Conservation Advisory Council Meeting Notes

May 11, 2016

Attending from the council:
Brent Barclay, Northwest Energy Efficiency Council
JP Batmale, Oregon Public Utility Commission
Warren Cook, Oregon Department of Energy
Julia Harper, Northwest Energy Efficiency Alliance
Andria Jacob, City of Portland
Don Jones, Jr., Pacific Power
Holly Meyer, NW Natural
Don MacOdrum, Home Performance Guild of Oregon
Tyler Pepple, Industrial Customers of Northwest Utilities
Nay Shayan (for Garrett Harris), Portland General Electric
Allison Spector (for Jim Abrahamson), Cascade Natural Gas

Attending from Energy Trust:
Tom Beverly
Kim Crossman
Hannah Cruz
Phil Degens
Fred Gordon
Jackie Goss
Marshall Johnson
Spencer Moersfelder
Thad Roth
Andrew Shepard
Katie Wallace
Peter West
Mark Wyman

Others attending:
Jeremy Anderson, WISE
Dave Bamford, SoundView Recording
Scot Davidson, Enhabit
Carolyn Farrar, NW Natural
John Frankel, NW Natural
Lindsey Hardy, Energy Trust board
Alan Meyer, Energy Trust board
Jeff Mitchell, NEEA
Bob Stull, CLEAResult

1. Welcome and introductions

Kim Crossman convened the meeting at 1:30 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at: www.energytrust.org/About/public-meetings/CACMeetings.aspx.

2. Old business

April Conservation Advisory Council notes are still in review. There will be two sets of notes to approve at the next meeting.

3. Home energy scoring

Andrew Shepard, residential senior project manager, presented information about home energy scoring. This is the result of work since we discussed phasing out Energy Trust's EPS™, energy performance score, incentive in 2015.

Andria Jacob: The City of Portland is exploring a requirement for home to have the Home Energy Score, HES, from the U.S. Department of Energy, when sold. This would cover renters, owners and new homes, but not multifamily yet. It's been in our Climate Action Plan since 2009. Mayor Hales made this part of his agenda for the remainder of his term. The Bureau of Planning and Sustainability has been tasked with making an ordinance. We are now in the public

engagement process. We've already learned that even a 1-10 score can be confusing. Asset rating is another issue. We will need a lot of development over time to ensure compliance. Input from equity stakeholders will be next, including tenants and renters. After that will be real estate professionals. We'll release a draft in June at public meetings. A draft will be out for public comment over the summer. We'll draft an ordinance and present to the city council in the fall.

Brent Barclay: Are HUD homes and manufactured homes excluded?
Andria: We are sticking with site-built homes for now.

Holly Meyer: It's great to hear about all of this progress. It's good to get the market perspective. Great work everyone!

Julia Harper: Will there be a translation mechanism between new and existing home scores?
Andrew: We are looking at how an HES score can be produced for new homes. Right now, HES doesn't have the granularity to tell the difference between homes built to meet code and homes built to exceed code. We currently don't have the technical confidence that the HES tool will accurately represent our new home stock.

JP Batmale: Have any tools been certified to be compliant with House Bill 2801? Are they accurate for Energy Trust and Pacific Northwest building stock?
Warren Cook: All scoring tools three are compliant. They don't currently come up with the same answers. EPS has really driven the bus on this, but we've been careful to say that none of them are out of compliance. It's an evolutionary process that needs to come at the right time. There's an energy efficiency story and a consumer protection story.

Don MacOdrum: None are compliant from an industry perspective. They don't have Oregon Department of Energy's stamp of approval. There was a stakeholder group that met through last year and provided feedback to Oregon Department of Energy's director. The director brought up some things that these changes will help address. We need one engine to produce all scores. If the one tool accurately reflects all homes, that will be great. Right now there are three systems with their own engines. Oregon Department of Energy has been asked to move to a single engine, but the three systems are contingently approved.
Andrew: There have been studies of the HES tool on new homes and we think it's relatively accurate, but we need to do more vetting to ensure HES is in alignment with EPS.
Warren: We do need a lot tighter granularity for new homes that are above code. It's like weighing yourself in pounds or stone. It's easier to stay within your stone range than your pound range.

Alison Rowden: How does the standard look, and what about the differences between gas and electric? Will site versus source be taken into account?
Warren: The wide granularity between every house ever built and the bins that turn into the 1 – 10 score tend to flatten out the differences between these things. It's all taken into account but won't be important to what the homeowner sees.

Alison: Will there be any mockups or draft calculations we can look at?
Andrew: Yes, we can put that together. If there are questions or concerns, we are open to organizing another meeting to dive into the details.

Brent: Are there any indications from other cities about how interested they might be in following suit with Portland?
Andria: Eugene has shown an interest.

Warren: Eugene has a green building component to their permit process, and there are other cities with groups that are interested.
Andria: People wanted to see it with their buyer hats on and think about it across the region. The thought was that no one should be exempt.

Don MacOdrum: This is exciting to hear. The consumer protection angle is a great part of this. Kudos to the city for helping inject some energy into the process. With the research on HES for new homes, what's the timeline and when are target dates for results?
Andrew: We don't have a defined timeline but one of the factors is whether or not new homes will be included in the city's effort. If they are, it makes more of a case for us to do it sooner. Right now, we are looking at all of our homes that have come through the program to find a data set for comparison.

Julia: When do you think the ordinance might become effective?
Andria: There will likely be a rulemaking process, but the hope is adoption before Mayor Hales leaves office. There were 600 scores done last year, but 11,000 homes were sold. We'll need to consider how quickly it can be scaled up in a reasonable way.

4. Residential hot water heater delivery adjustments
Thad Roth, residential sector lead, presented information about upstream incentives for residential hot water.

Thad: Our ultimate goal is to move away from a customer-facing incentive to a midstream incentive by 2017. We have learned that we are going to need to move to midstream incentives to be successful with water heating. We'll expand agreements with distributors and other supply chain actors to promote the sale of efficient water heating equipment. We have changed incentives, reduced the reporting requirements and announced gas and electric tank incentives at retail. We rely a lot on NEEA's work on heat pump water heaters on the electric side.

Holly: Is it the total resource cost or the utility test that gas water heaters don't pass? If we do more production, it becomes a cheaper program. Does greater volume make it more cost-effective for the total resource cost test?
Marshall Johnson, residential senior program manager: We learned that some tanks that are more efficient and cost less. We can influence products and processes that encourage lower installation costs. We also have seen that some technologies, such as power vented units, have increased prices.
Thad: We can identify tanks for key market actors to help influence installation of eligible measures.

Several Conservation Advisory Council members asked about the sales allocation tools that are being developed to attribute savings from retail sales.
Mark Wyman: Sales allocations for water heaters will work in a similar fashion to how the retail lighting program collects sales data. You collect bulk sales data from a retailer, but you need a predictive model to tell where the lighting is being installed. The tool is oriented around lighting and showerheads, but it's been adapted for major appliances like water heaters.

JP: What's the timing on that?
Mark: We're working with CLEAResult to get it ready by July and expect to use it next year.

JP: Will you develop a standard offer for retailers?
Marshall: The gas territory is easier because there's less overlap. With heat pump water heaters, there is room for an incentive even in overlapping territories, but where you deploy at

retail you reduce the savings based on location and splits of electric providers. It would likely be a similar dollar amount.
Mark: Retailers would have to list it at an approved price, and we would have to verify they sell at the approved price. It's like what we do for lighting.

Julia: Would you require retailers to pass the incentive through to customers?
Mark: The cost savings would likely be realized at the point-of-sale, but we haven't drafted the agreement.

Don Jones: Are you finding different drive patterns for appliances and lighting equipment? Would people come from further away? Who's doing the research?
Mark: We are seeing some of that. The research is being done by CLEAResult's business intelligence team.

JP: Isn't there a chance for better data from a distributor than a retailer?
Marshall: We think we can get site-level data from retailers and we think we can maintain that in a future design.

Nay Shayan: On the retail initiative slide, can you tell more about the marketing collateral and where it will be used?
Susan Jamison: The collateral is being developed. The best guide would be the lighting signs we already have with retailers. We won't be signing the tank itself. Each retailer has parameters for signage. Other collateral will be added. The results of the online marketplace tool, Enervee, are very preliminary right now. It's been active for about four weeks. We need a few months of study time to learn more.
Kim: We'll bring Enervee back for a demo.

Don MacOdrum: I'm not familiar with how the dynamic changes between customer and contractor. I'm assuming the distributor passes the savings onto the contractor who explains it to the customer.
Thad: The incentive really will go to the distributor in the end. The benefits in terms of reduced transaction cost will come from them. They'll deliver data to us and we pay them. The training for the contractor covers how that benefit flows to the customer. The contractors will receive help from us and the distributors to explain benefits to the customer.
Marshall: You can think of it as the distributor being rewarded with more sales, and they can pass through additional benefits to the contractors. The distributors can help the contractors understand what might be most suitable in a given situation. Sales approaches that help overcome identified barriers will be part of the training. There will still be coordination in demand creation with us. Cooperative marketing dollars may also be dedicated to help create momentum.

Don MacOdrum: There was a mention of paperwork barriers for contractors. Have there been complaints about the paperwork from contractors? Are there concerns about incentive forms in general or specific to water heaters?
Thad: Concerns about paperwork came up quite often, but they weren't only about water heaters. Someone has to follow up on missing information, for example. We have made efforts to solve that problem, such as by reducing data requirements.

Brent: Of the 60,000 to 65,000 units that are sold in your territory, 1 percent go through your program. What percentage of the total units sold are the product you want to see?
Holly: If you're getting the savings without paying, so much the better.

Marshall: We know through NEEA that there were roughly 1,500 heat pump water heaters in our area. We claimed savings for only 400. That's an indicator of the delta. On the gas side we get a similar amount. We think the gas market is 85 percent tank and 15 percent tankless. We don't know what percentage would be qualifying product.
Thad: I have seen statistics showing that nationally, ENERGY STAR® qualified gas tanks are at about 5 percent. We are looking for full category data from distributors.
Holly: Right now, 400 units are incented and 1,500 are installed. If we are moving to a model where 1,500 are being incented, we move from 1 percent to 3 percent. If we get to 25 percent with this program, we know it was a slam dunk. However, if the program only gets 3,000 units when you previously had savings from 1,500 and only paid for 400, it could be a lot more expensive in total. Tracking it will be important.
Thad: Better data will be a goal of this initiative.

Holly: If we are paying for free riders that have to come out, the incentive may need to go down. Is there room for more incentives on the electric side?
Thad: The incentive for electric is lower than we can potentially pay.
Marshall: We don't have to continue paying at this level once we build distributor relationships.

Julia: Hopefully as these things scale up, you won't have to pay as much because prices will come down. Will this get at the emergency replacement market?
Marshall: The training will focus on the emergency replacement market.

Holly: I know that setting incentives is part art and part science. Since NEEA has worked on this for some time, is that factoring into the calculation to see what the heat pump water heater incentive should be?
Thad: Yes, we are looking at the net cost to customers. We reduced heat pump water heater incentives from $500 to $300, for example.

Brent: There are challenges unless we can do things across the region as a whole. It's hard to sync up. We've been collaborating on lighting and allocations. The stakes change when you're talking about hundreds of dollars instead of a couple of dollars. We have to think about how adjacent consumer-owned utilities fit into this effort.
Marshall: We have to evaluate the impact because we don't get individual customer information through things like Fast Feedback.

Brent: Would you just rely on the sales allocation methodology?
Marshall: Yes. NEEA has offered to support a test to help us. We can use a quality assurance strategy or send a plug-in module that goes with the water heater to help track where units are installed.
Don Jones: RFID tags can track installations currently.
JP: Retailers can set up opportunities to give free products to people who purchase certain products. Is there a chance to use that approach?
Mark: We can explore it.
JP: I recommend that you explore that type of complementary marketing and rewards.

Mark: We're preparing for both possibilities: minimal leakage or larger scale.
Kim: It sounds like leakage for us might be savings for you.
Brent: Yes.

Holly: It's worth noting that the goal is to move the electric resistance customers to heat pump water heaters and gas customers to more efficient products. With this plan, there aren't the tendencies to maintain the same fuel source. Heat pump water heaters have higher incentives,

and we want to be careful that incentives are not so high that they sway gas customers to convert to electric heat. We want to be careful electric customers stay with electric heat and gas customers stay with gas heat. The total incentives on the table may make the gas customer choose to switch. It's food for thought and needs to be on the record.

Thad: Clearly, this is a lot of work and I appreciate the staff time and cooperation between Program Management Contractors. I want to acknowledge the coordination and cooperation between Ecova and CLEAResult. Also, I wanted to point out that embedded within the slides is a link to the gas water heating market research report, which features more details

5. Public comment

Dave Bamford, SoundView Recording: As an observer of these meetings, I wanted to express my appreciation for what this group does. Thank you for coming together for the sake of my grandkids and making things better for them as they come of age.

6. Meeting adjournment

The next scheduled meeting of the Conservation Advisory Council will be on June 22, 2016, from 1:30 p.m. – 4:30 p.m.