CONSERVATION ADVISORY COUNCIL
Notes from meeting May 20, 2009

Attending from the Council:
Jim Abrahamson, Cascade Natural Gas
Paul Case, Oregon Remodelers Association
Suzanne Dillard, ODOE
Andria Jacob, City of Portland
Brent Barclay, for Karen Meadows, BPA
Lauren Shapton, PGE
Don Jones, Pacificorp
Holly Meyer, NW Natural
Charlie Grist, NWPCC

Attending from the Energy Trust of Oregon:
Fred Gordon
Steve Lacey
Spencer Moersfelder
Kathleen Ortbal
Kate Scott

Others attending:
Arthur Smid, Neighborhood Notes
Tom Kovolak, CSG
Stephanie Vasquez, CSG
Allie Robbins, PECI
Becky Walker, PECI
Natasha Houldson, PECI
Pamela Elliott, CSG
Kari Greer, Pacific Power
Clyde Manchester, H.E.L.P. Group Inc
Jerry Page, Total Comfort
Jeremy Anderson, WISE

1. Welcome and Introductions
Steve welcomed Jim Abrahamson and Brent Barclay as new official members of CAC

- Steve reviewed the agenda and asked for self-introduction.
- Steve mentioned the board retreat/strategic plan coming up in June which is open to the public.

2. 2009 New Buildings Program Updates *(Discussion)*

- Program Enhancements
- Net Zero Pilot

Spencer presented on the NB program enhancements

Discussion:

- For systems approach portion of Spencer's presentation:
- Don Jones commented that this new approach models the way they do their new construction programs.
- Suzanne asked how many we expected would be above 5k—wouldn't most of them then need pre-approval? Spencer clarified that projects receiving more than 5k would need pre-approval.
- Lauren asked whether this would not catch free-riders? Steve affirmed that it is in line with our current programs, and we identify free-riders in the evaluation stage. Andria pointed out that the window would keep people from acting retroactively. Spencer noted it would be consistent with EB program.
- CAC granted approval on allowing projects receiving ≤$5,000 incentives to participate in the program and purchase equipment without pre-approval from the program.

- Don asked about projects over $500K—Steve pointed out that's a megaproject, which would go to the board.
- It was asked what the expected budget implications are. Spencer said that most wouldn't come near the cap, but it helps reduce people playing the system. Anticipated budget impact is zero, however it establishes consistency and provides another avenue for those wanting to do more.
- CAC endorsed increasing the per project installation incentive cap to $500,000.
- Don wanted to know if there was a way for people in one track to be switched to another if their plans changed—Spencer said this is meant to reduce people moving back and forth and "track shopping". Don wanted to make sure tracks wouldn't hurt people from doing projects, Spencer confirmed it would not and these transitions would be circumstantial.
- For people who don't want to do the whole building approach this makes participation more intuitive by using a systems approach.
- For whole building approach portion:
- Spencer proposed doing technical assistance for LEED projects (in addition to custom track) no one objected. Charlie Grist clarified that there are many ways of modeling to get to LEED, so this ensures that they will incorporate EE into their plans as well.
- CAC endorsed adding Technical Assistance incentives to the LEED Track.
- Early Design Assistance—Don asked who got the $2500 design assistance incentive, Spencer said it would be the owner. Spencer pointed out there are deliverables associated and it will not be paid until the charette has occurred. Don noted that PacifiCorp added a design team incentive, on top of the owner incentives, paying the designers rather than owner. There was discussion of whether it is better to pay the owner or designers. Don noted they also incent early involvement $1500 for designers coming when plans are being initially drawn up.
- CAC endorsed offering an Early Design Assistance incentive of $2,500.
- Monitoring and Verification incentive structure: Don said it all looked good—their experience has been that you need to market it as the incentive is not at risk—be clear that it's just part of process improvement. Also need to be very clear about what the owner's requirements are and what they need to do to adhere. Charlie noted that RTF is starting this year on a series to help people know what to monitor, suggested ETO get involved in that discussion. Also said we have an opportunity as part of their commissioning package to track some subsystems to get more valuable information, which you can use to establish savings.
- Don pointed out the need to make sure they monitor the correct stuff, take a look at what they're doing establish a feedback loop to make sure they're monitoring what they need to and the information is valuable and relevant—be thoughtful about what to monitor, be careful about setting specifications, have people based resources with both technical and user-friendly aspects that make sense.
- Charlie pointed out turning data into useful charts, harvesting information that is useful is difficult and to make sure we allot budget and time to do that. Don agreed you have to keep touch with it to make results meaningful to owners and to us. Charlie said if you could tie it to an onsite manager who will be with the building that could be a good idea because they're interested and there.
- Energy Star track offering: Brent asked for clarification between this vs. the systems approach. Spencer said it spans across all program tracks and would be for everybody.

- LEED core & shell track: Don said they struggled on when to pay on the whole buildings, he said they'd like to see how this works for us and thinks we may be "onto something."
- Charlie encourages us to think about in our whole building approach to consider commissioning and perhaps give a kicker to roll in a conservation resource program manager or something like that to build in someone who will operate it correctly to ensure savings over time. Spencer said he and Greg Stiles have talked about this, EB is working on rolling out an O&M initiative and trying to figure out how to maintain attention to buildings that have already been built, which is similar.

It was decided to go forward with the presentation Net Zero pilot and push back the evaluation portion to the next CAC meeting if time runs short.

Spencer presented on the NB Net Zero Pilot

Discussion:

- CAC endorsed the proposed definition of net zero for the purposes of the pilot:
  - Buildings that generate on-site all of the energy that they consume on an annual basis. Energy consumption and generation is calculated in kBTU to capture both electric and gas sources**.**
- CAC endorsed proposed eligibility criteria for participation in the pilot:
  - Projects that will be at least 50% better than 2007 Oregon Energy Code based on efficient design features, equipment and operations AND
  - At least another 10% better than Oregon Energy Code through any combination of energy efficiency and on-site renewable energy generation
  - Projects must be in schematic design phase or earlier
- Holly asked how we arrived at $10,000 for the early design assistance. Spencer said it was some rough calculations based on who needed to attend and how much time it might take. Brent asked if there was a threshold of how to decide and scale back which buildings got how much. Spencer said not at this stage, but in the next stage (technical assistance) there is.
- CAC endorsed offering an Early Design Assistance incentive of $10,000 as long as there were requisites for a project to receive the money.
- Charlie: you will need agreement on baselines assumptions. Also the plug loads (nonregulated) loads are tough—those we don't typically regulate but are killers with energy usage, we'll want to find a way to address this in the design phase of these buildings. Spencer said they'll want to have an understanding of the appliances and plugloads that will be in the buildings.
- Don said that they go back to code as defined by ASHRAE "G" as guiding document for this problem, and incorporate as a reference appendix.
- Spencer said that we also considered an approach that considered the pilot from the perspective of EUI as opposed to using Oregon code as a baslein. If we use EUI we know tha the goal is 0 kbtuh/sq. ft. over the course of the year. However, we don't know how to establish a baseline EUI for the whole universe of building types and this makes it difficult to calculate savings and quantify an incentive. So we're not entirely wed to the ideas of using an Oregon code baseline model, but we don't know how to incorporate the idea of EUI either.
- Don said this is how you train the market, it would bring knowledge of EUI to the marketplace.

- Charlie said people are building to EUI's and if you go with EUI strategy you may end up with buildings that are not for typical uses that may not be repeatable or inform mainstream market. We need to go for low absolute numbers but setting a goal that may get us buildings that are different and not necessarily representative of the market.
- Don said talk about code but also talk about EUI so people come to understand it.
- Charlie asked about how many projects we thought we'd get in the net zero pilot. Spencer said we're guessing 8-15, of varying sizes. Charlie asked about custom track and whole building in our regular tracks—Spencer said that was about 40-50. Don noted these projects will tend to self-select.
- CAC endorsed the concept of offering up to $50,000 in Technical Assistance which is double what we presently offer for custom track projects.
- Input on incentive caps: Don asked if there was a total dollar or percentage cap, Spencer said that it would be consistent with regular program caps, and would have to pass cost-effectiveness tests.
- Don said they pulled cost cap due to difficulty of determining incremental cost and said that we're headed in the right direction to addressing this issue but need to make sure we keep thinking about it and that the market knows it's subject to change pointing out that people don't always understand cost-effectiveness tests.
- Fred noted that we will be interested in knowing what things cost but we won't jeopardize incentives as a result for the pilot. Charlie said that we need a more liberal threshold for cost effectiveness for this approach, since we're trying to push a piece of the market into a whole new realm. Spencer pointed out we want to make sure that we're also doing things that are going to work again later on, not just one-offs and novel projects.
- Fred says that this comes from people coming to us asking about measures that are strange or expensive but they want to do it— this becomes difficult making sure that their reasons for doing things have to do with energy. Don said if you do your diligence on what it saves, you can make sure you get results. Fred pointed out we don't want to waste effort on pilots that don't have legs and can continue to be done. Charlie proposed that we bring into selection criteria the repeatability of proposed projects to address this issue, and not just cost-effectiveness.
- It was decided that this would be brought back for update at the August meeting.

3. Existing Homes Moderate income Program Design *(Discussion)*
Tom Kovolak from CSG presented the moderate income program design.

Discussion:

- Jerry Page noted that he suspected most of these buildings will have ducted systems.
- Andria asked for clarification on the caps—Tom said it is per square foot, but there is no percentage cap.
- Holly asked what level of efficiency furnace will be incented—it will be the same as our current requirement.
- It was asked what will happen once NWN contract ends with Ecos—Steve said that we will take incorporate NWN customes as soon as Ecos wraps up. Tom pointed out that this will be for all Energy Trust customers, and we will still cover Cascade and will serve NWN customers as soon as they are not being served by Ecos. Holly says the Ecos contract has ben extended to December 31st but it is expected to end much

sooner than that. Holly will keep in close contact with Energy Trust to communicate that.

- Fred asked about multi-measure firms, whether we will look for contractors who can do comprehensive jobs or will we accept more specialized contractors who will subcontract. Tom said that it is preferable that contractors can perform multi-measure installations, but they will be considered even if they can't and need to subcontract certain pieces.
- Paul asked about on-bill financing, and whether that would be eligible for these customers. Steve said we are looking for that type of customer for this pilot,
- Tom asked what sort of financial gaps exist where customers still are unable to pay—he said in the range of $1000. Jerry expressed concern about the term "owner-occupied" and said that he strongly encourage the ability to do rental houses and duplexes
- Where do they get the balance? It was pointed out that Business Energy tax credits are available and can help pay the balance for landlords.
- Tom said that the reason we chose not to rentals was because the owner would get the incentive but the tenant is the eligible party with the lower income and there was concern about equity. Jerry pointed out that the tenant is paying the utility bill. Tom said we will consider adding the rental group.
- Comment on "honor system" income verification: Jerry said that people take income requirements very seriously, doesn't think they will game it.
- It was asked what happens if the customer doesn't want a measure they really need—will we penalize contractors for not doing it? Tom says of course not, we'll just be looking over for quality control.
- It was asked how long contractors wait for incentive checks, Pamela estimated 6-8 weeks. Paul Berkowitz estimated it would be much quicker for this effort, 2 weeks. It was pointed out that accelerating payment would be worth discussing due to money flow issues for contractors with up-front discounts.
- Paul Case asked about duplexes, etc.—would the typical definition of up to 4 units apply to this as well? Tom said it would. Renters were brought up again, which is something that will be addressed.
- Jeremy Anderson pointed out that we will have to consider, in multi-units, a variety of incomes and the need to think about that. Tom says this is something we will think about. We will take into consideration participation of those under the income limits. Jerry strongly encouraged that we consider this as well. Fred pointed out CAPs are about to do lots of work with federal money—so this is something to take into account. Paul encouraged pre-qualification be made easy. Pamela said it will be its own program track, have its own number, and won't interfere with other program tracks and vice versa.
- Jim—concerned about owners even being eligible based on tenant incomes—Jerry said same reason they can get the business energy tax credit—the tenant will pay the bills. Concern about compromising tenant being able to stay there. Jim pointed out that you may end up with more rentals than owner-occupied due to landlords being able to afford the measures more often than lower income tenants. Steve said that may happen but that's ok.
- Paul Berkowitz pointed out that low income agencies do it based on occupant, but pointed out that those cases have agreements that that unit will stay low-income.
- Paul Case pointed out some of these people have assets, but not income, so for some they can afford it even though they don't have income coming in.

- Holly Meyer said that Ecos mostly gave up on owner-occupied because they weren't seeing the savings in that market sector, so we should consider other groups, and we should talk with them about lessons learned.
- Kari Greer—how are we finding these customers? Tom said data mining, and some general marketing. Kari said they get plenty of these customers coming through their call center, it would be great if we can work together on training for connecting them to this offering. Holly pointed out we should do this with CAP agencies as well. Pamela said we would certainly do training for utility call centers and work with them, and potentially set up a referral transfer process
- Kari also encouraged us to find a different name than "moderate" income, concerned about negative associations.
- It was noted that we want to do pre and post testing yet there are no incentives listed for that portion of the contractor's work in this—Tom said we will add that in.
- Jeremy noted that "max-cost matching" is mentioned—asked for clarification. Tom said that we need to establish caps on pricing for these projects. Jeremy said that these jobs are so hard to sell. Paul Berkowitz pointed out that the caps are there to ensure that these customers are not charged more than any other customer.
- Jerry said that we need to do what Spencer identified in his presentation—minimize market barriers and get information out to the market. Also said please work with contractor to work this out before we roll it out and really figure out all of the details.
- Asked about minimum reduction requirements—do they fall unto this? Tom said current spec is the same for this program track.
- Brent pointed out we could use this to cross-sell our refrigerator recycling program.

4. Evaluation Reports (*Information*)
Phil decided to address one issue in this meeting, and then defer the rest to the next meeting.

Phil presented on the Home Energy Monitor preliminary results.

Discussion on the Blue Line Energy Monitor:

- Brent asked about other companies, what range they claim about typical energy savings. Phil said that Blueline pointed out studies done in Canada which found a range of savings and found persistence, but the calculations vary. Brent asked if those had ongoing education, and Fred said no. Fred pointed out that there are different methods to do these evaluations, and that we may try some other methods to see if results change, but pointed out other factors influence impact—weather, social norms, rates, etc. Phil pointed out that price-point is decreasing, and Black and Decker is now manufacturing a comparable product which will address quality issues, and it will still be an interesting ancillary device to observe effects on consumer energy usage. Fred said that it is unfortunate that they found a production flaw while they were out in the field, which messed up the experiment.

5. Adjourn

The meeting adjourned at 3:50 pm. Next meeting is July 8, 2009.