

RENEWABLE ENERGY ADVISORY COUNCIL

Notes from meeting on October 24, 2012

Attending from the council:

Glenn Montgomery, OSEIA
Suzanne Leta Liou
Juliet Johnson, OPUC
Megan Decker, RNP
Bruce Barney, PGE
Vijay Satyal, ODOE
Tashiana Wangler, Pacific Power
Thor Hinckley, PGE

Attending from Energy Trust:

Kacia Brockman
Betsy Kauffman

Peter West
Sue Meyer Sample
Jed Jorgensen
Shelly Carlton
Thad Roth
Fred Gordon
Elaine Prause
Pete Gibson

Others attending:

John Reynolds, Energy Trust board member
Peter Greenberg, Energy Wise
Judy Frauman, member of the public

1. Welcome and introductions

Betsy Kauffman called the meeting to order at 9:30 a.m. No adjustments to the notes from September were suggested. The notes were approved. The meeting agenda and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public-meetings/REACouncil.aspx.

The Harvesting Clean Energy Conference is taking place January 27-29, 2013, in Corvallis. It is an agricultural conference with an expected attendance of roughly 400-500 people. The cost is \$100 for the 2.5 days. They are still looking for sponsors.

Tashiana Wangler announced that there will be a dedication ceremony for the Black Cap solar project on Friday, November 9. The event is being held in Lakeview and will include a luncheon at The Gathering Place.

2. 2013-14 budget presentation

Thad Roth presented. Thad reminded everyone that this is a challenging energy market. Qualifying Facility rates are low, there are no longer robust incentives for renewable energy and there is uncertainty around the federal Production Tax Credit renewal. Energy Trust is pursuing smaller projects, like net-metered or partial requirements customers.

The Renewable Energy Sector is also transitioning to two program tracks, though this is an internal change and won't change external offerings. Staff is proposing to combine Biopower and Other Renewables into a Custom program. A Standard program would remain for solar energy and some wind projects up to 50 kilowatts. Staff would make an exception of custom analysis for solar, but it would stay under the Standard program. Doing this will make it easier to move resources internally.

The Renewable Energy Sector is continuing a portfolio management approach. This is something staff has been doing all along, which was formalized at the end of 2010. This allows Energy Trust to be flexible and responsive to the market, support a variety of geographic

solutions and maximize Oregon Public Utility Commission goals. Staff thinks this allows Energy Trust to maximize total generation.

Staff is proposing to implement an expanded development assistance offering to respond to the tougher market. Staff is also looking at a solar Request for Proposals, which will be discussed later in the meeting.

Revenue/budget trends

Thad: From 2004-2012 the Renewables budget increased from \$10 million to nearly \$14 million, with a dip in 2010. PGE is requesting a rate decrease of 2.5 percent, which is contributing to a dip in the 2013 forecast. We accumulated unspent funds from 2004-2008, and we began to spend down the accumulated funds in 2009. That has now been exhausted, and we've reached a funding plateau.

Vijay Satyal: Were there extra investments to offset the change in the Business Energy Tax Credit?

Thad: These expenditures were not investments for the future. Federal American Recovery and Reinvestment Act funding and the state Business Energy Tax Credit were available at the time.

Vijay: Leveraging impact.

Suzanne Leta Liou: Just to clarify, Energy Trust is not overspending.

Thad: No, the graph shows only the yearly income not how much was in the bank.

Bruce Barney: Are future liabilities included in these numbers?

Thad: Yes and we'll talk about that.

Thad: The graph shows that we have a \$23.1 million overall budget for 2012, to spend in 2012 and into the future. Our proposed 2013 budget is \$18.9 million. Both numbers include funds already dedicated to projects. Importantly, the solar budget has been reduced by nearly one-half in the last few years.

Kacia Brockman: Funding for solar has gone down. Because pricing and incentives have decreased, we've been able to get the same amount of generation for less money. In 2013, activity will be similar to 2012. The purple bar on this graph represents that commercial investment has gotten smaller due to the Business Energy Tax Credit going away.

Peter West: Kacia, if you were to put in the feed-in tariffs on commercial and residential, would the blue and purple bars for residential and commercial generation activity be double?

Kacia: Yes, almost double. The feed-in tariff represented the same amount as what Energy Trust was able to invest, so it almost doubled the size of the solar market in PGE and Pacific Power territories. The portfolio approach has given us an opportunity to maximize the generation when opportunities arise. The gold bar, large-scale solar, in 2012 represents extra dollars in PGE territory that we were able to move to where the projects were. The 2012 budget slide shows that we are going to utilize \$10 million of the \$14 million PGE budget, and are right up against the \$6 million budget for Pacific Power.

Thad presented a summary slide showing the sources of 2013 funds and how they are proposed to be utilized. There were questions about individual lines on the slide. Thad explained that there will be little carryover at the end of 2013 compared to previous years.

2013 budget allocation

Thad: The 2013 activity budget is \$18.8 million divided among Biopower, Other Renewables and Solar. Solar is 46 percent of the budget. Next year there will just be two programs, Custom and Standard.

The costs per average megawatt are expected to go up because we are expecting to see smaller projects and there will be fewer incentives from other sources. Our investments will be more expensive.

PGE is heavily weighted toward solar, which includes the RFP that Kacia will talk about. Biopower and Other Renewables make up the rest of the PGE budget, but it is always challenging to bring non-solar projects online in PGE territory. That said, we have two wastewater treatment projects that we think will go next year. There have been cases where we have not been able to bring forward custom projects in PGE territory.

Suzanne: How long does it take these custom projects to come to fruition?

Thad: One to three years from the date that we say yes.

Betsy: When we commit to a project, we commit the dollars from this year's budget and move those dollars into future budgets. We take those future liabilities into consideration. In the case of Pacific Power, we had some dollars come back to the program. We're in the midst of an RFP as we speak. On Biopower and Other Renewables, the cost per aMW is showing an increase for the same reasons discussed before.

John Reynolds: Are we doing any small wind?

Betsy: This year was incredibly slow, partly because we stopped marketing due to some problems in the market. We have worked through things and are going to start up again in 2013.

Thad mentioned the proposed budget is open for council and public feedback until November 2, 2012.

Juliet Johnson: Can you say a little bit more about developing effective rates?

Thad: What we know is from past experience with biomass, geothermal, hydropower, etc. we have a higher confidence in what they cost and how they perform. Costs vary within and across technology, but as we combine those technologies, we come up with an effective rate with ranges for the entire portfolio.

Vijay: Are you then trying to come up with cost expectations? An internal benchmark?

Thad: We are trying to predict what we can capture. It will be a competitive process, which is why we include a range. This isn't a target that will limit our investment. Just a range.

Tashiana Wangler: Bruce has been trying to connect with Kacia about another potential Pacific Power solar project. We know that these larger projects are only funded when there is funding available and that we need to start talking sooner rather than later. This would be for 2013.

Thad: We appreciate that, and as you have articulated, we've decided that the only time we will do these large solar projects is when the funds can't be allocated on the custom side. A key driver is when projects that were expected to complete do not. As you can see, things are tight.

Peter W.: As we look at large-scale solar, we need to look at whether we're meaningful. We would have to focus on the rationale for doing another utility-funded project for the solar mandate. We need to ask if these large-scale projects really need scarce Energy Trust funds or if they fit into a different category.

John R: I think I speak for the Energy Trust board when I say that the reduction in carryover is welcome.

Betsy: Small Wind is in the Other Renewables program. We've made some changes to our procedures and requirements in Small Wind due to underperformance of some projects. Strategies for 2013, because QF rates are so low, many projects don't pencil out. We'll be shifting focus to projects that net meter and offset retail rates. We'll be looking for customers that have non-financial reasons, so that the cost is not such an issue. We'll be expanding marketing for Small Wind and development assistance funding to continue building a pipeline of projects. We'll also be doing targeted outreach to municipalities.

Juliet: Can you say more about non-financial reasons?

Betsy: A business will often only go for short payback. A government may be able to handle a longer payback, or may be trying, in addition, to meet some sustainability requirements. A dairy farm may want to manage waste, and a biopower project would help with waste stream and energy production.

Kacia: 2012 was a transition year. We looked at how we could fit our Solar program into a budget based on new revenues and no carryover, and we lowered our incentives accordingly. Now we are looking to keep incentives steady. If demand increases, we may need to lower incentives, but we'll do it more slowly than in 2012. The Residential Energy Tax Credit is still here, and residential solar is strong. For commercial, we're looking at how we can be more influential upstream so that there will be a pipeline of projects ready to go when conditions are right. We'll be leveraging relationships that our energy-efficiency teams have with building owners. In 2012 we've been managing demand, but we anticipate doing more marketing next year. We'll also be tracking solar issues that come up during the 2013 legislative session.

Peter W.: Comments before November 2 would be most useful, so that we could incorporate them into our presentation of the proposed budget to the board on November 7.

3. Proposal for increasing early stage assistance

Betsy: Two years ago, we shared four options with the Renewable Energy Advisory Council for how we could move forward as our yearly budgets declined. They included maximizing generation; focusing on early stage assistance; choosing a couple of winning technologies or only doing net-metered, onsite generation projects, where most QFs would be eliminated.

In that discussion, the council supported doing more early stage assistance. It's a place where we're uniquely suited to fill a gap and can have a great impact. It allows for support of a range of technologies. Today we are proposing changing how we offer project development assistance.

We currently have a cap of \$40,000 per project, regardless of need. We occasionally go higher. We require 50 percent cost sharing, with payback provisions if the project does not sell to PGE or Pacific Power. No payback is needed if the project fails to happen. It's a non-competitive process, and we judge applications as they come in the door.

Bruce: When does staff decide not to award development assistance?

Betsy: We sometimes say no if a project is too far along or what they are asking for is inappropriate. I have said no to PR consultant funding, for example. Generally when they're asking, they need it.

Suzanne: Will we hear how many projects fail?

Betsy: I don't have that statistic here, but we will get that to you.

Bruce: How many projects move ahead? Is it one in 10?

Betsy: I'd say it's about one-third.

Betsy: Our proposal for 2013 is to continue what we've been doing with part of our development assistance funding and add a second program development assistance offering with an increased cap of \$150,000 per project, \$400,000 per utility and distribute through a competitive process. The budget over the last five years has been about \$400,000. We're proposing a little over \$1 million for 2013. We budgeted \$700,000 for 2012, and only spent \$400,000. This proposal will allow us to better spend those dollars.

Bruce: Are most of these projects getting assistance that nears the cap?

Betsy: Most are less, about \$20,000 on average. We've had people ask us for as little as \$1,000.

Bruce: By increasing the funding, will that increase the raw numbers or give the projects a better chance?

Betsy: There are a number of projects that would greatly benefit from a higher cap.

Thad: It allows us to be more involved, not only financially, but in the project development decisions.

Suzanne: So these do not have enough development capital?

Thad: Sophisticated developers don't come to us. This lets the market know that there are funds available and there is confidence in the opportunity. We're moving earlier in the process.

Glenn: Do you anticipate a change in the types of projects, or are the projects just needing more money?

Betsy: I don't think it will change the types of projects.

Betsy: This is proposed as 12 percent of the non-solar budget or \$1.06 million. My goal here is to get your feedback. We're proposing a \$150,000 project maximum with a twice-yearly solicitation limited to hydropower, biopower, geothermal and wind over 250 kW. One of the criteria would be maturity of project proposal. We'd like to fund a range of technologies, if possible, and we would need to see a plan for utilizing the funds. We would agree upon a set of milestones and require a 50 percent cost share with up to 12.5 percent in-kind.

John: I have a little concern over projects closer to completion. Even more projects will think they can get money for PR.

Suzanne: If they're asking you for the money, but they need to pay first, how is this helpful?

Betsy: They have some initial investment. What I tell people is that if they can't afford the feasibility study, they'll never be able to fund the project. They need to have some financing available somewhere else.

Suzanne: If you only have \$40,000 to spend on one project, and they have enough financial support to spend upfront, do you have any requirements that keep them from spending on things we cannot finance?

Betsy: We recognize that we're part of their financing picture. They may spend some money on items we wouldn't necessarily finance. Are you wondering if these projects may not need us?

Suzanne: That's what I'm wondering.

Tashiana: What portion of the 2012 budget did this represent?

Betsy: It would be less than one-half what it is in 2013.

Tashiana: Is there a perceived need that with less incentives, the projects need more help?

Jed Jorgensen: For the larger projects we work with \$40,000 isn't a very meaningful amount. They may have \$1 million in development costs.

Tashiana: How do you anticipate covering the risk? Do you anticipate more renewable energy credits?

Betsy: We anticipate that we'll get better projects later. The risk is that we'll move a project along and they'll get to a point where they're ready to go and they'll end up not needing an Energy Trust incentive. Then we would get no renewable energy credits from the project.

Thad: We have a pretty good sense of what projects have an above-market cost and which don't. We know that we've seen a lot of 10 MW wind projects developed and we haven't participated in any of them. Also true of landfills. We have a pretty good idea of how those perform financially. We talked about this a few years ago. Demand is increasing and our budget is declining. Our impact has gotten really small, and we're suggesting that we carve off a piece of that to provide this early assistance help. The smallest project on the biomass side is \$2 million to \$3 million. This proposal brings cash early on to get over hurdles, brings our development experience into play and improves the position of the developers. They need technical experience and credibility, and that's the role we could play.

Tashiana: As you know we've been pretty consistent in encouraging in-service territory projects. Would you consider only in-system projects?

Thad: We would continue to give greater weight to in-system projects. Bear in mind that we're trying to determine the value and the demand for this. We think it's there but we'll see.

John: I think we do need to know the failure rate, and it needs to be made available to the council as soon as you can get it.

4. Concept for solar RFP in PGE territory

Kacia: We have unspent, unallocated PGE funds, and we're looking for opportunities for these funds. We prioritize custom non-solar projects, and we carve some funds out for the standard solar program. But we have a lack of opportunity in PGE service territory for the custom projects. We could do an RFP for larger-scale solar that doesn't fit in the standard program or we could put more money into the standard solar program. If we put funds in the standard program, we would need to raise incentives to be able to spend it. We've just ratcheted down our incentives for standard solar, and we don't want to be disruptive to the market. So we look to an RFP.

We're looking at \$1 million based on the draft 2013 budget. We'll finalize the amount in November. We think an RFP is the best use of PGE funds because we can drive near-term generation. Larger-scale solar is also a market we've stepped out of and this would give us some intelligence. For reference, our current incentives are \$0.75 per watt in residential and \$1 per watt in commercial. On a dollars-per-average-megawatt basis the Outback project represented about twice the value of commercial solar, but it had a Business Energy Tax Credit.

If we look at the full above-market cost of commercial solar, now that incentives are reduced, it's around \$14 million per aMW. That means in an RFP we may not get projects as cheaply as the residential and commercial programs. Should we reconsider?

We are thinking that we should be open to any kind of project that wants to bid in, whether it's a QF, net metered, negotiated PPA, commercial scale, utility scale, single or aggregated site, roof mount or ground mount, technology neutral, owner/operator neutral or financial structure neutral.

Bruce: You say technology neutral, this is just solar PV correct?

Kacia: Right. This includes the various technologies within PV, such as thin film, etc.

Peter Greenburg: Would you consider solar thermal?

Kacia: No, we cannot support solar thermal because that is considered an energy-efficiency measure.

Kacia: Threshold criteria would be the same as in the custom RFPs, including a qualified team, site control, business plan, construction begins in 2013, interconnection scoping in progress and permitting in progress. The selection criteria would also include societal benefits but the major emphasis is on cost per MWh for Energy Trust and the levelized above-market cost, which measures how efficient the project is financially.

Juliet: So the difference between this and standard is size?

Kacia: Yes. How should we distinguish this from the standard offering? We don't want this to carve activity out of our standard program. Should we set a minimum size, such as 200 kW? Our standard program cap is at 75 kW. There are potentially market opportunities between 75 kW and 200 kW.

Bruce: With the current incentive structure, if you are not seeing projects larger than 75 kW, it would be a good argument for setting the threshold at 75 kW.

John: I think there's value to the visibility of small solar projects.

Glenn Montgomery: I would agree with that. I think spreading out is the way to go.

Vijay: What about hybrid projects? Solar-geothermal in Idaho. Are you open to that?

Betsy: This is PGE territory.

Vijay: There is Hood River geothermal available.

Kacia: We can consider that for the future, but we want to deploy these funds in 2013, which is a limitation.

Betsy: Custom programs would be a much better fit for that.

Juliet: I'd support taking it down to 75 kW and allowing other funding like the Business Energy Tax Credit, as that would be an opportunity for more intelligence. Go broad early and then limit as needed.

Suzanne: The fact that the process requires a lot of information will wean out a lot of projects, and there will probably be larger projects submitting.

Peter G.: How many kW do you expect \$1 million to get you?

Kacia: The standard commercial solar incentive is at \$1 per watt, so maybe around one megawatt.

Kacia: As for the timeline, the draft final budget will be ready in November, with final approval by the board happening in December. We would issue the RFP in January. We have to think about how long to leave the RFP open. We would need at least 30 days for review but we might be able to bring recommendations to the council in March. If that works then board approval could happen in April and contracting in April or May.

Suzanne: Is there leeway in the budget to hire additional staff for review?

Kacia: Yes, we are considering that.

5. Public comment

There was no public comment.

6. 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 November 28, 2012.