Conservation Advisory Council Meeting Notes

June 22, 2016
Amended August 29, 2016

Attending from the council:
Jim Abrahamson, Cascade Natural Gas
JP Batmale, Oregon Public Utility Commission
Warren Cook, Oregon Department of Energy
Wendy Gerlitz, Northwest Energy Coalition
Julia Harper, Northwest Energy Efficiency Alliance
Garrett Harris, Portland General Electric
Don Jones, Jr., Pacific Power
Don MacOdrum, Home Performance Guild of Oregon
Tyler Pepple, Industrial Customers of Northwest Utilities
Stan Price (by phone), Northwest Energy Efficiency Council
Gary Smith (for Brent Barclay), Bonneville Power Administration

Attending from Energy Trust:
Mike Bailey
Amber Cole
Kim Crossman
Phil Degens
Sue Fletcher
Fred Gordon
Steve Lacey
Ted Light
Spencer Moersfelder
Thad Roth
Julianne Thacher
Jay Ward
Peter West

Others attending:
Dave Backen, Evergreen Consulting
Mike Christianson, Energy 350
Tony Galuzzo, McKinstry/Building Owners and Managers Association
Bill Henry, EQL Energy
Bob Stull, CLEAResult
Adam Shultz, Oregon Department of Energy

1. Welcome and introductions

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

2. Announcements and old business

April and May meeting notes were approved with one correction to the May notes. Allison Spector, not Alison Gowdon, attended from Cascade Natural Gas in May.

Tyler Pepple: On page five, the May notes feature a potential cap of 20 megawatts. Is that average megawatts or megawatt hours.
Warren Cook: That cap didn't actually make it into the bill.

3. Senate Bill 838 large customer funding restrictions compliance study results

Ted Light, senior planning project manager, presented the results of Energy Trust's compliance study for large customer funding restrictions stipulated in SB 838, passed by the Oregon Legislature in 2007. SB 838 stated that customers using more than 1 average megawatt of electricity are exempt and should receive no direct benefit from additional funding for cost-effective energy efficiency above the portion Energy Trust receives of the 3 percent public purpose charge outlined in SB 1149.

> To determine if Energy Trust is under the threshold for funding large customers, staff calculated a cumulative average incentives to large customers as a percentage of SB 1149 revenue in pre- and post-SB 838 periods. The cumulative average spending for large customers is well under the spending threshold in Pacific Power territory and slightly under the threshold in PGE territory.

Garrett Harris asked roughly what percentage of large customers are industrial and commercial. Ted responded that it's roughly 80 percent industrial and 20 percent commercial.

JP Batmale: Does Energy Trust expect to exceed the incentive cap at the end of 2016?
Kim: If Energy Trust exceeds goals, it is likely to exceed this threshold. A small number of very large projects can have a big impact on annual outcomes.

Wendy Gerlitz: What happens if Energy Trust exceeds the cap?
Ted: Energy Trust will have three years to bring the cumulative average below the cap.
Kim: Several years ago when we thought this was imminent, we laid out several options to reduce spending for large customers. We would probably lower the cap for self-direct customers and create a cap for large customers. These changes would not impact customers using less than 1 aMW. Any of these changes would lead to a reduction in Energy Trust's overall energy goals. We also need to consider different changes for Pacific Power and PGE territories because reduction in spending on large customers would only be needed in PGE territory. If we make these kinds of changes, the board and Conservation Advisory Council members will be involved.

Don MacOdrum: Are all of these projects cost effective?
Kim: Correct, these are very cost-effective projects.

Garrett Harris: The baseline was established years ago, correct?
Kim: Yes. The baseline is lower in PGE territory because it took longer for Energy Trust programs to develop there, so early savings were low. This means we have a lower cap in PGE territory.

Tyler: Is the report available?
Ted: Yes, the reports are available in the Conservation Advisory Council June packet online.

Tyler: It's good that we're not at the cap, but the corollary of that is we didn't get as much savings as we could have from those customers.

4. Commercial Pay for Performance pilot and offering
Sam Walker, commercial senior project manager, presented Energy Trust's Pay for Performance pilot results and expansion plans.

> Historically, Energy Trust had limited operations and maintenance and behavioral offerings for commercial customers. In 2011, the state legislature directed the Oregon Public Utility Commission to submit a report on energy-efficient power purchase agreements by the end of 2012, which led to the OPUC docket UM 1573 and a subsequent report. The report stated that Energy Trust and the OPUC would continue to explore opportunities for pilots.

Based on OPUC feedback and input from the public, Energy Trust issued a request for proposals to develop a Pay for Performance pilot in 2014.

The objectives of Energy Trust's Pay for Performance pilot were to encourage broader customer participation, deeper retrofits and greater persistence of savings. In addition, Energy Trust sought to gain knowledge of whole-building analysis tools, implementation and verification costs, operations and maintenance and behavioral strategies that enhance commercial Strategic Energy Management, administrative management strategy and long-term potential for acquiring additional savings.

Sam described how the Pay for Performance pilot worked, including payment of performance-based incentives annually over three years. Participants were encouraged to implement a blend of operations and maintenance, behavioral and capital energy-efficiency investments. Energy Trust negotiated incentives based on the mix of measures implemented. Energy Trust required a whole-building modeling approach and a respondent-proposed modeling platform that was transparent to evaluators.

Energy Trust selected one pilot participant, the 1000 Broadway Building in Portland. The building was ENERGY STAR® certified. Energy 350 did the energy modeling through a contract with the customer.

Don MacOdrum: How many proposals were submitted?
Sam: Six.
Don MacOdrum: How many were you open to approving?
Sam: Three to five.
Oliver Kesting, commercial sector lead: Four of the applications were not cost effective. One application included one measure that was not cost effective. Energy Trust negotiated an exception with the OPUC for that measure, but the customer later decided not to participate.

Garrett: What does the market look like going forward? It seems like there are a lot of barriers to recruiting participants.
Sam: The measure mix for 1000 Broadway included operations and maintenance and capital improvements, but no behavioral improvements. Capital measures were primarily for variable speed drives on pumps. The customer requested an incentive of 5 cents per kWh of savings per year. Energy Trust added a cap on the total incentives.

Warren: What year was 1000 Broadway built?
Don Jones: The 1990s.

Sam: The year-one performance period ended in December 2015. The customer estimated 550,000 kWh in its proposal and achieved savings of 778,000 kWh. This is a 16 percent total reduction in the building’s energy use. In the first year, Energy Trust paid $29,000 in incentives, roughly 11 cents per kWh over three years. Project costs were less than expected.

Don MacOdrum: How would you have structured the incentives for a different measure mix, such as primarily capital upgrades?
Sam: We calculated the incentive rate based on the blended measure mix.

Don Jones: The rate is set upfront and can’t be renegotiated if the measure mix changes?
Oliver: We had a disclaimer that we could renegotiate if the mix changed dramatically.

Don MacOdrum: Does the length of payment period impact the incentive offering?

Oliver: Yes.
Sam: For operations and maintenance, we are still evaluating the measure life. We worked with Planning to extend the measure life to five years for operations and maintenance measures.

Gary Smith: Do the customers cost share?
Sam: Yes. Incentives were allowed to cover up to 100 percent of the implementation costs.
JP: Is the payment from the customer to Energy 350 part of the cost share?
Oliver: Yes, that was built into the proposal.

Don MacOdrum: If the customer pays nothing, then the participant cost is zero. How do you achieve cost-effectiveness?
Oliver: I think the customer paid some portion of the capital upgrade costs. We will follow up with more information.

Sam described the lessons learned from the pilot. The approach appears to work. The customer is happy and so is the service provider. The market is interested.

> However, negotiated incentives add complexity. Energy Trust has alleviated some of the complexity by going to a five-year measure life for operations and maintenance. Similar offerings, like operations and maintenance, should be aligned with Pay for Performance. Energy Trust also seeks to better understand the measure life after three years of visibility.
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> Sam offered recommendations from Energy Trust's Evaluation team, which include expanding the potential building market by reducing savings targets and including other building types, reducing the reporting frequency from monthly to quarterly, making the request for proposals and contracting language more transparent and using lay terms where possible, and cross-marketing incentives for capital measures through Pay for Performance.
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> Sam described Energy Trust's expansion plans for this offering. Staff aim to recruit up to five additional projects in late 2016. Staff will use a Program Management Contractor approach, prequalify service providers and specify simple regression analysis. Energy Trust will establish incentive rates rather than negotiate rates with the customers, and will align incentives with other measures. Finally, the measures will be limited to operations and maintenance and behavioral.

Wendy: These high-level results are encouraging. In talking to potential customers, it seems like having one simple approach for the building owner is important. I think capital upgrades should not be excluded, and I'd like to revisit that decision. I also think we should revisit the three-year timeframe constraint. Lengthening the payback period could alleviate customer concerns about cost differences between operations and maintenance and capital investments.

Kim: Is the constraint about extending our ability to pay customers over more than three years?
Oliver: Yes. I know a 10-year payback period would help alleviate cost differences between operations and maintenance and capital. However, we still have the same levelized cost targets. If we extend payment over 10 years, we would pay 1.5 cents per kWh. Is that enough to motivate customers? Also, we already have successful offerings to incent capital investments.

Wendy: Our construct for energy-efficiency programs is based on a single measure approach. The Northwest Energy Coalition is wondering if this new blended model could attract new customers who are not currently participating. I think you should add this as an additional

offering rather than use it to replace existing offerings. There's value in the new approach, and it can't be compared to our current measure by measure approach. I think by divorcing the operations and maintenance from the capital incentives, you make this a less appealing offering for customers.
Oliver: We're not reverting back. We're just delivering the offering differently. Since we know we probably won't be able to deliver incentives over 10 years, why not deliver capital incentives upfront and operations and maintenance and behavior incentives over time? Also, if Energy Trust pays incentives to the service provider, the service provider can distribute incentives over however many years the customer wants.

Stan Price: Congratulations on a successful pilot. First, I second the points Wendy made. They're consistent with the point of view of Northwest Energy Efficiency Council. Energy Trust should think about new delivery methods and not stick to how we've done things in the past. My second point is that while 10 years is too long and three years is too short, somewhere in between may be viable, maybe seven or eight years. Extending the payment period could alleviate Energy Trust's concerns about overpaying in early years based on savings estimates. Third, this pilot exceeded expectations and energy-savings estimates in a building that seems like it would not have had a lot of conservation potential left. It's bewildering to redesign the program given that the pilot worked so well. The open-endedness of the program was key to the success.
Oliver: Our design is meant to respond to some of the complications regarding the contract negotiation brought on by the blended measures. Removing capital simplifies the application process for customers and streamlines administrative work for Energy Trust.

Julia Harper: What kind of customers would be best suited to Pay for Performance rather than SEM?
Oliver: We have three types of operations and maintenance offerings. First is retrocommissioning, which is about specific measures or pieces of equipment. The second is SEM, which is a longer-term commitment for larger customers with multiple buildings. Pay for Performance fills the niche of single buildings that are too small or lack the organizational infrastructure to invest in SEM.

Don Jones: I was involved in the initial docket. I was expecting this to suit a building that needed more capital upgrades and could blend them with operations and maintenance. I would like to engage these customers to help them make a great leap forward.

Garrett: What does the market look like? How small can the buildings be to participate in this program? How many eligible and high-potential buildings are out there?
Oliver: For the pilot, eligible buildings were 50,000 square feet or larger. I don't think we would want to engage buildings less than 50,000 square feet.
Sam: The City of Portland's new energy reporting policy is also for buildings of 50,000 square feet and greater. There are roughly 450 of these buildings in Portland.

Tyler: How did you promote the request for proposals?
Oliver: Through our website and PMCs. We also asked service providers to recruit participants.

Don MacOdrum: I echo Stan and Wendy. It doesn't make sense to exclude capital projects. One of your objectives was to encourage deeper retrofits. What kind of savings persistence are you seeing?
Oliver: We'll know more in years two and three of the pilot.
Sam: For some operations and maintenance measures that only require a single human intervention like relocating a sensor, we know savings will persist for many years.

Oliver: For SEM, we do have evidence that operations and maintenance savings persist for longer than three years.

Tony Galluzzo, McKinstry: I'm thinking about differences between owner managed buildings and third-party managed buildings. For third-party managers, turnover negatively impacts savings persistence. Of the 450 Portland buildings, how many of them are third-party managed? In addition, having an experienced building engineering staff will also impact a building's savings.
Kim: Are you saying that buildings managed by a third party are the best candidates?
Tony: I'm saying the motivations are different for third-party building managers because they think shorter term, so a three-year payment period would be more attractive.

Don MacOdrum: What was the management arrangement at 1000 Broadway?
Sam: It is owner managed.

JP: Thank you to Energy Trust, Stan and Wendy for contributing to this. I also want to note that this is still a pilot, so we're still evaluating the results. I think there will be chances to revisit this with the OPUC through the docket process. The OPUC appreciates how this approach shifts the risk by spreading it out over three years and aligns performance with incentives. We also appreciate the increased administrative work for both the customer and Energy Trust. Finally, we like how this product aligns with the market. The OPUC is not sure about pulling out capital upgrades. We need to revisit this conversation in six or nine months when we have more results.

Stan: We are eager for this pilot to become a more robust offering in the future.

Holly Meyer was not present at the June meeting, but asked that the June meeting minutes reflect her comments on the Pay for Performance presentation.

> *Holly Meyer: Why aren't capital improvements included, and should they be considered in the future? Express caution over concluding too much with a sample of one. Continue treating this offering as a pilot to ensure savings in years two and three. As Pay for Performance expands and it becomes more difficult to determine a measure portfolio, we may consider asking for a Utility Cost Test approach—pay each year based on annual savings, somewhere below avoided costs.*

5. Public comment

There were no additional public comments.

6. Meeting adjournment

The next scheduled meeting of the Conservation Advisory Council will be on July 27, 2016, from 1:30 p.m. – 4:30 p.m.