CONSERVATION ADVISORY COUNCIL
Notes from meeting February 21, 2007

Attending from the Council:
Suzanne Dillard, ODOE
Andria Jacob, City of Portland Office of Sustainable Development
Ken Keating, BPA
Mat Northway
Paul Olson, Oregon Remodeler's Association
Susan Steward, BOMA
Lauren Shapton, PGE

Attending from Energy Trust board:
Debbie Kitchin

Attending from the Energy Trust of Oregon:
Kacia Brockman
Diane Ferington
Fred Gordon
Margie Harris
Steve Lacey
Sue Meyer Sample
Elaine Prause
Jan Schaeffer
Greg Stiles
John Volkman
Kendall Youngblood
Spencer Moersfelder

Others attending;
Jeremy Anderson, WISE
Paul Berkowitz, CSG
Kyle Diesner, City of Portland Office of Sustainable Development
George Lorance, Milgard Mfg., Inc.
Ken Self, Lockheed Martin
Bob Stull, PECI
Buzz Thielemann, RHT
Randy Emerson, LBL Windows
John Hill, LBL Windows

1. Introductions and announcements

Steve Lacey reviewed the agenda and asked for self introductions.

2. 2007 housekeeping

Steve reviewed a draft CAC charter and the council roster for 2007. He noted we discovered that the CAC, which has functioned since 2001, has not had a charter. The draft charter explains council functions, composition, meetings and procedures. He also noted CAC operating principles adopted by the CAC in 2004.

A new practice, included under the council composition heading, would be to allow replacing members who do not attend meetings for a year or more.

He hopes to take a charter to the board for approval at their March 28 meeting.

Ken Keating suggests being cautious about stating that CAC *will* review issues before they go to the board. There might not always be adequate time for this to happen. He suggests softening the language to something like "the CAC's role is to review…." Steve said it's a guideline, not a hard-and-fast rule. Fred noted not every issue will be aired before the CAC.

Steve noted currently there are 18 individuals on the CAC roster. There are some members who have not attended in 1-2 years. Debbie thinks 18 is a comfortable number. She thinks the issue of attendance and number of members should be separated. She thinks we might want to have some organizations represented even if a particular individual cannot continue to participate. Paul Olson thought one year of nonattendance is generous. Steve said Alan Meyer, who could not attend today, suggested shortening the absence time to 6 months.

Paul asked if the members serve at the pleasure of the board or the staff. John Volkman said Energy Trust staff would recommend members, for approval from the board's policy committee.

Steve polled council members.

Susan Steward thinks 10-15 is a reasonable number. In her organization, if someone misses four meetings, they will be talked to.

Ken Keating thinks the 1 year absence is generous. He recognizes you have some valuable people who only come when an issue interests them. He suggests checking in with folks if they miss 6 months to make sure their email address hasn't changed. Size is fine.

Mat Northway thinks the 1 year timeframe is fine, and size is fine.

Suzanne Dillard agrees a year is generous and long enough. She echoes the recommendation to check in with missing folks.

Lauren supports the proposals.

Andria Jacob suggested getting a sense of why someone misses meetings and to try to find someone else from that organization. They should have one warning before being removed.

Paul is fine with what's been said.

Steve said he heard consensus that 1 year of absences is acceptable, with a 6-month check in with folks who haven't been seen for a number of months. Fifteen-18 members is an acceptable number. He will reword the sentence about reviewing issues before they are brought before the board.

Steve reviewed the rest of the 2007 CAC meeting schedule. He noted next month is the second Wednesday, not third Wednesday, to avoid conflict with an ACEEE market transformation conference.

3. 2006 program results

Steve reported in Q4 '06 over half of the year's savings were logged. By sector, residential produced 6.04 aMW, commercial 2.43 aMW, and industrial 3.8 aMW. For the year, we achieved 109% of the best case goal. On the gas side, we achieved 40% of the conservative goal but came in under the goal by 12%.

Debbie suggested comparing gas results to 2005. Steve said we got a million more therms in 2006 compared to 2005.

Paul asked if additional gas savings to get us to the 2012 goal are going to come from the commercial sector. Steve said we expect new, higher efficiency technologies for both commercial and residential applications. Fred said there is more potential on the residential side. He said in single family homes, the majority of our savings are gas.

Buzz notes that RHT does walk-through audits for Avista. He runs into a lot of gas installations that were designed when gas was cheap. He wonders if Energy Trust can do walkthrough audits and find the low-hanging fruit. Steve said he thinks there will be opportunities to take this approach as we ramp up our outreach to small businesses.

Building Tune-Up and Operations. Spencer Moersfelder noted in 2007 this program is folded into the Building Efficiency program. He noted most of the electric savings landed in Q4 '06. Most of these savings come from students completing BOP training. Retrocommissioning and building tune-up projects are not expected to complete until mid 2007. He noted that incentive spending for the quarter significantly exceeded budget, a result of budgeting evenly across the quarters. We will correct that in 2007 by assigning proportionally more budget to the fourth quarter.

New Building Efficiency. Spencer said he took over this program from Greg Stiles in mid 2006. In Q4 on the electric side, the majority of savings for the year landed. Levelized costs are relatively low, because a number of multiyear projects completed in '06 (associated developmental spending happened predominately in prior years). The program exceeded the best case electric goal for '06 by more than $5 million and was on par with other programs in relation to gas savings goal. The program closed more than 100 projects in '06, including a number of high-profile projects that had been enrolled in the program for a few years.

Building Efficiency. Greg Stiles said the program exceeded its best case electric goal for '06 but fell short on gas. The program was under spent for the year, compared to budget, which means the program was operating very efficiently and providing added value to the Energy Trust performance measures. He noted Q4 was devoted to a lot of housekeeping activities. We are receiving special notice by EPA for ENERGY STAR partnership in '06.

Production Efficiency. Elaine Prause said Q4 saw 3.26 aMW savings. Year-end total was 6.63 aMW. She said at end of the year we began focusing on filling the pipeline for 2008. Funding is stable.

Home Energy Savings. Diane Ferington reported the program achieved 170% of the conservative case electric goal and 92% of the conservative gas goal. She listed communities statewide served in Q4. She noted the effort to get permanent reviewers in the eastern and southern parts of the state. She showed slides demonstrating performance by sector and measure over the year.

Debbie asked if the pie charts by measure are calculated by spending or savings. Paul Berkowitz said they are based on savings.

Ken Keating asked if he thought the CFL savings numbers are exaggerated, to the extent they are based on user reports. Self-reported usage is 25% high, compared to metered usage. He thinks the weighted average saved watts of 50.3 is high. Direct-install CFLs have much more reliable savings associated with them. Fred said that the issue is difficult to assess because CSG is taking some care to do a reliable job. He thought the reported reduction in wattages would be reasonable, the interactive effects are analyzed

consistent with the Regional Technical Forum, but there would be less certainty about the hours of operation. He will look into this.

New Homes and Products. Kendall noted the program fell under its conservative case electric goal but exceeded the conservative case gas goal. She noted 2006 had 15% fewer housing starts than 2005 but at the same time claimed a 10% market share for Energy Star homes in Energy Trust territory.

The 230 efficient new manufactured homes in 2006 represent a 1200% increase over 2005. In 2006, 82% of all manufactured home retailers in Energy Trust territory participated in the program. Incentives for clothes washers increased 153% over 2005, and the Savings with a Twist promotion increased 54% over 2005 and sold over 99,445 more CFLs in a three-month period.

Solar Water Heating. Kacia Brockman said the solar water heating effort exceeded electric and gas goals on the residential side. We have expanded marketing and outreach for solar through the OSD's Solar Now program, Solar Oregon's solar workshops, home energy reviewers (existing homes program) and building outreach specialists (new homes program). Paul Olson asked if we are doing anything to rehabilitate old systems. Kacia said no.

Market Transformation. Steve said NEEA programs achieved 212% of the conservative goal. Spending came close to budget.

Ken Keating noted yesterday the RTF got a presentation on existing and new building sockets. Newer homes are putting in more sockets. Although it looks like we've done a lot, there's a lot of potential left. Installed CFLs represent only 6% of all light bulbs. He noted California is considering banning incandescents. If done, the impact would be right up there with getting all cars to achieve 50 mpg.

4. Home Energy Solutions Existing Homes 2007 Incentive Summary

Paul Berkowitz noted he presented proposed 2007 incentives to about 100 contractors in early January, and to 30 contractors in Grants Pass in February. Trade allies also had until Feb. 1 to provide written comment.

He summarized contractor feedback, including:

- Tiered incentives are complex and open to gaming
- Contractor spiffs for trade allies should be added to the customer incentive
- Continue $50 payment for a duct leakage test
- Provide a $300 incentive for faced duct insulation
- Create an air sealing test incentive for contractors
- Add duct leakage and duct sealing incentive to multiplex and multifamily programs
- Create an attic ventilation incentive
- Develop an incentive for gas hearth
- Increase window incentives to cover incremental cost of U-30 window
- Meet minimum window U-Value .30 on an overall weighted U-Value average
- Trade ally to assist customers with tax credit paperwork; some TAs offer this service and don't want us to remove their market differentiation
- Minimum jobs per year requirement to be a trade ally would be retained
- Don't provide any contractor spiffs instead pass along the discount to the customer

Paul reviewed staff recommended incentive changes to make incentive offerings simpler:

- Combine gas and electric incentives (same incentive across fuel type and building types – sf, mf, manufactured)
- Tiered incentive not recommended for insulation measures
  - Insulation measures (attic, wall and floor) paid per square foot for ally building types
  - No incentive cap
  - Contractor spiffs eliminated (duct and air sealing); dollars allocated to appropriate measure incentives
- Air-sealing test added at $50 level
  - Because there is disagreement with providing the contractor any incentives both the $50 air seal test and duct leakage test have been removed with the cap for both measures being raised to $400, thus passing the savings along to the consumer instead of the contractor.

Paul Olson commented that the proposal to pay on a per square foot basis takes away the higher proportion of cost paid on smaller (often poorer) households under the existing system. The existing system paid the same incentive regardless of square footage.

More staff recommended changes:

- SF window incentives increased from $2 to $2.25/sf
- Gas hearth $70 incentive at minimum 80% AFUE
- No incentives for attic ventilation since this is required in the program Weatherization Specification Manual
- SF measure packages added with enhanced incentives
- Minimum of 5 measures completed in a calendar year to remain on active trade ally list; also must have completed Participation Agreement and appropriate insurance assignment on file with PMC
- Bundled incentives
  - $150 bonus for air sealing and thermal measures combo
  - $300 bonus for heat pump upgrade to HSPF 8.5 EER 12 or better, commissioning and performance tested/sealed ducts
  - $100 for 90%-94% gas furnace and performance tested/sealed ducts
  - $125 for 95+ AFUE and performance tested tested/sealed ducts

Ken Keating commented on merits of incenting high efficiency heat pumps in basements, as little incremental savings are associated with this.

Paul discussed the merits of increasing minimum average U-value for windows versus per window U-value.

Jeremy Anderson said the reason trade allies support the overall average U-value for a window mix is because it's simpler; manufacturers list U-values on their windows. Paul noted many trade allies don't submit documentation to support the incentive payment. If the trade allies can come up with a form and a methodology, he would consider changing from a window-by-window U-value.

Ken Keating suggests using a weighted average.

Mat Northway does as well.

Jeremy Anderson said he would be more than happy to work on this.

Milgard's representative George Lorance, supported the weighted average approach.

John Hill, LBL Windows and Doors, thinks the weighted average approach punishes those trade allies who have done the work to get to the numbers we are looking for. If he's in a house where the average is not going to reach .30, he'll change his recommendation to include more efficient fixed windows, etc.

Randy Emerson, also from LBL, said using a weighted average opens the process to gaming.

Suzanne Dillard said her staff thinks the subject is complex. She would go with the package the way it is.

Lauren Shapton said the more we can get rid of data entry issues, the better.

Andria Jacob said she supports Paul's recommendation because it reduces the administrative burden.

Paul Olson noted he has heard two positions from two different window manufacturers. He has a feeling the per square foot approach for insulation will be a little more complicated for multifamily complexes, but a lot more complicated in large homes. It was a lot simpler to go by the footprint of the attic. His personal view is that the former system was easier. He thinks we should use a number between $200 and $300. As for windows, he would like window manufacturers to get together and reach a single position. Steve said this is practical for incentive changes in 2008.

Paul Berkowitz said he needs a decision within a day so he can begin to load measures.

Jeremy noted that most of the trade allies he has spoke to are in favor of the per square foot basis for insulation.

Jeremy noted the trade allies had additional written comments he would like Paul to address. Fred suggested holding this discussion to the end of the meeting. That discussion took place, with Paul Berkowitz, Kyle Diesner, Steve Lacey, Diane Ferington, Jeremy Anderson, Paul Olson and Fred Gordon participating. Notes were not recorded of this post-meeting discussion.

5. Production Efficiency Case Study

Buzz Thielemann thanked the team and everyone in the room for supporting his nomination as one of the Daily Journal of Commerce's Rainmakers of the year.

He presented a case study of Sierrapine Medite Division, which makes a dense particleboard product. He reviewed the typical progression of a participant from being uninformed, to informed, to participating, and – in cases like Sierrapine's – to becoming enlightened.

Sierrapine's baseline system in Medford did not have enough air. They needed about 25% more capacity. A used, secondary baghouse could have been rebuilt and installed to achieve needed extra dust collection air capacity. This would have added 365,000 kWh year increased energy use, or $11,700 added electricity costs. The Medford branch lobbied their management office in California for new energy efficient equipment for the saw and sander. The headquarters company wanted a less than one year payback. It took several years to get this approved and installed. It saves 1.85 million kWh/year and $67,000/year in electricity cost. Final project cost was $1.1 million and had a 4.2 year payback. Energy Trust incentive was $410,446.

The meeting adjourned at 4:15 pm.