EnergyTrust of Oregon, Inc.

Policy Committee of the Energy Trust Board of Directors

Oct. 16, 2007, 3:00-5:00 pm

Attending: Jason Eisdorfer, Tom Foley, John Reynolds, Margie Harris, Fred Gordon, Sue Meyer Sample, Steve Lacey and John Volkman

1. Discount rate/cost-effectiveness policy: Discount rates affect Energy Trust evaluations of the cost-effectiveness of measures and programs, budget, and reporting. They are a key variable in evaluating whether Energy Trust is meeting the OPUC's levelized cost performance measure. The discount rate issue will have a significant effect on the 2008 Energy Trust budget. Staff hopes to get board approval of a change in the discount rate at the November 14 meeting.

Discount rates allow us to compare the value of energy resources with different lives and costs. For example, energy conservation is mostly purchased up front, when measures are installed. A low discount rate, like the 3% rate that Energy Trust uses, says that conservation's future value will stay relatively high. A higher discount rate leads to a lower estimate of future value. Analytically, this may make a small difference for measures with shorter lives (like CFLs), and much more for measures with longer lives (like insulation). Each utility IRP uses a slightly different discount rate. Energy Trust uses yet another, much lower rate.

OPUC staff would like the Energy Trust to use a discount rate and other assumptions that are consistent with those used in utility integrated resource plans (IRPs), including factors that affect utility system avoided costs. Under SB 838, additional Energy Trust funding will be based on IRPs, so consistency will assure that our funding and our investments are made on a consistent basis. We discussed this issue with OPUC staff in April, and since then the two staffs have continued to talk in a broader process in which Energy Trust, the utilities, and PUC staff are trying to reach agreement on avoided cost.

The avoided cost discussions addressed factors such as avoided fuel and construction costs, savings from avoided T&D construction, avoided power delivery, CO_2 benefits, the 10% conservation advantage from the regional power act, and hedge value of efficiency. Our expectation is that the avoided cost discussions will (discount rates aside) show higher avoided costs. However, the discussion is likely to take some time to work out.

In the avoided cost discussions, staff reached tentative agreement on a 5.2% (real) discount rate. This is close to the utilities' discount rates. Staff is comfortable with using this rate in cost-effectiveness analysis if the OPUC raises its levelized cost performance measure for Energy Trust going forward. While this has an effect on the cost-effectiveness of measures in different sectors, the effect is not large and we do not expect to recommend sector changes.

The policy committee is reluctant to adopt a higher discount rate without assurance of this change in levelized cost. It would be better to link changes in the discount rate with the other changes. Staff thinks that increasing the levelized cost performance measure from 2 cents to 3-3.5 cents on an interim basis pending more definitive resolution of avoided cost issues would be reasonable. The increase is warranted by the reality that as we go after significantly more efficiency, measures are more expensive even though they are still cost-effective. For example,

we expect to include home insulation as a measure if we receive supplemental efficiency funds. We expect our levelized cost to rise from 2.1 to 2.9 cents with supplemental funding and measures. This trend is well understood in Oregon and nationally.

Staff feels a need to resolve the discount rate issue so it can prepare a 2008 budget. We would not actually use a different discount rate in cost-effectiveness screening until we reach agreement with the OPUC on other adjustments to avoided cost, factoring risk, etc. Staff proposes to check with OPUC staff before it makes a recommendation to the board. If we have sufficient assurance that the levelized cost performance measure for 2008 will increase along the lines discussed above, staff would recommend changing the board's cost-effectiveness policy at the next board meeting along the lines of the attachment, so we can settle this issue for purposes of the 2008 budget.

2. Budget: Work on the 2008 budget is still in progress. Margie will make a presentation at the RAC and CAC tomorrow. At this point, the budget is based on revenues from the 3% and gas charges because we don't know how much or when supplemental efficiency funds may materialize. The budget appears to balance; we expect to largely eliminate carryover in the electric budget and reduce it on the gas side. Demand for solar has gone way up and we will have to figure out how to ration limited funds. Jason suggested Margie mention in her presentation not just that climate change significantly changes the context for our work, but that carbon regulation is likely to be in place in the next few years.

3. Briefs: Updates on issues associated with program and SB 838 implementation:
   - SB 838 efficiency funding: Staff have worked with utilities on their proposals for supplemental efficiency funding. PGE's lost-revenue proposal may raise concerns with some parties. Pacific Power's proposal appears to be straightforward. Both are expected to be filed this month.
   - SB 838's requirement that renewable funds be used only for the cost of "constructing and operating" projects of 20 megawatts and less in size. The OPUC has issued proposed rules defining this phrase. Basically, the proposal says that the authority to pay above-market costs to construct and operate projects refers to the cost developers would expect to incur for specific projects. Other costs such as market development and program delivery are authorized under another section of the law.
   - Carbon credits: We have scheduled a meeting for Oct. 26th to scope this subject with Bill Nesmith, Lori Koho and the strategic planning committee. After that meeting, we will report back to the Policy Committee.

ATTACHMENT

4.06.000-P Cost-Effectiveness Policy and General Methodology for the Energy Trust of Oregon

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	February 27, 2002	Approved (R83)	March 22, 2002
Board	March 22, 2002	Reviewed, Revised	April 3, 2002
Board	April 3, 2002	Reviewed, Revised (Minutes)	April 2005
Board	September 7, 2005	Revised (R353)	September 2008

Introduction

The Energy Trust of Oregon seeks a future that includes sufficient, stable, and affordable power available to all customers through sustained investment in energy efficiency and renewable resources that reduce the economic and environmental costs of using gas and electricity. To properly evaluate such investments, the Energy Trust of Oregon (Trust) evaluates energy saving projects and measures and analyzes how to compare their economic cost compares to alternative sources of gas and electric energy. In the past the Oregon Public Utility Commission (OPUC), the Northwest Power and Conservation Council (NWPPCC) and the Northwest Energy Efficiency Alliance (Alliance) have all used similar approaches and assumptions to analyze the cost-effectiveness of energy efficiency investments. This policy encompasses three generic perspectives – Consumer, Utility System, and Societal. It describes the key variables or economic model inputs that define these perspectives and allow the analyst to compare the cost of energy efficiency to conventional sources of gas and electrical energy.

Policy

The Energy Trust of Oregon adopts the Utility and Societal perspectives, as described below, as its primary perspectives for evaluating energy efficiency projects. It will also use the utility-system perspective as an additional tool to assure that the kWh saved per dollar invested by the Trust is reasonable. The Consumer perspective is used to help design projects.

The societal cost definition is in alignment with the OPUC docket no. UM-551's definition of Total Resource Cost (Societal) perspective as including total costs and total benefits in cost effectiveness calculations. The following costs will be included in the societal perspective:

1. Trust incentives paid to the participant

2. Trust administrative costs
3. Monitoring, evaluation and non-incentive costs of PMCs and Energy Trust staff
4. Oregon and local government administrative costs associated with incentives
5. The participants remaining out-of-pocket costs for the installed cost of the measures

The cost of tax credits to the State of Oregon will not be included, because they are considered to be a transfer, not a net cost to society. However, to the extent that they are significant, the administrative costs of those tax credits will be considered.

The Energy Trust will include the following benefits:

1. the value of the electrical and/or gas energy saved based on (1) the Regional Technical Forum long-term forecast of wholesale market prices for electricity and (2) the NW Natural gas price forecast for gas, as long as it is reasonably consistent with the Regional Technical Forum forecast of gas prices for power plant fuel.
2. non-energy benefits as quantified by a reasonable and practical method and described in situations where they cannot practically be quantified
3. for electricity, bulk system transmission capacity benefits (both line loss and avoided transmission construction.
4. for electricity, transmission and distribution benefits, both line losses and avoided Transmission and Distribution construction.
5. natural gas capacity benefits are of a lesser magnitude and difficult to quantify, so the Energy Trust will not quantify them. Natural gas delivery loss benefits are also modest in magnitude. Local delivery losses will be considered to the extent that they are included in NW Natural price forecasts. Gas transmission losses are difficult to quantify and will be described.

In addition, the Energy Trust will apply in its analysis the 10% credit for energy efficiency as required under the Northwest Power Act and OPUC docket no. UM-551. This credit recognizes the benefits of conservation in addressing risk and uncertainty.

Both the Power Act and OPUC docket no. UM-551 also suggest consideration of external costs such as environmental costs associated with air pollution. The Trust will initially use a credit of $15.00 per ton of carbon dioxide and will update that figure as information improves.

Methodology

The following additional decisions have been made about implementation of this policy:

- For the near-term, the Pro-cost model, using marginal costs from the Aurora model, will be used to analyze the costs and savings of efficiency programs. The selection and specifics of these tools will be updated as time, resources, and opportunities permit to maximize transparency, time-dependent variations in resource value, and reasonableness.
- The Energy Trust of Oregon will adopt a 5.2% discount rate for comparing the costs and benefits of efficiency investments to other investments.
- The Energy Trust of Oregon will develop estimates of line losses specific to Oregon based on prior utility filings if this provides an improvement over Regional Technical Forum estimates, and then update these with better information when it is available.

The Energy Trust of Oregon will investigate the use of data from prior PGE and PacifiCorp filings to enhance estimates used by the RTF for avoided transmission and distribution costs

attributable to efficiency measures. The Energy Trust of Oregon will work over the next several months with PGE, PacifiCorp, the NWPPC, and others to improve these estimates.

The economic comparison will be presented as a benefit-to-cost ratio except for the consumer perspective that (for reference) will be presented as a two simple payback, one with non-electric benefits and one without non-electric benefits. The final decision on cost effectiveness will be based on the benefit-to-cost ratio for the Societal and Utility System perspectives (must pass both if data permits use of both) over the appropriate project period along with description and Board consideration of non-quantified costs and benefits. The Energy Trust will also consider other factors in selecting programs, as specified in the various strategic and action planning documents of the Energy Trust.

The cost-effectiveness analysis will include impact on the action of customers who do not directly participate and long term market effects (e.g., impact on long-term price, sales, or efficacy of efficient technologies beyond the direct program participants) for projects where such effects are a significant and likely result.

In conclusion, an Energy Trust project should be reviewed from both the Utility system and the Societal perspectives, and if the Societal benefit-to-cost ratio is greater than 1.0, it should be considered cost effective.

Adopted on September 7, 2005, by the Energy Trust of Oregon, Inc. Board of Directors