Meeting of the Conservation Advisory Council
Wednesday, March 17, 2010 1:30 – 4:15 p.m.
Energy Trust Megawatt Conference Room
851 SW 6th Ave. Suite 1200
Portland, OR 97204

EnergyTrust of Oregon, Inc.

AGENDA

1:30 Welcome and Introductions

1:40 Self Generators Policy *(Decision)*
Energy Trust has an expiring policy that requires self-generating customers to be subject to lower priority for any other funding for subsequent efficiency projects. The concerns in 2003, which prompted the policy, have never materialized. Energy Trust staff and the Policy committee believe the policy is no longer warranted and can be addressed through other policies.

2:15 Direct-use biomass procedures *(Decision)*
Since 2008, staff has followed agreed procedures for evaluating biomass projects that generate heat to offset fossil fuel use or reduce electricity consumption. With minor modifications, staff proposes to continue applying the review criteria.

2:45 Break

3:00 Incentive caps for existing buildings *(Review)*
During the first half of 2009 the existing buildings program paid up to 50% of eligible costs, within the cost effectiveness caps. The program reverted to a more historic 35% of eligible costs for the remainder of 2009. Activity fell off with at the lower eligibility level for cost-share. Staff proposes to return to the higher cost share of 50% to re-invigorate the market.

3:20 Update on Clean Energy Works Portland Pilot *(Information)*

3:45 Additional Public Comment

4:15 Adjourn

The next scheduled meeting of the Conservation Advisory Council will be on April 21, 2010.

Energy Trust Biofuel Efficiency Project Process

March 17, 2010

Summary

The energy efficiency programs adopted a short-term procedure in 2008 for reviewing and qualifying certain direct-use biomass projects. Those procedures were to be in place for two years. Staff proposes to simplify the process to treat direct-use biomass the same as any other approved, custom measure.

Background

Biofuels can be broadly defined as solid, liquid, or gas fuel consisting of, or derived from biomass (living and recently dead biological material that can be used as fuel or for space heat, water heat, and industrial production). Thermal biofuel projects are those that use biomass combustion to reduce or eliminate use of gas or electricity to heat buildings, homes, hot water, or for other purposes.

Consistent with solar thermal, thermal biofuel projects are high value conservation measures worthy of support. Business Energy Solutions programs will offer services and incentives for biofuel projects consistent with regular custom incentives. Projects are limited to commercial, industrial and large scale multifamily buildings greater than 10 units.

Biofuels for heat and/or power are common practices and accepted applications in food processing, dairies, wastewater treatment plants and the wood products industry across the US and in the northwest. Two years ago, the Energy Trust became aware of a 'fuels for schools' initiative, headed by the US Forest Service, to promote direct use of biomass for thermal energy in public schools. The economics for it are marginal in Oregon and in the last 2 years, the initiative has not had momentum.

Expiring Process

The 2008 procedures were meant to address the potential for a rush from the fuels for school initiative (see attached). However, the actual procedures were written quite broadly and could apply to accepted, standard measures we encourage, particularly in industrial settings. It was also inconsistent with the procedures and polices that apply to renewable generation projects using biomass.

New Process

The revised procedures, attached:

- Align the definition of eligible biomass fuels with those for renewables in SB1149
- Pull the review and approval of such projects into the standard, custom tracks within the programs for evaluating projects and defining incentives.
- End the temporary nature of the procedures.
- Continue to assure the sizing of such projects are appropriate to the situation, not precluding future on-site, efficiency efforts.
- Continue applicability to only those eligible to participate in Energy Trust programs.

Energy Trust Revised Biofuel Efficiency Project Process

March 17, 2010

Biofuel can be broadly defined as solid, liquid, or gas fuel consisting of, or derived from biomass (living and recently dead biological material that can be used as fuel or for space heat, water heat, and industrial production). Thermal biofuel projects are those that use biomass combustion to reduce or eliminate use of gas or electricity to heat buildings, homes, hot water, or for other purposes.

Consistent with solar thermal, thermal biofuel projects are high value conservation measures worthy of support. Business Energy Solution programs will offer services and incentives for biofuel projects consistent with regular custom incentives. Projects are limited to commercial, industrial and large scale multifamily buildings greater than 10 units.

Conditions for Project Eligibility

1. Only renewable waste fuel source projects will be considered as defined in SB 1149, which 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.
2. To be eligible, a project sites must maintain eligibility to receive natural gas or electric funds.
3. Analysis will ensure that any project is appropriately screened for cost-effectiveness and sized for the proposed application.
4. Requires all emission regulatory permits that a customer would be required to obtain (i.e., as issued by the Department of Environmental Quality).
5. Program will have assurance that the incentive investment leads to sustained reduction in fossil/electric loads in accordance with our existing program requirements.
6. 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. And,
    b. require proof of the biofuel supply though the incentive payback term

Project Application Process

Applies to replacing electric or natural gas fueled system with biofuel alternative and utilizes the normal, custom-track processes, including the following steps:

1. Perform technical and economic feasibility assessment of existing system and high performance biofuel system and of efficiency measures.
    a. Establish current or baseline equipment fuel consumption.
    b. Determine project cost For a new or end of life system, we assume the baseline system is a new fossil fuel or electric system and compare the cost of that system

to the cost of the biofuel system to determine eligible incremental costs. In a retrofit application, the total cost of the thermal biofuel system are eligible costs.

2. Perform cost-effectiveness screening using project cost and avoided fossil fuel or electric costs as savings.
3. Offer the standard Production Efficiency, Existing Buildings or New Buildings program incentive calculated from the fossil fuel energy savings and eligible project costs..

Claim all of the off-set electric and or gas usage regardless of B/C outcome providing that Energy Trust influence resulted in project implementation.

Expiring Energy Trust Biofuel Efficiency Project Process
April 22, 2008

Biofuel can be broadly defined as solid, liquid, or gas fuel consisting of, or derived from biomass (living and recently dead biological material that can be used as fuel or for space heat, water heat, and industrial production). Thermal biofuel projects are those that use biomass combustion to reduce or eliminate use of gas or electricity to heat buildings, homes, hot water, or for other purposes.

Consistent with solar thermal, thermal biofuel projects are high value conservation measures worthy of support. Business Energy Solution programs will offer services and incentives on a pilot basis to support thermal biofuel projects. Under this pilot, Energy Trust will accept up to 10 projects in 2008 and 2009. No active marketing and outreach efforts will be made by Energy Trust. Evaluations for project success and to measure efficacy will be conducted before adding biofuel projects to the programs' standard list of measures.

Conditions for Project Eligibility

7. Only renewable waste fuel source projects will be considered. Biofuel sources derived from crop production specifically grown for biofuel production such as ethanol or biodiesel from rape seed or soybeans will be ineligible.
8. Projects are limited to commercial and industrial applications including large scale (> 10 unit) multifamily buildings.
9. To be eligible, project sites are required to contribute to public purpose funding <u>after</u> project is completed.
10. BioPower CHP will be explored before thermal-only projects are eligible for incentives.
11. Participant must agree to initiating a site-wide efficiency program as a condition to Energy Trust support for a biofuel project
    a. Perform analysis of biofuel project based on loads remaining after any efficiency measures with lower cost/unit savings.
12. Offer standard program incentives based on reduction in gas or electric energy load.
13. Requires all emission regulatory permits (DEQ) per BioPower program requirements.
14. Program will have assurance that the incentive investment leads to sustained reduction in fossil/electric loads. This is a particular concern for projects where fossil fuel systems will act as backup.
    a. Program requires proof of biofuel supply though incentive payback term, and
    b. The incentive agreement will contain provisions for partial recovery of incentives if the plant reverts to fossil fuel.

Project Application Process

Applies to replacing electric or natural gas fueled system with biofuel alternative.

4. Perform technical and economic feasibility assessment of existing system and high performance biofuel system and of efficiency measures.
    a. Establish current or baseline equipment fuel consumption.
    b. Determine project cost (incremental cost for new and end-of-life systems). We assume the baseline system is a new fossil fuel or electric system and compare the cost of that system to the cost of the biofuel system.

5. Perform cost-effectiveness screening using project cost and avoided fossil fuel or electric costs as savings.
6. Offer the standard Production Efficiency, Existing Buildings or New Buildings program incentive calculated from the avoided fossil fuel costs, providing it passes societal cost effectiveness.
7. Claim all of the off-set electric and or gas usage regardless of B/C outcome providing that Energy Trust influence resulted in project implementation.

Allow Self-Generators Policy to Lapse

March 11, 2010

Summary

A policy 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. Staff and the Policy Committee propose to allow the Self-Generators policy to lapse.

Background

- Those who produce electric energy and use it on site do not pay public purpose charges on this generation, because the 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 (Attachment 1) allowing self-generators up to $500,000 in incentives per site/calendar year; with priority to non-self-generators for incentives over $500,000.
- The Policy Committee reviews all policies every three years to see if they still serve a purpose. The committee reviewed this policy in February, concluded that it is no longer needed, and recommended that the board allow the policy to lapse.

Discussion

- 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 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.

Recommendation

Allow the Self-Generators policy to lapse.

Attachment 1

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.**

Clean Energy Works Portland
Report to the Conservation Advisory Council 3-17-10

Clean Energy Works Portland is a pilot program that is helping up to 500 qualified Portland homes finance and install energy efficiency upgrades.

The pilot offers homeowners access to low-cost financing for energy efficiency home improvements, like new insulation or the installation of a high efficiency furnace or water heater. To help decide which upgrades and financing options make sense, participants will receive the assistance of a qualified Energy Advocate throughout the process.

Clean Energy Works Portland qualifies as a pilot under the Oregon Energy Efficiency and Sustainable Technology act, 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 federal recovery act monies, 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 Mar. 15 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.

More information on the pilot and how to apply at www.cleanenergyworksportland.org.

Clean Energy Works Portland status as of 3/6/10:

- 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