# Conservation Advisory Council Meeting Notes

November 21, 2014

**Attending from the council:**
Brent Barclay, Bonneville Power Administration
Warren Cook, Oregon Department of Energy
Wendy Gerlitz, NW Energy Coalition
Garrett Harris, Portland General Electric
Holly Meyer, NW Natural
Andria Jacob, City of Portland
Don Jones, Jr., Pacific Power
Juliet Johnson, Oregon Public Utility Commission
Don MacOdrum, Home Performance Guild of Oregon
Stan Price, Northwest Energy Efficiency Council

**Attending from Energy Trust:**
Tom Beverly
Amber Cole
Kim Crossman
Fred Gordon
Marshall Johnson
Oliver Kesting
Steve Lacey
Spencer Moersfelder
Ed Wales
Jay Ward
Peter West

**Others attending:**
Jeremy Anderson, WISE
Scott Davidson, Clean Energy Works
Cameron Gallagher, Nexant
Kendall Hansen, CLEAResult
Mark Kendall, Energy Trust board
Alan Meyer, Energy Trust board
Tim Miller, Clean Energy Works
Bob Stull, CLEAResult
Becky Walker, CLEAResult

## 1. Welcome and introductions

Kim Crossman 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.

## 2. Old business

Kim asked the council if there were any changes to the October 2014 Conservation Advisory Council notes. The group adopted the previous minutes with no concerns.

## 3. 2015 Budget and Action Plan: Round 2 changes (discussion)

Peter West: This discussion is about the changes proposed as we finalize the 2015 Budget and Action Plan. The changes we are proposing are relatively small and can be characterized as cleanup from the draft R1 budget presented last month. The overall change is a cost increase of about two percent, with savings increases about 0.5 percent. The majority of the changes are due to shifts in the measure mix, including a much higher share of LEDs in lighting initiatives. We are still delivering low-cost, high-value resources across the board.

Mark Kendall: The biggest change is the revenue reduction in bullet number five.
Peter: This is what we proposed the last time and it has not changed. We proposed and worked out with the commission and utilities to have a lower SB 838 collection.
Mark: Not all utilities collections are going to be reduced by 12 percent.
Don Jones: We're using up carry over.
Peter: Yes.

Peter: There are no changes to the proposed budget focus areas, as we received supportive comments.

> We propose a slight increase in electric savings and a minor increase to gas savings. The slight increase in electric savings is largely due to market adoption of LEDs increasing more rapidly than expected. LEDs are more expensive than compact fluorescent light bulbs, and offer more energy savings per bulb. Our forecast for CFLs was too high, but the LED forecast too low. Consumers are buying more LEDs at a higher rate than they are purchasing CFLs. LEDs meet market needs that CFLs can't satisfy.

Don MacOdrum: Are there any implications to previous savings when CFLs are replaced early? It seems like you would discount savings from LED to account for shorter CFL life.
Mark: The power council does a very complicated look using NEEA data. It's kept very current and used as a baseline.

Peter: We realized that our R1 budget didn't fully account for the extension of gas measures through the end of April 2015. The revised R2 budget forecasts slightly better uptake of weatherization measures for electrically heated homes.

> On the gas side, the revised budget proposes an increase of 1,000 therms. This change is reflective of higher transformation savings in New Homes and Products. There's a tiny change in Existing Homes to increase the positive effect of retaining weatherization measures longer than we had expected.
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> We also removed a couple of proposed pilots that won't get traction for NW Natural in Washington. These are small changes.
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> The increase in goal for Cascade Natural Gas corresponds to a slight reduction in goal for NW Natural. We realized we had assigned some Strategic Energy Management savings to NW Natural that were more properly assigned to Cascade Natural Gas.
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> Electric costs increased two percent in the R2 budget, largely due to extra cost for LEDs. Part of the budget increase reflects costs for delivery and services to support continued weatherization as we transition away from certain measures.
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> The budget is lower on the gas side due to changes for Existing Buildings and some changes for New Homes. We realized we overestimated for Existing Buildings gas incentive costs. Overall, this correction will lower the natural gas budget by about $600,000.

Peter: We expect the same levelized costs as in the draft budget for all utilities except for NW Natural in Oregon. Levelized cost for NW Natural were reduced from 34 to 32 cents per therm. This is directly related to the revised incentive budget, as noted earlier. We believe the savings will remain the same for NW Natural, but we overestimated the necessary amount of incentives in R1.

Holly Meyer: What is New Homes and Products market transformation?
Peter: New Homes and Products market transformation investment is designed to drive new and more stringent building code standards. Once code is updated to reflect the changes we have promoted, we can count savings for a two- to three-year period.

Garrett Harris: Looking at the levelized cost for PGE and Pacific Power for renewables, there is a discrepancy. Levelized costs change drastically between years and utilities. Why is that?
Peter: In one year or in one utility territory, more solar projects may be installed, which have higher levelized costs. Other Renewables projects, such a hydropower projects and wastewater treatment plants, have much lower levelized costs. It is normal to see a range of levelized costs based on types of projects installed.

Peter: To summarize the R2 budget changes, we propose a slightly higher budget with electric savings of 53.1 aMW, similar gas savings and slightly higher renewable generation. Electric levelized cost is about the same, and gas levelized cost is slightly lower. Spending is reduced by 3.6 percent. Revenue is down by 12 percent.

Energy Trust will present the budget to the Oregon Public Utility Commission on December 3, 2014. Final revisions will follow, with the budget online by December 4. Energy Trust's board of directors will approve the final budget on December 12.

Mark: It should be noted that Energy Trust employee healthcare costs have gone down.
Peter: Healthcare costs will be 14 percent lower next year.

Mark: Is there anything notable about the public comments?
Amber: There have been few comments, and they are positive and supportive. A few questions and clarifications came in, which will be included in the budget packet.
Kim: Did we receive the same number of comments as in prior years?
Amber: We received slightly fewer comments.

Don Jones: Thanks you for involving the utilities during budget development.

**4. Northwest Energy Efficiency Alliance gas market transformation (information)**
Fred Gordon presented on NEEA's new gas market transformation initiative, including formation of the NEEA gas collaborative and 2015-2019 NEEA strategic plan development. Through NEEA's gas market transformation, NEEA will invest $18.3 million regionally over five years to save 280 million therms over 20 years. Energy Trust's will contribute about $500,000 in funding in 2015.

Juliet: Can you summarize the governance of the gas market transformation initiative? There won't be a separate board and it's within the committees?
Fred: NEEA has an electric regional portfolio advisory committee, and will create a parallel gas committee that approves specific projects. Gas funders will be welcome into the advisory committees. NEEA's board will still be the convening body and approver. Three of the gas funders are already on the board. With Energy Trust budget approval in December, work will begin on January 1, 2015.

Holly: We are excited to get started on it.

**5. 2015 measure changes: Residential**

Marshall Johnson provided updates to residential measure changes presented to Conservation Advisory Council in October.

Marshall Johnson: In October, we presented to the Conservation Advisory Council on Existing Homes measure changes for 2015, including eliminating the Home Performance with ENERGY STAR® assessment incentive and adding a $75 incentive for multiple upgrades and a $75 EPS incentive.

> In the October presentation, we proposed to sunset the Home Performance assessment at the end of 2014 and implement the EPS incentive and multiple measure incentives sometime in Q1 2015. Conservation Advisory Council members communicated that this timing would leave a gas in the market, so we convened a stakeholder group with impacted contractors to discuss it.
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> Based on these stakeholder group discussions, we now plan to introduce the EPS and multiple measure incentives on January 1, 2015. On January 1, trade allies who currently have EPS agreements with us, including 25 Home Performance contractors, can begin receiving a $75 incentive for delivering EPS. Also on January 1, trade allies who install multiple measures can receive the multiple measure incentive of $100—increased from $75.
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> We will launch these incentives in a broader format next year. Stakeholders have expressed satisfaction with this compromise.

Jeremy Anderson: Sounds good to me.
Don MacOdrum: Thank you to the Existing Homes staff for making efforts to hear about the perceived impacts. These changes will make the multiple measure incentive more attractive. I'll be interested to track on these going forward.

Juliet Johnson: The multiple measure incentive is in addition to other measure incentives? With the measures going away in April, do they count until April?
Marshall: Yes to both.

Warren Cook: This group of Home Performance contractors will now be a new licensed group of assessors who didn't exist before.
Marshall Johnson: We need to collaborate with the Construction Contractors Board and others in the HB 2801 process to ensure this works for a full offering.

Mark Kendall: What percentage of residential measures do those 25 contractors represent?
Marshall: In 2015, we expect to see fewer contractors complete more projects. The vast majority of Home Performance comes through Clean Energy Works. Outside of Clean Energy Works, 81 percent of Home Performance assessments come from four contractors.

**6. 2015 measure changes: Business**

Spencer Moersfelder described changes to prescriptive incentives for Existing Buildings (including multifamily) and Production Efficiency programs.

Spencer: Incentives for most measures will increase. The measures that will be eliminated are not cost-effective and have not been a large source of savings. To determine measure changes, we use assumptions based on average costs and savings, including an internal rate of return metric with a five-year horizon. We also looked at the run-rate for each measure, or dollar saved per kilowatt hour or therm. A run rate is the unit amount paid for savings.

Kim: Sometimes we also call it acquisition cost, and it's very important to our budgeting process. It's dollars per energy unit for first year savings, not levelized cost.

Don MacOdrum: What is the discount rate that you used to calculate internal rate of return?
Spencer: 5.2 percent.

Kim Crossman: Production Efficiency just launched a leakage measure for compressed air and will increase the incentive amount to boost participation. The measure is still cost-effective.

Spencer: Prescriptive measures are a way to reach small to medium customers. Prescriptive incentive increases are intended to get customer attention and increase measure installation. These increased incentives still fit within the budget for 2015. We will increase incentives for plug strips that shut down when computer equipment is not in use. We will raise cooler door incentives to include doors. We will eliminate incentives for night covers, which are not cost-effective. Night covers cover coffin coolers when not in use and are used mostly in small stores.
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> We will raise incentives for buildings that have zero insulation and add incentives for buildings that have some existing insulation. Incentives for insulation are aimed at buildings under 50,000 square feet. If these measures prove cost-effective, we plan to add insulation incentives for buildings with more than 50,000 square feet. The incentives will be the same for buildings heated with gas and electricity. Production Efficiency is also raising the insulation incentive, but not as much as the Existing buildings program.

Holly: Why are Production Efficiency insulation incentives different from Existing Buildings?
Kim: Production Efficiency customers have different operating hours, internal heat loads and sometimes totally unconditioned space in manufacturing. Industrial doesn't always need insulation.

Spencer: Lodging and foodservice incentive increases are dramatic. In Multifamily, these measure often installed in dorms and assisted living facilities.

Brent Barclay: What is your max cap on incremental costs you'll pay?
Spencer: These prescriptive incentives have been configured with average costs in mind. We will pay up to 100 percent of incremental costs and we check against invoices.

Mark Kendall: These are rigorous tiers?
Spencer: Regional Technical Form and Energy Star.

Spencer: We are dropping residential refrigerator incentives align with residential on residential fridges. We are dropping ozone laundry because it isn't cost-effective.

Mark: Are the incentive amounts per system? They look close to custom incentive amounts.
Spencer: Incentive amounts are per system. They could still receive custom instead of prescriptive incentives for ozone laundry. We had to drop it on a prescriptive basis.

Spencer: The incentive for boilers in 2015 will be $6 per kBtu. The maximum incentive we can provide on a boiler would be $12 per kBtu. Boilers can be big and achieve a lot of savings. Sprinkler levelers are going away. We've only done four of them, so it wasn't a big change.

Jeremy Anderson: No changes to multifamily or small multifamily windows?
Spencer: No.
Juliet Johnson: Weren't there changes to windows?
Fred Gordon: I think they will sunset in April.
Peter: We will get back to the group with more information at the next Conservation Advisory Council meeting.

Spencer: Lighting incentives are aligned across the business programs. Lighting is a large part of business savings for electrical.

> Federal linear fluorescent ballast changes are going into effect this month. The Energy Trust baseline will change in mid-2015, consistent with our policy to continue to use the current baseline for 6 months after a change to give the market time to deplete existing stock. The baseline that we will use will be a blending of existing condition and federal standards. There will be fewer savings per ballast, making them less cost-effective. As a result, we will reduce incentives. Linear fluorescent lighting is not as captivating to the market as LEDs at this time. We will track the LED opportunities in the market and adjust our offerings accordingly.

Brent Barclay: We've been talking about this for several years and have done a lot of work to get ahead.
Don Jones: T-8 and ballasts are it. T12 doesn't exist in our planning.
Spencer: LED marquee and cabinet lights will now receive custom incentives.

Spencer: We will continue to emphasize lighting controls. There will be more and higher incentives for occupancy sensors and daylighting sensors. Outdoor lighting has a lot of savings potential, and we will raise incentives within the boundaries of our cost-effectiveness requirements and budgets. There will be no change on the custom incentive side.

Kim: We made a big changes to custom lighting incentives last year.

Mark Kendall: Will the TLED lamp incentive will require de-wiring or will we offer a kit?
Spencer: TLEDs are presently eligible for custom incentives if they have internal and external drivers. We are looking at the possibilities of kits and are having extensive conversations about safety. We are also talking about safety stickers and other considerations.
Mark: Safety stickers should appear in French, English, Spanish, German and Japanese.

Holly: Is it a hard sell to get people to transition to TLEDs?
Spencer: The lighting market is really energized. New measures continue to drive the market. Customers who upgraded their lighting a few years ago can now install even more efficient LED products.
Kim: We will run a major marketing campaign next year for LEDs.

Brent: It looks like things are trending up in terms of incentives, but I didn't see that directly in the budget.
Kim: In Production Efficiency, we've seen a higher volume of projects with lower savings per project. To maintain the level of annual savings we need, we are increasing incentives. You don't see it in the budget due to tighter budgeting. The numbers are in the run rates.
Peter: A lot of these incentive increases were incorporated in the R1 budget. We are calling them to your attention at this time.

**7. Commercial Pay for Performance update**

Brian DiGiorgio: The Pay for Performance pilot will determine if paying incentives for capital and operations and maintenance improvements over a multiyear period will help contractors close projects and achieve additional energy savings from more comprehensive projects.

> The pilot is focused on commercial office building only. Incentives will be paid annually for three years for verified savings, in contrast to Energy Trust's standard process of paying incentives at time of measure installation. The pilot structure allows us to pay for operations and maintenance and behavioral savings, and may provide some Strategic Energy Management-type solutions for certain customers who may not be well suited for SEM.
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> Objectives of the pilot include learning if this payment model encourages participation by customers who wouldn't normally participate, and whether this model helps sales professionals close more retrofit sales. Can paying for operations and maintenance generate more persistent savings? Does the multiyear payment stream generate deeper savings? We'll also see if we can use this pilot to enhance existing SEM offerings. The pilot has an element of whole building performance, although there are constraints on the regulatory side: We can't bundle measures without each measure being cost-effective, although there is some flexibility for pilots.
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> We circulated a draft request for proposals to stakeholders for comment and received substantial and useful input. The OPUC held a public hearing, including a public comments period. As this is a new incentive payment model, the input we received led us to considerably stretch out the timeline for responses to the RFP. This was useful, as respondents told us they needed more time to educate their customers on the pilot funding model.
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> An RFP was released at the end of February 2014. Two buildings were selected at the end of June. One building has an executed contract. Another building is reviewing the contract draft.
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> We want to make the Pay for Performance offering scalable. We brought in Cadmus as a consultant on the RFP development and response evaluations, and we consulted MetaResource Group to help determine baseline and savings calculations. We'll agree on building energy use baselines, then after measure installation we'll have a 12-month performance measurement period followed by the savings and incentives calculation. We will pay incentives on the difference between baseline energy use and post-retrofit energy use.
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> In the RFP, we asked for respondents to propose a broad array of measures and gave them the freedom to suggest either behavioral and operations and maintenance measures, or a combination of capital and behavioral and operations and maintenance measures. The RFP generated six responses. Because the respondent buildings have been continually renewed, many of the proposed measures were cutting-edge, with long payback periods. Consequently, many of the projects were not cost-effective.
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> The two projects selected are in Portland. Because they are regularly renewed, the projects are not super cost-effective. One is a large, newer building, and will include a mix of capital and operations and maintenance HVAC measures. The second participant is a 100 year-old building proposing entirely capital measures, including interior and exterior lighting, HVAC and retro-commissioning. The proposed retro-commissioning

measures were expensive, so we received from the OPUC a cost-effectiveness exception that allowed us to include these retro-commissioning measures in the pilot. Retro-commissioning means bringing systems back to their optimal performance parameters.

Alan Meyer: Will participants receive Pay for Performance incentives in addition to Energy Trust regular incentives?
Brian: Pay for Performance incentives are in lieu of standard incentives. We expect incentive costs to be reasonably aligned with our regular portfolio costs.

Brian: We wanted to encourage operations and maintenance and capital projects, so we requested both a capital incentive rate and an operations and maintenance/behavioral incentive rate from respondents. Because we have to reserve the incentive funds for three years, we needed to set boundaries around the incentive amounts. We also wanted to encourage the service providers to identify additional savings, so we are taking the proposed incentive cost amount and adding an additional cushion of 25 percent.

We have two tiers set up for payments. Since we will use a whole building analysis, we can't break payments down by savings for individual measures because we have no ability to verify the source of the savings. We will pay incentives at the higher, combined rate for the first 110 percent of the proposed incentive cost amount, then pay at the lower incentive rate for the next 15 percent of the proposed incentive cost amount. We can capture more savings at a lower cost in the lower tier.

We have one project underway now, with measure installation expected to complete this month. The utility will read the meters in early December, and then we will begin the performance measurement period. After that 12-month measurement period, we will review the savings and calculate the first incentive payments.

Holly: This pilot is different and exciting. It brings up some of the same issues we dealt with in the cost-effectiveness docket. Maybe this is an experiment. It feels wrong that customers want to do cutting edge work and we are trying to promote energy-efficiency and have to shut down "that new thing" instead of embracing it. There's a rub there. It's the same rub as insulation. Paying for savings sounds like the utility cost test. If you pay for savings, what is the rate?
Brian: The cost effectiveness is based on the Total Resource Cost.
Kim: On custom measures, cost-effectiveness is a yes or no screen.

Brian: The incentive rate is negotiated with the customer. We ran them through the normal cost-effectiveness calculator. One retro-commissioning measure didn't pass.
Holly: Could they still do it and not tell you about it?
Brian: We will treat it like a normal cost-effectiveness tested project and cannot pay incentives.

Mark: If a customer installed a non-cost-effective measure at their own expense and claimed savings, would they get the Pay for Performance payment?
Brian: We will use the costs measures proposed to evaluate cost-effectiveness.
Oliver: We've asked that participants inform us if the project scope changes. If it changes substantially, we will have to reexamine cost-effectiveness. If they do something within our regular program structure and receive incentives, those savings would have to be netted out of the payment calculation.
Fred: They could do measures with one year of savings or 30 years or savings. We're paying them based on the balance of long- and short-term savings. The value changes massively if the measure life is different.

Brian: If the measurements change dramatically, we have the ability to change and renegotiate the incentives. We didn't want them to change measures between long and short measure life.

Brent: Were the proposers the building owners or intermediary?
Brian: We talked with the representatives of the building owners.

Stan Price: We were an early proponent of this and are happy to see Energy Trust moving forward. I have a little disappointment that we weren't asked to be more engaged in the process. We've been more involved in other Pay for Performance pilots. We had lessons learned that might have been helpful, in particular the possibility of participants gaming the system.
Brian: There is a lot of risk mitigation in everything we do.
Oliver: The risk with two customers isn't that great. We want to create a replicable pilot and a contract we can reuse in the future. If the measure mix shifts and the projects are not cost-effective, then we set up something we can't replicate as easily.
Holly: I know we're trying to manage risk, but I would like to open ourselves up to more risk and ability to learn from failure.
Oliver: We had six proposals. Two passed the cost-effectiveness test. Others were a lot more expensive. Going to that next level of customer was too expensive and not scalable.
Alan: I like your idea. In a pilot you're trying things to find out what doesn't work. You might have tried other things if you made it more open ended.
Brian: I wish we had received more responses with different options. If we had more time, we could have negotiated with the respondents who provided proposals that were not cost-effective.
Holly: Maybe there's a concession that in the future we can look at proposals differently. Maybe we can negotiate for lower payments.

**8. Public comment**

There was no additional public comment.

**9. Meeting adjournment**

The meeting adjourned at 3:55 p.m. The next Conservation Advisory Council meeting is scheduled on February 4, 2015.