

## Conservation Advisory Council Meeting Notes

April 29, 2015

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### Attending from the council:

Jim Abrahamson, Cascade Natural Gas  
Brent Barclay, Bonneville Power  
Administration  
Warren Cook, Oregon Department of  
Energy  
Wendy Gerlitz, Northwest Energy Coalition  
Charlie Grist, Northwest Power and  
Conservation Council  
Chris Walker, Portland General Electric  
Scott Inman, Oregon Remodelers  
Association  
Elaine Prause, Oregon Public Utility  
Commission  
Don Jones, Jr., PacifiCorp  
Don MacOdrum, Home Performance Guild  
of Oregon  
Holly Meyer, NW Natural  
Alexis Allen, Northwest Energy Efficiency  
Alliance

### Attending from Energy Trust:

Kathleen Belkhatat  
Amber Cole  
Kim Crossman  
Fred Gordon

Jackie Goss  
Margie Harris  
Jessica Iplikci  
Marshall Johnson  
Betsy Kauffman  
Oliver Kesting  
Steve Lacey  
Ted Light  
Spencer Moersfelder  
Kate Scott  
Julianne Thacher  
Peter West

### Others attending:

Dave Backen, Evergreen Consulting  
Susan Brodahl, Energy Trust board  
Christina Cabrales, CSG  
Scot Davidson, Clean Energy Works  
Cameron Gallagher, Nexant  
Mike Gantman, Nexant  
John Morris, CLEAResult  
Alan Meyer, Energy Trust board  
Nick O'Neil, E360  
Chris Smith, E360  
Bob Stull, CLEAResult

### 1. Welcome and introductions

Peter West convened the meeting at 1:30 p.m. The agenda, notes and presentation materials are available on Energy Trust's website at: [www.energytrust.org/About/public-meetings/CACMeetings.aspx](http://www.energytrust.org/About/public-meetings/CACMeetings.aspx).

### 2. Old business

The March Conservation Advisory Council notes were approved with no changes.

Kim Crossman announced that the planned second round of discussion regarding a proposed combined heat and power incentive increase will be delayed by a few months.

Peter announced that Julia Harper is the new NEEA representative on the council, and welcomed Elaine Prause as the new Oregon Public Utility Commission liaison.

### 3. Planning updates

Marshall Johnson: Yesterday the OPUC ruled on Energy Trust's incentive cap proposal related to the UM 1622 docket on the cost-effectiveness of some gas measures. The commission

decided to extend current incentives for wall and floor insulation through the end of June. On July 1, Energy Trust will offer revised measures for wall and floor insulation in gas-heated homes. Energy Trust will notify trade ally contractors of these changes.

Fred Gordon: Regarding UM 1622, last year NW Natural forecasted that it will need to build a new pipe to the Salem area. The OPUC requested that NW Natural pursue instead demand-side management solutions. This spring, NW Natural no longer expects the load to increase, so a new pipe will not have to be built. However, NW Natural has not yet updated its Integrated Resource Plan to reflect the changes. In light of this, the OPUC directed Energy Trust to retain in the Salem area only measures to be eliminated for cost-effectiveness reasons from the gas program on July 1. The OPUC could not reach a conclusion to change this directive based on current evidence. We will regroup to see whether NW Natural can provide sufficient evidence that the facility is needed to the OPUC by July 1.

Marshall: Energy Trust worked with NEEA to introduce a tier two heat pump water heater. The only qualifying unit, made by AirGenerate, has been removed from Energy Trust's qualifying products lists. Energy Trust is working with Portland General Electric and Pacific Power, NEEA and trade allies to address potential warranty concerns on behalf of customers.

Warren: How many AirGenerate units were installed in Energy Trust territory?

Marshall: There are 410 units in Energy Trust territory of about 900 heat pump water heaters in the region.

#### **4. SB 838 large customer funding restriction: 2014 results**

Ted Light: SB 838 allows Energy Trust to receive additional funding above the SB 1149 3 percent public purpose charge to pursue additional electric efficiency as identified in coordination with each electric utility. Because large customers, greater than one average megawatt, are exempt from SB 838, statute also determined they cannot receive any benefits from those funds. Energy Trust estimates the maximum benefits allowed for these large customers as a percentage of the incentives Energy Trust paid to these customers by utility before SB 838 was passed in 2007. Energy Trust is restricted from providing incentives above that estimated threshold. To track funding paid to large customers, Energy Trust commissions annual studies by a third party.

Don Jones: Is that study public?

Ted: We typically share the studies with stakeholders but have not posted them on our website.

Ted: If Energy Trust exceeds the threshold of incentives paid to large customers, we have three years to correct the problem. In 2014 in Pacific Power territory, we remained well under the threshold. In 2014 in PGE territory, we were very close to the threshold but have not exceeded it.

Holly Meyer: Is Energy Trust required to make any changes to avoid exceeding the cap, because when you're so close?

Peter: Energy Trust has an understanding with the electric utilities and the OPUC that we will react once we actually exceed the cap, not before.

Ted: In conclusion, Energy Trust is still under the limit for each utility of incentives paid to large customers. There will be no program changes at this time. This topic is being discussed as part of OPUC docket UM 1713.

#### **5. Industry and Agriculture Sector 2015-2019 Strategic Plan**

Peter: Energy Trust recently approved a 2015-2019 Strategic Plan for the organization, and the Industry and Agriculture, and Commercial, sector strategic plans with major trends and challenges provide high level information about how these sectors will meet Energy Trust's overall 2015-2019 Strategic Plan goals. We are seeking feedback about areas of confusion and ideas that resonate with you or cause you concern.

Today we will focus on the two business sectors for energy efficiency. The plans for the Renewable Energy sector have been reviewed at the Renewable Energy Advisory Council. We will bring the plan for the Residential sector here in June.

Kim: Industry and agriculture is a mature sector, and the priority is to continue to operate effective programs. The sector achieves energy savings through custom projects, streamlined projects and industrial Strategic Energy Management. The sector's strategic plan focuses on stability, and identifies smaller industries as a potential source of increased savings. Goals include increasing gas projects and savings across all tracks, expanding SEM participation and continuously improving internal operations.

The sector's sources of savings fluctuate from year to year and can be difficult to predict. A large number of small streamlined industrial track projects helped stabilize the program's savings. Most of the sector's savings growth has occurred in urban areas over the past five years, but savings have held steady in rural areas despite poor economic conditions. Going forward, the sector identified high electric savings potential from most sectors, with specific opportunities in the growing high tech and emerging indoor agriculture industries. Many sectors offer high gas savings potential.

Holly: You said that the electric potential in pulp and paper is shrinking because the plants have closed, but it looks like there is a lot of gas potential in that sector. Why is that?

Kim: One or two pulp and paper plants are eligible for gas, and all that potential is tied to them. Clearly we also need to continue to diversify our savings from other sectors.

Wendy Gerlitz: It would be helpful to see graphs of savings in comparison to total load for urban and rural projects. This would make it clearer that you are reaching and serving rural markets.

Kim: The sector's challenges and barriers include large transport customer eligibility limitations, the impacts of climate change and drought on agricultural customers, the higher costs of serving smaller customers and improving internal operations. Industry and agriculture is the only energy-efficiency sector at Energy Trust to operate without a Program Management Contractor, and this creates challenges in procurement of program data management systems for harnessing the power of internal data systems, which have largely been designed to interface with PMC systems rather than providing a turnkey program data management solution.

Don Jones: I'm concerned that you're already in the first year of the 2015-2019 Strategic Plan. If you're developing the plan now, shouldn't it begin in 2016?

Peter: These plans are aligned with Energy Trust's 2015-2019 Strategic Plan, which incorporated robust stakeholder and board input prior to 2015. Each program then reflected that direction in individual program action plans for 2015. Neither of these sector strategic plans represent dramatic changes in strategies and goals.

Jim Abrahamson: I'm concerned that the plan may be overstating Oregon's status as the nation's second most industrial state as a percentage of gross domestic product. I also noticed that much of the industrial savings potential is from high-tech industries, which are located in

urban areas. I would like to see what the landscape of potential projects looks like with the tech sector removed. Finally, what comprises “other industries” in the plan?

Kim: The statistic about Oregon industry is from the U.S. Department of Commerce (footnoted). Oregon is the second most industrial state in the country as a portion of our GDP. According to the federal government, we have a very robust industrial sector as a portion of our economy and always have. Oregon industry is also very diverse. The “other” category includes the next 10+ largest sectors. We combined them so the chart would be readable.

Elaine: The plan mentions smart manufacturing, which makes me think about smart homes, where some people are moving ahead early and there are more products available. Is the smart manufacturing market similar to what's happening in the residential smart homes market?

Kim: Smart manufacturing is emerging technology for this sector, and little activity has occurred in the market yet. But this may begin in the next five years. The U.S. Department of Energy is soliciting proposals to promote smart manufacturing solutions in small and medium industries. The Pacific Northwest National Laboratory is leading a regional collaboration effort to pursue this funding for testing and developing smart manufacturing applications in our region.

Don Jones: I am not seeing consistent applications of smart manufacturing techniques.

Charlie: Is smart manufacturing different than SEM?

Kim: Smart manufacturing is about information and controls. SEM is about equipping people with information to make decisions. Smart manufacturing will result in fewer people-driven decisions and more automated controls. SEM customers may be the best candidates for smart manufacturing. This approach is so new that it is unlikely to save a lot of energy in the next five years.

Charlie: Are streamlined industrial projects about learning from custom projects and applying these lessons to many projects? Will streamlined industrial projects be a growing source of savings as we learn more?

Kim: Streamlined industrial projects include prescriptive measures, such as roll-up doors, and calculated savings measures. These projects are really defined by the delivery channel as they are delivered by trade allies. Yes, when we see a replicable measure that is a good fit for trade ally delivery, we take what we learn in the custom track and make it a streamlined measure.

Charlie: How do you nurture the streamlined industrial strategy?

Kim: We do this through multiple channels. Mainly it's about developing trade allies, and this is the scope of the Streamlined Program Delivery Contractors. They also develop measures. And we get PDCs out in the field discovering new potential prescriptive measures, in cases where custom analysis would be too hard and we think we might be able to standardize. One recent example is developing prescriptive measures to serve welders.

Peter: The plan may benefit from adding explanation about how we identify and grow these prescriptive opportunities. We can add this.

Charlie: Who are the PDCs?

Kim: Streamlined PDCs are Evergreen for lighting and Cascade Energy for streamlined industrial. We have four custom PDCs: RHT in Southern Oregon, Nexant in Central Oregon, the northern part of Eastern Oregon and parts of the Portland metro area, Energy 350 in the Willamette Valley and North Coast, and Portland General Electric-CTS in parts of the Portland Metro area. In their work with customers, PDCs are identified as Energy Trust, not their individual brands. While customers do work with PDCs, we work hard to also cultivate and maintain relationships with customers and Energy Trust staff for continuity.

Charlie: Lighting has been a big contributor to the sector, although it's been falling off in recent years. What about emerging solid state technology? Do you think lighting could grow as a source of savings?

Kim: We had a big increase, lighting was a major source of savings in 2014. LEDs and Performance+ delivered a lot of lighting savings. High-bay LEDs also deliver substantial cost savings through reduced maintenance.

Alan Meyer: The plan says that many customers with the most savings potential are limited or prevented from participating. Is that true?

Kim: Large gas users who pay NW Natural or Cascade Natural Gas for distribution of gas but who buy the commodity from a third party, called transport customers, are ineligible for Energy Trust offerings. For electric efficiency, the exclusion of large, greater than 1 aMW sites from SB 838 supplemental efficiency funding creates a limitation around SB 1149 public purpose funding available to serve these sites. The plan anticipates meeting the large customer funding cap in the next five years.

Warren Cook: It sounds like we're saying we can only count energy savings that we incent. This doesn't mean these companies are prevented from investing in energy efficiency, it just means they haven't figured out how yet and we haven't figured out to help them without incentives.

Kim: Our incentives help make energy upgrades good business investments. With the Oregon Department of Energy managing self-direction, do you know about many energy savings are being acquired outside of Energy Trust?

Warren: Yes, but customers are challenged to achieve short enough payback periods without Energy Trust incentives. We can figure out how to influence them without incentives.

Peter: To summarize, we may not be able to influence through incentives but we may still have influence. We will go back and clarify language around what is constrained and not. Thank you.

Elaine: I appreciate the presentation and the clear story. It's helpful that you mentioned how your internal operations needs are changing.

Charlie: More on your internal operations would be even better, in particular the IT challenges.

Charlie: Indoor agriculture was identified as an opportunity. Will indoor agriculture be served under the industrial sector?

Kim: Yes, indoor agriculture fits in the industry and agriculture sector. The sector is designed to serve all types and sizes of industries.

Charlie: Will indoor agriculture projects be custom projects?

Kim: Yes, and indoor agriculture sites can also be served through streamlined industrial offerings and lighting. We don't yet know what will be standard for these customers. There may also be outdoor agriculture customers.

Peter: We are engaged with and are following activities and regulations in Washington and Colorado. The regulatory rules will define the directions of this emerging market and we will react as the rules and directions are fully defined.

## **6. Commercial Sector 2015-2019 Strategic Plan**

Oliver Kesting presented the Commercial Sector 2015-2019 Strategic Plan, which includes the Existing Buildings program, New Buildings program and Existing Multifamily initiative, and provided high-level trends and strategies for the commercial sector for the next five years.

Oliver: Similar to the industry and agriculture sector, the commercial sector has mature program offerings. Plan goals include expanding participation with small and rural customers, developing new measures and savings approaches, and continuing to improve internal operations.

Commercial SEM now makes up 20 percent of gas and 10 percent of electric savings, and market transformation efforts and lighting have also grown as a percentage of savings in the last five years. Lighting savings continued to grow in 2014 primarily due to new LED opportunities. LEDs came down in cost quicker than anticipated. Custom projects are consistently a large portion of the sector's savings, but are somewhat lumpy due to the larger project sizes. Currently, about 25 percent of the sector's projects are from rural customers and this grew in 2014 with a big push in Existing Multifamily. We continued to see a decline in savings per project, and to maintain the savings we increased the project count by 160 percent since 2009.

Key challenges include relatively lower fuel costs, which are reducing cost-effectiveness of some measures and making the business case less appealing for energy-efficiency investments. The commercial sector has concerns with potential large customer funding limitations. Large commercial customers, such as universities and hospitals, would be affected by the greater than 1 average megawatt spending limitations along with the industry and agricultural sector. If we reach the large customer incentive cap and have to limit our budget for large customers, we would lose the savings that are the least cost to incent. Historically large customers' incentives per kilowatt hour are about 25 percent less than the smaller customers. The commercial sector also has transport gas customers, especially in the SEM initiative, and they can't be served by our programs. Rising awareness of climate change may bring new opportunities, but it also brings more unknowns, including federal and local legislation to reduce carbon emissions. We are challenged to support and coordinate with these various climate change endeavors.

Jim: Is the savings potential for Cascade Natural Gas aligned with the savings potential in utility Integrated Resource Plans?

Fred: Yes.

Elaine: The plans put the program savings in perspective with the total sector savings. Do you see the programs shifting in terms of percent of savings they provide for the sector?

Oliver: Savings proportions by program will remain roughly similar. New Buildings savings may increase due to data centers and increased building activity, and savings from Existing Multifamily will increase due to direct installation of energy-saving products.

Peter: New Buildings market solutions packages are also a strong and growing source of savings.

Charlie: I would like to see a table of savings by program approach and another table to show savings by types of measures. You showed savings by building type, and that is just one slice of the information. I also noticed that one of your challenges is how to get cheaper savings from smaller customers.

Oliver: Yes, and that's why we talk about streamlining our offerings.

Charlie: Do your costs include program overhead, too?

Oliver: Yes, it's all costs, including marketing. Some of these businesses have never engaged with Energy Trust, and require more marketing investment to reach.

Peter: We have a new direct-installation lighting effort that includes financing to encourage very small businesses, such as strip malls, to invest in energy efficiency.

Charlie: The Total Resource Cost is not higher for these customers, it's just more costly to get customers to participate, right? Program administration costs are higher, but not the Total Resource Cost.

Oliver: Yes.

Allen: Why does the plan say there's reduced savings potential for gas transport customers if they aren't included in Energy Trust's goals?

Oliver: We're seeing more transport customers through our SEM initiative and we can't support them as comprehensively as they would like. Also if a customer is not eligible for gas offerings, it's harder to get them to engage on energy-efficiency improvements.

Peter: When we can provide both gas and electric savings, we can offer more incentives for more efficiency investments.

Brent Barclay: I don't think you've articulated the challenge of serving rural customers clearly in your plan.

Oliver: We were trying to keep the document to a reasonable length and didn't have space to go into that much detail. The strategies are different for the different programs, including regional outreach, how we utilize contractors and how we leverage trade allies to do this work. We do provide some more detail within specific program sections of the plan.

Don Jones: Going forward, will you report on urban and rural customers served?

Fred: We did some scanning to identify gaps in service by geographic region, and saw that in the residential sector we're serving a smaller percentage of homes outside of the Portland Metro area. That's going to be the focus of our next effort to better understand the baseline of where we are now, and where the gaps are and how we might better serve them. Commercial and industrial sectors have had major initiatives seeing some success in reaching smaller customers and rural areas. Given the apparent progress we are focusing analysis less there, while the programs are trying to continue efforts to expand participation.

Peter: I think it would be more meaningful to report savings by market or customer type.

Don Jones: It's more expensive to serve rural customers, from our experience.

Margie Harris: To follow Brent's comment, these plans align with our overall Energy Trust 2015-2019 Strategic Plan, which identified some of these challenges of serving rural and small customers. We will continue to capture this kind of information following the overall Energy Trust Strategic Plan. Also, there is an interplay between large customer funding and SB 838 funding limitations, and small customer outreach. The extremely cost-effective projects with large customers balance out the more expensive projects with small customers. If we lose the ability to serve large customers, it will be harder to serve small customers.

Holly: The new City of Portland commercial energy reporting standard is estimated to impact 1,000 buildings. Will Energy Trust use this data to direct Energy Trust marketing?

Oliver: The data will be publically available in two years, and at that point we will use it as a resource for targeted marketing. We are currently collaborating with the city to determine how we can support this effort.

Elaine: You mentioned transitioning New Buildings customers into Existing Buildings customers. I think that's an interesting handoff to focus on.

Wendy: Have you talked about partnering with utilities to serve small and rural customers?

Peter: Yes, we currently promote programs jointly with Clark Public Utilities. Other examples of collaboration include our former work with Eugene Water & Electric Board to deliver residential efficiency programs and with the City of Ashland to deliver solar programs. We also share customer leads with utilities around the state, and vice versa.

Wendy: People at EWEB were very positive about that coordination effort. More collaborative efforts may offer ways to reduce costs.

Peter: We could add rural outreach utility collaborations to our annual budget and action plans.

Charlie: Regarding multifamily direct installations, what are you installing?

Oliver: Lighting and water-savings devices in dwelling units.

Don Jones: How do you feel about your performance so far in 2015? That will indicate whether your plans are on target.

Peter: We have strong commercial pipelines. We are successfully rolling out trade ally outreach.

Kim: We have 215 percent of our 2015 gas goal in our industry and agriculture pipeline.

Peter: We need to address incentive levels for gas, as our incentives are less valuable compared to very low natural gas prices. This remains a challenge.

Don Jones: Sounds like your strategic plans are probably on target.

Charlie: Do you still have flexibility to try approaches that might not work? Keeping up the pace of savings given tightening regulatory constraints can be difficult. I encourage you to keep experimenting and discovering new strategies. Failing is part of developing new approaches.

Peter: NEEA gas market transformation efforts are emblematic of support for new approaches.

Peter: I hear validation from the group that our plans are on track, and our progress in 2015 so far supports that. Thank you for your comments. We will incorporate them into the strategic plans and record your comments as emphases to note in the next budget action plans in September 2015.

Brent: When will the sector strategic plans be final?

Peter: The plans will go to the board for consideration in June, and we aim to distribute them by July. Based on today the plans will not change markedly.

Peter called for public comment.

Chris Smith, E350: My comment is about the commercial sector plan. It seems like there should be a role for RCx (retrocommissioning) that I didn't see called out.

Oliver: We called out operations and maintenance, and we do it in our SEM initiative, but I agree that we need to find opportunities to expand operations and maintenance to smaller customers and to customers who are not participating in SEM.

## **7. Public comment**

There was no additional public comment.

## **8. Meeting adjournment**

The meeting adjourned at 3:52 p.m. The next Conservation Advisory Council meeting is scheduled on June 3, 2015.