Meeting Notes
Evaluation Committee

January 15, 2010, 10:00 AM – 1:00 PM

Attendees

- Debbie Kitchin, Board Member and Committee Chair
- Alan Meyer, Board Member
- Dan Enloe, Board Member (by phone)
- Ken Keating, Evaluation Expert
- Maureen Quaid, Conservations Services Group (CSG) Program Manager
- Paul Berkowitz, CSG Operations Manager
- Peter West, Director of Energy Programs
- Fred Gordon, Director of Planning and Evaluation
- Steve Lacey, Director of Support Programs
- Lauren Gage, Bonneville Power Administration Evaluation Manager
- Amber Cole, Director of Communications and Customer Service
- Diane Ferington, Residential Sector Lead
- Phil Degens, Evaluation Manager
- Matt Braman, Planning Project Manager
- Brian Zoeller, Portland Energy Conservation (PECI) Program Manager
- Julie VanDyne, PECI Program Manager
- Jesse Holland, PECI Program Manager
- Andrea Guillet, PECI Program Coordinator
- Sarah Castor, Evaluation Project Manager
- Brien Sipe, Evaluation Project Manager
- Matthew Taylor, Evaluation Contractor

Next meeting

- February 26, 2010; 10am-1pm

Topics covered

1. Home Energy Solutions (HES) program 2007-2008 Process and 2007 Impact evaluation
2. 2010 True-up inputs
3. 2008-2009 Efficient New Homes program evaluation
4. Fridge recycling program evaluation
5. Evaluation of the evaluation committee

1. Home Energy Solutions 2007-2008 Process and 2007 Impact evaluation

Contractor: Process evaluation; Opinion Dynamics Corporation (ODC), Impact evaluation; Heschong Mahone Group (HMG).

Sarah Castor presented the results from Energy Trust's most recent residential evaluation. Project tasks were:

- Review of program documents
- Staff interviews

- Surveys/interviews with participants, TAs
- Market assessments for key measures
- Assessment of processes
- Engineering review of measures
- Billing analysis

Sarah mentioned that the engineering review of measures was not very productive due to the history of changes to predicted savings. Energy Trust's 'true-up' process uses the best available information from evaluations to inform changes to predicted measure savings. Over many years, savings may have moved away from their engineering basis based on the findings in the field.

Upon seeing slides outlining total sites participating by program in 2007-08, Debbie asked when the Home Performance program hit 1000 sites per year, as has been claimed by the program. Diane explained that many Home Performance jobs in 07-08 came through the single family program 'track' since the contractors did not use Home Check software to book the projects as Home Performance. Despite this, sites tended to be multiple measure jobs. Diane indicated that improvements to the Home Check software and program design have led to more projects going through the official Home Performance program. In addition, the program is mandating the use of the software to ensure comprehensive reports are presented to the consumer.

Satisfaction was rated on a 0-10 scale; ratings of 'very satisfied' customers (8, 9, 10 for all but multifamily, 1-5 scale used for multifamily) were very high across the different program elements:

Table 1: Satisfaction rates across residential program components

	% rating 8, 9, or 10 (on 0-10 scale)	% rating 4 or 5 (on 1-5 scale)
Home Performance	93%	
Manufactured homes	92%	
Energy Saver Kits (ESK)	83%	
Home Energy Reviews	83%	
Single-family rebates	79%	
Multifamily (owners/managers)		86%

Steve asked if there were specific comments from 'dissatisfied' customers of the Energy Saver Kit (ESK)[1]. Sarah indicated that the study did not ask follow-up questions on reason for dissatisfaction. Matt mentioned that some people will always be dissatisfied with flow rates of the showerheads/aerators. The study did record mentions of CFLs burning out in a short amount of time. Phil explained that this could be due to some people installing CFLs in inappropriate applications, such as recessed cans.

Single family free ridership

Heat pumps and gas furnaces had the highest free rider rates. There is some question about how accurate free-rider estimates can be when studies ask questions like: 'would you have put in an efficient heat pump' with the expectation that customers fully understand what an efficient

[1] ESKs include combinations of CFLs, showerheads and aerators depending on household water heating fuel. These were offered only to Pacific Power customers as a means to reach outlying areas.

unit is. Phil indicated that questions can only be so detailed when asking customers about specific efficiency levels.

Alan asked if the difference in gas furnace free-ridership between the two years was statistically different (2008 numbers decreased). Sarah indicated it was, and anecdotal evidence from contractors indicated the economy was affecting the efficiency of units installed.

Single family process findings:

- Difficult, and unclear paperwork
- Most participants were aware of Energy Trust's website and half have visited the site
- Most participants indicated contractors did not recommend additional measures

Debbie mentioned the use of spiffs to encourage contractors to engage in contractor networking and to make additional recommendations and asked if there was a way to track this. Fred indicated we've tried this, and that collaboration is a niche. Diane discussed past use of bonuses to encourage bundling of measures, thus facilitating networking by contractors; this has been met with success in the past. Alan asked about the feasibility of implementing a finder's fee. Diane said this has been tried in multi-family (paid as a spiff per unit served).

Maureen raised some issues with spiff's and taxes – in 2004, contractors would sometimes not want to collect the money due to complications with taxes.

Single family recommendations

- Simplify paperwork
- Encourage contractors to recommend additional measures
- Coordinate with and leverage tax credits
- Implement a tiered trade ally list – based on QC rates, volume, guarantees about customer service such as filling out paperwork for customers

Diane mentioned that the program will now be able to process incentives and tax credits on duct sealing, as CSG is approved to provide QA/QC for the state.

Home Performance (HP) process findings

- Average of 6 measures per site
- Participants found Home Performance approach was valuable and they learned a lot
- Energy Trust doesn't provide much info on how Home Performance is different than Home Energy Review or regular incentives
- HP contractors indicated 10-25% of their business is from Home Performance jobs

Diane asked if the evaluator looked at the website before or after the revamp in September. Sarah indicated they looked at both and that the new website still does not provide as much information as it could.

Home Performance recommendations

- Consider and incentive for diagnostic testing
- Improve and expand program info on the web

Steve began a discussion of the diagnostic testing incentives. Diane mentioned that there is currently a nominal incentive for duct testing. In the upcoming year there is budget to provide

testing incentives, but the incentive is contingent on the home going forward with measures, to discourage excessive test-only work.

Maureen indicated that the program is seeking to move Home Performance contractors toward booking 50% of their work through the Home Performance track. Maureen indicated that if they want to be listed as a Home Performance contractor they must move toward this goal. Debbie expressed some concern over whether these goals are attainable if customers don't sign up for this program in substantial numbers.

Home Energy Review findings (HER)

- Follow-through on HERs is consistent with prior findings.
- Half of participants found out about HERs through the bill stuffers.
    - Sarah indicated that bill stuffers are a good method for ramping up/down volume.

Home Energy Review Recommendations

- Review and possibly improve training for auditors
- Review the current leave behind, potentially look to include more information on:
    - Costs & priorities
    - Step by step guide on participating
    - List of resources

Alan asked if there is a way for the HER auditor to initiate work on measures by helping to set up an appointment with a contractor. Sarah and Diane indicated there is a fine line to walk around identifying contractors. The program now has auditors leave their business card and offer help in following up on recommendations and program participation.

Maureen suggested collecting emails and asked whether an email follow up would be helpful. Alan indicated this would be helpful. The group discussed email communications, as the agency does want to capture emails for simpler communication. Paul suggested that the email contain personal contact information to allow interaction between consumers and the program, for example to get a hold of HER auditor.

Multifamily findings

- Difficult paperwork, slow turnaround
- Participants want more information on savings/incentives
    - Sarah brought up the question of how current jobs have been sold based on the little understanding of energy use in units prior to recent research
- Bad experiences with contractors reflect back on Energy Trust, despite the fact that owners/managers are primarily working with their own contractors
- 41% of participants were aware of others rebates/tax
- Vast majority would participate again about 40% have plans for further energy upgrades
- Two thirds have additional properties, many have significant numbers of properties
- CFLs had the highest free rider rate
    - Ken mentioned that free rider rates for direct install measures may be too high, given that the products have been readily available in the market for years and managers/owners had not already installed them on their own.

Multi-family Recommendations

- Simplify paperwork
- Review building assessor training – there were some comments about professionalism

- Institute higher a level of QC for new trade allies or contractors who are not trade allies

Steve asked about the tiering of contractors in multi-family as with the single family program. Diane indicated that given that the program has shifted to the commercial sector, existing buildings program staff will have to decide on this. Phil indicated that many owners have their own contractors who they already work with. More QC and training/outreach efforts to this group could be a means of improving program experiences and quality of installations.

Debbie highlighted the competitiveness of the multifamily market, where many owners will select the least expensive contractor, but this can yield complaints. The market is cost driven, caution is needed, and more hoops – such as contractor training requirements – may just lead to a continuation of the status quo.

Diane brought up bonuses for multiple measures as means to encourage use of Energy Trust trained contractors, since bonuses can only be collected when using trade allies.

Manufactured homes findings

- Primarily air and duct sealing measures, some direct installs of CFLs
- FR rate is very, very low at 0.5%
- Participants generally do not take other actions but are interested in finding ways to improve dwellings, especially upgrading HVAC systems
- Contractors effectively marketed the program on their own

ESKs process findings

- Kits were requested by participants (Pacific Power only)
- Installation rate of about 60% for all measures
- 75% indicated the included action checklist was helpful, with many reporting taking small actions (changing how appliances were, turning off lights, caulking, etc.)
- Estimated realization rate was about 40% but planning had already assumed a 50% rate, so the hit isn't as great as it could be
    - We won't apply the reduction for measures reportedly not received, as recall on a phone survey is imperfect and it is unlikely that some kits were missing some of the measures

Fred emphasized that these savings are a substantial fraction of the residential program in 2008. Ken indicated the install rate is not unexpected. Pacific Power did a pilot when CFLs were coming out, with planners having a hard time projecting what application the devices would be used for, with bulbs potentially not appropriate for all end uses.

Market assessment findings

- Gas furnaces – trade allies indicated incentives are influential, want to see the requirement increased to .95 AFUE. The group indicated this isn't on the table.
- Heat pumps – trade allies indicated new spec (HSPF 9.0) is too high, but it is in line with the tax credits, with the exception that RETC does require an EER spec that Energy Trust does not
- Duct sealing – trade allies reported the incentive was influential but suggested that it might be reduced with little impact to volume
- Insulation – no incentive changes needed
- Windows – trade allies were ambivalent about the influence of incentives

Other process findings/recommendations

- Energy Trust could provide more training in outlying areas
- Find more ways to encourage trade allies to complete paperwork
- Work toward online forms for all measures
    - Phil mentioned the removal of requirement of account number on forms, we now just use the address to find the bills
- Track and report outcomes from marketing efforts

Trade allies suggested providing two weeks for comment and 90 days notice for policy and incentive changes. ODC suggested that it be obvious that emails or mailers contain program changes (to prevent people from tossing them before readings). Diane mentioned that the program will likely use 30 days, but if measures blow out budgets, changes need to be made quickly. However, 90 days will be given when possible. Solar uses a 10 day lead for incentive changes. Alan mentioned that 90 days is a good rule to adhere to for providing information to contractors.

2007 Impact evaluation

Sarah discussed the methods and approach used that caused some concern over the results. Due to some issues, Sarah indicated we will not be using the results from this study. HMG was asked not to conduct the 2008 impact evaluation, as had been planned. Instead, impact analysis will be conducted in-house with review by two experts in the field.

Dan commented on past experiences on modeling. He suggested exploring finite element modeling approaches to retrofits and weatherization using diagnostic tools and asked if Energy Trust had considered these approaches. Phil mentioned that the modeling would be more of a front end estimate of savings. For the purpose of exploring realized savings in the field, evaluations use billing analysis, primarily due to the availability of the data. Dan noted that the billing analyses can lead to many puzzling results that cause uncertainty and discomfort around the efficacy of the estimates/techniques. Fred indicated that many labs conduct studies on small samples to do comprehensive work, but these are expensive. Phil noted that there are resource constraints on evaluation budgets for conducting thorough research. Iterative discussions, and comprehensive modeling, can quickly eat up budgets and lead to unanswered questions.

Evaluation's take on HES study

Not much was recommended that wasn't already, or in the process of being, implemented. Fred said this was partly due to recommendations being available to the program earlier in the year, as the contractor supplied interim memos for each program as the analysis was completed.

2. Overview of select inputs for 2010 True-up

Brien presented brief slides on three projects whose findings will be used to help inform the 2010 True-up process. Each year, the agency uses the best available information to re-cast previous reportable savings, and adjusts predicted savings for future years.

2006-2007 Single family existing homes gas savings

Brien presented results from an in-house analysis of gas savings. This comes on the heels of the 2007 impact evaluation discussed above. The approach was similar to, and was informed by, work Michael Blasnik has conducted on the program.

Key findings were:

- No savings for air sealing in 2006-2007

  - Program design issues, rather than air sealing being ineffective, are likely the culprits for this finding.
- Duct sealing and duct insulation estimates are higher than current working estimates
- Insulation measures save much less than current working estimates

Table 2: Combined 2006-2007 estimated therm savings in single family homes

Measure	Current FastTrack predicted therm saving	2006-2007 therm impact estimates*	2011 suggested working therm estimate
Air sealing	26	0	TBD
Duct sealing	21	59	59
Gas furnace	71	82	TBD
Windows	44	28	TBD
Ceiling insulation**	95	62	62
Duct insulation**	12	16	37†
Floor insulation**	89	41	41
Wall insulation**	105	53	53

*Savings estimates will be applied to 2008-2009 program years until those impact evaluations come in.
** Savings are calculated at average square/linear feet of insulation installed in 2006-2007.
† Suggested savings estimate going forward is from calculating duct insulation savings for 2007 only. The study found a significant increase in duct insulation savings in 2007 over those in 2006. This finding was corroborated by work conducted by Michael Blasnik on the 2006 and 2007 program years.

Diane asked where the suggested working estimate for 2011 for Duct insulation came from – Brien explained that it comes from looking at duct insulation as a standalone measure, and examining changes between 2006 and 2007.

Fred mentioned that these estimates are being included in this years' true up because they didn't want to leave the issue unaddressed for another year, changes can always be made down the road.

Ken asked about what initial values of insulation were assumed in calculating savings, and it was explained the attribute was captured, but not included in the analysis. It was discussed that current predictions of wall insulation savings are higher than ceiling, due to the expectation that starting wall R-value is 0, while ceiling may be higher.

Fred expressed that differences in savings come from differences in occupants, homes, and contractors; the thermodynamics and building science are well understood in ideal conditions.

The differences in duct savings estimates are not due to different contractors (same big three doing the work): Fred suggests that this is because contractors are finding more applicable homes or they are getting better at installation. Findings in the study also noted a significant change in the pre-treatment usage between homes receiving duct insulation in 2006 compared to those in 2007.

Peter asked what the blanks in recommended estimates for gas furnace and windows implied (TBD in table 2). Staff responded that given the end of the gas furnace measure, no changes to the savings are recommended, as they would also require investigation of baseline efficiency. For windows, the savings estimate represents 'replacement' savings (28 therms), which was found to be considerably lower than Energy Trust's current predicted 'incremental' savings of 44

therms. Given a current baseline U-value of 0.35 and incentive requirements of 0.30, actual incremental savings are likely to be less than 10 therms.

Fred asked if the impact estimates for these measures was meaningful; Brien replied that they were consistent with other findings, after noting that there were some issues with incremental versus replacement savings and the need to quantify non-energy benefits in the future.

Diane noted that the program has reduced their floor insulation incentive in response to results from this study and prior analyses by Michael Blasnik.

Debbie emphasized the need for a more thorough explanation of the use of one set of estimates over another. Transparency in the selection of predicted savings is key for encouraging confidence in the methodologies employed.

Multifamily engineering review of savings
Stellar Processes recently conducted a review of project savings, including billing analysis, as a result of earlier studies on the Multi-family program (2003-2007). Low realization rates (22% for electric space heating measures, and 48% for gas space heating) were consistent with prior findings. The program will move toward a savings calculation based on the study findings.

It was asked why the realization rates were so low – Fred noted that it was because heating consumption was assumed to be much higher than it actually is. Matt commented that the savings are there: the estimates were off so the realization rates are low, but projects are still saving 10-30% of space heating load, with many projects approaching savings of 50%.

The study also indicated that there is uncertainty around ‘base-load’ saving measures (CFLs, aerators/showerheads, water heaters, etc.) and shifting significant resources to these measures will not necessarily be a viable strategy to contains costs.

In line with single family findings, these results point to the need to examine why customers invest in measures such as windows. Quantifying non-energy benefits may be the only way to maintain some measures’ cost effectiveness.

2006-2007 Existing Building Lighting Site Visits
In the last commercial program evaluation, a discrepancy was noted between lighting savings estimated though billing analysis versus site visits. Energy Trust recently conducted another 40 site visits (in which lighting loggers were installed at 22 of the sites) of 2006-2007 sites receiving lighting measures only that showed low realization rates from billing analysis. The resulting estimated realization rates for the study were in line with site visit data from the original impact evaluation. Energy Trust will update the savings estimate and feed the new data into the true-up.

Maureen noted that billing analysis doesn’t work as well for commercial buildings because of more diverse uses of energy. The group discussed past success in commercial modeling by select individuals (Ken Train) who are no longer active in the field. Ken noted that the heterogeneity of the buildings also introduces differences in interactions between building characteristics.

Because we can’t trust the billing analysis, and commercial lighting is a big piece of the pie, Phil doesn’t want to true up based on billing analysis for the commercial sector.

Lauren noted that Bonneville Power Administration has observed similar discrepancies between their realization rates using billing analysis and site visits.

Ken noted that realization rates from the last metered evaluation at Bonneville were similar to those found by Energy Trust (99%) and this was likely because of the way incentives were structured. By incentivizing based on fixture cost, not savings, there was less incentive by any program actors to exaggerate the hours of operation.

Future impact approaches for industrial and commercial sectors will rely solely on site visits to ascertain savings.

3. New Homes program evaluation
Contractor: Research into Action and Stellar Processes

The evaluation involved staff interviews; interviews or surveys with site-built home builders, manufactured home retailers and manufacturers; an assessment of processes, communications and the Energy Performance Score (EPS) for new homes; and an engineering review of savings estimates.

In mid 2008, Oregon building energy code for new homes increased, and the program moved from providing incentives only for ENERGY STAR new homes, to providing incentives for any measures above code. For this, the program models homes using REM/Rate software, comparing energy use as built to use if the same home was built to code. Incentives are provided on the difference and an EPS is awarded.

The engineering review examined 55 homes that were examined that received an EPS. The goal was to determine is the new method is encouraging the use of new technologies or more efficient homes. The evaluation found that ENERGY STAR homes still dominate the program, and on average, participating homes use 82% of the energy of (or, 18% less energy than) a code home.

Debbie asked about the timing of the program changes and evaluation, and whether some of these homes were grandfathered in under the old code. Sarah indicated that only homes coming in under the new code and program incentives were investigated in this study.

The envelope path (which includes upgraded insulation, duct and air sealing) was the most popular way that homes earned incentives. Phil indicated builders prefer the prescriptive path, rather than compiling their own combinations of measures.

The evaluation raised the question of whether a ducted system is the appropriate base case for heating systems like radiant floors or ductless heat pumps. The committee felt comfortable that this was the appropriate base case. The report also identified the SEEM model developed by the Regional Technical Forum as an alternative to REM/Rate. However, from Evaluation's perspective, SEEM has its own quirks and changing software would be costly in terms of time and effort. Ken noted that no modeling software is perfect and modeling cannot always accurately account for occupant behavior.

The process evaluation portion of the report was divided into site-built and manufactured homes. ENERGY STAR market penetration for site-built homes was estimated at 12% in 2008. Fred noted that this is impressive given the dramatic increase in the ENERGY STAR specs after the code change.

Builders were very satisfied with the program, and felt communication was good. All builders indicated they would participate in the future. The evaluation also found that builders do not speak the language of the program, and are not familiar with builder option packages, or why they received a particular level of incentives. Builders deferred to what the builder outreach specialist told them to do on the home.

There was limited familiarity with the EPS, and builder interviews indicated that it would take 3 to 5 years to be influential in the marketplace. Some builders have not yet used the EPS to market their homes, but they were optimistic about its potential.

Small, custom builders indicated they were interested in building increasingly efficient homes, while larger builders are interested in controlling costs. Large builders indicate that awareness of energy efficiency is very low among their customers (or potential home buyers).

Dan commented that the use of acronyms in the program language can be confusing, and that we should make sure to spell out terms.

Peter West indicated the program is focusing on creating demand and consumer awareness in 2010. The budget creation process was informed by these early results.

Brian Zoeller noted that the program has been trying to target only new home buyers, mostly through home tours, because the EPS for existing homes is still under development and they want to avoid confusion for buyers. When the existing home EPS is ready, they will target buyers more broadly.

Recommendations from the evaluator were to increase the transparency of incentives and builder option packages; improve coordination between incentives and the state high performance tax credit, and increase buyer familiarity with the EPS.

Dan would like to see more development in energy efficient mortgages, since operating costs for efficient homes are lower. Fred noted that attempts to push energy efficient mortgages are happening at the federal level (and have been for a couple of decades), but we are too small to affect much. Ken mentioned that Bonneville's experiment with mortgages resulted in only two home mortgages.

Brian indicated that the program is hiring a financial steward and assigning an outreach specialist to focus on lower income populations.

In findings for manufactured homes, there is a high – but difficult to estimate – penetration of ENERGY STAR homes. Retailers report they are successful in up-selling energy efficiency 50% of the time, and that customers are interested in energy efficiency in general, not specific features.

Retailers would like to be able to present customers with more collateral on energy efficiency, appliances, and tax credits.

Alan asked if the incentive is paid on where the homes are built or sited. The incentive is only paid on homes sited in Energy Trust territory, but Julie noted that Oregon is a net exporter of manufactured homes and most of the homes sited here are built here.

Retailers indicated the incentive led them to promote more efficiency that they would have otherwise. The program allows the incentive to go to the retailer (company) or to the salesperson, and retailers reported a variety of ways the salespeople are compensated. Satisfaction with coop marketing is high, but more retailers would like to participate. We are limited in budget for coop marketing.

The retailers were presented with the idea of a tiered incentive (ENERGY STAR as the base and another higher tier), but there were mixed reviews for this, which may be due to limited knowledge of other labels among retailers.

Manufacturers were asked if an incentive to them would encourage them to build more efficient homes; they indicated it would, but specific dollar amounts were not discussed. They also said they could track where homes are sited for incentive purposes. Fred noted that we may have to take a more upstream approach as the market transforms and ENERGY STAR becomes baseline. For now, there are no plans to give incentives to manufacturers.

Recommendations were to potentially expand coop advertising, and investigate and build awareness of other labels.

Evaluation feels the program is operating well and a 3-5 year timeline is realistic for the EPS. The program should increase builder knowledge of incentive structure, but there is no need to move away from REM/Rate.

4. Refrigerator recycling evaluation
Contractor: Innovologie

The evaluation included a review of documents, measure databases (Fast Track and JACO's), staff and implementer interviews, and assessment of program processes. Alan asked what the geographic range of the program was, and Sarah reported that all of PGE and Pacific Power territory is included, with pick-ups scheduled strategically.

Unit characteristics from the database review:

- Most pick-ups are of single units
- About 60% of fridges and 86% of freezers are more than 20 years old

Based on other metered studies of unit consumption, the program savings for the first year are estimated at between 7.2 and 11.5 GWh (low end based on at-manufacture usage and high end based on degraded usage). Ken asked if they used the California standard of metering, Phil and Sarah indicated they did not meter, but used study findings from California to estimate. Ken indicated that on-site metered savings can be very different from lab-metered savings due to fridge loads and other factors. Phil said that ADM on-site metering study numbers were used.

Dan asked if the pick-ups could have used kilowatt meters on-site to measure consumption. Sarah indicated that the program is not interested in estimating savings, since other studies have been very consistent.

Unit characteristics, continued:

- About half of units are primary and half are secondary

- There was a large reduction in 2009 in units labeled 'not in use'.
  This appears to be a result of how drivers categorized units, resulting in an increase in fridges labeled secondary and freezers labeled primary.
- There was a decline in the percent of removed units being replaced in 2009, although three quarters of replacements were new units.

Participant characteristics:

- Most are homeowners who have been in their homes long term, typically empty-nesters
- After participating, 35% of fridge participants still had more than one fridge, 55% of freezer participants had 1 or more freezers.

Participant surveys indicated customers feel the program may be too good to be true, since the pick-up is free and they also receive $30. Bill inserts and retailers were how most participants found out about the program. Convenience and incentives are the top reasons for participating, and bill savings were only a reason for 4% of customers, even though 60% knew that the unit could cost them up to $200 per year to operate.

The participant survey indicated that half of units would have been scrapped and half would have remained on the grid for an unknown amount of time. Ken noted that where units would have ended up in absence of the program is difficult to determine.

More than three quarters of participants signed up by phone, and the use of online sign-up decreased from 2008 to 2009. Both phone and web sign-up processes are efficient.

The report noted that the lack of normalized addresses provided to JACO created a significant amount of work during sign-up and incentive processing. Energy Trust should provide normalized addresses to JACO, with utility customer names when possible (name would require a new data sharing agreement with PGE). Some data on refrigerators was missing due to difficulty reading labels on units.

The database review found that 9% of program units were picked up by Sears through Energy Trust and JACO's arrangement with the retailer. Committee members asked what percent of fridges are sold through Sears and Julie indicated about 30-40%.

Phil mentioned that partnering with retailers offers cost savings for us, because JACO can collect many units at one pick-up from the Sears warehouse. Julie said that the program is approaching other retailers about the program and hope to get more to participate.

Satisfaction with the program is very high: 97% of participants reported being "satisfied" or "very satisfied" with overall program experience and 100% would participate again. Most participants had all their questions about the program answered by the time they participated. They also reported that the scheduling and pick-up processes worked well. Some indicated they did not receive the call 30 minutes before pickup, although almost all received a confirmation call 24-48 hours in advance.

Eighty one percent of respondents would have participated without the incentive.

Recommendations from the evaluator were to:

- Try to increase removal of secondary units (marketing through bill inserts in likely to reach these households)

- Stress convenience of participation
- Provide more information to customers on what the agency gets from the program (energy savings), and what the participant gets (utility bill savings)
- Continue working with Sears and expand to work with other retailers
- Implement real-time feedback mechanism (participant survey) for satisfaction questions
- Have program staff visit the JACO call center to emphasize why the program needs the data it does and see how call center staff gather information

Phil mentioned that marketing through bill inserts could be done geographically, with the program sending in a truck and capturing all units in that area.

Pete asked whether the evaluation provides support for other appliance turn-in programs, such as for TVs. JACO does recycle AC units outside the program. Fred indicated some thought has gone into a program for TVs, and the process could be effective, but there may not be enough savings, especially with customers upgrading to larger TVs and plasma units.

Evaluation staff feels the program is working very well. The program is flexible and able to be ramped up when needed. Fast feedback surveys will be used for this program, beginning this quarter. It may be worth investigating whether there are certain geographic areas or demographic groups that have low participation and their potential for savings.

Peter noted that promotional space bill insert requires a long lead time, despite its effectiveness.

A committee member asked if savings would be revisited, given the age of recycled units; planning staff said they would take another look at the measure life for savings.

5. Evaluation committee evaluation

Evaluation staff asked how the current committee format works for members.

Debbie suggested sending out meeting material sooner, due to the volume and length of some studies. Two weeks to a month would be the ideal scenario. Alan seconded, noting that there isn't enough time to read all the studies, but ensuring executive summaries are available is key.

Phil indicated that there is some drive to move evaluations away from high level process overviews. This has been spurred by many consistent recommendations (higher incentives, simplify paperwork). Projects could key in more closely on program infrastructure questions. Feedback from program managers with repeated recommendations may not be that useful. Debbie indicated program managers may need to hear these recommendations continually, as programs may have the room to improve with regard to satisfaction. Fred indicated that some people will always be dissatisfied (e.g., many parties dislike forms, etc.).

Phil asked if it's ok to present major findings and highlights than go over study methodologies in detail. Alan indicated current level of detail is good, and that the committee can delve into detail when needed.

Dan will email his feedback. Ken indicated that any changes to the committee process should be up to board members.

Meeting adjourned at 12:55. Next meeting is scheduled for February 26, 2010, 10am-1pm.