

CONSERVATION ADVISORY COUNCIL

Notes from meeting March 17, 2010

Attending from the Council:

Andria Jacob, City of Portland Bureau of Planning and Sustainability
Jeff Bissonnette, Fair and Clean Energy Coalition
Jim Abrahamson, Cascade Natural Gas (phone)
Joe Esmonde, International Brotherhood of Electrical Workers
Lauren Shapton, Portland General Electric
Paul Case, Oregon Remodelers Association
Steve Weiss, Northwest Energy Coalition
Theresa Gibney, Oregon Public Utility Commission

Attending from Energy Trust:

Fred Gordon
Jan Schaeffer
Jessica Rose
John Volkman

Kathleen Ortbal
Kim Crossman
Leana Mathews
Oliver Kesting
Pete Catching
Peter West
Spencer Moersfelder
Steve Lacey
Sue Meyer

Attending from the board:

Dan Davis
Dan Enloe (phone)

Others attending:

Chad Gillless, Global
Jess Kincaid, CAPO
Kari Greer, Pacific Power
Lisa Worachi, PECl
Maureen Quad
Murali Varahasamy, Lockheed Martin
Peter Gutmann, Gutmann Consulting

1. Welcome and introductions

At 1:37 p.m., Peter West asked for self-introductions and reviewed the agenda. The agenda was adopted with an added update on Bonneville Power from Steve Weiss.

Steve Weiss gave an update on Bonneville and said they are coming to an agreement with utilities to do a tiered rate system. Utilities wanted to get Bonneville out of it but Bonneville doesn't agree and is offering a big discount. This either a "use it or lose it" policy. It is set now which targets council with a higher rate. They must spend enough money to meet council's target on an aggregate basis. Now paid per kilowatt hour and evaluation will be done to make sure savings are there. If they don't spend money than it will go to others and other activity utilities would collect this money and use leave behind money from other utilities. If it is in aggregate and utilities are not getting enough than half way through Bonneville can raise rates and review it on their own and can take it back over.

Fred Gordon asks when this will start. Steve Weiss thinks this will start September 2010. Jim Abrahamson asked if the savings are based on kilowatt hours and will there be verification or is this a deemed savings approach. Steve Weiss stated they are working through it now and depending on the measure they will be verified differently. He also said NEEA savings will come off the top and reduce it.

Fred asked if Bonneville offers smaller utilities help with this. Steve Weiss clarified that Bonneville will focus on how to make this work for them. Also, low-income weatherization funded through tier 1 and programs will continue as they are.

2. Self-Generators Policy

Peter gave a summary of this policy stating that it was adopted in 2003 to address a concern that has never materialized (that a firm would request a large incentive even though the firm pays a small public purpose charge because it generates most of its own energy), and which can be addressed through other policies. Energy Trust staff and the Policy Committee propose to allow the Self-Generators Policy to lapse.

Background and details on the policy:

- Those who produce electric energy and use it on-site do not pay public purpose charges on this generation, because charges are based on sales, not generation.
 - In 2003, the question arose whether large self-generators (which use more than one megawatt per year), who seek a large (more than \$500,000) efficiency or renewable incentive yet pay little to the public purpose fund, should have access to Energy Trust incentives on the same basis as others.
 - At the time, Energy Trust was concerned that demand for incentives would outstrip resources, and wanted to ensure that people who make fuller contributions to the fund have access to incentives.
 - The board adopted a policy allowing self-generators up to \$500,000 in incentives per site/calendar year; with priority to non-self-generators for incentives greater than \$500,000.
 - The Policy Committee reviews all policies every three years to see if they still serve a purpose. The committee reviewed this policy February 2010, concluded that it is no longer needed, and recommended that the board allow the policy to lapse.
 - Energy Trust has never encountered the situation with which the policy is concerned.
 - Other policies require board approval of any incentive above \$500,000, which would seem to address the original concern.
 - If the policy were renewed, it should probably be revised:
 - Most self-generators of significant size are combined heat and power (CHP) projects (facilities that use a fuel, e.g., gas for industrial processes that produce heat that generates electricity). The Energy Trust CHP Policy encourages CHP, yet the Self-Generators Policy would disadvantage them later in competing for large incentives. The Self Generators Policy should address this if it is not allowed to lapse.
 - The Self-Generators Policy applies if a large energy user self-generates *any* energy. It would seem more reasonable to allow at least some amount of self-generation before disadvantaging a self-generator in seeking a large incentive. However, it would be hard to say how much self-generation is appropriate.
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4.16.000-P Self-Generators Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	December 17, 2003	Approved (R236)	December 2006
Board Decision	December 13, 2006	Approved (R420)	December 2009

SELF-GENERATION POLICY

The Energy Trust of Oregon, Inc., Board of Directors directs staff to employ the following policy with respect to self-generators.

1. This policy applies to Oregon customers of Pacific Power and PGE who generate power from nonrenewable sources at a site, whose generation capacity at the site is one megawatt or greater, and who pay a public purposes charge, either on power purchases, standby charges, or both. These customers are defined for this policy as "self-generators." This policy has no bearing on efficiency services for natural gas conversion.
2. For Energy Trust electric energy efficiency or renewable energy technical assistance and financial incentives with a combined value of up to \$500,000 per site per calendar year, self-generators will have the same access to Energy Trust efficiency programs as other Oregon customers of PGE and Pacific Power and will be subject to the same program rules.
3. The Energy Trust may, in its sole discretion, provide more than \$500,000 per year in technical analysis services and financial incentives to self-generators consistent with the rules of individual programs. However, Pacific Power and PGE customers who are not self-generators have priority over self-generators for this additional funding. This means that, should funding be available from a program for only one project requiring more than \$500,000, and both a self-generator and a non-self-generator have projects that meet the program criteria for such large projects, the project of the non-self-generator will be funded.
4. The \$500,000 threshold in this policy was set to conform to the incentive cap in the Production Efficiency program. This \$500,000 threshold also applies to activities under all Energy Trust programs combined. Should the threshold for the Production Efficiency program be moved, staff may move the threshold in this self-generation policy to conform to the Production Efficiency program threshold.

Peter recommends allowing the Self-Generators Policy to lapse. The Policy Committee wanted this to go through the Conservation Advisory Council before being sent to the board for final approval on April 7.

Steve Weiss asked that although this has never come up in the past, does this mean that it could happen in the future and how would we handle this if it did come up in the future.

Peter clarified and said that anything over \$500,000 is required to go to the board and this would be a case-by-case basis. This would also allow companies to not have to wait until the end of the year to bring in the project. Peter also said that they do have the money to pay for these types of projects and the board is the safety valve since it needs to go through them for approvals. There have already been a few biomass and efficiency projects that have already gone through.

Dan Davis asked when this policy would lapse and John Volkman clarified that would be on April 7 when it goes to the board.

Peter asked for approval and all council members approved.

3. Direct-use biomass procedures

Jessica Rose presented the history and changes of biomass procedures in place that will be lapsing and a preliminary look at the cost-effectiveness of the sites reviewed. In 2008 Energy Trust established a procedure for reviewing and qualifying biofuel projects. These procedures have been in place for two years and in that time Existing Buildings has received interest from three sites. Consistent with solar thermal, thermal biofuel projects are high-value efficiency measures worthy of support. Commercial programs will offer services and incentives for biofuel projects consistent with regular custom incentives.

Preliminary Results:

Natural Gas Savings (Therms)	Total Incremental Cost	Total Potential Incentive	Utility PV of Benefits	Societal PV of Benefits	Utility System BCR	Societal BCR
12,140	\$40,000	\$12,140	145,885	145,885	12	3.647
16,990	\$41,000	\$14,350	194,297	194,297	13.5	4.739
12,440	\$31,000	\$10,850	149,490	149,490	13.8	4.822

Joe Esmonde asked if this will be good for 30 years and Jessica answered that the assumed measure life is 30 years and said they assume the customer would displace 100 percent of the heating fuel with no back-up source, so this would be a large investment for the customers.

Joe asked if the pellets would be compressed. Jessica said yes they anticipate pelletized fuel. Fred Gordon asked would the pellet fuel be taken into consideration for the cost. Jessica answered that the preliminary review did not capture additional costs but additional costs would include fuel, operations and maintenance and housing the fuel.

Dan Davis asked if the replaced boiler would be a natural gas boiler and if there are any other cases where the boiler would use methane or another biofuel? Jessica answered yes there were other possibilities and another on-site fuel source would be possible. Peter clarified that this is referring to commercial buildings and that methane is handled within the Production Efficiency program. Jessica also added the projects would follow a custom path and would be 35 percent of the project cost or in accordance with custom gas projects.

Jessica then explained the cost-effectiveness tests for each of the three runs:

- 30-year measure life and zero non-energy benefits
- Load profile is space heat
- Displacement of 100 percent of space heating load above the cost effectiveness
- Incremental cost because the boilers are close to end of life and considered at replacement

Staff proposes to simplify the process to treat direct-use biomass the same as any other approved custom measure. The following are the proposed changes to the Biofuel Efficiency Project Process:

1. Moved definition of building types to the introduction and removed first bullet
2. Added reference to SB 1149 to #1
 - a. To define renewable waste fuel consistent with SB 1149
 - b. Includes digester gas from sewage treatment facilities, food processing or dairies, solid organic fuels from wood, forest and field residues, landfill gas, or dedicated energy crops available on a renewable basis
3. Replaced language that would limit participants to those who are recipients of services as long as they contribute to the public purpose charge
 - a. To be in alignment with the program
 - b. Project sites must maintain eligibility to receive natural gas funds
 - c. Support all customers we would currently serve, including firm and interruptible rate schedules
 - d. Remove reference to public purpose charge
4. We can eliminate exploring CHP before thermal only
 - a. As we meet with the customer and start to analyze their site
 - i. Pinpointing needs and understanding their project goals
 - ii. We determine how to appropriately size equipment
 - b. We will have assurance that the project leads to persistent reduction in loads and any impacts from efficiency
 - i. This is accordance with our existing program requirements
5. We do offer standard incentives to customers — they recognize that payback is quicker than other large capital improvement projects or renewable projects
6. DEQ — participant would go through this as their normal procedure, pulling required permits
 - a. Has less to do with the Biopower program; it is just a normal part of the process for the customer
 - b. Remove DEQ and Biopower requirements

Peter clarified this would clean up the language this would still be regulated and would require the necessary permit.

7. Commercial programs will have assurance that the incentive investment leads to sustained reduction in fossil/electric loads in accordance with our existing program requirements
8. In commercial and multifamily projects where fossil fuel systems will act as backup, the incentive agreement will:
 - a. Contain provisions for partial recovery of incentives, if the site reverts to fossil fuel
 - b. Require proof of the biofuel supply though the incentive payback term

- c. New or end of life system assumes a baseline is a new system
- d. Retrofit system assumes existing conditions as baseline

A question was asked if a participant has ever reverted back to fossil fuel. Yes, this has on the renewable side. Fred referred specifically to commercial and multifamily as the only place where we have seen fossil fuel as the back up and asked if we want to contain this.

Kim Crossman said there are only opportunities where a waste fuel source was on their site and they would not be able to run biomass without this so it wouldn't change this.

Peter asked the concern about if they do have back-up fuel supply and we accept projects with back-up diesel supply there are other regulations that limit this.

Dan Davis said there might be cases where this is an industrial customer. Fred said he was not concerned and can change again if circumstances change. A suggestion was made to eliminate the words commercial and multifamily if it doesn't confuse industrial projects.

Peter said he sees a lot of wastewater treatment plants and if we are dealing with this we need to think of circumstance and find out what we are really worried about.

Fred agreed with Peters comment and the need to distinguish where there is an on-site fuel source and determine the chances of this happening.

Dan Davis asked if this policy would apply to industrial customers with on-site fuel—if someone does have an alternative fuel and reverts back to fossil fuel do we want to get our money back. Dan Enloe said yes. Lauren suggested keeping this broad. Peter suggested looking at the operation over time.

Kim added that with a custom analysis they would look at up time and down time and offer incentives based on analysis. A year later the project also receives third-party verification.

Theresa Gibney asked about an example and what if a plant shuts down in two years. Peter said this depends on the size of the plant since payback provisions depend on size and the value of what is remaining. This is built into the program's risk analysis and not measure life and realization rates account for lower than expected savings.

Steve Weiss said this is an unintended situation and as far as when the plant shuts down the savings are there and they aren't using additional energy and there is not a load growth. These plants are risky for industrial customers—why they need help in the first place—so there is some risk involved for Energy Trust.

Theresa asked if there are situations where energy use goes up after the plant shuts down and if we have appropriate safeguards in place to make a decision if it is cost effective. Peter said we will make assumptions and assume flexibility with this.

The general consensus was to rework this item and after further discussion the following changes were made: "Projects where fossil fuel systems will act as backup, the incentive

agreement will: a) contain provisions for partial recovery of incentives, if the site has a sustained use of fossil fuel significantly in excess of what was forecast in the study.”

9. Eligible project costs in alignment with a custom project
 - a. New or end of life system assumes a baseline is a new system
 - b. Retrofit system assumes existing conditions as baseline

Dan Davis asked what the cost is. Jessica said it is an incremental cost and based on the benefit/cost test. Dan then asked if part of the incentive is for the consumption and Jessica said it does not. Fred clarified that when we are done we have to factor in present value with fuel cost but this is not part of incentive calculation.

Everyone approved the given changes with the revision Jessica made to item number 6.

4. Incentive caps for new and existing buildings

Oliver Kesting presented on the plan for the Existing Buildings program and New Buildings program to reinstate the enhanced incentive levels that had been in effect in 2009 in order to achieve the stretch goals for 2010. This plan would take effect this month.

Enhanced incentive levels for retrofits and major renovations in 2009 for custom non-lighting measures started at \$0.25/kWh up to 50 percent of eligible costs. These were discontinued in mid 2009 due to concerns over constrained budgets for Pacific Power and lowered to 2008 levels of \$0.20/kWh up to 35 percent of eligible costs. As the year unfolded those concerns did not materialize and the program fell short of stretch goals. Existing Buildings program’s forecast indicates program changes are required in order to meet 2010 stretch goal. The change will help to drive more market demand for non-lighting measures. Returning to the higher levels will re-align Existing Buildings and New Buildings with the offerings in the Industrial and Agriculture program. Oliver said they have done the analysis on the cost and this will require no additional budget.

The incentive changes for retrofits and major renovations would be effective 3/25/2010 through 12/31/2010 and would include:

- Cap increased from 35 percent to 50 percent of eligible cost
- Increase electric incentives for non-lighting measures from \$0.20/kWh to \$0.25/kWh
- Gas incentives remain at \$1.00/therm
- Lighting incentives and caps remain at \$0.17/kWh capped at 35 percent of eligible cost

The budget impact would require no additional budget to achieve conservative goals. The Existing Buildings program might require up to \$650,000 in additional incentives to meet stretch case goal, however this is can be managed through shifting funds from other contract activities

	Budgeted \$/kWh	Projected \$/kWh	Additional Incentive Budget
2010 \$/kWh (Conservative Goal)	\$ 0.220	\$ 0.172	\$ -
2010 \$/kWh (Stretch Goal)	\$ 0.158	\$ 0.172	\$ 650,000

There would be minimal if any 2010 budget impact to New Buildings due to longer project lead times. Any impact can be handled internally within the existing contract.

Joe asked how much of an interest there is in retrofits and will there be a bigger push for older existing buildings. Oliver said the market is looking slower since there is not much capital budget and this could help increase this.

Paul asked if this will include multifamily and Jessica said no it would not include multifamily.

Joe asked would this entail mostly HVAC measures. Oliver said yes mostly HVAC, controls and shell measures.

Andria Jacob wanted to understand how we can keep the incentives more consistent without having to jump around as much since there was a long discussion on lowering the incentive. Oliver responded that they have been working more closely with the PMCs to forecast and get feedback sooner so that they can get a consistent level.

Peter said this is a legitimate concern and it was a mistake to lower the incentive and their forecasting was incorrect. Now we have the stretch case goal and know the other levers to maneuver to make this work. Last time we did not take a better internal look at the system. Compared to last year, we are behind with projects in the pipeline and we need to react to the current market.

Oliver said gas goals and gas incentives are going to stay the same. Oliver also clarified that for the New Buildings program the major gut rehab falls under new buildings and these incentives would apply to these types only.

Everyone was in favor and approved.

5. Update on Clean Energy Works Portland Pilot

Steve Lacey gave an update on Clean Energy Works Portland, which is a pilot program helping up to 500 qualified Portland homes finance and install energy-efficiency upgrades. This collaboration with the City of Portland and Energy Trust started over a year and half ago when the city wanted to meet climate change goals and Energy Trust (anticipating impending EEAST legislation) wanted to be prepared for piloting EEAST efforts.

The pilot offers homeowners access to low-cost financing for energy-efficiency home improvements, like insulation, high-efficiency furnaces or water heaters. Participants work with an Energy Trust Energy Advocate on prioritizing upgrades and considering financing options.

Clean Energy Works Portland qualifies as a pilot under the Oregon Energy Efficiency and Sustainable Technology Act (EEAST), HB 2626, enacted by the Oregon legislature in 2009 (with technical amendments enacted in 2010).

The pilot is led by the City of Portland in collaboration with Shorebank Enterprise, Cacadia, Multnomah County, Portland Housing Bureau, Portland Development Commission, Energy Trust of Oregon, NW Natural, Pacific Power, Portland General Electric, Construction Apprenticeship and Workforce Solutions, Worksystems Inc., Home Performance Contractors Guild and Green For All.

Funds for the pilot come from American Recovery and Reinvestment funds, which are focused on job creation. With this in mind, Portland City Council in September approved a Community Workforce Agreement to support equity and workforce goals for Clean Energy Works Portland and appointed a committee of stakeholders to oversee progress toward these goals. Portland expects to hear in March regarding its proposal for \$75 million in additional federal recovery act funds to scale the pilot in the Portland metro area and selected communities statewide.

The pilot is continuing to evolve and community activists and workforce groups will be offering these services in the field.

Clean Energy Works Portland status as of March 6, 2010

- 40 homes complete, 97 in process
- Phase 1 (pre-pilot) completed with 23 homes
- Phase 2, started late November, has 17 homes complete, 33 more by end May
- Phase 3, started February, has done 56 assessments and will complete 210 homes by end June
- Phase 4 and 5 start May, will complete remaining approximately 200 homes by September
- First contractor reports on Community Workforce Agreement performance began arriving in February; reporting tool in place; two training programs certified; contractor/business support in place and more coming
- First widespread call for participants issued in last week February; "viral" outreach continues
- Evaluation data collection in process, including cost and process analysis, survey of participants upon home completion and interviews with key stakeholders

There are 500 homes total within the pilot and this could scale up over the next few years depending on the infusion of federal funding. We are looking at doing two more pilots geared toward small commercial and rural residential. We anticipate that this will be implemented across the state dependent on EEAST legislation.

Steve Weiss asked if the loans are paid back on utility bills. Steve Lacey said they are passed through and invoiced as part of the normal utility bill with the charge on it that goes through the utility and back through Shorebank who holds the note.

Steve Weiss asked about the issue if a customer cannot pay their bill. Lauren Shapton said the utility turns it back to Shorebank who then tries to collect the money. The customer's power will not be turned off. Lauren also said that if the customer does not pay this will not affect their credit rating.

Steve Weiss asked if this is for owner-occupied homes only. Steve Lacey said this is only for single-family homeowners at this time but hopefully this will scale up with multifamily and small commercial.

Paul Case said this pilot is serving houses that were harder to access before and there are large savings available.

Steve Weiss asked if in the houses completed so far they have seen bill reductions to pay for the loan. Steve Lacey said not on large loans because they entail furnace replacements and you will only get incremental savings, but if it is just base measures than it could reduce the bill. Loan payments are 20 years. Fred added that the loan is for efficiency and also for buying a new furnace which is a large purchase.

Joe asked if Emerald City was part of the grant. Andria said that Emerald City approached the City of Portland but she was not sure of the outcome.

Dan asked what the interest rate was. Andria said it ranges but the majorities are at 5.99% and they are trying to hit a diversity of income levels.

Paul asked if this will be going statewide and how will the rest of the state take advantage of this. Steve Lacey said there are potential entities with fund pools just like in Portland. The Oregon Department of Energy will get involved and will add funding with a different funding mechanism created through EEAST.

Andria said they have been talking with Oregon Department of Energy on how to run pilots and ways to represent the outlying areas. Shorebank is also advising Oregon Department of Energy on their experience and how to solicit pilots so that it is a unified force. The city is also exploring the creation of an entity so that they wouldn't have to replicate this multiple times throughout the state.

Theresa asked if the Oregon Department of Energy's Small Scale Energy Loan Program (SELP) is on the table. Steve Lacey clarified that SELP along with loan offset grant money is not intended for this purpose.

Andria mentioned Oregon Department of Energy said SELP can't serve as that capitol foundation. Steve Lacey said they may have to change legislation within EEAST to address this.

Dan Davis asked how a community could get involved in the program. Steve Lacey said they need to have a fund pool, a fund manager entity and some sort of advocacy group in order to be considered for an Energy Trust-sponsored EEAST pilot.

6. Adjourn

The meeting adjourned at 3:22 p.m. Next meeting is April 21, 2010.