CONSERVATION ADVISORY COUNCIL
Notes from meeting on October 24, 2012

Attending from the Council:
Scott Inman, Oregon Remodelers Association
Don MacOdrum, Home Performance Contractors Guild of Oregon
Brian Zoeller, Bonneville Power Administration
Stan Price, Northwest Energy Efficiency Council
Anne Snyder-Grassman, Portland General Electric
Jim Abrahamson, Cascade Natural Gas
Juliet Johnson, Oregon Public Utility Commission
Wendy Gerlitz, Northwest Energy Coalition
Holly Meyer, NW Natural
Theresa Gibney, Oregon Department of Energy
Jeff Bissonnette, Fair and Clean Energy Coalition
Andria Jacob, City of Portland

Attending from Energy Trust:
Margie Harris
Kim Crossman
Steve Lacey
Spencer Moersfelder
Taylor Bixby
Peter West
Oliver Kesting
Diane Ferington
Fred Gordon
Marshall Johnson
Bradford McKeown
Tom Beverly
Sue Meyer-Sample
Amber Cole

Others attending:
Kari Greer, Pacific Power
Brian Simmons, Fluid Market Strategies
Sheryl Bunn, Fluid Market Strategies
Kendall Youngblood, PECI
Phil Damiano, PECI
Murali Vasily, Lockheed Martin
Wendy Koelfgen, Clean Energy Works Oregon
Andrew Morphis, Fluid Market Strategies
Zach Erdman, Premium Efficiency
Kyle Barton, CSG
Casey Maharg, CSG
Jerry Page, Total Comfort Weatherization
Mary Mann, Goose Hollow Windows
Jeremy Anderson, WISE
Jeff Catlin, ECONTC
John Warner, Blue Tree Strategies
Carollyn Farrar, NW Natural

1. Welcome, introductions and short announcements
Kim Crossman convened the meeting at 1:30 p.m., made introductions and presented the agenda. The meeting agenda and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public-meetings/CACMeetings.

2. 2012 savings forecast
Peter West presented the overview of savings forecasts.

Peter: The forecasts tell a fantastic story. Thank you to the Energy Trust staff and PMC staff for your work. We are reaching 97 percent or better of stretch goals for all utilities. Our Q3 dashboard shows us making 97 percent of stretch for PGE, 109 percent for Pacific Power, 104 percent for NW Natural and 101 percent for Cascade Natural Gas. This is great in Cascade Natural Gas territory where we have been challenged over the last two years because of the economic downturn.

We were great on every program for Pacific Power. Our prior work revamping our outreach for Pacific Power customers has been extremely effective.

New Buildings, New Homes and Existing Buildings, especially the rooftop tune-up initiative, have been driving us over stretch goal.

Production Efficiency has been a struggle. Having a broad portfolio is how we make goal and the drop in Production Efficiency is offset by success elsewhere. Effectively, we go where activity is hot to drive savings across the portfolio of programs.

Industry and Agriculture Sector

Kim Crossman: As of the end of September, the chart shows a good reflection of our expectations for Production Efficiency. We're very confident about Cascade Natural Gas territory. These are solid projects; a small set, but big savings. In PGE territory, we're on track to meet conservative goals, but probably will land higher. One large project may give us more than expected. One project can sometimes swing things for us. NW Natural industrial customers paying the public purpose charge are coming up smaller. More are on industrial demand-side management rates. We found more DSM customers this year, and fewer public purpose charge customers.

Holly Meyer: So that's why industrial is down and commercial is stronger?
Kim: For industrial there are two eligible rates, and we have to manage them as separate utilities. The smaller the buckets, the harder it is to be accurate in goal setting. We're seeing fewer projects from industrial customers paying public purpose charges this year. That's also shown in 2013 plans.

Wendy Gerlitz: Where are the customers not paying public purpose showing up?
Kim: They are in the same pipeline, the NW Natural chart. Both those paying under the eligible rates for NW Natural industrial DSM and industrial customers paying the public purpose charge are grouped together in the Energy Trust dashboards as NW Natural.

Kim explained Pacific Power savings are coming up short, and staff is in the process of determining why. The program may have done a better job pushing lagging projects out to 2013 earlier in the year. In past years, many lagging projects sat in the pipeline all the way until the end of the year. The program decided not to pull out all the stops, such as running a bonus or some other intervention, because commercial programs were overachieving in Pacific Power territory during this same period. Regardless, the Production Efficiency program will have to explain that it didn't hit all of its 2012 goals.

Commercial Sector

Oliver Kesting: The Commercial Sector is ahead of historic levels for all utilities. We are on track to exceed stretch goal for PGE and NW Natural, and working on conservative goal for Pacific Power and Cascade Natural Gas. Rooftop tune-ups and steam traps may help. The Kick-Start Bonus contributed to the pipeline, and many projects will close in 2012. The Kick-Start Bonus is the 20 percent bonus incentive offered for lighting and custom capital projects that had been committed and equipment purchased by June 29, 2012.

Oliver said New Buildings has already hit stretch goal for both electric utilities. New Buildings is close in gas savings. There were new data center offers this year, and programs have collaborated with the Oregon Department of Energy, especially Existing Buildings on Cool Schools. Multifamily deepened its outreach, cultivated relationships with decision makers and also added more instant-savings measures. Its work with regional and national organizations on M-power and Strategic Energy Management for existing facilities is off to a strong start. SEM started in November 2011 and is on track to save nearly 7 million kWh and 130,000 therms.

Oliver said Existing Buildings will deliver about 93 percent of stretch goal for PGE. The program will close the gap with projects at groceries, hospitals, hotels, lighting at auto dealers and Cool Schools. New Buildings achieved its goal for PGE, actually going 40 percent beyond. Multifamily is way ahead.

In Pacific Power territory, Existing Buildings is on track for 121 percent of goal, New Buildings is at 220 percent and Multifamily is also ahead.

Existing Buildings is looking at 147 percent for NW Natural, and New Buildings is within 2.5 percent of stretch and is looking at quick-turn opportunities.

Existing Buildings is on track for conservative goal in Cascade Natural Gas territory, and will focus on rooftop tune-up and steam trap projects.

Residential Sector

Diane Ferington: Existing Homes is on track to reach stretch goals for all utilities. New Homes and Products will hit conservative goal or a little above, and will be barely under stretch for PGE and Pacific Power. New Homes and Products is not quite there, and state tax credits may be a factor. The Residential Sector as a whole will reach Cascade Natural Gas goals.

The New Homes program achieved 117 percent of its expectations for EPS, the energy performance score. There were 125 homes in the air sealing pilot for New Homes. Ductless heat pumps and gas fireplaces were also a big deal for New Homes.

Diane said fridge recycling and other appliances were down. Staff is looking to go a little above conservative goals, but will attempt to move it higher through a promotion in Q4. There is a weatherization uptick now, but the program is still below expectations from earlier in the year. A lot traditionally comes in during the fall.

Clean Energy Works Oregon had its highest ever intake in August. Existing Homes has achieved 51 percent of its goal through Q3, which is good through this time of year. Fridge recycling outreach has been added. The highest measure has been ductless heat pumps. Pacific Power is at 67 percent of stretch goal and moving quite well in Existing Homes. They will most likely go over stretch. The program is over 69 percent for ductless technology in Pacific Power.

Diane said 655 gas fireplaces were installed this year, 31 percent higher than at this time last year. Staff is really ramping up the measure offering this year.

Diane: Clean Energy Works Oregon launched in Bend and is doing about 25 percent of what we expected. They started later than planned and will add to Home Performance savings.

Kim: We have covered program initiatives in recent council meetings. Are there questions about anything we covered?

Jim: Cascade Natural Gas sounds great, and you mentioned a lot. It's a great break from just showerheads. We're looking forward to the detailed information that led to these spectacular numbers.

Andria Jacob: If Clean Energy Works Oregon will do about 1,200 homes, what does non-Clean Energy Works Oregon Home Performance numbers look like?

Diane: Non-Clean Energy Works Oregon Home Performance projects are at about 300 out of 900 total Home Performance projects completed year to date, as of two or three weeks ago. There were 600 completed for Clean Energy Works Oregon.

3. Draft 2013 budgets

Peter: Behind all of this information we're presenting today are details in the Conservation Advisory Council packet on the Energy Trust website. For each major program, and Multifamily, we have program plans that show our objectives, strategies, tactics and places we test innovation. It shows all the thinking of our programs and how we plan to get what we intend. There is a condensed version called a one-pager, which is out for everyone to review as well and will be included in the draft budget packet when it is posted for the board meeting. Those include a description and short budget summary for each program.

Overview by Peter

This is the beginning of the 2013 budget process, and we need comments by November 2. We'll present the budget to the board on November 7, 2012. Between November 7 and November 28, we'll incorporate comments, views and updates into round two of the budget for final board approval on December 14, 2012. It'll be back to the next council meeting with your comments and comments from others who may not be here.

This takes off from the results you just saw and looks at where we're going, and where we can go, in terms of IRP, program plans and customers.

Thank you to all the staff, PMCs and PDCs who helped put these together. Thanks to Sue Meyer Sample and her staff for staying up late last night to get these draft data tables ready for today.

We received good feedback from utilities on our budget and program planning this summer, which was the first time we did that early presentation and intake of comments, and it really helped us improve the budget.

We're proposing a budget of $156.4 million. We are asking utilities to support a $12 million increase. It's a good buy at 38 cents per therm on the gas side and about three cents per kWh on the electric. That's a very economical way to acquire resources. We put a plan in place in 2009, and we intended to double our savings in five years. We are more than double this year for gas than where we started in 2009. This budget has us reaching a doubling for electric as well in 2013. It's earlier than planned, and we achieved it with very high customer satisfaction for every program.

One of our main themes is to remain flexible. We used to acquire savings primarily through capital projects, but changed to an Operations and Maintenance focus in response to customers' lack of capital during the recession. Our customers are now returning to capital measures. That means more incentives up front, and the levelized cost is cheaper.

Another is to manage cost and cost effectiveness. This budget is $700,000 less than last year's for program delivery and Energy Trust expenses.

We are addressing new avoided costs. A 45 percent drop in avoided cost for natural gas means we have to ratchet back on some measures. It's more of a problem on the residential side, but 15 percent down on what we offer on the commercial side has also been affected.

We plan to offer more support for trade allies and customers. Driving more work with trade allies has helped our success. In the end, they are the ones who do the work and we train them to help customers access our incentives.

What we have today are not the same programs we had on the commercial and industrial side because of Oregon Department of Energy Business Energy Tax Credit changes. How we take advantage of tax credits is in flux, and our programs are more independent of tax credits than ever before. The Kick-Start Bonus incentive was great to get us past the transition in state tax credits, but we don't feel we need to do it next year. If we are wrong, we will adjust.

It's great to be in a state where policy, utility and regulatory levels support us. We have to maintain our success; maintaining the growth we've gotten is a final big theme.

Residential Sector Overview by Peter

The Residential Sector is shown in more detail online. We want to increase the market share for new homes. We want an 18 – 20 percent share for 2013 – 2014.

There are 17,000 single-family households we want to work with on weatherization and equipment upgrades. We will move away from compact fluorescent light bulbs and Energy Saver Kits, and find different ways to motivate people beyond just incentives.

We need to work more on the behavioral approach, and how to embed a culture of people making little changes continually to break down the barrier to doing big things. We will continue to focus on the historically hard to reach customers, rural customers and customers with lower incomes. We'll leverage trade allies and market actors, like the City of Portland, Solarize and similar organizations and efforts. We need to simplify and find better ways to model and collect data to lower costs of projects.

We'll continue to do single-family prescriptive measures, but also address results of evaluations. As we do better, we get less incremental savings. As with CFLs, you eventually have to declare success and move on. Success is when people are doing it anyway, without the incentives, and the ones who aren't doing it are never going to unless they have no other option.

The EPS rollout for Existing Homes was slightly delayed, but will be in full swing in 2013. Where we go with phase 2 of this effort will depend on phase 1.

For enhanced engagement we have an option for direct trade ally referral and follow-up to speed customers to market.

Clean Energy Works Oregon and the standard Home Performance offering will be offered at the same time. One includes financing and the other doesn't. Savings Within Reach is looking into adding a loan module.

For trade allies, we have enhanced tools and engagement, and a real estate ally channel.

Products continues fridge recycling as we have good market penetration. There will be higher tiers for appliances but average savings are going down as standards go up. We seem to have done quite a bit toward getting what is out there. 2014 may be the time to move on. We will be engaging retailers to put out more of the higher tier products so customers only have options of energy-efficient and more energy-efficient products.

On our pilots, we shifted Opower into a final phase to test persistence. Savings are good on the electric side, and only okay on the gas side. We're not sure it has to be done jointly, dual fuel, in the future. We now want to see how long the savings persist by ratcheting back engagement. We are replacing it with a Pacific Power, electric-only test with 15,000 high user homes. We'll try an Aclara direct mail with PGE. We're in discussion with NW Natural for a pilot of similar type in 2013.

Commercial Sector Overview by Peter

For the Commercial Sector we want to get customers to act sooner, reduce the delay between studies and action, and do more at the same time. That's the biggest theme on the commercial side, to speed customer action and get more immediate savings. We have streamlined offerings and created packages. Where we had packaged things, customers moved more quickly.

We are moving SEM further forward on the commercial side. We will use what we learned from industrial for commercial. There will be more targeted efforts. There are 32 target sectors in all and more than 18 on the commercial and industrial side. It's more complex for us, but specificity is working.

For schools, we worked out a new way of coordinating with the Oregon Department of Energy. We co-market and recruit through the Oregon Department of Energy and we offer services. Ten school districts with 30 schools have been involved so far. It's quite effective.

Existing Multifamily was changed. It used to be divided into small and large buildings. Smaller buildings were handled in residential, but over this past year, it became a fully dedicated offering with less confusion for customers. Landlords wanted a one-stop shop. It was broken apart before to focus on larger owners. Many smaller properties can be approached in the same way. The offering includes appliances and engaging suppliers upstream to incent more efficient models.

We are focusing on improving how we make the business case. More and more management is involved in decisions, especially larger capital choices. CFOs, risk management and real estate are all involved. Building operators need to sell these things up and down their chain.

Path to Net Zero will end soon as a pilot. It asked how close a building can get to net zero. Many reached 70 to 90 percent and some were close to 100 percent. The results can help us learn how to exceed the new code.

PMC contracts last a set amount of time and we re-bid each contract on a set schedule in accordance with our policy. Next year we will have a PMC Request for Proposals for New Buildings.

Industry and Agriculture Sector Overview by Peter

For the Industrial Sector, we need to maximize savings from each project for cost effectiveness. We need high technical realization rates of savings and need to facilitate projects, so it's very hands-on.

We've seen an increase in smaller industrial and agricultural projects. Our volume has gone from 300 projects to 1,000 per year in the last three years. We'll keep doing what's working. We have the right approach with incentives and more SEM. SEM drives engagement over the long run with customers. We'll continue with PDCs as account managers. SEM has given us a great set of sales people, the participants. They bring ideas from what they've done. We are building a community of industrial champions and will continue to coordinate with these market players and leverage them to engage other customers.

ISO 50001 launched. It's starting off slow, and we'll know more in the spring.

We'll also focus on wastewater treatment and on agriculture and scientific irrigation.

Program delivery services RFPs will go out next year for the custom PDC contracts that are nearing the end of their contract terms. They are scheduled to be settled by August 2013.

2013 Budget Summary by Peter

Peter went over the proposed expenditures and associated savings goals in some detail. We are proposing to get 54.8 aMW and about 5.1 million therms at a cost of $153.2 million. The presentation is available on the Energy Trust website, along with all the supporting documents.

Discussion

Jim Abrahamson: Great presentation.

Kim Crossman: The information we're presenting was just completed this morning and is last minute, and it will be on the website.

Diane Ferington: Program plans will be there, too.

Andria Jacob: Opower is controlled for avoided cost for gas, but it's still not cost effective. Is that due to the drop?
Peter: One of the things we learned is that it takes two years to be cost effective on behavioral pilots. By the second year, they have gone deep enough that the average makes it more cost effective. The results on gas were not as robust as electric. This, plus the new avoided cost, would mean we need 50 percent better savings from each gas customer.

Holly Meyer: Will you make sure the Pacific Power pilot is electrically heated, and not just electric customers?
Peter: Yes, that is the intent.

Juliet Johnson: It's a shame to see the savings from Opower going away. Are there other ways to get the behavioral savings?
Peter: Yes. Our behavioral initiative with PGE through Aclara will launch fall 2013. We're in discussions with NW Natural about other options and with Pacific Power for the mentioned Opower effort for electric-only users. We're toying with different kinds of contests to get behavioral savings. Opower just wasn't a good buy for gas with the new avoided costs.

Diane: We also have a small budget for new technology, like the Blue-line monitors pilot, but we haven't identified anything. A few devices are close, and if the Energy Trust Planning Group approves, we'll do it.

4. Gas weatherization cost effectiveness – revisited
Fred Gordon: This discussion is about what happens when avoided costs go down. The Oregon Public Utility Commission granted an exception for weatherization measures, and we're putting together another request for a bundle of other things. How we deal with cost effectiveness drives the budget.

> In July, we were presented with a forecasted 45 percent drop in long-term natural gas prices. We had trouble with cost effectiveness for some measures before, but with the drop, the measures were no longer passing the societal test and the program wasn't passing the societal test. We needed 50 percent more therms per dollar spent to pass the test. We put together a detailed appeal to the OPUC and asked for an exception to bring things up to the right level over a two-year period.
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> There are two steps: Right now for the gas weatherization program as a whole, we have a societal benefit/cost ratio of 0.6. That means that we need 50 percent more therms per dollar spent to get to 1.0 and to pass the test. We will shoot for 0.8 in 2013, and 1.0 in 2014. For some measures, the B/C ratio is worse. No single improvement can make this big of a difference. We need higher avoided cost forecasts, more savings and lower measure costs. Avoided costs might be revised in the next couple of years, but we can't count on it, especially on them changing enough to solve the problem without performance improvements. We're not waiting for avoided costs to go up; we're getting more efficient.
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> Under the OPUC's agreement to grant an exception through UM1622, single-family duct sealing ends on January 1, 2013. We will still run a prescriptive duct sealing pilot to see if that will increase savings and lower costs. Air sealing only has one year of impact evaluation. We are cleaning up the data to perform an evaluation of years post-2009. Unless results improve markedly, we'll have to discontinue air sealing at midyear 2013. We will try to develop a procedure for a prescriptive approach to air sealing and pilot test that.
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> Part of our agreement with the OPUC is to put more realistic payback information in front of customers. Payback estimates currently provided by simulation models are on average based on estimated heating loads that are twice what the bills show; we need to fix that. If we do, we can hope that customers are better educated on cost and value and will get more bids and look for lower project costs. The invoice cost is what's considered in the cost-effectiveness calculations.

Fred: Given the current cost-effectiveness approach, cost per delivered therm will have to go up and measure prices must go down if we are to continue to support these gas measures. There's no magic that can change that. We have to focus more on where we can get big savings and eliminate installations with marginal savings. Also on how to reduce transaction costs. Solar water heating will go down some tracks that Rob Del Mar, Energy Trust's residential solar senior project manager, started. They'll streamline quality control checks for both solar and weatherization. We'll look at whether we can we simplify and ensure quality by reducing procedures for contractors.

What might change? The forecast may go up or down; nobody knows what will happen with gas costs. We may or may not be better off in two years. The rule may be open to consideration for cost effectiveness. The role of the state government in weatherization may change as part of Governor Kitzhaber's 10-Year Energy Plan. We need to get to a convergence of cost and savings.

Now I'll talk about other gas programs that have gas cost-effectiveness issues. Within Home Products we're still sorting out some issues with clothes washers, and other measures are okay. For New Homes, most gas Builder Option Packages don't pass the societal test. For New Buildings, the gas end of the program doesn't pass, and neither do several measures. For Existing Buildings, the gas program doesn't pass, and measures accounting for about 15 percent of 2011 gas savings don't pass. Commercial solar water heating is at 0.9, even with use of a proxy for non-energy benefits.

For New Buildings and New Homes, we're thinking about a second exception request with the OPUC, because programs impact codes, standards and practices, and transform markets. Over the next two years, New Buildings and New Homes would review gas measures to make sure they really have market transformation potential, and will discontinue them by 2015 if they don't.

For Existing Buildings, measures that don't pass on a site-by-site basis may have potential for market transformation. Our current idea for an appeal includes the feature that measures with a societal B/C ratio below 0.7 will be discontinued beginning January 1, 2013. These measures in 2011 accounted for about 5 percent of savings.

We'll review measures with societal B/C ratios between 0.7 and 1.0 to see if we can improve the B/C ratio or we think there's real market transformation potential.

With respect to the Existing Buildings program as a whole, we think we can improve the societal B/C from 0.8 to 1.0 by the end of 2014.

Commercial gas solar water heating will follow the residential exception of trying to reduce cost, adding new technologies and doing custom analysis with cost caps. B/C ratios could improve, but are unlikely to reach 1.0. We'll revisit it in two years.

The next steps are talking to the OPUC, plus the Conservation Advisory Council and our programs, about what sort of proposal to submit. There will be a public input period for the OPUC. Staff will write comments and recommendations, then go to the OPUC to decide. We want to get something in their hands during the next two weeks or so to resolve in time for our 2013 budget process. Two years allows us to review it all. At a program level, there may be other requests for individual measures. We won't hold up the big requests just for single measures.

> The discussion so far has been about gas measures. Electric avoided costs may drop by 10 to 20 percent next year. That's not as huge as gas, but some measures on the margin will have problems. We haven't looked yet because we're busy on gas right now.
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> How are other states addressing these problems? There are a range of approaches. British Columbia deemed gas avoided costs to be half of electric, but their electric avoided costs are based on gas turbines. We're not sure how that makes sense. Utah uses only a utility test. Massachusetts uses a deemed value for soft benefits. Washington has an open docket reviewing assumptions and factors in avoided costs. They are about one to two months behind us in their process.

Holly Meyer: It's helpful to see other states because this is a national issue. Are the others just giving up? What's the alternative?
Fred: Avista has proposed to shut down gas programs, but other states aren't shutting down the shop. They are trying to decide and make sense of it. Some California programs are said by the utilities to be politically mandated, so cost-effectiveness issues are acknowledged, but programs are proceeding.

Juliet Johnson: Avista and the Idaho PUC have agreed to suspend Avista's gas programs in Idaho.

Holly: Are we open to looking at other ways to measure cost effectiveness; policy things?
Fred: Yes. This has been around the Conservation Advisory Council for a while, and we're open to engaging in these conversations.

Scott Inman: Do these changes flow into Clean Energy Works Oregon projects? Won't they affect Clean Energy Works Oregon?
Fred: Clean Energy Works Oregon can include measures such as duct sealing as eligible for their financing offerings but they will not be eligible for Energy Trust incentives. They are set up to save energy but also have a primary objective to create jobs, and Energy Trust doesn't.

Stan Price: Is there any thought about using the two-year window to run a parallel process and figure out the quantification of non-energy benefits? What if there are ways to make changes in cost-effectiveness determinations with better numbers?
Fred: It's whether or not the OPUC wants to look at that. Our process evaluation of Home Performance was discouraging in terms of the consumer's stated values. Many said that once trade allies described health and safety benefits, those things were considered. But when asked why they made the investment in efficiency, very few listed those things as major considerations. A new draft process evaluation of the Existing Homes program appears to provide some different information. Different studies will give you different answers. I think it's an area we can look at if the OPUC considers it important.

Kim: Custom projects in Production Efficiency and Existing Buildings can yield quantifiable, non-energy benefits. We don't typically do the work to quantify these because we don't need to to pass, but we quantify them when it's important to do so.

Fred: There are clear cut things like the water, detergent and sewer savings from efficient washing machines. We can measure productivity or product quality benefits from some industrial projects. Health and safety benefits cannot be estimated in a cut and dry way. How hard do we lean on these non-quantified benefits? I'm worried about investing a lot more in studying them and getting contradictory information.

Stan: If it wasn't hard it would have been done already. If Energy Trust is going back to the trade ally community and asking them to sharpen their pencil, or work for free, it's incumbent upon Energy Trust to do everything possible to show you're working on your side to reduce costs and study the problem.
Fred: Completely agree. As long as we focus on work that will be useful.

Don MacOdrum: EPS is another contentious topic. It's conceivable that EPS can be a pilot to track non-energy benefits we're installing. On electric avoided costs dropping, how does that relate to electric air and duct sealing going away? What's the electric drop prediction based on?
Fred: The forecasts provided by the utilities are dropping. We don't know exactly by how much. There's a hedge value assigned to efficiency that hasn't yet been determined by PGE. That will influence the degree of the drop. We do know that electric avoided costs are going down.

Marshall Johnson: It's about higher costs of measures, lower savings than expected and lower avoided costs. Even if electric avoided costs are not as significant of a decrease as gas reduction impacts, the higher cost of measure installations impact the benefit cost ratio.

Fred: We're looking at how to lower our costs and PMC costs as well as to encourage vendor invoice costs to drop. We have cut out some Energy Trust planning and evaluation studies for instance. Peter has worked to cut a few million dollars out of our draft budget for next year. It's not just the trade allies who are impacted by this cost-effectiveness issue. We are asking questions like how do we streamline, do more online and refer people more quickly so they can act.

Scott: Clean Energy Works Oregon costs were generally higher than others.
Fred: At this point Clean Energy Works Oregon is a small part of the overall Existing Homes program activity and not the biggest influence on our costs. Its cost data also is more difficult to understand because of the nature of the program. How trade allies report costs may be different under Home Performance and Clean Energy Works Oregon and different again from the standard program. We're trying to understand it better.

Scott: Window projects show full invoice costs, where only a portion of the cost may be for the efficiency upgrade.

Theresa Gibney: In terms of which benefits are included and not included, what is the OPUC allowed to include?
Fred: They include ratepayer and utility system benefits. It may be beyond the authority delegated to them by the state legislature to consider jobs or economic benefits, because they benefit Oregon at large, not the utility system or ratepayer, per se.
Theresa: At a minimum, it becomes a political question, and not for this forum.

Don: So it's a question of ruling or opinion?
Juliet: The Department of Justice opinion is from the early '90s.
Fred: And it is the basis of the 1994 OPUC rule.

Holly: Clean Energy Works Oregon measures are deemed instead of custom?

Marshall: Costs of Clean Energy Works Oregon may include energy enabling improvements embedded in our database but maybe aren't part of that measure. We found that savings for a given measure in Clean Energy Works Oregon and Home Performance are consistent with savings claimed in the prescriptive track, but installed costs per measure are higher in Clean Energy Works Oregon and Home Performance.
Fred: We are assuming deemed savings estimates for all weatherization tracks. They look more reliable than modeled savings results so far. We may later develop simulation models that are better calibrated to the loads we find in homes, but not for now.
Marshall: For context, these issues for modeling are with respect to homes. Commercial programs rely on simulation models and will continue to do so.

Mary Mann: It's puzzling. When you talk about contractor costs, you have to talk about wholesale prices, and you have to look at the time you're adding to sort through programs. I gave a price for insulation to someone who doesn't qualify. Another trade ally said the homeowner did qualify. It's very confusing to us, because the requirements don't line up with the state's requirements. If a customer is moving away soon, how is the payback going to support doing a project? How do I answer that? It's good for the house, good for moisture problems, good for air quality and more, but that's not enough. The economy is moving and prices are going up, which comes back to contractors. Your incentives aren't decided on that basis.

Marshall: We'll give a resource that allows customers to have enough information to know the savings over the life of the measure. Our job isn't to decide on an individual basis. It's more like a mortgage calculator.
Fred: With intent that they find it and use it. We're seeing a problem. Can we make it cheaper or should we stop?

Kim: Should we clarify utility versus societal tests?
Fred: The societal test includes all the costs. That has been in the rules since 1994. You may feel what you charge isn't our business, but we still have to figure the whole cost into the investment.

Jeremy Anderson: When you're looking at total measure cost, how much is your PMC and program cost? Part is contractor costs and part is your costs.
Peter: When we're talking about utility test or societal?
Fred: For individual measures, we look at the measure cost and incentive cost.
Peter: We need to go back and look at the cost of incentives as it relates to PMC delivery cost. Some program activities that are delivered directly by Energy Trust such as Opower are included and aren't relevant for looking at the homes program at the PMC level.

Kim: Fred covered measures and programs. The question of program costs comes up in relation to program cost effectiveness, not measure cost effectiveness. There is information in the meeting packet about the portion of administration versus delivery and incentive costs. The back page of each one pager shows it.

Jerry Page: A couple of things. When I started in the business, the first state bill lasted three years until there was a surplus of energy and the programs died. It's a rollercoaster. It's better to step back and not get caught up in all the evaluations, because it will change. I talk to a lot of homeowners, and air and duct sealing are considered very valuable. Policies and overzealous best practices are adding costs, and they aren't necessary.

Fred: We're open to two kinds of things. Ways to show more savings and less cost. Jeremy brought the issue of simplifying our specifications to our July council meeting. If there are other ways of doing things, we're open to them. Among other strategies, we can use the data from our new data sharing agreement to better target customers with high loads, and, hopefully, higher savings.
Jerry: I appreciate that you're doing that. Jeremy is very effective at communicating all of this.

Kim: The OPUC very quickly engaged with us and made quick decisions when we needed them. Programs in other states may not have gotten that response. We appreciate that.

Andria Jacob: What are the side effects of getting rid of the societal test? It doesn't measure the benefits to society, and the measures create jobs and are good. Why do we discuss this?
Fred: We sell incentives, trust and payback. Homeowners mostly buy trust; many aren't into the math. In watching other states that only use the utility test, I'm seeing vendors go to their legislator and drive individual measures that are not beneficial to customers. One example from Connecticut is gas chillers for homes. Without a value metric based on overall cost, when does a technology not make sense? The societal test helps hold up trust. If you're paying a huge amount for low benefits, it erodes trust. There are other ways to measure it. There may be another way to create a clear boundary for such projects, but we don't have it today.

Peter: For Jerry and Jeremy, we are interested in hearing about cost savings and redirecting these. When we look at evaluations, we have a benefit cost value of 0.2 for duct sealing. The payback is three times longer than expected, cost has gone up by 78 percent and we are getting 40 percent less savings. If you have specifics, they would be helpful. Air sealing costs have gone up 50 percent and savings are about one-third of expectations. If you can present techniques and ideas that won't tie the market up in knots, tell me.

Jerry: We would love to follow through.

Juliet: What would be the right place for the discussion?

Marshall: We have a group of trade allies represented by ORACCA, HBA, the Home Performance Guild and others to help inform our process. That group heard it first. They gave input that helped us craft the changes from a trade ally perspective and customer perspective. We would be open to more entities that fit in as a trade association participating in the dialogue through that venue.

Peter: If you give us a path that would be appreciated.

5. Planned residential incentive changes

Marshall Johnson: One of the bigger points to reference from the previous conversation is that we need more savings per project. There is an opportunity to move away from the traditional way we serve all customers to how we can serve high users and guide contractors to help prioritize. All in an effort to increase savings per measure. We have to be mindful about program requirements and measure specifications, which specs are best practices and which impact savings. Specifications impact cost and we have to find the right balance to achieve savings at an acceptable cost.

> The Trade Ally Stakeholder Group was the first venue to hear about the planned changes to incentives. We made some modifications based on the group's feedback and in agreement with the Energy Trust Planning Group.

We are proposing to end the air leakage test, the duct leakage test and duct sealing incentives on December 31, 2012. These are prescriptive measures that cut across multiple tracks. It doesn't impact mobile homes, and air and duct sealing will continue in mobile homes. Air sealing requirements will change, as will attic and floor insulation.

In the new year, air sealing will be a $150 incentive per home only available through Home Performance and Savings Within Reach tracks in Oregon. Contractors must be PTCS, BPI, REAP or PATS certified in Washington and Savings Within Reach tracks. The existing condition must be greater than 9 ACH50, with a minimum 500 CFM reduction.

Attic insulation will maintain the same incentive amount, but the existing condition requirement will be reduced from R-19 or less to R-12 or less; the requirement will remain R-19 or less for self-installed projects.

Floor insulation will maintain the same incentive amount, but existing condition requirement will be reduced from R-11 to R-0; the requirement will remain R-11 for self-installed projects.

We looked at our projects when choosing these limits. On air sealing, 80 percent of current projects coming through would qualify for pre-treatment condition of 9 ACH50. On insulation, we found that the year-built criterion would be tough for customers so we didn't use it.

Our bonus incentives will expire at the end of this year. These are things like Home Comfort Package, Heat Pump Premium Installation Package, the Windows Bonus, Home Performance with Solar Assessment package and the Solar Bonus. We feel our programs have evolved in a way that we can drive multiple measures without the bonuses.

For solar water heating, we will simplify the calculations based on loads. We will have two tiers, essentially east and west of the Cascade Mountains.

Gas tank water heater incentives will be reduced to $125 per unit.

Heat pump water heaters will transition from pilot mode to an active measure. We will continue to leverage NEEA's work to introduce this new technology into the market and will do more to actively promote measure installations.

Holly Meyer: I thought solar water heating was really close to cost effective, but it's dropping to a third.

Fred and Marshall: That was commercial, but also for homes. It's really hard to bring it to a cost-effective level with the proxy. Utility benefits are only carrying 15 percent of the cost; the rest is the proxy for non-energy benefits. This is complicated. There's no short story on that one.

Holly: If it's really close, why lower the incentive?
Peter: It goes back to utility costs. The amount of incentive we can put on the table is low based on avoided cost drops. The value of energy to the utility, divided by the incentive, is what drives this one.

Fred: When we asked for an exception, it was only for the societal test. Incentives needed to be lowered to pass the utility test in a couple of places, and that's what you see here.
Marshall: That's why the gas tank water heater incentive is being reduced.

Marshall continued: Equipment incentives are moving forward, along with advanced controls for heat pumps. Currently, incentives for Heat Pump Advanced Controls are only available through a pilot effort, which is struggling to achieve the pilot quota due to limited promotion. We have confidence in the savings assumption and will prefer to promote more installations to give us the quantity installation we need for a comprehensive evaluation. The addition of on-demand pilot fireplaces will provide more available models. Ductless heat pumps incentives will be expanded to include eligibility for mobile homes, in addition to site built.

Fred: We have QC information that indicates the installation protocol for heat pump controls are working. That measure will save energy, but we don't yet know how much.

Marshall: In 2013, we have to do something about Home Performance assessment incentives, washers and fridge recycling. Removing comprehensive modeling requirements to simplify Home Performance assessments is one step to decrease program requirements. With the removal of the duct leakage test as a requirement, we must evaluate what is the appropriate incentive level for this measure. We may want to consider requiring the installation of Instant Savings Measures to help justify the current incentive level. We must engage the Home Performance Stakeholder Group as we finalize Home Performance assessment changes in the new year. We are awaiting Regional Technical Forum information for clothes washers and fridges.

Fred: We need a decision soon on clothes washers, the measure will probably change. What we've done has succeeded.
Marshall: We plan to continue providing incentives for the early decommissioning of fridges and will move forward planning to deliver this service in 2013 in a similar manner as 2012. We will review additional information from the RTF as it's available.

Marshall: Small Multifamily is moving into a unified program offering with large Multifamily.

Don MacOdrum: Thank you for taking the Trade Ally Stakeholder Group comments back to Fred. We don't want to see these things go away, and you have worked on our behalf. Efficiency First put on a cost-effectiveness workshop yesterday, and Energy Trust staff member Lakin Garth did great. Two others were there who you know. Maybe we can all use a cost-effectiveness workshop, and it would help if we can get familiar with jargon and math. With floor moving to R-0 we asked how that is evaluated, given that hanging insulation is close to that. How is hanging insulation going to be treated?
Marshall: It's a good question, and we'll work with the PMC on how to communicate that. We'll alter what we've said historically. There has to be no floor insulation for the site to be eligible for the floor insulation measure.

Don: Not hanging, but no insulation?
Marshall: A follow-up communication with specifics will be needed. There has been an interpretation before now that hanging insulation equals R-0. We'll provide guidance.

Jeff Bissonnette: On the general conversation, we're in a unique position. There is some ebb and flow in support for efficiency, and established policy to keep down ebb and flow and not make the peaks and valleys as extreme. We tried to avoid the situation we saw in the late ‘90s when we left a lot of savings on the table by not being consistent. With respect to low gas avoided cost forecasts, we may not be seeing a blip. We’re trying to figure out what we’re seeing, and need to look at smart investments and keeping the programs intact. We need to be more surgical. What’s smart for the industry and ratepayers? The utility system isn’t supposed to do economic development. If we can monetize other parts, we’re okay with that, but there needs to be a focus on the utility system and a close look at the math. We have the ability through Energy Trust to be more surgical, and we should take advantage of it. We need to move forward in a way that’s not crazy for everyone involved.

Theresa Gibney: We had all learned our lesson together last time, and everyone wanted to avoid ups and downs. We wanted to make things stable through Energy Trust. We need to do the right thing, and it’s great that everyone wanted to avoid metrics with negative consequences.

Holly Meyer: It’ll be a bigger discussion later, and I appreciate what Jeff, Andria and Theresa said. We need to be consistent, and utilities shouldn’t be in the societal part. We need to be sensible about it, and we may be cutting things out that people want, are beneficial to utilities and are wanted by contractors. It’s good that we are all discussing it together.

Peter: If you take out Opower, it looks like the gas goal in the draft 2013 budget is 5 to 8 percent less. In what we’re proposing, we’re still getting about 90 percent of what we are doing today, if we include the drop in avoided costs.

6. Public comment

Mary Mann: I’ve been in this industry since 1980, and if, out of the entire program budget, 50 percent is going out in incentives, with residential getting a small percentage, maybe the money needs to be backed out of program management. Unless you plan on cutting back the public purpose charge, which would also be beneficial to the public, where is there room in cutting back on program management? If I was a nonprofit, I would be shut down if only 50 percent was all that’s delivered back to the public.

Peter: We compete the program management and PDC contracts. We have the lowest delivery rate around. Training, advertising, customer service, trade ally assistance and ensuring we can stand behind our trade allies are all in the administration costs. We are the fourth best state in overall support for efficiency, as reported by ACEEE. We are doing great for a state that has one of the lowest electric rates. We’ve lowered the delivery costs and hit our goals, and I’m proud to stand behind those things. I do not believe we’ve done badly for the ratepayers by pumping $154.6 million back into the economy. We offer a high-quality, high-touch product.

Jeremy Anderson: Two things on duct sealing. With the current plan, you will disqualify all Energy Trust customers for state tax credits. The Oregon Department of Energy perhaps can change?

Marshall: For context, we currently help the Oregon Department of Energy in processing projects that qualify for duct sealing, so when they meet our requirements, they meet the state’s requirements. They piggyback on our processes. The state would need a new way to regulate duct sealing. What Jeremy is referring to is that if we stop doing it, the state may not have resources to fill in the gaps.

Theresa Gibney: Jeremy and I need to meet with Maureen at the Oregon Department of Energy.

Jeremy: The state hasn't got another answer besides let Energy Trust keep running the administration. Is there any way to salvage a shred of duct sealing? You have an infrastructure that knows how to do it, and if you kill the program, you lost them when they're laid off. If a few know what they're doing still, your next pilot won't fail.

Brian Zoeller: Gas is B/C ration of 0.3, but what's the electric ratio for duct sealing?
Marshall: It's 0.7. The PTCS model may have trained people to sell at a higher rate, due to more complex requirements related to diagnostic testing.

Jeremy: If you split out Savings Within Reach, their costs may be lower.

Marshall: We found duct sealing costs increased by 78 percent from 2009 to 2011. Savings went down 48 percent.

Brian: The RTF looked at measures that were higher. The Bonneville Power Administration won't get rid of PTCS, but a prescriptive approach may be good idea.

Juliet Johnson: Why did the price go up so much in two years?
Paul Sklar: We used deemed costs before, and actual costs have ended up higher than we originally deemed.

Jeremy: Can you look at it geographically?
Zach Erdman: Yes, because my rates haven't gone up.

Paul: Initially, we deemed the cost at just below $400 after the state tax credit is deducted, but in reality we've seen the average cost at more like $700 after the state tax credit is deducted. This is about an 80 percent increase in the cost. We picked the wrong cost initially.

Marshall: It's a good suggestion to look at variances in cost across regions and program tracks, and we will.

7. Meeting adjournment
Kim thanked all council members for their participation and adjourned the meeting at 4:40 p.m.

Presentations are posted online, and council members and the public can send additional comments to info@energytrust.org or to Peter West at peter.west@energytrust.org.

The next full council meeting is November 28, 2012.