EnergyTrust of Oregon, Inc.

Resolution 464
Approving Changes to the Energy Trust Cost-Effectiveness Policy

Category: Policy
Adopted: February 13, 2008

APPROVING AMENDMENTS TO THE ENERGY TRUST COST EFFECTIVENESS POLICY

WHEREAS:

1. **Energy Trust uses a three percent discount rate to evaluate efficiency programs for purposes of analyzing new measures and initiatives, developing supply curves and reporting on results. Utilities, in contrast, use higher discount rates for efficiency and other resource options.**
2. **When Energy Trust and utilities use different discount rates, the OPUC has a hard time evaluating efficiency costs compared to other resources in integrated resource planning. The problem becomes more significant with the passage of the Oregon Renewable Energy Act, which authorizes the utilities to seek supplemental efficiency funds. The OPUC intends to evaluate those filings using IRP data and analysis.**
3. **Energy Trust has discussed discount rate with OPUC and utility staffs in the context of other factors that affect the avoided cost of resource, factors such as avoided fuel and construction costs, savings from avoided transmission and distribution construction, avoided power delivery, CO2 benefits, the 10% conservation advantage from the regional power act, and hedge value of efficiency.**
4. **Energy Trust has communicated to the OPUC the importance of increasing the levelized cost performance measure that the OPUC uses to evaluate Energy Trust program performance. Without such an increase, using a higher discount rate could prejudice Energy Trust programs.**
5. **Assuming a higher levelized cost performance measure and considering the other avoided cost factors mentioned above, increasing the discount rate Energy Trust uses to qualify and evaluate measures and programs to 5.2% should not have a significant effect on Energy Trust programs.**

THEREFORE, the Energy Trust of Oregon, Inc. board of directors amends the Energy Trust cost-effectiveness policy as follows:

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
Board	February 13, 2008	Revised (R464)	February 2011

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 refine estimates of line losses specific to Oregon based on new information from utilities.

The Energy Trust of Oregon will consider avoided transmission and distribution costs attributable to efficiency measures as appropriate.

The economic comparison will be presented as a benefit-to-cost ratio except for the consumer perspective that (for reference) will be presented as two simple paybacks, 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.

Caddy McKeown asked for clarification if Tom was still a voting board member. Tom replied that his term on the board ends at the end of this meeting.

Moved by: Al Jubitz		Seconded by: Tom Foley
Vote:	In favor: 9	Abstained: 0
	Opposed: 0	

Adopted on February 13, 2008, by Energy Trust Board of Directors.