

Conservation Advisory Council Meeting Notes

June 21, 2017

Attending from the council:

JP Batmale, Oregon Public Utility Commission
Warren Cook, Oregon Department of Energy
Tony Galuzzo, Building Owners and Manager Association
Wendy Gerlitz, NW Energy Coalition
Charlie Grist, NW Power and Conservation Council
Rick Hodges, NW Natural (for Holly Braun)
Julia Harper, Northwest Energy Efficiency Alliance
Don Jones, Jr., Pacific Power
John Karasaki, Portland General Electric (for Garrett Harris)
Don MacOdrum, Home Performance Guild of Oregon
Lisa McGarrity, Avista
Tyler Pepple, Industrial Customers of Northwest Utilities
Allison Spector, Cascade Natural Gas

Susan Jowaiszas
Corey Kehoe
Oliver Kesting
Steve Lacey
Andrew Lunding
Alex Novie
Jay Olsen
Thad Roth
Kenji Spielman
Cameron Starr
Mariet Steenkamp
Rob Strange
Scott Swearingen
John Volkman
Sam Walker
Katie Wallace
Jay Ward

Attending from Energy Trust:

Mike Bailey
Gwen Barrow
Quinn Cherf
Amber Cole
Tara Crookshank
Hannah Cruz
Sue Fletcher
Fred Gordon
Jackie Goss
Marshall Johnson

Others attending:

Heather Beusse Eberhardt, Energy Trust board
Scott Davidson, Enhabit
Kari Greer, Pacific Power
Mitt Jones, Cadmus
Roger Kainu, Oregon Department of Energy
Lonny Peet, Nexant
Alan Meyer, Energy Trust board
Chris Smith, Energy 350
Bob Stull, Ecova

1. Welcome and Introductions

Hannah Cruz convened the meeting at 1:33 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/. Hannah introduced herself as the new facilitator for Conservation Advisory Council meetings.

2. Old Business and Announcements

Hannah noted that there is a slight edit and correction to the May minutes based on comments received. The notes were reposted online at the link listed above.

She reminded the Conservation Advisory Council that the Energy Trust budget review survey closes on June 22 and encouraged participation. Energy Trust will use survey feedback to assist in reviewing and identifying improvements to the annual budget objectives, process and stakeholder engagement approach.

The September council meeting has been moved from September 6 to September 13 to allow staff time to develop draft 2018 action plans as part of the overall budget process.

The Energy Trust Board of Directors met on May 18-19, 2017, for the annual Strategic Planning Workshop and received a mid-plan update from staff. The workshop information is on the Energy Trust website. At its July 26, 2017 board meeting, the board will approve the notes from the workshop and review topic areas staff can research over the next year to assist them in initiating development of the next 2020-2024 Strategic Plan.

Thad Roth provided an update on the Residential Sector Request for Proposals (RFP). The results of the competitive RFP will determine the contract or contracts the residential sector needs to manage and deliver sector services starting January 1, 2018. The review team is currently in the decision process after interviewing candidates over the past month. The RFP received a robust response. Staff will present their recommendation for board consideration at the July 26 board meeting.

Hannah reported that the Oregon Secretary of State has opened a performance audit of Energy Trust and some Conservation Advisory Council members have been contacted by the auditors for interviews. Mariet Steenkamp is the lead for Energy Trust and is collaborating with the Oregon Public Utilities Commission (OPUC) to be responsive to the auditors and their information requests. JP Batmale noted the performance audit is likely focused on Energy Trust's efficacy and OPUC oversight. JP invited any Conservation Advisory Council questions to be sent his way.

Alan Meyer: Is this the first time Energy Trust has been audited?

JP Batmale: Energy Trust was previously examined during an audit of the Oregon Department of Energy (ODOE).

3. 2017 Legislative Update

Jay Ward provided an update on the current state legislative session. Energy Trust tracks and monitors legislative activity for potential impacts with Energy Trust's work, and does not take positions in support or opposition to any legislation. The two main areas the legislature is currently focused on are balancing the state budget and passing a transportation infrastructure package. The draft transportation package bill (HB 2017) previously included provisions to alter the purposes of the public purpose charge; committee co-chairs have said those provisions will be pulled from the next iteration of the bill. The state Residential Energy Tax Credit (RETC) is scheduled to expire at the end of 2017. There are bills still active that would extend the tax credit in some way. Session constitutional sine die is July 10.

4. Large Customer Funding Analysis

Steve Lacey provided an update on large customer funding analysis and noted that Director of Energy Programs Peter West is lead on the project. Energy Trust electric efficiency funding is set legislatively through SB 1149 and SB 838. The former legislation applies to all customers of PGE and Pacific Power while the latter exempted commercial and industrial customers (collectively "large customers") using more than 1 average megawatt of electricity annually. SB 838 directs that the investment of those funds shall not benefit customers that do not pay into the fund. To ensure alignment with this directive, Energy Trust and the OPUC set up a process where incentives serve as a proxy for program spending in the area of large customers in commercial and industrial sectors. Energy Trust contracts with a third party to conduct an annual analysis on incentive spending and to determine if incentive spending stayed within the proxy threshold. In spring 2017, Energy Trust contracted with CLEAResult for analysis of 2016 incentive spending.

Energy Trust provides an annual update to the Conservation Advisory Council. In addition, Energy Trust provided a stakeholder review of guidelines in 2014; no changes were made at that time. The board reviewed the analytic methodology in 2013 in preparation for the 2015-2019 Strategic Plan,

and anticipated that at some point, the threshold would be exceeded at least for Portland General Electric (PGE).

Staff recently received the 2016 analysis and is now providing an initial update to Conservation Advisory Council. Staff will provide additional information later in the year as the threshold for one utility was exceeded in 2016.

Steve presented the results of the 2016 analysis. Energy Trust's incentive spending threshold for Pacific Power large customers is set at 27.3 percent. As of 2016, the incentive spending at 20.1 percent remained below the threshold. Energy Trust remains in compliance with Pacific Power.

JP Batmale: What is the average over multiple years?

Steve Lacey: The threshold was set to a four-year average.

Scott Swearingen: The threshold was set at the cumulative average for the years 2005-2007. The number shown for each year post-SB 838 is the cumulative average from 2008 forward.

Steve continued that Energy Trust's incentive spending threshold for PGE large customers is set at 18.4 percent. As of 2016, the incentive spending at 18.7 percent exceeded the threshold. Energy Trust has been very close to the PGE threshold since 2013, and this is the first year that the threshold was exceeded. This has set some actions in motion. Achieving the threshold is attributed to a healthy economy, new construction, an increase in industrial activity and success with the Program Delivery Contractor's engagement with PGE large customers.

Staff will conduct additional analysis to forecast the year-end incentive spending and to determine whether the threshold will be exceeded in 2018. That information will be available later this summer and staff is looking at some form of corrective action to start later this year and in 2018. Based on the early information we have, we expect consistent or increased activity for large customers of PGE over the next three years. An update will be provided to the Conservation Advisory Council in late summer or early fall after analysis of the pipeline and creation of a correction plan.

Steve noted that Energy Trust has a three-year grace period to come back into compliance. Given that Energy Trust has a robust PGE pipeline, staff needs to understand what the horizon is going forward.

Warren Cook: It would be interesting to see pre- and post-energy savings of SB 838.

Tyler Pepple: What will happen over the next three years?

Steve Lacey: It looks as though we'll be in the same position for at least the next couple of years. This is not just occurring in the industrial area, but also with large customers in the new construction and commercial markets.

Charlie Grist: It's best to quantify the data to help lead the discussion.

Tony Galuzzo: How are large commercial customers defined?

Steve Lacey: Any customer that consumes over 1 average MW. This data is tracked by the utilities and provided to us on an annual basis.

Allison Spector: Does this specifically pertain to electric customers?

Steve: Yes.

Lisa McGarrity: As part of this analysis, will you look at free ridership to determine if there is a category where incentives aren't needed?

Steve Lacey: I think so. Some of the strategies include potentially lifting our incentives for self-direct customers. Another strategy is to reduce our PDC outreach efforts and soliciting of projects, thereby taking a more reactive stance by allowing the work to come to the PDCs rather than Energy Trust going after the business.

Tyler Pepple: Can you email the study?

Hannah Cruz: Yes. It is important to come back into compliance with the customer incentive funding levels.

Tony Galuzzo: Do you expect changes within the program to occur in the next year?

Steve Lacey: We expect so. We have three years' worth of funding analyses and have a small threshold that has been exceeded, so we don't want any corrective actions to have an outsized impact on savings.

Tyler Pepple: Because these are cumulative savings, do you know how much in terms of annual reduction you would need to achieve?

Scott Swearingen: If we were to take action in 2017 to be compliant within the year, it would be a \$2 million reduction in incentives if revenues remain similar to 2016.

Hannah Cruz: We will follow up with pertinent documents this week and more updates will be provided at an upcoming Conservation Advisory Council meeting.

5. New Buildings Program Update

Jessica Iplikci gave an update on the New Buildings program market engagement activities. The program review focused on market strategies and activities that Energy Trust employs in the marketplace to transform new commercial construction with the goal of market transformation. To create savings opportunities in the market and drive future project activity in energy efficiency, Energy Trust works to increase the market's capacity to deliver high-performance and net-zero energy buildings. The objective is to work with a wide range of projects and allies to engage and enroll projects. Strategic market engagement activities that include outreach and support, community building, marketing, training and education. Energy modeling has evolved and was built out to engage the larger market and focus on influencers, including design professionals and building developers and owners.

Don Jones Jr. joined the meeting at 2:33 p.m.

Jessica asked the Conservation Advisory Council for feedback. She will capture thoughts shared today and bring back to the council for further training and education analysis.

Warren Cook: What is Energy Trust's current market share in new buildings?

Jessica Iplikci: The overall program numbers are significant and are measured by square footage. The number currently stands at 70 percent efficacy.

Julia Harper: What percentage of the sector do we think we're reaching through training and education per profession?

Jessica Iplikci: We don't currently have that information, but it would be beneficial to consider developing methodology to understand that.

Lisa McGarrity: Are continuing education credits given to those who attend?

Jessica Iplikci: Yes. This is a recent development and we'd like to expand that going forward.

Rick Hodges: Who attends the events? Are they new attendees or returning?

Jessica Iplikci: There are approximately 100 attendees per event. Many attendees return because the content changes. We continue to build on concepts and address different design strategies.

Don Jones, Jr.: Are any of the larger firms missing from the meetings and education opportunities?

Jessica Iplikci: I don't think so. There are some new names and businesses participating due to the construction boom.

Hannah Cruz: How many new employees within companies attend?

Jessica Iplikci: We don't expect all staff from various firms to attend, and we want self-selection for those driving energy decisions to attend.

Lisa: Are design builders on the contractor participant side attending?

Jessica Iplikci: They are, but this information is not captured well in Energy Trust records of attendees by category, profession or role.

Warren Cook: Are the audiences split pretty close to where the area of influence is?

Jessica Iplikci: Yes. We've focused on key influencers and built this forum with the goal of reaching building owners and influencing that audience.

Charlie Grist: Is this education all focused on new buildings? Seems that you would want to look at where the need is. Is there work to be done in training and project requirements?

Jessica Iplikci: It is a big part of how we are attempting to build demand for high-performance buildings and informing how they can set requirements for energy to be a project goal. Our strategy is to use marketing as the tool for creating awareness among owners. We're currently doing that through marketing channels and bringing a strong owner voice by highlighting their projects.

JP Batmale: For completed projects, has a subset come out that we know as new projects?

Jessica Iplikci: When we started to be intentional in bringing project highlights, we focused on a great project in Central Oregon. We used that to highlight what's happening in local new construction. As a result, firms that developed successful projects are participating and leading or presenting through Allies for Efficiency and are enrolling in the program.

John Karasaki: Does Energy Trust conduct exit interviews with builders and developers?

Jessica Iplikci: We evaluate and continuously build from what we learn through projects with owners and developers. As we gain more high-performance projects, we will start gleaning common aspects that are successful and transferable. Then we will develop content that can support the learnings introduced in Allies for Efficiency. This will be backed up by technical guides and content they can continue to reference after the training. I see an opportunity for the program to build best practices as a parallel strategy. As we see net-zero projects approach, we want to develop marketing materials and technical briefs.

Tyler left at 2:55 p.m.

Lisa McGarrity: One thing I don't see addressed is the financial piece.

Jessica Iplikci: How we might be able to address the financial area is the net-zero energy fellowship. We will start to get the results in 2018 and will be able to incorporate the financial focus, which might be where we connect content to training and education.

Charlie Grist: Have you surveyed attendees about desired enhancements?

Jessica Iplikci: We do have surveys geared toward satisfaction, but we would want to use that survey in new ways to understand how influential it was.

Heather Beusse Eberhardt: In the Board Evaluation Committee we talk about the performance after measures have been adopted. This education seems low in terms of people maintaining systems. Is there separate training for building operators or an opportunity to better retain the information?

Jessica Iplikci: Operations are a big piece in high-performance and zero-energy buildings, and are addressed through early design phases and program design. We inform the assumptions designers use to develop buildings and apply commissioning, which is important for new construction.

Oliver Kesting: Operations switches over into an existing buildings function and we can address this through Strategic Energy Management (SEM) or Building Operator Certification training.

6. Residential Lighting Update

Ryan Crews gave an update on the Energy Trust residential retail lighting strategy. The lighting market continues to evolve and staff is monitoring progress. He provided an overview of regional

statistics. There has been a 39 percent decrease in lighting consumption over the last six years, attributed to more affordable LEDs and to the federal Energy Independence and Security Act coming into effect. According to a 2016 Northwest Energy Efficiency Alliance report, LED prices continue to decline annually and last year constituted the largest share of the market at 43 percent.

Energy Trust's residential lighting market landscape is changing quickly. It is a complex landscape with varied retailers. To understand and navigate the complex lighting market, Energy Trust created a decision-making framework composed of five components: 1) Track LED market share; 2) Characterize the maximum market-share indication point; 3) Track incremental cost; 4) Adaptive measure approval and budget management; and 5) Improve industry stakeholder engagement. This framework will support Energy Trust in achieving available cost-effective savings, providing appropriate incentives and reducing free ridership, avoiding prematurely exiting the market, allowing for flexible and innovative program design, and growing relationships with retailers and manufacturers.

Julia Harper: How do you determine the correct context of incentives?

Thad Roth: Current projections show \$10 million to \$12 million in incentives representing just under 60 percent of total residential lighting savings. Energy Trust is also looking at how to go into certain stores to make changes while recognizing that those retailers have aggressive sales tactics. We are using that criteria to inform when and what parts of the market we will exit.

Marshall Johnson: The 80/20 rule applies here as in the trade ally sector. Eighty percent of savings come from Costco, Walmart and Home Depot; the remaining retailers make up the other 20 percent.

Charlie Grist: What is the cost of halogen lighting in the big box stores?

Ryan Crews: Halogen typically makes up about half of the product on the shelf. Price wars have driven ENERGY STAR® products cost down. We will follow-up with the cost of halogen bulbs.

Thad Roth: We'll use data to work on next year's budget. We'll have a better sense in the fall about our findings from this year's savings.

7. Cannabis Market Update

Sam Walker reported on the current cannabis market for production grow facilities. As of today, there were more than 1,500 cannabis Oregon Liquor Control Commission (OLCC) producer applications for outdoor, indoor and mixed-use facilities, with 20-30 percent for indoor grow operations. Most energy-efficiency opportunities are indoor. The OLCC limits indoor growing space to flowering plant canopy not to exceed 10,000 square feet.

Energy Trust began serving legal cannabis medical services in 2013 and adult-use recreational in 2016. Energy Trust provided incentives to 15 cannabis sites for 1 million kWh in total savings. Energy Trust projects savings in excess of 4 million kWh in 2017. Most opportunities are in lighting, representing 70 percent of load. Evergreen Consulting is handling customer interactions and coordinating with the custom PDCs.

JP Batmale: Is OLCC establishing a baseline on production?

Sam Walker: The governor's task force delivered a report in fall 2016 on best practices, but there were no standards set.

Warren Cook: Real data will come annually from growers and inform analysis and statistics.

Indoor growers have concerns about airborne contaminants, and tend to operate with elevated CO2 levels. This limits outside air exchange, requiring additional mechanical cooling. Most projects completed to date are lighting, though additional opportunities exist in HVAC, dehumidification and air filtration systems. Staff is seeing LEDs and other efficient lighting in all phases of production, from vegetative to flowering. Plasma ionization air filtration can be employed to reduce odor. Total feasible savings of 25-50 percent are possible in indoor facilities. One challenge in implementing projects is that growers know best what works for particular strains based on their experience with high-intensity discharge lamps. There are also a number of competing priorities as customers establish their businesses, from evaluating efficient technology to staffing and getting their product

out the door. Energy Trust is building awareness of programs, learning with the market and conducting qualitative market research that will be available in August 2017.

Charlie Grist: Energy Trust should work with cannabis producers on lighting. There will be a lot of discovery of what works with lighting and what doesn't.

Rick Hodges left the meeting at 3:21 p.m.

Alan Meyer: Are we able to get adequate financial information before we provide incentives?

Sam Walker: We don't specifically evaluate the financial characteristics of customers. Customers are required to have a legal license before they can qualify for an Energy Trust incentive.

Julia Harper: Was it a conscious decision not to vet financial data?

Sam Walker: We treat the cannabis industry as we do every other business. They need to be legally operating customers of our partner utilities paying into the public purpose charge and installing qualifying measures.

Fred Gordon: At one point, we went to industrial projects to gauge and collect data and then changed our estimated life on the industrial process to 15-20 years for capital assets.

Hannah Cruz: These customers pay into the public purpose charge and are eligible for Energy Trust incentives when installing qualifying energy-saving projects.

Allison Spector: Is there any requirement that cannabis producers need to stay with the program for a certain amount of time?

Steve Lacey: Incentives greater than \$500,000 are presented to the board for approval.

Lisa McGarrity: What kind of payback are we experiencing?

Sam Walker: In the two to four year range.

Warren Cook: This is a unique industry where there is an increase in lighting and a decrease in production. It would be good to change the discussion to production instead of lighting.

Heather Beusse Eberhardt: There are rules that cannabis producers can't take advantage of some incentives.

Sam Walker: As long as they pay into the public purpose fund, they are eligible as legal producers.

8. Business Customer Reports Overview

Scott Swearingen provided background on Energy Trust's business customer reports, a customer engagement tool that provides a comprehensive overview of all projects completed at the customer's site.

Heather Beusse Eberhardt left at 3:33 p.m.

Outreach managers and program staff use the reports, which include three major features: a project summary, a raw data file and a project recognition handout. The project recognition document is helpful for SEM, new engagements and large projects. The business customer reports have been provided more than 70 customer surveys since May. Initial feedback has been positive.

Alan Meyer: Who typically initiates the report?

Scott Swearingen: Customers can contact the program.

Allison Spector: This a fantastic value-added report. Would there be a way to encourage additional project savings results from this tool?

Scott Swearingen: Yes, the first goal is to leverage this report to encourage additional customer participation. Staff will investigate these findings and report back.

Charlie Grist: Who may request the report?

Scott Swearingen: Anyone who is authorized as a representative of the site or Energy Trust outreach staff who is sharing information with the current customer.

Charlie Grist: Can reports be shared with current customers?

Scott Swearingen: Yes, but they cannot include information about prior customers that occupied the site.

Bob Stull: What kind of requests do we receive and what information is available on them?

Scott Swearingen: Any eligible Energy Trust customer can request a report, but we need to match their information with the current customer. You can't include project information from multiple entities if they have a different tax identification. The site has to match the accounts associated with that site.

Bob Stull: Would you provide information about a site to a new owner?

Scott: Project information can only be shared that is relevant to the new account, as identified by the tax identification number. We cannot share project information related to any former accounts. There are too many caveats with missing information and the report would need to be cleaned up before releasing to the customer. It was decided not to include utility information in the initial rollout.

Lisa McGarrity: I would be cautious when including utility information if that is the direction you decide to take.

Kari Greer: Can a utility manager request this report?

Scott Swearingen: We will follow up with you on how this tool could be shared with utilities.

Lonny Peet: Does the report use utility information?

Scott Swearingen: When we were first putting together the requirements for this project, we anticipated to ride coattails on the Utility Customer Information project that was wrapping up. We decided against this idea, as there were so many issues with cleaning utility information. The reports would require more manual quality control prior to release if we included this information.

9. Public Comment

There were no public comments.

10. Meeting Adjournment

The meeting adjourned at 4:25 p.m. The next scheduled meeting of the Conservation Advisory Council is August 2, 2017.