

Conservation Advisory Council

Notes from meeting May 12, 2004

Steve Lacey convened the meeting at 1:40 pm.

Attending from the Council:

Carol Brown, PGE

Janet Fairchild, OPUC

Ken Keating, BPA

John Reynolds, Energy Trust board

Dave Tooze, City of Portland Office of Sustainable Development (for Sue Anderson)

Steve Weiss (for Sara Patton), NW Energy Coalition

Attending from the Energy Trust of Oregon:

Ben Bronfman

Fred Gordon

Steve Lacey

Spencer Moersfelder

Char Rollier

Jan Schaeffer

Others attending

Teri Duncan, PEI

Hassein Haeri, Quantec

Brian Hedman, Quantec

Jane Peters, Research Into Action

Robert Scholl, Research into Action

Sam Sirkin, Ecos Consulting

Jim Volkman, Efficiency Concepts

Phil Welker, PEI

Geoff Wickes

1. Introductions

Steve welcomed attendees and asked for self introductions.

2. Refrigerator recycling initiative

Sam Sirkin of Ecos presented the proposal to remove second refrigerators from people's homes. It currently is not cost-effective to do a second refrigerator pickup in association with sales of new EnergyStar refrigerators. This is because EnergyStar refrigerators have only modest savings above current models, and because people who buy a new refrigerator and were planning to get rid of the old one tend to keep it plugged in so the program will take it away for free. He noted reasons why a second refrigerator pickup and recycling program by itself makes sense include (1) the untapped market, perhaps with many older units, (2) recycling programs have worked elsewhere (including California, Connecticut and Nevada), (3) high customer satisfaction and (4) environmental benefits from recycling materials that contribute to ozone layer depletion and (5) it's a cost-effective measure. He summarized concerns, including potential to be a budget drainer, savings lifetime of less than 10 years, and questions about how "green" to make the recycling process and at what cost. He reviewed cost-effectiveness determinants and marketing options (through home energy reviews, general marketing or as a combo).

Ken Keating discussed free ridership factors (fridge recycled that is rarely used, fridge recently replaced with a new one, dead refrigerator recycled that would not have been used). It was agreed that checking for second fridges during the home energy review can overcome some of the free ridership situations. Sam will check on how Pacific Power and others are dealing with some of the remaining issues.

Sam reviewed recycling scope options. His base case is full recycling with a \$35 incentive. His recommended scenario is to drop the incentive to \$30. Scenario 3 adds a provision avoiding CFC-II foam incineration by recycling it. Sam noted the internal debate over whether to include the incentive as an added cost in calculating cost-benefit, or to consider the incentive a “transfer” from the utility to the customer that does not increase the total societal cost. The Regional Technical forum takes the former position, California takes the latter. Fred suggested that the incentive might be considered a proxy for the value of the second refrigerator that the consumer is forgoing, therefore might be an added cost. . This topic provoked considerable discussion, without resolution.

Sam presented a levelized cost analysis. Steve Weiss said the refrigerator program would serve non-electrically heated homes that pay into the public purpose fund but don't receive benefits from programs serving only electrically heated homes. Energy Trust staff noted that the Energy Trust already provides CFLs through gas or oil audits; this would be an added benefit for these homes.

Sam proposed limits of 700 units of pre-1994 vintage and 10+ cubic feet, \$30 incentive, identify participants through Ecos home energy reviews with a limited general advertising campaign (tagging onto other HES marketing materials). Additionally, people calling for a home energy review that are turned down for lack of potential energy improvements will be screened for inclusion in this initiative. It would not require a change to the Home Energy Savings program budget.

Steve asked for a show of hands supporting or opposing the proposal. Supporting: Dave Tooze (6-month pilot only), Steve Weiss, Carol Brown (borderline), Ken Keating (borderline), John Reynolds (so long as option *3, no incineration of CFC insulation is chosen). Not supporting: Janet Fairchild. Steve said we'll take the comments, frame something, circulate it among council members, and – barring lack of support – will take it to the board.

3. Program evaluations

Ben Bronfman reported on three recently completed evaluations, two of which are our first two impact evaluations. The third is a process evaluation of the Production Efficiency program. We have made a commitment to our board that they will be the first to see the reports, so the reports themselves will not be available until the board June 9 board packet is published.

C&I Transition Program Evaluation. Ben presented findings of the C&I transition program evaluation. He noted the contract was with Quantec. Purposes were to estimate savings, and establish an Energy Trust methodology. Priorities were to estimate lighting savings, (address other facility end-uses if possible) estimate realization rates, estimate free-rider ratio, and combining these measures into “net” savings directly attributable to the program. Several approaches were used: engineering review and site visits for large buildings, billing analysis for small buildings, comparison groups where possible, and surveys of participants and

nonparticipants. There were 74 site visits, 54 engineering simulations, 416 phone surveys, 700 statistical modeling and a multi-method approach yielding “triangulation.”

Overall realization rates were 93% of engineering estimates. Free-ridership of 8% was offset by additional measures done without incentives (spillover) of 8%. Lighting realization rate was 77%; other end uses = 97%. Ben reviewed more details. Next steps: An update of the study for 2003, integrate the methodology into the planned evaluation of the 2003 Building Efficiency program.

Pilot Manufactured Home Duct Sealing Program. Ben said this program ran in 2002 through January 2003. There were approximately 1,000 participants. Based on numbers from EWEB, we assumed 1,200 kWh/yr savings. Evaluation was done by Stellar Processes. The analysis included 280 participants and 91 nonparticipants. Comparisons were done with 2003 and 2004 participants in Home Energy Reviews, using data from the same time as the treated structures. Energy Savings were less than 50% of predicted savings: 543 kWh compared to 1,200 kWh. But participants used significantly less energy to begin with: 14,000 kWh/yr vs 18,000 kWh/yr for the EWEB participants. And there were significant performance differences among contractors: 450-750 kWh/yr. The program still looks cost effective but obviously much less so. At 8% heating load savings, our pilot program is in the ballpark: other studies showed 4%-12% savings. Lessons learned from the evaluation:

- Be more stringent about QA/QC: all contractors should have “good” performance
- There may be more savings because of larger than anticipated proportion of A/C in the sample

These considerations will be included in the design of the Home Energy Savings program evaluation going forward. Next steps include reconsidering all aspects of the program design, adjustment of tracking estimates in June, and integrating findings into new planning estimates. John Reynolds asked how participants felt about the process. Ben said we didn’t survey this, based in part on limited survey budget. Participants will be surveyed in the evaluation of the Home Energy Savings program.

Production Efficiency Process Evaluation. This was an end-of-the-first-year review. Contractor was Research Into Action. Interviews were conducted with Energy Trust and PMC staff, all four program delivery contractors, 6 of 13 technical assistant contractors, Industrial Customers of NW Utilities and 31 program participants. Findings: process is working well. Savings projections have exceeded expectations. Program flexibility and simplicity is valued by participants. Participants identified the high quality of program staff and representatives as a significant program asset. Findings include room for improvement. Program staff feels understaffed, especially at the PMC level. The time-limited “kicker” taxed program resources. Customer “ownership” among contractors is still an issue; some believe that they provided leads to the Energy Trust and other contractors got the jobs. Energy Trust legal/decisionmaking process is still felt to be cumbersome. Balancing large vs. small customer service is challenging.

Some surprises: 41% of participants had never participated in a utility program. These customers represent only 7% of projected energy savings. Non-energy benefits played an important role in the decision to participate. But non-energy benefits have not been included in the cost effectiveness calculations. The draft is out for review, with the goal of having it ready for the

board in June. (note, it was still incomplete at the time of the Board meeting; will be ready shortly) An end-year process update and impact evaluation (2003 participants) is scheduled.

Jane Peters, from Research Into Action, the firm that performed the evaluations, said that the limited feedback so far is that participants were pleased to work with specialists who understood their business and how to improve energy efficiency.

Steve asked if this approach to reviewing and discussing evaluations is effective. Folks nodded in assent.

The meeting adjourned at 4:00 pm.