

Conservation Advisory Council Meeting Notes Summary

February 27, 2019

Attending from the council:

John Frankel, NW Natural (for Holly Braun)
Charlie Grist, Northwest Power and
Conservation Council
Lisa McGarity, Avista
Dave Moody, Bonneville Power
Administration
Julia Harper, NW Energy Efficiency Alliance
Warren Cook, Oregon Department of
Energy

Danny Grady, City of Portland Bureau of
Planning and Sustainability
Wendy Gerlitz, NW Energy Coalition
Tim Hendricks, BOMA
William Gehrke, Citizens' Utility Board of
Oregon
Kari Greer, Pacific Power
Anna Kim, Oregon Public Utility
Commission
Jason Klotz, Portland General Electric

Attending from Energy Trust:

Hannah Cruz
Fred Gordon
Thad Roth
Peter West
Betsy Kauffman
Ryan Crews
Debbie Menashe
Dave McClelland
Justin Buttles
John Volkman
Dave Moldal
Jackie Goss
Cameron Starr

Julianne Thacher
Kenji Speilman
Mana Haeri
Alex Novie
Samuel Girma
Michael Colgrove
Lizzie Rubado
Mana Haeri
Eleni Eisenhart
Spencer Moersfelder
Steve Lacey

Others attending:

Alan Meyer, Energy Trust board
Elee Jen, Energy Trust board
Chad Gilles, Stillwater Energy
John Molnar, Rogers Machinery
Alicia LaRoche, Evergreen

Joe Marcotte, Lockheed Martin
Shelly Beaulieu, TRC
Mark Lyles, New Buildings Institute

1. Welcome, Old Business and Short Takes

Hannah Cruz convened the meeting at 1:34 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/. The meeting was recorded on Go To Meeting. If you'd like to refer to the meeting recording for further detail on any of these topics, email info@energytrust.org.

2. CAC Operations and 2019 Planning

Topic summary

Hannah Cruz conducted an annual review of the CAC operating principles, including the 2018 Operating Principles document and an additional 2018 Meeting Guidance document. The operating principles spell out CAC engagement for the year, including how many meetings are

held, how members are engaged and what discussion topics are brought to the group. Hannah asked the group to review her recommended updates, which combined the two documents into one by incorporating some Meeting Guidance information into the operating principles. Recommended changes were presented using tracked changes. The group had the opportunity to provide feedback on the document before being finalized for 2019.

After finalizing the Operating Principles, Hannah presented the results of a survey that CAC members recently participated in. CAC provided feedback on meeting topics brought forward in 2018. Overall, the respondents found most of the 2018 topics to be useful. Respondents also indicated they prefer to provide feedback about meeting topics in a variety of ways, mostly after a presentation. CAC noted in the meeting they do like small group discussions.

Discussion

CAC inquired about the process for relaying takeaways from their meetings to Energy Trust's board of directors. Hannah clarified that the board is provided with CAC meeting notes, and she provides high-level updates on CAC discussions during board meetings.

CAC asked whether Energy Trust was getting what they needed from the group and emphasized that they want to be helpful contributors. Peter West mentioned the group will have a valuable role in strategic planning, and their perspectives help Energy Trust understand if we have considered all aspects of a topic.

CAC noted the Operating Principles could also list the expectations of CAC members.

CAC recommended showing key takeaways at the beginning of each presentation to provide visibility for members who don't have time to read the whole presentation.

Regarding the survey, CAC discussed the level of detail desired in a presentation and concluded that they preferred to have more detail available for those who may be less informed on a topic.

Next Steps

Hannah Cruz will compare the CAC charter to the Operating Principles to ensure the expectations of CAC members is documented in one of the two documents, and will then finalize the Operating Principles, providing the final copy in the next meeting's packet.

The results of the survey and CAC discussion will be used to inform upcoming topics for 2019 CAC meetings.

3. 2018 Preliminary Annual Results

Topic summary

Peter West shared preliminary annual results for 2018. Official annual results will be available on April 15, 2019. The results show that Energy Trust is expected to achieve 95 percent of the electric savings goal, 114 percent of the gas savings goal and 126 percent of the renewable energy generation goal. The shortfall in the electric savings goal is largely due to lower-than-expected savings from the commercial sector in Pacific Power territory and a megaproject in PGE territory; the savings not acquired in 2018 from the megaproject are expected to come in during later years.

Discussion

Pacific Power asked how Energy Trust's work with schools intersects with Oregon Department of Energy's schools funding. Peter West explained that Energy Trust coordinates with ODOE to ensure customers receive the maximum benefit without duplicating incentives.

CAC expressed interest in how diversity, equity and inclusion efforts and progress will be incorporated into annual reporting moving forward. Hannah said quarterly reports now contain highlights of DEI activity and there will be a section devoted to DEI in the 2019 annual report.

Next Steps

No next steps.

4. Residential Net Zero Specification

Topic summary

Mark Wyman (residential) and Jeni Hall (solar) presented on program concepts and different approaches to net zero in the residential sector. Energy Trust is developing a net-zero offering for residential homes that is targeted for launch in 2020 to prepare for Governor Brown's Executive Order 17-20. Staff is currently in the process of gathering stakeholder feedback. The new offering will combine elements of the existing EPS New Construction and residential Solar programs and aim to increase adoption of energy efficiency and solar while decreasing the cost of combining both elements in one project.

Jeni and Mark reviewed possible ways of defining net zero in homes and asked CAC for input on which definition made sense for Energy Trust to use in this offering. Some definitions assume all energy use will be offset, while others assume all or some electric use or consider "smart home" grid benefits.

Discussion

CAC inquired about potential cost-effectiveness concerns, and the program clarified that the cost-effectiveness for new construction, which is a custom program, is based on a number of representative prototypes for each tier that are updated on an ongoing basis. The Solar program works under above-market costs as opposed to cost-effectiveness but has a set of requirements that go beyond current code requirements.

CAC discussed whether the new homes would automatically be built EV ready, and if the energy load from transportation would be included in the zero energy calculation. It is currently not included in the model but may still show up in the home's energy footprint.

CAC discussed the idea of how integrating energy efficiency and solar incentives would ultimately decrease costs. The goal is to decrease the cost of solar and working something into common practice will generally bring costs down. Net zero is an overarching brand and can be a rallying point to make sure the solar trade allies and builders are working in closer alignment, which will decrease the cost of collaboration to get to net zero on the energy efficiency side.

Earth Advantage noted that they have been doing this work through their Zero Energy and Zero Energy Readiness programs. Until recently, gas homes were excluded from the Earth Advantage program due to a site definition of net zero energy use. They have now moved to a source energy definition, which allows gas homes to participate but that necessitates oversizing the solar system. Having the system oversized can ensure enough load for a future electric vehicle, and they see that as a win.

Bonneville Power Administration noted that the zero-all energy use definition could lead to gas homes not reaping the full benefit of their solar systems and could inadvertently lead to fuel switching. On the other hand, the zero-some energy usage definition would be hard to brand and communicate in the market. Zero-all electric usage is the most viable near-term option for implementation.

NW Natural stated since power is generated to a large degree with fossil fuels, a source-based approach would have the most integrity. Within the three options, the zero-all electric option would be best to determine zero or near-zero.

CUB noted that for PGE, the basic charge is subsidized. The customers who are receiving the full benefit of the solar investment would have larger fixed charges even though they're not using the grid. If you market zero-all electric energy costs, there could be negative feedback from customers who pay increasing base costs.

Oregon Department of Energy noted that there is a national definition of net zero from the U.S. Department of Energy that refers to zero regulated load. Staff should consider what "zero" in Governor Brown's Executive Order refers to, and the original proposition was related to reducing carbon emissions and producing low-load homes. That changes the formula and means you wouldn't necessarily have to offset with renewables on-site. The low-load home is a great way to go but would also necessitate homeowner education and explaining that they would need to make behavioral changes to get to zero.

Next Steps

The members filled out a survey handout with their feedback, which has been aggregated by staff and added to these notes. See Attachment 1.

5. Overview of Market Research at Energy Trust

Topic summary

Peter Schaffer presented market research underway or recently concluded at Energy Trust, including sample studies. He explained that Energy Trust completes around eight to ten 10 market research projects each year with the goal of better understanding how to target, acquire and retain a customer base with regard to our services and offerings. These projects could take many forms including customer analysis, supply chain models, consumer choice information, market segmentation, market trends, pricing, cost research and branding research.

Peter reviewed a few examples of recent studies. One study sought to understand capital planning and project cycles for the water and wastewater sector, while another study researched the market for energy-efficient windows for residential homes.

Discussion

Bonneville Power Administration expressed that all of the studies were of general interest, especially the wastewater study.

Avista expressed interest in the low-income energy affordability study that was performed by Oregon Housing and Community Services, ODOE and the OPUC.

Next Steps

Hannah will send a link to the wastewater study when it has been posted online and will add the energy affordability study as a topic for 2019, depending on available time.

6. 2019 Measure Development Preview

Topic summary

Jackie Goss provided a high-level summary of measures that will be reviewed and potentially revised in 2019. CAC is being given the opportunity to review the draft list in case there are measures to bring back to a future meeting. The majority of the measure revision work will be completed by the end of July before staff begins developing the 2020 budget and action plans.

Energy Trust reviews all of our measures at least every three years, but some measures are updated more frequently than that. Measures that have exceptions tend to have a two-year exception which means they must be reviewed every other year. Measures that are highly dynamic or have some kind of deadline such as a code change may have a shorter time between reviews as well. At minimum, measures are re-tested to ensure they are cost effective. For other measures, we review the assumptions and the data that went into them to ensure that we're claiming appropriate savings and offering appropriate incentives.

Discussion

NEEA noted they'd like to partner on midstream lighting.

CAC noted a lot of these measures are going to affect moderate-income customers more.

CAC discussed the non-energy benefits of some measures, like ductless heat pumps in both residential and multifamily settings.

CAC asked how complementary funding is used by staff in cost-effectiveness tests. We have guidance from the OPUC on how we can work with other partners who have funding available. This provides direction on how we treat that funding in our cost-effectiveness test when the payments from other organizations are reflective of other non-energy values. Using this guidance, we can use their contributions to reduce the cost used in the Total Resource Cost test.

Next Steps

Staff will inform OPUC staff of reviews for measures that might have a large impact on savings and will bring back to CAC any measures that show, post review, a potential for a large savings change.

7. Public Comment

There was no additional public comment.

8. Meeting Adjournment

The meeting adjourned at 4:22 p.m. The next meeting is Wednesday, April 10, 2019.

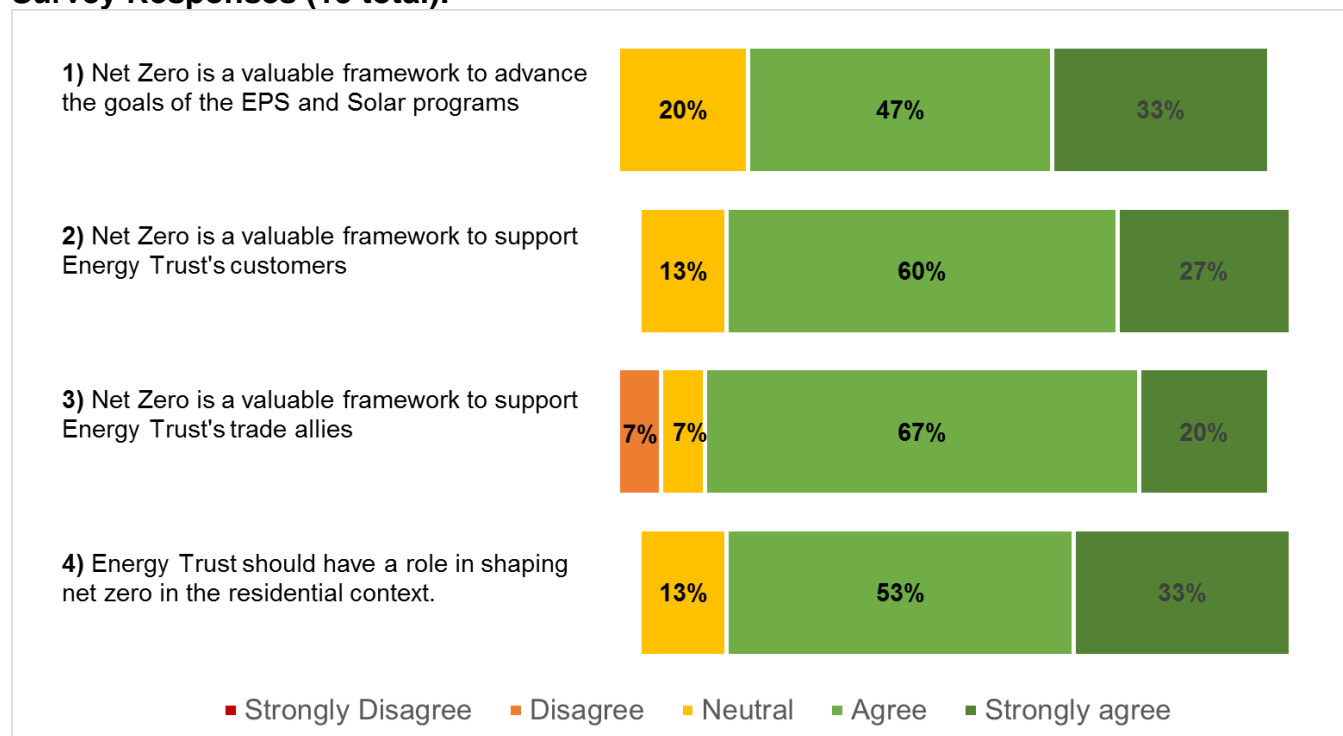
Attachment 1: Residential Net Zero Specification

Compiled survey responses and highlights from the discussion at CAC and RAC on February 27, 2019.

Key points that should be considered in program design:

- How and whether to incorporate EV adoption and usage
- How the program would interact with carbon programs at the city, county and state level
- Creating a net zero specification that works for both home buyers and builders
- The importance of branding/marketing/communicating the concept to home buyers
- Coordination with other groups in Oregon and Washington defining net zero

Survey Responses (15 total):



Highlights from the discussion at both RAC and CAC for each of the Net Zero concepts discussed

Zero all energy usage

- I would be concerned the homeowner might use more energy because they are overproducing and not getting the benefit.
- If you are encouraging a home buyer to build out a solar system that is larger and more expensive, does it tacitly encourage fuel switching?
- At scale, does this produce grid management issues? That could drive utility cost up.
- The potential for oversized solar to accommodate gas load could exacerbate issues with grid constraints.
- I am concerned that there could be some perverse incentives (or disincentives) under the [zero] all energy [usage] (gas+electric) definition of net-zero.
- It could work if our net metering policy is changed.

Zero all electricity usage

- Would an [zero all] electric energy only approach drive more all electric new construction vs gas?
- Cost to customer is something to consider whether the market will adopt. Zero all electric use or some would probably increase participation.
- Considering challenges with the other two methods this zero all electric usage seems most viable.
- Options 1 (zero all energy usage) or 2 (zero all electric usage) offer the most understandable process. We think option 2 (zero all electric usage) has more integrity than option 3 (zero some energy usage).

Zero some energy usage

- You will struggle with communication/marketing this to home buyers.
- Eliminating the space and water heating load is not the way to go.
- Cost to customer is something to consider whether the market will adopt. Zero all electric use or some [energy usage] would probably increase participation.

Grid Responsive

- Smart homes should be an aspect of net zero homes. Storage is very important. Makes more grid neutral, if can be integrated, multitude of benefits.
- I think the smart grid responsive homes should definitely be overlaid on whatever "net zero" definition is chosen. Far less expensive to integrate when home is built than to add distributed energy resources later.

General

- Make sure to coordinate with Washington as I understand they are fairly far down this road.
- Energy Trust's skillset is in providing training and standardization to the community and trade allies. Seems like there is value to the state of [Energy Trust] developing a "standard program".