready and budget is available.

Glenn: The eligibility criteria. Is this what we're typically looking at when a project comes in today?
Betsy: Yes, although we are looking at more than that when we dig into calculating the above-market cost. Some are a little bit tighter, such as the timeline and interconnection criteria. The goal is to push projects to be more ready before they apply.

Robert: Proof of community support means what? And why? Like Christmas Valley for example.
Betsy: The issue there is that we've had projects come to us and we get three quarters of the way through and we discover they need a city council vote on something that they haven't gotten or there is significant community opposition.
Robert: So it's proof of lack of opposition?
Megan: Does it come down to permitting or popularity?
Betsy: No it's different than permitting. So maybe it should be the opposite—a demonstration of a lack of opposition.
Robert: Christmas Valley didn't have proof of community support; they had just gone through some hurdles of community opposition.
Juliet: Proof of community support is difficult to show.
Betsy: Much of this is based on bad experiences we have had. Do you have some ideas for how we could do this?
Vijay: I'm glad you are learning from experience. You need to keep this qualitative and subjective, so I think you should look for letters of recommendation and support to come with the project so you can see evidence of support. I would be creative in the area of how to evaluate community support; the goal is to demonstrate community engagement.
Robert: Just don't create hurdles.
Glenn: I think it's a recognition of a plan for how to approach the public involvement process. You need to know they have at least recognized this and have a strategy for approaching potential barriers.
Troy: Those are good ideas. Robert is right and you shouldn't burden a project. Though you can start getting into the weeds of local politics, so watch out that you don't get people trying to jump through those hoops. You might engage with the agencies involved in public process, or mine the local paper to see if there is a red flag.
Betsy: It sounds like the concerns you are raising is about "proof" and avoiding creating a burden that would not otherwise exist.
Vijay: You want to reserve your ability to be subjective.

Fred: I like the process you are outlining though. You may want to have some criteria to identify that a project is not yet ready with some green, yellow, red indicators. Red indicates it looks like there is a major hurdle, etc…. but if you don't know, the project is not ready.

Megan: A project at a good stage may well have a plan for getting a permit. I wouldn't want to have you discount a good project because it looks like they may run into difficulty.

Betsy: What about the process of invitation-only to apply?
John: My discomfort comes about as a board member. It sounds a little good-old-boy.
Vijay: What if the project didn't have the experience of working with you in the past, and wanted to come in at the last minute? You really want to be open about this. You may want to try this for a year.

Glenn: Another way to look at this is what is the down side of leaving it open?

Robert: My reaction is the same. Inviting people to get into an open process still gets you to the same place. If it's open, you might also get others into the process. So there's no downside.
Elaine: We put out the idea of invite-only to get your reaction. We're trying to focus on developing projects and moving the market with a limited budget. If we open it up broadly, it's very time-consuming and puts us back into the typical process for review. So that's where we landed. We said wouldn't it be perfect if we know the projects coming through and then at a certain time we say it's time to compete. But it may cut some others out. However, we do feel we are talking to the majority of projects out there. So we could open it up broadly, and for projects we are not familiar with, if they don't meet the threshold criteria, they won't be eligible. If a project had been working with us, they would be more likely to be ready because we would have been working with them to move them along in the development process.
Betsy: The downside is that we get a lot of projects at uneven levels of readiness and we use a lot of staff time to weed through them, but I also recognize the issues you are raising.
Glenn: Certainly you have the right to filter out the response you feel like are not ready to take the next step. But by leaving it open, you may get a project at the 11th hour. And you can make it clear in your solicitation that you encourage projects to work with you in advance. If we don't know you, chances are unlikely that you will get funds. But at least you have not cut yourself off from potential projects.

Vijay: You may gain knowledge from a project having some stumbling blocks that you wouldn't get by only seeing projects that look ready to you. You want to make sure you are open to new approaches. Also, I would hope internal reviewers would include someone who has not worked with that proposal before. We've taken this approach at the Oregon Department of Energy.
Elaine: There would likely be two who are not involved with the project.

Dick: In reality, either approach won't likely change the amount of effort for you. But the perception of an open process is better. It's complicated to develop a renewable energy project. I can't imagine a project will show on your doorstep without having engaged with you. You should present your criteria for readiness upfront and let your staff enforce it and have the ability to say "come back when you are ready."

Vijay: Clarify what you mean by persistence.
Elaine: We want to make sure projects can operate for the long haul. We don't want to see a project developed and then not perform well. It's not in the ratepayer interest. We want to see that they have a good plan and are paying attention to operation and maintenance, and are going above the standard minimum. We're trying to build this in, but we're not saying this is the very best way. Ideas would be helpful.

Diane Henkles: I want to hear more about feasibility funding.
Betsy: We're not planning to compete our feasibility funding. If someone is going to complete in 12 months, they should be well out of the feasibility stage. So we have no plans to compete that.

Robert: Can you explain the distinction between incentive dollars and above-market costs?
Betsy: The size of the above-market cost and the actual incentive they get may be different. We are allowed by law to give up to the above-market cost, but we don't necessarily give that. It depends on whether they have other sources, and they want more RECS, or they can look at a longer payback.

Dick: I agree with folks on the community support thing, having them tell you about the process for demonstrating that. I'm more concerned about what you mean by "interconnection is underway." I think you need to narrow that down a bit and get a description of where they are.

Betsy: That's a tough one and I'd like to talk with you a bit more about that, maybe offline. We want to get that one right without creating an undue burden.
Dick: The issue may not be money so much but time. It may not be feasible to get the thing done in 12 months, so you need to know where they are.

Glenn: Is there a rationale for evenly weighting these categories?
Elaine: This was our first cut. There was not a strong rationale. These are the categories we are looking at.

Betsy: Anyone with comments and thoughts is encouraged to contact us.

Robert: I applaud the staff and the organization for going through this process and not just going with a blind process.

Tashiana: We're hopeful that they'll be some inclusion in the ranking for whether the project is located in our service territory.

Dick: If you don't get through this process, could they opt to go through a different route and get a lower amount?
Betsy: They could, if they want to get an incentive under $150,000.
Peter: But if they need substantially more than $150,000, it's doubtful the project could be successful with an incentive less than $150,000.

Frank: It would be good to have a review of this after the first round in case you need to adjust how you are ranking things.

Robert: You're not locked into your ratings.

Glenn: My understanding is that pushing for diversity is about playing catch up in a certain geographic area or technology. I don't know how that will play out.

Betsy: We are trying to avoid an unintended consequence of having only technologies with high capacity factors being funded. We want to be able to invest responsibly and well, but still maintain some kind of portfolio. I hear you saying that the unintended consequence could be just the opposite—that a marginal technology gets funded in the name of creating technological diversity.

Glenn: I'm looking at this at a macro versus micro level, so be careful about this. It becomes qualitative.

Betsy welcomed further comments in the coming days, and asked for any other comments.

6. Public comment

There was no public comment.

7. Meeting adjournment

Betsy thanked all council members for their participation and adjourned the meeting at 11:50 a.m. The next full council meeting is February 15, 2012.