

## Conservation Advisory Council Meeting Notes

September 14, 2018

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### Attending from the council:

Anna Kim, Oregon Public Utility Commission  
Holly Braun, NW Natural  
Danny Grady, City of Portland Bureau of Planning and Sustainability  
Kari Greer, Pacific Power  
Charlie Grist, NW Power and Conservation Council  
Jeff Mitchell, Northwest Energy Efficiency Alliance

Warren Cook, Oregon Department of Energy  
Jason Klotz, Portland General Electric  
Wendy Gerlitz, NW Energy Coalition  
Lisa McGarity, Avista  
Dave Moody, Bonneville Power Administration  
Al Spector, Cascade Natural Gas

### Attending from Energy Trust:

Mike Bailey  
Amber Cole  
Mike Colgrove  
Ryan Crews  
Hannah Cruz  
Oliver Kesting  
Jessica Kramer  
Steve Lacey  
Alex Novie  
Amanda Potter  
Thad Roth  
Kate (Scott) Wellington  
Cameron Starr

Peter West  
Mariah Wills  
Tom Beverly  
Shelly Carlton  
Sarah Castor  
Mana Haeri  
Andy Giguen  
Denise Olsen  
Dan Rubado  
Adam Bartini  
Marshall Johnson  
Jessica Iplicki  
Jay Olson

### Others attending:

Lindsey Hardy, Energy Trust board  
Karla Hendrickson, ICF  
Rick Hodges, NW Natural  
Alan Meyer, Energy Trust board  
John Molnar, Rogers Machinery  
Josh Weissert, Energy350  
Mike Christianson, Energy350  
Jason Eisdorfer, Oregon Public Utility Commission

Julie Peacock, Oregon Public Utility Commission  
Elaine Prause, Oregon Public Utility Commission  
Colin Podelnyk, ICF  
Dan Reese, CLEAResult  
Angel Swanson, ICF  
Mark Kendall, Energy Trust board

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### 1. Welcome, Old Business and Short Takes

Hannah Cruz convened the meeting at 1:35 p.m. The agenda, notes and presentation materials are available on Energy Trust's website at [www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings/](http://www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings/).

Hannah introduced Anna Kim, new OPUC liaison to Energy Trust and Conservation Advisory Council member. Prior to joining the OPUC, she worked for evaluators for Energy Trust, then Seattle City Light. She brings experience and expertise in energy efficiency.

Anna Kim: Energy Trust has been a big part of the landscape in this field, along with the professional environment in Portland. You've had a strong influence.

Hannah noted staff is working with Building Owners and Managers Association on a potential replacement Conservation Advisory Council member.

Hannah presented the strengths and capabilities map, which was revised with Conservation Advisory Council feedback and will be used by staff as they develop the 2020-2024 Strategic Plan. Hannah provided a schedule to of upcoming engagements on the development of the plan. Strategic plan development will run through May 2019, when a draft of the plan will be presented to the board of directors. The board is looking for Conservation Advisory Council member advice and feedback, and there will be various sessions when staff engages with Conservation Advisory Council on the plan. This may mean a few extra hours asked of members over the next six months. We haven't set 2019 meeting dates, so we'll revise the list of meetings and resend the schedule.

## **2. Northwest Power and Conservation Council Underserved Populations Study**

Charlie Grist from the Northwest Power and Conservation Council presented a summary of the council's "Northwest Underserved Energy Efficiency Markets Assessment" report.

*A copy of the assessment is posted on the Council's website at <https://www.nwcouncil.org/reports/northwest-under-served-energy-efficiency-markets-assessment>.*

Charlie Grist: This is a quantitative look at the markets, and the first time we've done it this way. Marti Frank, who specializes in diverse and underserved markets, conducted it for us. Our goal is to tap all cost-effective conservation, but you can't get to all of it if you're leaving segments untapped. We know there's untapped potential across the region. As analysts, we decided to take a quantitative look at how we're doing. The study was equity based. The council facilitated and organized the process, and Bonneville Power Administration (BPA), Energy Trust, utilities and other organizations did much of the work. This looked at 2014 to 2016.

We didn't get full participation by all utilities and programs in the region. BPA, Energy Trust, Pacific Power, Northwest Energy Efficiency Alliance and many others put significant effort into it. Each provided their own report, all of which are appended at the end of our report. We worked on participation rates and participant distribution. We saw a participation rate of 1.8 percent for homeowners and 0.1 percent for renters. We looked at the total population of renters versus owners by utility territory.

One of the key goals to look at were what data sources were available to do this work. We got participant data from utilities and compared them against data services that Energy Trust and utilities use from credit raters. We found that race and ethnicity are an add-on data collection effort with extra costs involved, so not everyone collects that information.

One noteworthy item is that every utility territory is different. The energy efficiency resource isn't necessarily homogeneously spread across the population. For example, lightbulbs are spread evenly across everyone, but not everyone has an electric water heater or the right house for a ductless heat pump. You have to go after the savings where you can get them.

We saw participation rates of 1 to 8 percent, with the highest being on the residential side. Manufactured homes had the highest cumulative participation rates compared to single family and multifamily. When everyone had been very active with duct sealing for manufactured homes, it showed up in the data. BPA did a lot of work because it has so many member utilities. Participation rates in BPA utilities closely matched each income level. Customer participation ranged from free kits to larger home upgrades.

Al Spector: Which programs were taken into account, and did the study include things that customers didn't pay directly out of pocket?

Charlie Grist: Yes, but it's different for every utility.

Charlie continued his presentation: Energy Trust provided a lot of great data, and I see the organization as a leader in this work. Overall, we saw that schools participated heavily while offices didn't.

A few key findings are:

- We determined that enough of the right data exists to do this gap analysis.
- There is evidence of successful targeted programs.
- Different purposes require different methods and data.
- There is value in continued monitoring and analysis.
- Multifamily housing is underrepresented in most programs.
- Programs are getting out to rural areas, sometimes more than urban.
- Renters are not being reached as well as homeowners.
- Measures with addresses attached to them are only half of the savings. Measures delivered midstream are a big portion of the savings, and you can't ignore that half of the data.

One of the follow-ons is figuring out how to pursue the gaps. Most of the big providers are trying to meet goals, and they are incentivized to find out who the remaining markets are. We found that they started sharing information on their own, meaning that the council doesn't need to facilitate that work completely. A lot of good comes out of that sharing. We need to find the causes of these gaps in participation. Is it language? Culture? Different reactions to borrowing money? We will need to be clever about finding solutions.

Mark Kendall: You showed disparity in multifamily. Was that weighted by potential or number?

Charlie Grist: Every utility is different. It wasn't by potential, but Tacoma did the most along those lines. The utility reports are appended at the end of the report.

Jason Eisdorfer: Is the 1 to 8 percent participation rate per year? Did BPA include the low-income weatherization numbers while Energy Trust didn't?

Charlie Grist: The percentages were cumulative over three years. Energy Trust didn't include low-income weatherization numbers.

Josh Weissert: What's the breakout between new construction and retrofit?

Charlie Grist: There was more existing than new, but it will be whatever the program provider did as their customer touch-point.

Jeff Mitchell: Do you plan to rerun to this study every year?

Charlie Grist: We're considering it, but we are headed into the eighth power plan. This was a lot of work. We'll work on it from the providers' point of view, but it's a heavy lift.

Mark Kendall: Thank your board for doing this. It's meaningful.

### **3. Review of How Energy Trust is Expanding Participation with a Focus on Diversity, Equity and Inclusion**

Hannah Cruz: Debbie Menashe gave you an update about our diversity, equity and inclusion initiative at the November 2017 meeting. The board of directors has since revised its equity policy into a diversity, equity and inclusion policy, and staff have developed a diversity, equity and inclusion operations plan. At the core is understanding where there are the gaps in participation, where we can learn more about customers and what barriers customers face.

Shelly Carlton: Engaging diverse communities is part of our core purpose. To understand gaps in participation, we conducted research to learn what direction to take. The research plan was started in 2016. We studied Energy Trust participation data overlaid with Experian income data. We also conducted a phone survey, which included more questions on demographics. And we conducted focus groups with small business decision makers in different communities. Combined, the reports have a lot of information and findings. With the external Experian data overlay, we found that one income group participated highly where others dropped off.

Holly Braun: Charlie's presentation showed population broken out, not just participants. Does your report show that?

Alex Novie: Yes.

Mark Kendall: Does this include renewables?

Shelly Carlton: This is only residential energy efficiency.

Shelly continued that the second part of the research plan was a customer insights phone survey. We asked 1,000 people to talk for 15 to 20 minutes on the phone. We used a sample of participants in residential measures and a sample of non-participants. In this study, we learned that high school graduates weren't being served at the same rate as those who have a college degree. Bear in mind that only 30 percent of Oregonians over 25 hold a college degree.

The focus groups were an effort to learn if those in rural communities or communities of color were aware of our services, and if they are interested in our services based on printed materials. These groups included Latino, Asian and Asian Pacific Islander, and African American business decision makers and a group of decision makers in Grants Pass. There was a desire from participants for a community based liaison who looked like them and talked like them, potentially dedicated staff or a partnership with a community-based organization. A second finding was that marketing materials need to be clear, quick and representative of the community. Our example collateral didn't look like the focus group participants or their businesses. This 2016 work informed what we did going forward.

Dan Rubado: The next part of our presentation is on developing participation baselines based on race/ethnicity, income and urban/rural location. Our goal was to determine a baseline for how well we served diverse communities in each sector. We received input from outside organizations that have experience with diverse communities and with conducting this type of analysis. Programs will be using this information to develop activities to target diverse communities starting in 2019. We conducted a geographic analysis based on census tracts. Census tracts are a small, sub-county geographic unit created by the Census Bureau to report demographic data. They are a good proxy for communities and generally contain between 1,000 to 2,500 households. We used tract-level demographic data to develop a set of broad diversity indicators. We computed tract-level site participation rates from our own data that we could overlay on the diversity indicators.

Holly Braun: It makes sense that this is a small number of households, but did you develop indicators? Did you measure diversity in specific ways?

Dan Rubado: We used American Community Survey data to develop tract-level indicators of community diversity for race/ethnicity, income and urban/rural location.

Dan continued that participation in midstream measures is not included in this work, because it cannot be tied to sites. However, it is significant, especially for the Residential program, and we need to find ways to measure it in the future.

Each of the diversity indicators were created using a one-to-five scale where five always indicates the priority areas: low income, high racial/ethnic diversity and rural location. We then created a composite diversity index that combines the income and race/ethnicity scores, weighted to include rural areas that may not be quite as diverse as urban areas. These indicators highlight communities that are both low-income and racially/ethnically diverse, or very rural and moderately low-income and racially/ethnically diverse. We then overlaid our five-year tract-level participation rates for each sector over the diversity indicators. Due to time limitations, we'll only go over the composite diversity indicator for residential and the urban-rural indicator for commercial and industrial. However, the results vary depending on what index we look at.

For the residential sector, which includes multifamily buildings, attached and detached single-family homes and manufactured homes, we don't see major differences in participation rates in communities with different composite diversity scores. Participation in the areas ranked as one—the most affluent, least racially diverse areas of the state—is slightly higher than the overall average participation rate of 26 percent, but not significantly. Participation in capital measures requiring participant investment was 18 percent, which is higher than the 12 percent participation in free measures.

For the commercial sector, the most striking difference in participation rates is between large energy-using businesses and small- to medium-sized energy users. Large businesses, defined as using 100,000 kilowatt hours or more per year or the equivalent in therms, had a participation rate of 28 percent compared with only 7 percent for smaller businesses. For both large and small businesses, participation rates were higher for most urban areas than they were in rural areas.

For the industrial sector, the biggest difference is again between participation rates for large energy users and small- and medium-sized energy users. Large industrial businesses, defined as using 1 average megawatt or more per year or the equivalent in therms, had a participation rate of 79 percent compared with only 13 percent for smaller industrial businesses. For large industrial businesses, the participation rate isn't correlated with the urban-rural indicator. For smaller industrial businesses, there appears to be significantly higher participation in the urban areas than the rest of the state.

Alan Meyer: Does this include low-income weatherization?

Dan: No, this just includes Energy Trust participation.

Charlie Grist: There's some fuzziness to these numbers. I'm trying to gauge the precision.

Dan Rubado: It's the total participation versus total households for all tracts in each of the five indicator bins, so there isn't really any error because the numbers are based on a census.

However, we don't know if individual participants are non-white or low income, we just know the general demographics of the area where sites are located. The urban/rural indicator is different

because it is a geographic characteristic, so we can classify each individual site based on how rural or urban its location is. That's the nature of a geographic analysis like this. We don't have a one-to-one match between sites and demographics because we don't track participation based on income, race or ethnicity.

Holly Braun: This showed no difference based on diversity.

Dan Rubado: For residential, there is no real difference based on the composite diversity indicator. However, there are more pronounced differences based on the urban/rural and income indicators. Participation gaps are in the most rural areas and lowest income areas. Also, there is much higher participation among larger businesses and those closer to urban areas.

Karla Hendrickson: How did you define large customers?

Dan Rubado: Commercial customers using 100,000 kWh or more per year or the equivalent in therms. Industrial customers using 1 aMW or more per year or the equivalent in therms were considered large.

Dan: There seems to be relatively even participation among large industrial customers across the state, but among smaller industrial, it was stronger in urban areas.

Alex Novie: The final part of our presentation is a summary of existing and proposed program activities aimed at expanding customer participation. Energy Trust has been pursuing many of these efforts since the diversity, equity and inclusion initiative was launched in 2015. Ongoing and new activities are outlined in our draft 2019 budget action plans. New Buildings is working with women- and minority-owned businesses as design allies in both customer trainings and fellowships, for example. As we rolled these initiatives out, we didn't have baseline data and we didn't want to wait for data. Now that we have initial results from the 2018 diversity, equity and inclusion data and baselining efforts, we are examining how these parallel paths align and how the data helps inform strategies for increasing customer participation. We have made strides with our diversity, equity and inclusion initiatives in the past, but it is crucial that we measure progress, adjust strategies as necessary and report out to stakeholders.

Engaging community-based organizations is a crucial component of our diversity, equity and inclusion goals to expand customer participation. This includes establishing baseline data, discussing tactics and partnering to deliver services to customer groups. We also have an emerging leadership opportunity to encourage design allies to recruit diverse candidates for internships. From the work Dan mentioned, we are developing a more consistent and transparent approach to developing market assessments and engaging partners. Furthering the small- and medium-sized businesses initiative is integral to expanding customer participation for commercial and industrial programs. This requires continued outreach to increase customer and stakeholder awareness and engagement.

Kari Greer: From the Pacific Power point of view, many of the areas you highlighted are in our territory. It's critical that you work with us because we are also doing a lot of outreach efforts. We can double up our efforts, but we don't want to work at crossed paths with each other.

Wendy Gerlitz: I want to reinforce the importance of working with the community action agencies. Low-income participation is a red flag for me. If you do one measure for low-income customers, it can hurt their eligibility for free low-income weatherization services. It's very important to avoid getting sideways with these efforts.

Peter West: We do have a protocol for that. It's part of the engagement with community-based organizations. Directing some things through them should help.

Lisa McGarity: I didn't see anything about the relationships between energy use and energy burden. Did you look at that?

Alex Novie: We looked at energy use, but energy burden is more challenging to do without individual customer-level information on income. It's a next step for us to address in our market assessments.

Shelly Carlton: There are national studies we can look at also.

Dan Rubado: It's also incorporated into our income indicator data, but not exactly called out.

Hannah Cruz: A question for Conservation Advisory Council members is how often would you like updates on this and what's important to know about?

Holly Braun: I'm impressed with the granularity. I look forward to digesting this further, but I'm impressed with what you've done so far. Now what do we do?

Peter West: There will be chances to talk to program managers about the specifics at the individual tables later in the meeting.

Charlie Grist: I mentioned this in my slides, but wanted to reiterate the tension between efficacy and equity. Early adopters aren't evenly distributed across these groups. There are stages in this work. You may need to look at individual measures, and consider where they haven't been adopted and why. Think of it as a long-term project.

Peter West: This isn't zero sum. Early adopters are very important to us. We couldn't move forward without their early willingness to try things out. Why can't the new technologies be in a low-income setting? Who can we partner with to get it into the field? Ideas like that come out of this work. You can find early adopters, now you need to find the partners.

#### **4. Mid-year 2018 Progress**

Peter West provided an update on forecasted year-end achievements to goal by utility. We are expecting another excellent year. We are expect to achieve 98 percent of goal in Portland General Electric territory, largely due to fewer savings than expected this year from an industrial megaproject. We expect to achieve about 95 percent of goal in Cascade Natural Gas territory due to a handful of business projects delaying into 2019. New construction is still high, but there it is slowing down in rural areas. Metro areas are outbidding other projects to get things done, leading to a lack of workforce in other areas. Multifamily is very strong across the board, and lighting is also very strong. High bay lighting in industrial settings is driving very strong uptake. Commercial projects are much smaller than before, but there are more of them. Expenses are at 99 percent of budget, so we're getting more savings at lower-than-budgeted costs.

Peter West: OPUC staff and commissioners supported our approach to how we treat the federal lighting standard in our cost-effectiveness calculations for next year. If we pull out of lighting, we would be the only efficiency provider in the region to do so and it would undercut many other programs and utilities. We exclude the federal lighting standard in our calculations, but others include it. All of the analytical approaches point to a need to stick with lighting. We'll continue our plan for lighting, but lighting savings in 2019 will be much less than a year ago. We'll revisit our plan again in 2019 to plan for 2020. We will likely be in the specialty market, which isn't impacted by these standards.

Hannah Cruz: The OPUC asked for lighting trends in our quarter two report, which we included and I recommend Conservation Advisory Council members read.

Charlie Grist: On the lighting decision, I want to follow up on the logic behind it. Internally, did you get a decision memo? How do you make the decision?

Peter West: The decision is documented in an appendix to the quarterly report, and we also presented it to the OPUC during a public meeting. They supported our logic.

### **5. Draft 2019 Program Action Plans**

Hannah Cruz: The draft 2019 budget will be public on October 10. We hope you'll attend the board budget workshop on October 17. Today, you'll receive a sector overview of the draft action plans, followed by time with staff to ask specific questions at individual tables. The objective today is to provide you with the information you need to participate in the budget workshop.

Thad Roth: One year ago, the residential sector transitioned to a single Residential program that includes three tracks: home retrofits, products and EPS new construction. This was in response to forecasted declines in savings. We are in the first year of the transition, and it is going well. We believe we are well-positioned going forward.

In the residential sector, we recognize that we must drive savings through trade allies, retailers, community-based organizations and utilities. We are testing more midstream efforts, and we need to maintain strong relationships with trade allies and customers.

Lighting savings have declined in excess of 70 percent, and we expect declines to continue. We expect to be largely out of the lighting market by 2020, driven by federal standards or market transformation. Low-flow water device savings will also continue to decline. Together, this will require the sector to change the contents of Energy Saver Kits in 2019. Air conditioning has become a larger opportunity, so we are now looking at a pilot in the coming year. We will also explore a residential pay for performance pilot.

Lisa McGarity: As the last meeting, there was concern about the uptake for commercial pay for performance. How will residential be any different?

Thad: That's why we're going to do a pilot. We tried to learn from efforts elsewhere.

Thad continued that the residential sector will learn more about our target audiences by using data. This will allow us to follow up multiple times with customers who are likely to be interested and develop an approach based on customer characteristics.

We will continue to drive savings through water heating, space heating (including smart thermostats), and new construction as retail lighting and showerhead savings decline. As we move toward midstream delivery mechanisms, we will continue to focus on marketing to customers as they make product decisions and on trade allies through training and sales support for these key measures.

To drive diversity, equity and inclusion activities, we're looking for feedback from community-based organizations on how to approach the customers they serve. We'll contract with them, or through program management contractors, to reach diverse customers.

We worked on manufactured housing and believe there is more work to be done on the heating systems. Manufactured home replacement is another effort. We will also supporting affordable housing. We're working in Woodburn to reach the Spanish-speaking population in that area.

Holly Braun: I'm curious about low-income efforts and whether measures aren't cost effective if we're all trying to buy them.



Thad: We have to be careful what's offered through our programs in addition to or separately from low-income offers. We want to be sure that qualifying customers have access to no-cost offers. At the same time, we are discussing dual funding options with the OPUC to maximize funding and savings for these customers. There are community-based organizations that use funds that have restrictions, and we want to be sure we don't put them at risk.

Lisa McGarity: When will the Spanish microsite be launched?

Mana Haeri: It should be later this year or early next year.

Oliver Kesting: In the commercial sector, we have several programs: New Buildings, Multifamily and Existing Buildings. Existing Buildings also includes Strategic Energy Management (SEM) and Pay for Performance. We're seeing a continuing trend toward more, smaller projects. We need more projects to obtain the same level of savings as in the past. There are fewer savings due to baseline changes. Outreach is becoming more costly to reach more small customers. We are seeing less lighting savings. We are working to reach small and rural customers, which requires outreach and cultivating local trade allies.

Most of the sector will remain the same in 2019. However, we're seeing more challenges with Existing Multifamily due to changes in direct installation of energy-saving lighting and showerheads. We will consider a different program design for 2020.

SEM delivery cost is a challenge, so we need to refine it with better targeting and better vetting for services. Pay for Performance has seen very limited customer interest, and we are considering options.

Kari Greer: At what point do you consider closing Pay for Performance?

Oliver Kesting: We believe we have a good design and the work has been done to make it available to customers. We can keep the offer open for another year and consider closing it if interest levels don't change.

Wendy Gerlitz: Seattle has an offer they expanded and they received a ton of interest. I'm puzzled by this. We hope to find out more and submit comments through your budget process.

Oliver Kesting: We are working with PropertyFit in Multnomah County, as well. This is the commercial Property Assessed Clean Energy program through Prosper Portland and Multnomah County.

Amanda Potter: In the Industrial sector, we have one program with a custom track, which includes SEM, and a standard track, which includes lighting and prescriptive incentives.

We continue to see strong savings potential in the industrial sector. We are planning on evolving our program next year to meet the changing needs in the market. We still see good savings opportunities at large customer sites, but we are also looking for ways to streamline program processes for small- to medium-sized customers in custom and SEM offerings. We're seeing more small- to medium-sized customers participate in the program, and we think they will be an increasingly important part of our savings.

The custom offering is moving to a new structure. We've included SEM and technical studies in our three Program Delivery Contractor contracts. We have a new PDC in territory one. We've developed a streamlined technical study process to test this year and ramp up next year. We will also add cohorts to our continuous SEM offering and develop a more streamlined SEM offering.

We see strong lighting savings in 2018 and expect this to continue into 2019. We're looking at how to evolve the lighting offering so that we can continue to capture cost-effective savings as savings per measure decreases. We are looking at reducing incentive levels, moving measures midstream and revising the Performance Plus offering. We will launch new prescriptive measures to sustain standard track savings.

#### **6. Break-out Session: Questions and Answers with Program Staff on Draft Action Plans**

Conservation Advisory Council members, Energy Trust staff and the public in attendance broke into small groups for question and answer sessions on draft 2019 program action plans. There were five program stations (Residential, Existing Multifamily, Existing Buildings, New Buildings and Production Efficiency) available for members and the public to visit in preparation for the October 17 budget workshop with the board of directors.

#### **7. Public Comment**

There was no additional public comment.

#### **8. Meeting Adjournment**

The meeting adjourned at 4:45 p.m. The next Conservation Advisory Council meeting will be held on Friday, October 12, 2018.

**Special note:** There will be a board of directors budget workshop in the afternoon on Wednesday, October 17 that Conservation Advisory Council members are encouraged to attend. The workshop was added this year to replace a series of budget-related presentations and ensure that Conservation Advisory Council, Renewable Energy Advisory Council and the board are receiving and commenting on the same information through the budget development process. More information on the workshop is forthcoming as we plan the agenda for that day. Please consider holding that time on your calendar as you would a Conservation Advisory Council meeting.