Follow-ups from previous meetings:

- Notes from meetings: Staff is considering the April council feedback on the style and detail to the notes.
- Draft strategic plan public comment period: The public comment period is slated to begin June 24 and end August 2; the June meeting will include a discussion of the draft 2020-2024 Strategic Plan and we will confirm the official public comment period dates.

1:30 Welcome, Old Business and Short Takes (Hannah Cruz; information)
Introductions, agenda review and approve April 10 meeting minutes
Review previous meeting follow-ups

1:40 Guest Speaker: NW Energy Coalition (Wendy Gerlitz; information)
NW Energy Coalition Policy Director Wendy Gerlitz will provide an overview of recent clean energy advancements in Washington State.

1:55 Review of Draft 2020 Organizational Goals (Mike Colgrove; small group discussion)
Staff will describe the process to developing the 2020 organizational goals. The goals are still in draft form and will be revised with further staff input and feedback from CAC and RAC. When final, they will guide the organization in developing the 2020 budget and action plan this fall. We are looking for council input on the goals, and encourage council members to gather feedback from within your organizations if appropriate. At the meeting, you will discuss key questions in small groups and report-out to the full group.

2:40 Break

2:55 Commercial and Industrial Lighting Strategy (Jessica Kramer, Jay Olson and Kate Wellington; information)
Staff is developing a longer-term lighting strategy for the Existing Buildings, Existing Multifamily and Production Efficiency programs. The council will receive an early look at how the forecasting is shaping up and why programs are proactively planning for anticipated savings changes.

3:25 Pilots Update (Kenji Spielman; discussion)
Staff will provide an overview of recently completed and in-progress pilots at Energy Trust. Any specific pilots council members would like further details on in follow-up or at a later meeting should be surfaced during this discussion.

3:50 Establishing Baselines for Diverse Population Groups (Kenji Spielman and Alex Novie; discussion)
This presentation is designed to be a conversation by examining what we might be able to do from a data perspective to support more targeted program services and outreach to underserved customers. Staff presented on this topic at the NEEA Efficiency Exchange Conference last week:
As we expand the available data on market shares and stock data tied to geographic and demographic awareness, combined with improved analytical techniques within the energy-efficiency community, can we make the case for different baselines and savings for well-targeted program action?

What do we know now? What do we need to know? In what circumstances is this worth the extra effort? During this session we will contextualize the need for more granular savings estimates, present some of the research and analysis Energy Trust has done so far and facilitate a group discussion on further opportunities in the region to more accurately quantify savings when a program targets underserved markets.

Slides will be available the day of the meeting.

4:20 Public Comment

4:30 Adjourn

Meeting materials (agendas, presentations and notes) are available online.

Next meeting: Wednesday, June 26, 2019
Conservation Advisory Council Meeting Notes

April 10, 2019

Attending from the council:
Holly Braun, NW Natural                  Wendy Gerlitz, NW Energy Coalition
Charlie Grist, Northwest Power and Conservation Council     Tim Hendricks, Building Owners and Managers Association
Lisa McGarity, Avista (on phone)          Kari Greer, Pacific Power
Dave Moody, Bonneville Power Administration     Anna Kim, Oregon Public Utility Commission
Tyler Pepple, Alliance for Western Energy Consumers Danny Grady, City of Portland Bureau of Planning and Sustainability
Julia Harper, NW Energy Efficiency Alliance         Jason Klotz, Portland General Electric
Roger Kainu, Oregon Department of Energy, for Warren Cook Kerry Meade, NW Energy Efficiency Council

Attending from Energy Trust:
Hannah Cruz                             Lizzie Rubado
Fred Gordon                             Spencer Moersfelder
Thad Roth                               Steve Lacey
Peter West                              Mark Wyman
Ryan Crews                              Erika Kociolek
Debbie Menashe                          Kati Harper
John Volkman                            Kate Wellington
Jackie Goss                              Ashley Bartels
Cameron Starr                           Mana Haeri
Kenji Spielman                          Jeni Hall
Alex Novie                              Peter Schaffer
Samuel Girma

Others attending:
Alan Meyer, Energy Trust board          Eric Bessel, ICF
Elee Jen, Energy Trust board (on phone) Colin Podelnyk, ICF
Shelley Beaulieu, TRC

1. Welcome, Old Business and Short Takes
Hannah Cruz convened the meeting at 1:32 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.

Hannah Cruz noted that the notes from the previous Conservation Advisory Council meeting were in a new format that summarized the discussion rather than attributing each comment to the individual.

Julia Harper: I liked that you changed us to the Conservation Advisory Council instead of individual names.
Alan Meyer: I’m interested in what the council has to say about the new format.
Dave Moody: The new style offers the protection of anonymity. You can more effectively speak a preference that might not align with the corporate direction of the organization you’re representing. Or you could be blunter. I managed a similar group in the past, and that was their preference.

Anna Kim: I appreciate that. There are many times you’re asking yourself if you’re saying something right. It adds pause for some people. I will say, sometimes I feel obligated to clarify that I’m speaking specifically as Oregon Public Utility Commission (OPUC) staff. I think I’m clear with that, but I’m not sure.

Alan Meyer: Several board members spoke up stating they liked the attribution.

Dave Moody: Can they get that from Hannah?

Alan Meyer: Maybe there’s a compromise. Members could make it known if they want their comment attributed to them personally.

Anna Kim: That would make it more official.

Holly Braun: When I review the minutes, if there’s something tricky, I look at that more closely. Or I search specifically for my name in order to review if my comments were captured correctly. If that goes away, it would make my review more difficult. I don’t read the whole thing. I need to know if something I said, or something that seemed tricky, was captured well. If we’re moving to broader minutes, we should keep the names.

Kari Greer: I agree with Holly. I appreciate having the names. It provides context, such as whether a comment was stated by a gas company versus OPUC. From our company’s perspective, any time we speak we assume it’s public record. I’m fine with my name being associated.

Hannah Cruz invited the group to provide more feedback after the meeting. She noted the importance of ensuring the board understands when the Conservation Advisory Council feedback is unanimous versus when there are dissenting opinions from an individual or group.

Holly Braun: Do we know if the board is using the minutes? I’m not on any boards that capture detailed minutes. In 10 years of participating on the council, I can only think of one time when the minutes were crucial to a decision being made.

Alan Meyer: The board members who spoke up all liked the detailed minutes.

2. Residential Pay for Performance Pilot Update

Topic summary

The Residential Pay for Performance pilot launched in quarter two 2019, including design principles, portfolio types and pricing, research questions, and risks and unknowns. The pilot will operate for up to two years with an additional year for evaluation. It is being delivered by select contractors, or aggregators, to deploy priority measures through three different portfolio types: weatherization, HVAC and whole home. Aggregators will receive an incentive for additional electric or gas savings achieved beyond typical deemed savings for the installed measures. To avoid impact to the customers’ experience, participants will receive the current standard incentive for any eligible measures they install prior to moving into the performance period.

Discussion

Wendy Gerlitz: Is that to compare against a control group, or to choose a control group?

Dan Rubado: It’s to choose a group of comparable homes to measure against.

Kerry Meade: If savings are measure agnostic, how do you compare deemed to achieved savings?

Mark Wyman: That is why we isolated portfolios into treatment types. We have all weatherization measures with deemed value, looking to see how it performed knowing that’s the treatment that was there. We are also allowing contractors to do other work for transparency. For example, stopping up a chimney flue, or installing another measure that we don’t incent.
We’re asking for everything they do at the site. Those savings will be credited. We’re helping them understand that we’re looking for cost-effective savings. We’re going to screen portfolios for them and show them how they ultimately fall in cost-effectiveness. They’re partners with us to see if their approach can lead to more savings. While we’re using site-specific metered savings, you still need a measure life. We’re using the industry fixed measure life. For heating systems, that’s 15 years and for weatherization it’s up to 45 years. The first-year savings value will fluctuate, but to determine lifetime savings we’ll choose a fixed value.

Kerry Meade: If a participant chooses one of the aggregators and that body of measures, you’re putting treatments into categories?
Mark Wyman: We’re trying to keep like for like with measures due to the similar lifetimes of those measures.

Kerry Meade: Can a participant just choose one, or could they incorporate all three?
Mark Wyman: We selected these aggregators due to what we know of their business. For example, an HVAC contractor lines up with the HVAC treatment. We will provide the option for a weatherization ally to do multiple measure projects, if they get enough of those. That opens up the whole-home portfolio. But in general, each aggregator is assigned to one treatment. The customers’ experience is the same in the pilot as out of it, since they receive the same incentive. We didn’t want to put the burden on a customer, and we didn’t think that with a limited deployment, there would be a disincentive to have to choose A or B.

Kerry Meade: I think in the Pacific Gas and Electric pilot, they have a different regulatory environment that’s measure blind so the aggregator can do any measure they want.
Mark Wyman: They are packaging together in similar portfolios. They also have to answer the lifetime value question. In New York, they’re packaging based on similar customer types. We’ve been mainly sharing information with New York. Their pilot is about to launch.

Charlie Grist: What if the savings are less than deemed values?
Mark Wyman: For the participants, you can win, but there’s no losing. If the savings are negative or zero, there’s simply no bonus applied.

Holly Braun: You only have three aggregators?
Mark Wyman: Correct, we have three. Some have more than one office. We’ll be active in Portland, Bend and Roseburg.

Holly Braun: This approach seems rational and logical, but also keeps the customer in mind. Good job finding that balance.

Alan Meyer: How much interaction have you had with Conservation Advisory Council members during the development?
Mark Wyman: It has been in our 2019 action plans since last fall and it went through the Evaluation Committee. This one was complicated enough that we felt we needed to dig through the issues. If I had been here six months ago, I wouldn’t have a coherent presentation. It’s a limited deployment that is adaptable over time. There are a lot of issues we pushed to the side to deal with later. This is a malleable design, and we likely will have to fix parts of it along the way. As a whole, it meets objectives to test. I was after research questions that are valuable to Energy Trust, and whether the pilot creates a course to answer those questions. We’re in a pretty good spot to do that. I’m expecting that the aggregators will have their own ideas.
Alan Meyer: I want to make sure we’re getting full value from the group.

Holly Braun: Does this pricing relate to the amount we would pay for the remaining savings after subtracting out the deemed savings?
Mark Wyman: In New York it works on an auction basis. They have a price in mind, and there are no upfront incentives.

Holly Braun: Could these amounts be higher if we didn’t have the initial incentives?
Mark Wyman: In no case would it exceed cost effectiveness. It’s a way to test what the true market cost is of acquiring cost-effective energy efficiency without fixed overhead. It’s a big risk to take. Other states are preserving infrastructure. Our pilot is several magnitudes lower than that, but it will eat up less of our budget.

Wendy Gerlitz: Is there an upper limit? What’s the size of projects you are anticipating?
Mark Wyman: They’re residential projects.

Wendy Gerlitz: Is this based on a single-home or aggregating multiple homes?
Mark Wyman: A project is a single meter. A portfolio is collection of multiple sites. Over time they’ll pull together 65-100 sites.

Holly Braun: Does the aggregator get the incentive?
Mark Wyman: It’s directed to them. But they’ve already started to think about advertising that as a discount to their customers. They can take that future earnings to help influence customer decisions to select the practice that yields better savings. Many examples came up in training, such as an HVAC contractor noting some customers are not putting their compressor on the south-facing side of the house. Older structures that have strong weatherization potential are another example to compete on price to bring the customer in. Maybe they would be in Savings Within Reach as well.

Kerry Meade: Will you be looking at a portfolio level at all the aggregators combined?
Mark Wyman: Everything is measured. Aggregators can see their own sites, and we can see all of the sites.

Charlie Grist: I’d be interested in looking at what you’re finding on research questions, and whether you’re getting good feedback from Evaluation Committee. I can think of other research questions. That’s one of the huge values of this work
Mark Wyman: There are more research questions than what’s shown on this slide. We have about 10. We’re adding a few more, but we’d welcome your feedback as well. To Alan’s point, we’ve appreciated feedback and direction.

Next Steps
No next steps.

3. Industrial Strategic Energy Management Initiative

**Topic summary**
Kati Harper presented on changes underway in the Industrial Strategic Energy Management (SEM) initiative. Due to declining enrollment and savings over time, staff aim to evolve SEM to achieve deeper savings through increased engagement with small to medium businesses. Since size can be a barrier to SEM participation, staff plan to test alternative delivery methods that involve less time and employee commitment from the participant. Staff is looking for the advisory council’s input on the four identified focus areas that will be prioritized for implementation by the end of 2019. Focus areas include requiring fewer attendees at SEM workshops, providing remote options to participate in monthly check-ins, employing alternative modeling strategies sooner and abbreviating completion reports.

Discussion
Holly Braun: With this streamlining strategy, what’s the driver? More savings, or cheaper savings?
Kati Harper: It’s driven by resource constraints as well as participation barriers when we’re recruiting.
Holly Braun: Barriers for the potential customers, or resource constraints internally?
Kati Harper: It’s both. We’re looking to test this approach at eight to 10 sites for our fall launch.

Wendy Gerlitz: Do you have a map of potential sites to compare what you’ve done versus the potential?
Kati Harper: We’re working on that. It would be great for us in recruiting sites. I have a list that shows where we’re headed, so we know there’s potential out there, but it is not shown visually.

Lisa McGarity: Do you know why gas savings fell short?
Kati Harper: Not quite. The gas eligibility can be challenging. They tend to be process load dependent and equipment specific. We’ve worked hard to get those savings but there’s still more to do. Part of doing that is reaching these smaller customers.

Lisa McGarity: Could the workshop be broken into smaller segments with a prerecorded webinar format? Or are they highly interactive?
Kati Harper: They are highly interactive in order to promote peer-to-peer learning. We’ve looked at how we could do record the workshop. We’ve used NEEA’s online modules to engage sites that weren’t able to attend a workshop.

Charlie Grist: I think you’re on the right track, but to get this to work, each facility will be different. You have to make sure whoever is attending can recruit someone. Peer-to-peer learning in the facility is really important. They need resources to fulfill the three roles. The overhead of sending someone to a full day training is a big ask.
Tim Hendricks: Even half days are almost a full day including travel time.

Charlie Grist: This is a good chance to look at what works organizationally. In the spirit of a pilot, there will be different organizational successes and failures. Finding out what works and what doesn’t would be valuable.

Julia Harper: Are you mixing business of different sizes within a single cohort? It must be a different day-to-day experience for the smaller ones. That might be intimidating.
Kati Harper: That was a learning in the CORE Improvement pilot. The smaller participants have the same challenges but experience them differently.
Julia Harper: Segregating sizes could increase enrollment from smaller businesses.

Alan Meyer: Do we have requirement for formal site-level management in the program? They control the resources.
Kati Harper: Yes, the executive sponsor has that role. It’s their job to make sure the energy team is not overloaded.

Holly Braun: SEM works, its cost-effective. It feels like we’re stretching when there are fewer savings, and now we’re doing smaller sites. I see why sending fewer people is tempting but having all three roles is essential to make sure the outcome lasts. By diluting the commitment, that could be a waste or suboptimal if the participant doesn’t have bandwidth to fully commit. It’s a risk for everyone. You may need to look for a different treatment for these smaller sites.
Kati Harper: Yes, there’s much to be explored. We want to start small, with just eight to 10 sites. We are going to track on workshop attendance, process completion and more.
Kerry Meade: As an evaluator, we introduced an executive summary that was visual, graphic and included positive feedback. That’s something to consider. You can take away narrative and just look at pictures.

Tim Hendricks: In my experience, when you get 50-page reports, they won’t get looked through. My first thought is to shorten it to emphasize summary and action items.

Roger Kainu: If you want someone to read and absorb, go sit with them and walk through it. You want them to own the value. To understand the value proposition, ask them, and that will feed a lot of what you’re trying to accomplish.

Charlie Grist: Part of this is trying to reach management and innovate. You need to figure out what sells to them.

Anna Kim: We wouldn’t want to reduce the number of people who get buy in, but maybe intentionally decide that there are some sessions where everyone shows up but others would have a smaller group.

**Next Steps**
No next steps.

**4. Multifamily Program Assessment Introduction**

*Topic summary*
Kate Wellington delivered an early update on challenges facing the Existing Multifamily program, and an assessment staff will conduct this year to identify possible changes to make to the program in 2020 and 2021. Kate reviewed the customer segments included in the multifamily program and current offerings. Declining savings due to market saturation and reducing savings for key measures led to a re-examination of the program to determine how it can be optimized. Staff is looking for early input from the advisory council and will return at a later meeting with more information.

**Discussion**

Anna Kim: Are you engaged with other programs?
Kate Wellington: We have had brief conversations with other utilities, a couple are in Washington. We’re looking at one in Massachusetts. We’re in an American Council for an Energy-Efficient Economy Multifamily Working Group and will ask them for insights.

Holly Braun: Will this include a new delivery model? Would that have to come later?
Kate Wellington: For the direct install track, if LEDs are not cost-effective, we would need a new system to deliver the remaining instant-savings measures. We are working on some scenarios now. We would need to implement a new delivery system for direct-install measures in 2020 if LEDs don’t meet cost-effectiveness. But for other changes in program delivery, any giant shifts would be in 2021.

Charlie Grist: I think this is a hard-to-reach market to begin with, and the rental market is a tougher one with not getting as much access to programs. Thinking about your stakeholder group and data participation, you should figure out how to focus and who to talk to about where those gaps are. I don’t have any direct suggestions. Some of the barriers we heard about were related to all kind of things, like low-income multifamily complexes may have non-citizens who don’t want to be surveyed. Taking that multifamily market and figuring out which segments, what you might need to get in and who the activists are might be able to help you target communities who are underserved.

Elee Jen: Do your changes include shifting from net to gross?
Kate Wellington: Yes, that will happen.
Holly Braun: I appreciate the two-stage approach, with context setting initially while recognizing there will be a larger discussion later. It feels like the right way to interact with us.

Next Steps
Interactive session at a summer Conservation Advisory Council meeting, likely in June, to present early concepts.

5. 2020-2024 Strategic Plan Development Update

Topic summary
Hannah Cruz provided an update on the process and development of Energy Trust’s 2020-2024 Strategic Plan. The board will consider the draft plan at its upcoming Strategic Planning Workshop on May 16 and 17. The advisory council is welcome to attend.

Discussion
Holly Braun: I think of cap and trade having effects on Energy Trust that are not incremental. Are you thinking that this wouldn’t affect Energy Trust or impact the plan?

Hannah Cruz: Where we are today and the timing of putting together the draft plan, we would put a signpost on that energy policy. If it were to significantly change the way Energy Trust works and our role, we would revise and look at the plan. As of now, due to the complexity of such a policy, we’re thinking it would take multiple years within that five-year period to determine the impact. A second signpost is the sunset of the public purpose charge. We see 2022 or 2023 as that signpost year.

Kari Greer: When will the public-facing draft be available?
Hannah Cruz: I don’t have that yet, but I’ll share the information when I know.

Next Steps
The board will consider the draft plan at its upcoming Strategic Planning Workshop on May 16 and 17. The Conservation Advisory Council is welcome to attend. At the June council meeting, an agenda topic will focus on gathering feedback from the council on the draft plan.

6. Update on Energy Trust Gross Reporting Transition

Topic summary
Staff is coming back to the Conservation Advisory Council with an update on changes that will be implemented starting in 2020 on how Energy Trust reports savings. This agenda item follows up on a previous council discussion; to see the original presentation and paper, refer to the June 2018 meeting packet online (starting on page 62) https://www.energytrust.org/wp-content/uploads/2018/06/CAC-Packet-June-2018.pdf. Fred Gordon presented context behind the shift from net savings, which adjust for free-ridership and spillover, to gross savings, which do not. This change is not expected to have an impact on measure exit because it’s not a primary driver to change incentives. We will continue to gather information about measure influence through fast feedback surveys. Savings will continue being reported in net through the end of 2019 before transitioning to gross the following year.

Discussion
Alan Meyer: Will we grandfather the goals and actuals for 2019 as both gross and net? Or try to look at the same year both ways?

Fred Gordon: We reported net savings for a long time because we thought it was the best reflection of our energy efficiency impact. We’re now doing gross for the same reasons. Now we’ll just call it “savings.” There might be a difference of 5 to 10 percent. We’ve tracked gross savings for a long time and reported it, but it was not our official tally of savings.

Jason Salmi Klotz: If you need a supportive letter from PGE, let me know.
Fred Gordon: I think OPUC is on board as long as we track influence and use that information to make decisions about when to change or eliminate incentives. Utilities have said in front of the OPUC that they are supportive.

Holly Braun: How does this play into utility Integrated Resource Plan (IRP) projections? Are they set at net or gross?
Fred Gordon: A long time ago, utilities were using econometric models to forecast price, and included conservation that is roughly analogous to net savings, so our using net savings was a better fit. But the methods utilities use in IRPs have evolved to look more like gross.
Peter Schaeffer: It doesn’t really change our forecast for IRP and actually makes it easier because we were building in assumptions about what free ridership was. It was hard to go back and forth between net and gross.

Holly Braun: Washington has been using gross all along?
Fred Gordon: Yes, and most other utilities in the Northwest, too. It will make it simpler to report to the NW Power and the Conservation Advisory Council.

Holly Braun: Will your staff overhead go down in 2020 with this change?
Fred Gordon: It will be devoted to more useful things.

Charlie Grist: On your first slide, you’re not really changing this for all replacement equipment, and new buildings and homes, because they use current practice efficiency as the baseline.
Fred Gordon: Yes, where we’re replacing equipment at or near failure or for new things, we can use what typically sells as the baseline. This method still works, so we still use it. The adjustment for free riders and spillovers is a separate method used when you’re tearing out stuff that works otherwise to save energy; we’re eliminating an analysis which for all the reasons stated in last year’s paper is no longer meaningful.

Holly Braun: Eliminating free riders will make efficient furnaces look a lot better in the future.
Fred Gordon: For furnaces, we have lagging market programs for moderate income, rentals and more. We have whole market data that says that well over 90 percent of purchases are efficient furnaces. We are continuing to track those markets and they look strong. To reconsider we’d ask if the efficient market has sagged or is there another gap we haven’t done a special case for.
Holly Braun: There’s space to talk about this. Both these factors are moving in a direction that there is more cost-effectiveness around getting 80 percent efficient models over to 90 percent efficient models than we’ve had in the past. We’ll get to look at all the factors around that in more of a workshop space.

Next Steps
Staff will proceed with transitioning to gross reporting, which will be reflected in the draft 2020 budget materials CAC will see in the fall.

7. Update on Energy Trust Avoided Costs

Topic summary
Staff delivered an overview of updated electric and gas avoided costs, with forecasted values increasing for both. These values will be used for planning for and developing the 2020 budget. Spencer Moersfelder presented an overview of what avoided costs are, how they are used and how they are quantified. Both electric and natural gas avoided costs have increased, on average, for the first time in a while. Avoided costs generally increased for measures that operate and save energy during peak energy times, providing benefit for the utility system.
Spencer presented overview of the avoided costs that have been updated for 2020 planning and budgeting. Avoided costs are the primary component of value in the benefit cost ratio in both the Total Resource Cost (TRC) test and Utility Cost Test (UCT). Measures and programs are both subjected to the TRC and UCT, and need to pass both tests to be considered cost-effective. Avoided costs represent the value of savings Energy Trust brings in relation to comparable supply-side resources. Avoided cost value streams are forecast over a 20-year horizon, with values for some measures extending up to an additional 35 years in relation to the respective measure life. A measure that saves when heating loads are highest is more valuable to the gas utility system, and a measure that saves when heating loads and cooling loads are highest will be most valuable to the electric utility system.

Discussion

Jason Salmi Klotz: Was there a congestion component for gas?
Spencer Moersfelder: Gas congestion is being factored into the supply and distribution capacity value on the gas side.

Holly Braun: The carbon values in gas avoided costs only represent the cost of carbon compliance, not the societal cost which is valued much higher.
Charlie Grist: Isn’t it that new gas resources have to be compliant with existing carbon reduction policies. If so, then this value is relatively small.
Spencer Moersfelder: I don’t know how to answer that. My understanding is the gas companies are all working with contractors to understand what potential costs may result from emerging carbon policies.

Alan Meyer: When I think of avoided cost, I think of utility avoided cost. That must be the starting point, but here you’re looking at measure avoided cost.
Spencer Moersfelder: The avoided costs that we receive from utilities are approved by the OPUC, and we distill these values down to an end-use level. We use end-use load profiles that represent the load distribution of measures throughout the year, and we correlate each end-use's coincidence with utility defined peaks to quantify a measure’s value in relation to peak.

Holly Braun: Since we don’t have an air conditioning measure, how can we calculate its avoided cost?
Spencer Moersfelder: We are looking at an air conditioning measure as an outcome. The value of air conditioning savings is high, but the amount of savings is relatively low because of when and how loads are occurring. We see relatively short periods of heavy use.

Charlie: How did you handle splitting the peak period between PGE and Pacific Power?
Spencer Moersfelder: We worked with utilities through UM 1893 to define their respective peak periods. We blended electric and gas avoided costs based on weightings from the utilities’ respective revenue forecast.

Jason Salmi Klotz: I’m curious whether you did any review given these new avoided cost numbers to determine if there are any measures that you passed up before that could be cost effective now? How would that affect prior reviewed measures?
Spencer Moersfelder: We already mentioned air conditioning because value there is going up in relation to capacity deferral value as result of calculations. As far as determining impacts to other measures, we’re going to continue with our regular measure update cycle and assess the cost-effectiveness of individual measures as we make our way through the cycle. Our cycle is such that we can only review a set quantity of measures every year.

Holly Braun: NW Natural believes there are more 80 percent efficient furnaces being installed. There seems to be an opportunity to put in 90 percent efficient models. With the increase in
peak value, it seems like now would be a good time to look for a niche opening to convert some of those 80 percent efficient furnaces over.
Fred Gordon: If you send over the data you are referring to, we will take a look.

Next Steps
No next steps.

8. Public Comment
There was no public comment.

9. Meeting Adjournment
The meeting adjourned at 4:20 p.m. The next meeting is Wednesday, May 22, 2019.
Energy Trust Draft 2020 Organizational Goals
Small Group Discussion at CAC and RAC

May 22, 2019

As part of annual business planning, staff is in the process of developing 2020 Organizational Goals. These goals will guide us in developing initiatives and activities for 2020, which will ultimately be reflected in the 2020 action plans written this fall.

As this is a key input that will shape our budget and action plans for next year, we are looking for feedback from CAC and RAC on the goals. We will use your feedback and additional feedback from staff to revise and finalize them.

Draft 2020 Organizational Goals

1. Advance program solutions to attract more diverse customer participation, support higher value solar, sustain services for multifamily customers, push new building efficiency beyond code, and create future savings opportunities for residential and business customers.
2. Develop cost-conscious approaches that will support more intensive collaboration with communities, public agencies, utilities and other entities to produce customer participation and energy savings and generation over time.
3. Strengthen capability for innovation by exploring structural options and employing tools and resources to develop multiple promising innovation proposals for programs or operations.
4. Accomplish operations improvements that achieve specific time savings in key processes and enable core systems to support current and future business innovations.
5. Provide impartial, objective information and analysis to support implementation of local and statewide policies, with a particular focus on the Portland Clean Energy Community Benefits Fund and (if passed in 2019) the state’s carbon emission reduction policies.

With these goals in mind, discuss the following four questions at your table, and capture your conversation in a 1-2 sentence description for each question. After 15 minutes, each table will report out to the full group.

Discussion Questions

1. Are these organizational goals meaningful to you and your organization? Are they at the right level? Should they represent the totality of what we do or should they highlight specific areas of focus for us in the coming year?
2. Do these goals reflect and advance Energy Trust’s role?
3. How would you and your organization be impacted by these goals?
4. Is this the right way to engage you in establishing Energy Trust’s organizational goals? Is there a different time or method we should consider to engage you most effectively?

To write your 1-2 sentence takeaway on each question, use the worksheet on the back.
Discussion Worksheet

1. Are these organizational goals meaningful to you and your organization? Are they at the right level? Should they represent the totality of what we do or should they highlight specific areas of focus for us in the coming year?

2. Do these goals reflect and advance Energy Trust’s role?

3. How would you and your organization be impacted by these goals?

4. Is this the right way to engage you in establishing Energy Trust’s organizational goals? Is there a different time or method we should consider to engage you most effectively?
**Draft Strategic Plan Focus Areas**

- Provide programs, information and services for all customers.
- Strengthen the value we deliver by linking energy to the approaches utilities are using to meet customer needs.
- Provide impartial, objective information and analysis to support implementation of energy policies.
- Maximize public benefits by leveraging additional funding.
- Continue to build organizational flexibility, adaptability, diversity and innovation.

**Draft Organizational Goals**

- Advance program solutions to attract more diverse customer participation, and address key issues and opportunities.
- Develop cost-conscious collaboration approaches to produce savings and generation.
- Strengthen capability for innovation.
- Accomplish operations improvements that achieve specific time savings and support current and future business innovations.
- Provide impartial, objective information and analysis to support implementation of local and statewide policies.
Draft 2020 Goals

1. Advance program solutions to attract more diverse customer participation, support higher value solar, sustain services for multifamily customers, push new building efficiency beyond code, and create future savings opportunities for residential and business customers.

2. Develop cost-conscious approaches that will support more intensive collaboration with communities, public agencies, utilities and other entities to produce customer participation and energy savings and generation over time.
Draft 2020 Goals

3. Strengthen capability for innovation by exploring structural options and employing tools and resources to develop multiple promising innovation proposals for programs or operations.

4. Accomplish operations improvements that achieve specific time savings in key processes and enable core systems to support current and future business innovations.
Draft 2020 Goals

5. Provide impartial, objective information and analysis to support implementation of local and statewide policies, with a particular focus on the Portland Clean Energy Community Benefits Fund and *(if passed in 2019)* the state’s carbon emission reduction policies.
Discussion Questions

1. Are these organizational goals meaningful to you and your organization?
   • Are they at the right level?
   • Should they represent the totality of what we do or should they highlight specific areas of focus for us in the coming year?

2. Do these goals reflect and advance Energy Trust’s role?

3. How would you and your organization be impacted by these goals?

4. Is this the right way to engage you in establishing Energy Trust’s organizational goals?
   • Is there a different time or method we should consider to engage you most effectively?
Small Group Exercise

In small groups:
• Discuss the 4 questions
• Capture the high points of your conversation in a 1-2 sentence recap for each question
• 15 minutes

As a full group:
• Each table will report-out
• Full group discussion, final comments
• 25 min
Thank You

Mike Colgrove
Executive Director
mike.colgrove@energytrust.org
Today’s CAC:

Introduction discussion about C&I 5 year lighting savings forecasts

Future CAC meetings:

How would CAC like to engage on this topic?
## Lighting and % of Program Savings

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL kWh/ % Lighting</th>
<th>INDUSTRIAL</th>
<th>COMM – EXISTING BUILDINGS</th>
<th>COMM – MULTIFAMILY</th>
<th>ALL PROGRAMS TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 (goals)</td>
<td>Total Prgm kWh(M)</td>
<td>164</td>
<td>165</td>
<td>14</td>
<td>343</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>37%</td>
<td>60%</td>
<td>54%</td>
<td>49%</td>
</tr>
<tr>
<td>2018</td>
<td>Total Prgm kWh(M)</td>
<td>162</td>
<td>132</td>
<td>16</td>
<td>310</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>38%</td>
<td>62%</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2017</td>
<td>Total Prgm kWh(M)</td>
<td>171</td>
<td>128</td>
<td>16</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>27%</td>
<td>65%</td>
<td>50%</td>
<td>44%</td>
</tr>
<tr>
<td>2016</td>
<td>Total Prgm kWh(M)</td>
<td>128</td>
<td>124</td>
<td>19</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>30%</td>
<td>66%</td>
<td>41%</td>
<td>47%</td>
</tr>
</tbody>
</table>
Scenarios

No Change

New Program Delivery & Offers
No Change Scenario

Lighting Scenario Analysis: 2020 - 2024

Program
☐ BE
☐ BEM
☐ PE

[Bar chart showing energy consumption by year and type of lighting program]
<table>
<thead>
<tr>
<th>Year</th>
<th>Working kWh</th>
<th>LY % Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>68,394,721</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>78,017,803</td>
<td>14.1 %</td>
</tr>
<tr>
<td>2016</td>
<td>100,979,478</td>
<td>29.4 %</td>
</tr>
<tr>
<td>2017</td>
<td>116,962,853</td>
<td>15.8 %</td>
</tr>
<tr>
<td>2018</td>
<td>150,052,836</td>
<td>28.3 %</td>
</tr>
<tr>
<td>2019</td>
<td>156,302,625</td>
<td>4.2 %</td>
</tr>
<tr>
<td>2020</td>
<td>130,086,280</td>
<td>-16.8 %</td>
</tr>
<tr>
<td>2021</td>
<td>114,744,995</td>
<td>-11.8 %</td>
</tr>
<tr>
<td>2022</td>
<td>78,168,523</td>
<td>-31.9 %</td>
</tr>
<tr>
<td>2023</td>
<td>76,348,818</td>
<td>-2.3 %</td>
</tr>
<tr>
<td>2024</td>
<td>72,977,500</td>
<td>-4.4 %</td>
</tr>
</tbody>
</table>
New Program Delivery & Offers Scenario

- Midstream
- Better Design
New Program Delivery & Offers Scenario
### New Program Delivery & Offers Scenario

<table>
<thead>
<tr>
<th>Year</th>
<th>Working kWh</th>
<th>LY % Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
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</tr>
<tr>
<td>2019</td>
<td>156,302,625</td>
<td>4.2 %</td>
</tr>
<tr>
<td>2020</td>
<td>126,309,379</td>
<td>-19.2 %</td>
</tr>
<tr>
<td>2021</td>
<td>109,839,179</td>
<td>-13.0 %</td>
</tr>
<tr>
<td>2022</td>
<td>103,817,291</td>
<td>-5.5 %</td>
</tr>
<tr>
<td>2023</td>
<td>98,864,847</td>
<td>-4.8 %</td>
</tr>
<tr>
<td>2024</td>
<td>91,683,332</td>
<td>-7.3 %</td>
</tr>
</tbody>
</table>
Future Engagement with CAC re: C&I Lighting

• Discuss
• Coming back in a few months with detailed presentation on scenarios and updates to program delivery and offers
Thank you!

Jessica Kramer
Sr. Program Manager
Production Efficiency

Jay Olson
Sr. Program Manager
Commercial Existing Buildings

Kate Wellington
Program Manager
Commercial Multifamily
Agenda

• Pilot process
  • What it is, what it isn’t
  • Goals

• General categories

• Pilots to measures

• Current pilots

• Questions
Pilot Process

• Why pilots?
• What they are?
• What they are not?
• Who develops them?
• What are the goals?
• Why do we have a pilot process?
Three Key Pilot Process Objectives:

- Pilot research objectives are clear
- Agreement on the research plan
- Assure that the pilot is a priority

- The goal is a successful pilot with well actionable results
What We Test

• Technologies
• Behavioral change techniques
• Delivery methods
Examples

• Extended Capacity Heat Pumps
• Pay for Performance
From Pilot to Measure

- Now it’s a measure, right?
- Normal measure development process
Recently Completed Commercial and Industrial Pilots

• Variable Refrigerant Flow (VRF)
• Commercial Pay for Performance Phase I
• Cadet Energy Plus Heaters
• Advanced Power Strips (APS) Tier 2
• Luminaire Level Lighting Control (LLLC) (collaboration with NEEA)
• Water Submetering
• Ductless Heat Pumps (DHP) in Multifamily
Recently completed Residential Pilots

• Nest Seasonal Savings
• Heat Pumps in Existing Manufactured Homes
• Ductless Heat Pumps in New Construction
Current C&I Pilots

• Commercial Pay for Performance Phase II
• Networked Lighting Controls (NLC)
• Smart Thermostats in Small- and Medium-sized Businesses
Current Residential Pilots

• Automated Thermostat Optimization
• Extended Capacity Heat Pumps
• Manufactured Home Replacement
• Pay for Performance in Residential
Questions?
Thank You

Kenji Spielman, Planning Engineer
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503.445.2947
Differential Baselines for Diverse Populations

5/22/19
Why are we talking about baselines?

- Baselines?
- Increased focus on equity
- Other perspectives
- No easy answers
- Examples
- Barriers and other considerations
What’s in a Baseline?

**Pre-Conditions:** Represents the existing condition of the building, such as the existing insulation level or existing lighting system.

**Current Practice:** Represents the market average practices, such as the average efficiency of appliances purchased or the average efficiency of a new home.
Why Different Baselines Matter

• Equity—certain demographic groups may be underserved, not considered in current measure designs, or unable to access current measures

• Savings—underserved groups may actually have higher savings per unit than the overall market average, in which case it makes economic sense to focus efforts on them

• Reach—serving all customers and achieving all CE savings may require different measures and different strategies than current practice
Current Examples

• Multifamily
• Code baseline for gas furnaces in rental and multifamily properties
• Direct install
Retail Clothes Washer Example

- Assumes market baseline of new retail products
- Low-income customers and landlords may purchase much less efficient appliances from secondhand market
  - May not even consider a new appliance
- Baseline case here is older and less efficient
- Efficient case may not be a premium product
- Delta between this baseline and efficient new appliance equals much higher savings
- Conduct a survey of low-income households and/or landlords asking about most recent clothes washer purchase and decision making
- Interview/visit secondhand appliance dealers and collect model information to determine average efficiency levels
- Could offer higher incentives to move low-income residents and landlords from secondhand market to more efficient new products
Key Considerations

1. Need sub-market clearly defined
   • Specification that allows you to put product into one application verses another
   • Easy (enough) way to verify delivery to ensure that you are assigning the right savings to the right end user

2. Data to inform baseline
   • Market (or other data) to inform what baseline represents that specific portion of the measure
   • Need sufficient difference in savings (+/- 10%) to warrant resource to break them out
Questions, Comments?
Thank you

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