CONSERVATION ADVISORY COUNCIL
Notes from meeting on June 19, 2013

Attending from the Council:
Garrett Harris, PGE
Don Jones, Jr., Pacific Power
Scott Inman, Oregon Remodelers Association
Warren Cook, Oregon Department of Energy
Juliet Johnson, Oregon Public Utility Commission
Brent Barclay, Bonneville Power Administration
Stan Price, Northwest Energy Efficiency Council
Don MacOdrum, Home Performance Guild
Charlie Grist, Northwest Power and Conservation Council
Andria Jacob, City of Portland
Karen Horkitz, Northwest Energy Efficiency Alliance

Attending from Energy Trust:
Kim Crossman
Peter West
Tom Beverly
Fred Gordon
Julianne Thacher
Andrew Shepard
Matt Braman
Taylor Bixby
Marshall Johnson
Diane Ferington

Others attending:
Tim Miller, Clean Energy Works of Oregon
Tim Davis, CSG
Sara Brockmeier, Fluid
Marilyn Morfitt, NW Natural
Kendall Youngblood, PECI
Keith Kueny, CAPO
Lis Saunders, NEEA
Christina Cabrales, CSG

1. Welcome and introductions
Kim Crossman convened the meeting at 1:35 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at www.energytrust.org/About/public-meetings/CACMeetings.aspx.

2. Old business and updates
Kim: We promised to revisit older items as a review at the beginning of each meeting. Last time, we asked the group to give us feedback about the program dashboards. Peter can tell a little more about it.

Peter: The assignment was to take a look at the one-pager dashboards we typically give out with our updates. We want to know if they're informative, timely and helpful. Many people who accepted the homework assignment aren't here this time. For one thing, it looks like we can stop limiting them to a single page. You can email your thoughts to us, also. It's a continuous improvement process and we'll give feedback as we make changes.

Juliet: The amount of information seems good. It would still be helpful to have the dashboards presented by staff at Conservation Advisory Council meetings.

3. Residential sector historical trends, current events and coming attractions

Residential sector

Matt Braman: The overall 2012 electric results for the residential sector were great. There was about 90 percent growth over the last four years, NEEA was consistent over the same time period and most of the growth was in Existing Homes. Fluid implements Existing Homes, and New Homes & Products is run by PECI.

> Our 2012 natural gas results were similar to electric. From 2009 to 2012, there was 105 percent growth in savings, so we basically doubled what we were doing.

Juliet Johnson: You are good at hitting the target, or just slightly above or below. Is there something at the very end of the year that you do to get so close?
Matt: That definitely happened in 2012. Part of it was that Existing Homes was great in some areas and New Homes & Products did well in others.
Marshall Johnson: There are some levers we can pull toward the end of the year to help us. That will become more challenging in the future as standards change. Simple marketing campaigns may not work as well to ramp things up or down.
Charlie Grist: We set many individual targets, and there are enough of them that if you're high or low in certain areas, you can still end up doing well overall. Unless there's a systematic overage or shortage, it shouldn't be a problem.

Kim Crossman: As Marshall mentioned, they do have some levers at their disposal to change outcomes, dial it in. Because of our long project development cycles, the programs serving large customers, like industrial, can't quickly ramp up and down, but residential can do that.

Matt: We expect natural gas savings to level off over the next few years, and it will take innovation to keep us on our current path.

New Homes & Products

Matt: New Homes & Products are two unique components of a single program. Products are sold at retail, while New Homes involves just new home construction. 2012 was harder for New Homes & Products. We fell short of savings goals, ending up with about 80 percent of electric and 90 percent of gas. For gas savings, Products realized a little under 300,000 therms, while New Homes realized about 500,000 therms.

> Electric savings in New Homes were trivial. Products drives electric savings for the full program and New Homes drives gas savings. Retail sales were down significantly in 2012. For appliances overall, which includes washers, fridges and lighting, the baselines are going up and savings are going down. As we see that happen, it becomes more difficult to hit the targets. We don't support LEDs, which also hurts our electric savings.

Juliet: You do ramp the incentives at the end of the year?
Matt: At the beginning of each year we adjust, but we don't typically ramp up or down during the year.

Matt: We also work with low-income agencies to hand out Energy Saver Kits to clients. They account for about 6 percent of electric savings. Retail showerheads and light bulbs account for a lot of savings. A couple of large retailers quit carrying the showerheads, and we are still working with them.

Don MacOdrum: Was it just that they weren't selling?

Matt: With products, when we first offer them they usually do well, but then they taper off. The shelf space is valuable, so retailers fill it with other things. Bonuses and limited-time offers may get them back on the shelves.

Juliet: Do you provide the store with incentives for each one they sell?
Matt: We reimburse them. Showerheads are part of the Simple Steps regional program with the Bonneville Power Administration. Fluid works on it, and utilities can opt in. They figure the percentage of sales going to various utilities. It sums to 100 percent as far as who claims the savings, and we don't have to pay for savings outside our territories.

Matt continued his presentation. For New Manufactured Homes, we are working on measures we can use to continue engaging in the market. We need to look at the next thing we can go after. ENERGY STAR® is about 60 percent.

> Fridge recycling is about 25 percent of our electric savings, and lighting is the largest part of savings at about 50 percent. That's mostly compact fluorescent light bulbs and a few LEDs. *[See presentation for breakdown.]*
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> Products don't have a lot of natural gas savings. High-efficiency washers use less and less water, and that's where gas savings come in. Energy Saver Kits with showerheads and faucet aerators have some gas savings related to them. Retail showerheads are another part, but they're a small part of the residential portfolio for gas savings.
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> Energy Independence and Security Act of 2007, EISA, impacts are coming into effect, and we moved away from general purpose CFLs to specialty ones in response. CFLs increased through 2011, then dipped in 2012. Savings followed the volume trend. Savings per bulb have been declining, and there was a 15 percent decrease from 2011 to 2012. As EISA goes into effect, the standard hours-of-use assumptions changed the savings.

Don Jones: What kind of installation rate do you have with those?
Matt: It's about 80 percent, which follows the Regional Technical Forum closely.

Scott Inman: Is that just retail? It's nothing to do with energy audits?
Matt: Marshall will address that in his slides. With LEDs, a variety of products have shown up. We were on board with CFLs, but not with LEDs. That was the main driver in the decrease. Retail sales were down, also. We have worked with our Planning and Evaluation group to pick LEDs to support, and determine how we should support them. Last fall we added screw-in reflector LEDs, and we saw some increases. They are about 10 percent of this year's retail lighting sales.

Charlie: Are they program qualified? The rest were CFLs?
Matt: Yes, those are qualified, and the rest were down-lights.

Matt: LED A lamps are the next thing we're looking at to include in the programs. We're determining what types we should look at.

Charlie: This is the first time I've seen retailers jump out ahead of us. It makes setting a baseline tricky.
Matt: Costco had a lot of products, and could probably use bulk pricing to offer them competitively. We're hearing about $70 for a six pack of LEDs, which is reasonable for a 60 watt replacement.

Fred Gordon: A lot of manufacturers and retailers have filled the shelves with LEDs we wouldn't touch. The lumen outputs weren't comparable to the products they were using for comparisons. We want to wait until the options are comparable. An LED that costs more produces fewer lumens, in many cases. We're struggling to find value. They also have problems with dimmers, and we didn't want homeowners to get into products without dimmers. We've been asking others who ran out ahead of us how well they did. If they stay out of trouble, we'll follow. We're slow because we're watching consumer value.

Don MacOdrum: I just purchased LEDs, the dimmable candelabra style. For a product like that, should we eventually expect to see incentives, for specialty items?
Matt: We might offer incentives for good specialty lighting, so I wouldn't say we will ignore them.

Don: For a typical $15 bulb, what would the buy-down be?
Matt: Right about $3 per bulb. We're finding that $10 seems to be the right price to get people to buy them.

Charlie: Part of the challenge for you is deciding on a set of specifications that determines what's good and bad. The market is kind of like the Wild West right now.
Matt: We start with "Buy ENERGY STAR." ENERGY STAR is about 45 lumens per watt, and we're looking at a slightly higher bar. We hope that the buy down and point-of-purchase signage will help steer people in the right direction.

Charlie: Higher-end retail chains may be an option there.

Don: As a side note, LEDs have a great life span. Supposedly, my new bulbs will last about 22 years.
Matt: That's true that they last longer.

Matt: We just completed a lighting shelf survey with NEEA, and we oversample in Oregon. In 2011, 50 percent of stores stocked LEDs, and it was 70 percent by 2012. They continue to grow, especially in higher lumen outputs. In 2011, 53 percent were less than three watts. I don't know how much use those have. By 2012, it dropped to 28 percent, so we're reaching the level where they are viable replacements for regular lighting. One of the biggest trends was that fewer products were being stocked, overall. When a consumer goes to Home Depot or Lowe's, they are replacing what they had in the sockets, or are just happy with what they buy. The quantity of incandescents fell by about 50 percent, and by 25 percent for CFLs. They are moving toward fewer products in the store.

Scott: Do they have fewer environmental problems with LEDs?
Matt: There's no mercury, and they don't have as many disposal problems. They also don't have the breakage concerns of CFLs.

Scott: If you can make more margin selling good ones, it makes more sense that they move in that direction.
Charlie: They need to look at providing light and savings, and what's going to sell best.
Peter: With market uplift, we are trying to negotiate with retailers to not even carry the low-end models; so we're moving the baseline higher.

Don: Maybe you work with manufacturers to drop the lower-end models and only make the better ones, if this trend can influence the reduction of models.

Matt: Phil has good information about LEDs. A good dimmable LED has many uses, but we don't need as many different products to fit the bill. A 100 watt incandescent had to become 25 percent more efficient under EISA. By 2012, 72 percent of incandescents met EISA standards. The ones that didn't meet them are coming off the shelves. That's the trend we want to see. The worst ones are essentially gone.

Charlie: This is from the store survey?
Matt: This is from NEEA's shelf survey. Lighting is a big part of the program. As they move away from the 100 watt incandescents, customers are moving toward a lower output in lumens. We're trying to understand it.

Charlie: There's some swapping. People may decide they can live with a 75 watt equivalent, for now. Is that right?
Matt: The 100 watt incandescent may be more light than they needed. That's what we're finding.

Matt continued his presentation: Appliances are two different stories. For washers, we had multiple tiers from 2008 to 2010 and we lost state tax credits. Retailers find it easier to upsell people to a high-efficiency washer. Fridges are harder to do because people want certain sizes and configurations that are harder to match. 2011 was the first year we didn't have state tax credits, and it's hard to say that tax credits caused the drop when clothes washers stayed roughly the same.

> For fridges, the baseline is going up and incentives are going down. 2014 will probably be the last year we are likely to support a mail-in rebate. We want to work with retailers to make their whole stock more efficient. Fast Feedback shows that the sales staff has equal or greater influence than our incentives. There's a fair amount we can do by working with retailers and their sales staff. We are pushing the bar also with clothes washers. We need the retail market to understand why they should work with us. We're working with Kmart, they have flexibility on what they stock, and we're trying to support a higher market share of high-efficiency models. If you get below a $50 incentive, it's hard to justify a mail-in rebate. A time-of-sale incentive has an impact.

Juliet: Have you done that before?
Matt: We did it with Sears, and are wrapping up with them. We're going to talk about expanding it.

Juliet: Was the pilot successful?
Matt: We have some lessons from the pilot, and we're learning from the wrap-up. Redemption rates weren't as high as we wanted to see. They were at about 40 percent of products, and we would have liked staff to push harder, but the incentives caused commission decreases for staff.

Brent: 40 percent of qualifying units sold had redemption data? Would you still be able to account for the rest?
Matt: That's more of a market transformation approach, and we're trying to get better market data on them.

Scott: Would they allow you to do a sales spiff by salesperson?
Matt: Sales spiffs are a possible way to work with sales staff, outside the commission issue.

Fred: BPA has a frozen efficiency baseline, which means they include efficiency regardless of whether they helped cause it. We're trying to account for what would have happened without us.
Brent: If you hadn't had the rebate, maybe some of the models wouldn't have been there.

Charlie: What was the fridge story?

Matt: The economy was down and the state tax credit went away. As we changed the requirements, there were fewer options to upsell customers to. We found that people came into the store wanting a certain size and type of fridge. They have a certain size of space to fill in their kitchen.

Matt: Fridge recycling is something we've pushed for about five years. In 2012, we saw a 15 percent decrease from the last year. The top line in the chart is 2011 and the bottom is 2012. We had a lower incentive, which we expected to have an impact. As you get the old fridges off the grid, you would expect to run out of them. In July and August 2011 we got a lot of media attention for our Oldest Fridge contest. Technically, a 1935 fridge is pretty efficient; so there were some challenges with messaging. It got a lot of attention and pushed us over the top. In 2012, it decreased during the same months, and I believe that's because we didn't have a big media campaign. We want to do it again in 2013. We worked with Oregon Food Bank in 2013 to allow customers to donate their fridge recycling incentive. The money is important, but the convenience of having free pickup is a big thing customers like about the offering. The donation is for a good cause and is related to fridges. We launched it in June, and consumers can already donate. About 10 percent of incentives are being donated, early on. Right now it's about $1,200 per week in donations. Media interest will bring more donations and increases in volume.

Scott: Are most people buying new fridges, or do they just have an old fridge for pickup? Are retailers taking them as they buy new ones? Is that down this year, from 2012?
Matt: About one-half are replacing existing units. In some cases we work with retailers like Sears to have them pick the old ones.

Marshall: What about saturation? Can we keep doing this for a couple of years?
Matt: We think we can do this for about another two years.

Charlie: One thing that's happening is that the standards haven't changed much over time.

Don Jones: Your unit energy savings will head down. I've seen that from other regions. The avocado fridges are the right age to be the sweet spot.

Matt: We may have a different message for the older fridges in 2014. Right now, the incentive doesn't depend on age. We're considering using incentives based on age to push the market toward the older fridges.

Diane Ferington: Also, we saw decreases in 2011 because we were going heavy in Pacific Power territory, so we didn't market fridge recycling in that area.
Kim Crossman: That's an example of the levers we were talking about earlier.

Matt: The new homes market hasn't been a huge source of savings, and we used the time during the economic downturn to develop a more scalable delivery structure. We moved toward independent verifiers during this time. Our New Homes program is based on Energy Performance Score, with six best practices that get builders to ENERGY STAR levels. About 90 percent reach ENERGY STAR and about one-half of those go beyond. In 2007, when we ramped up, market share was about 6 percent, but the housing market was also bigger at that time. The yellow line on the chart shows EPS rated homes we incented. The blue line is market share. 2008 – 2010 showed a decreasing number of homes but a larger market share. Code increased by about 10 percent in 2010, so we saw a decrease in market share as the new code came in. By the end of 2012, you see the effects of the 2011 code update, which added another 10 percent to efficiency requirements. In 2012, it was about 25 percent market share, and we had the largest number of EPS rated homes. We beat our target number by twice as many homes. We expect a bit of a decrease in 2013 because of code changes, but will rebound in 2014.

Scott: Is that because of the standards changing?
Matt: Yes

Charlie: It's also a natural lag in the market as they slow down to meet the new standards.
Matt: We want to push them to ENERGY STAR, but at least to go above code.

Warren Cook: Will savings-per-home drop enough that we need to do twice as many homes?
Matt: It's decreasing, but not yet by that much.

Charlie: Those things that are off the table are getting done in every home.

Brent: With homes that go ENERGY STAR but not EPS, do they get to claim the savings?
Matt: If you are ENERGY STAR qualified, you can get an EPS.

Existing Homes

Marshall Johnson: The next aspect of this presentation is focused on existing housing stock, and within Existing Homes, there are a few sub-programs and initiatives. Opower was a pilot in 2011 and 2012 with 60,000 dual-fuel customers of PGE and NW Natural. We're currently conducting a persistence study with a subset of the original sample, about 30,000 customers. We have tracks for Home Performance with ENERGY STAR, manufactured homes, Savings Within Reach and standard, prescriptive incentives. We're hitting a peak and leveling off. We're going to have to challenge ourselves to create innovative ways of driving savings on major measures. We knew that EISA was coming into play, and we wanted to achieve savings through Energy Saver Kits before that. Mobile homes were about 8 percent and Opower was about 17 percent in 2012. Two percent came from solar water heating in 2012. It was about 1 percent in 2010, and didn't register in 2011 and 2012. Cost is a challenge for solar water heating. We have plans for marketing solar pool heating in 2013.

> About 19 percent of gas savings came from Opower. 15 percent came from Home Performance and it's definitely a driver of gas savings over electric. The prescriptive track accounted for 66 of savings on the gas side. Savings come through individual measures in the prescriptive track, and are the base of the program. We claimed gas furnace market transformation in 2010 and 2011. We planned to claim 2013 and 2014 savings from gas furnace market transformation, but the glut of savings we planned to count are probably off the table due to challenges enforcing federal standards that were intended to mandate higher gas furnace efficiency levels; about 300,000 therms in 2014.
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> The majority of electric savings came from Energy Saver Kits and about 61 percent of those savings were from lighting. Lighting and water-saving devices comprise the majority of electric savings. Equipment is about 12 percent, and weatherization is about 11 percent. Mobile homes are included in direct installs.

Charlie: Opower is a big part of the savings, but why isn't it included in major measures?

Juliet: Clean Energy Works of Oregon isn't included in this?

Marshall: Clean Energy Works of Oregon figures into a few categories within the pie. Opower is still a test, so I didn't include it here.

Charlie: So the kits include lighting?
Marshall: They include lighting and water-saving devices. Customers get information about the kits in a few ways, and they complete an online survey to receive a kit in the mail.

Don Jones: Is Opower considered behavioral change? The kits fall into the prescriptive bucket, so how much of the prescriptive savings are from Energy Saver Kits?
Marshall: The category of Opower is behavioral change, and is not included in this pie. I will come back to kits soon. This also doesn't include avoided costs.

Kim: These slides focus on meeting annual goals.

Marshall: About 31 percent of gas savings are from weatherization, and direct installs and kits make up about 51 percent of those. There were over $10 million in non-energy benefits we could quantify, like water savings. It's important that we can do that for cost-effectiveness test requirements.

> This slide includes Existing Homes sites served with water heating, weatherization and heating improvements, but not kits. The chart shows the numbers and trend. Home Performance is steadily and modestly growing. Prescriptive is growing, but in 2013 we'll probably have fewer sites served. There could be 35 percent falloff of attic insulation and 10 percent falloff of floor insulation because of the new pre-existing qualifications.
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> We've penetrated the opportunity for manufactured home duct/air sealing in PGE territory, but less so in Pacific Power territory. Mobile homes in more rural areas may still show a fair amount of potential.
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> Home Performance is a sub-program track: The yellow on the chart is activity in Home Performance not including Clean Energy Works of Oregon. Clean Energy Works of Oregon is a Better Building-funded program we've worked with since 2009. Clean Energy Works of Oregon has accelerated penetration of Home Performance. We did about 1,660 Home Performance projects last year, and 75 percent went through Clean Energy Works of Oregon. It facilitates relationships between customers and trade allies, and packages the offer with incentives to the customers. A Home Performance assessment is a whole-house evaluation, and those aren't included in the numbers. The slide only shows installed measures that have savings associated.

Charlie: What kinds of measures?
Marshall: Air sealing, duct sealing, insulation, direct installs, water heating and heating system upgrades.

Juliet: With duct sealing and insulation requirement changes, will fewer projects be completed?
Marshall: Yes. The qualifications for existing insulation conditions became tighter, so fewer homes qualify. There's less savings if you start at a higher R-Value. We'll serve fewer customers with those measures, but get more savings from the ones we do. It's a program response to the need to increase gas savings per site weatherized.

Scott: If they insulate, but the starting value is above the base, you don't get credit for savings? Home Performance would go above code anyway, whether or not they qualify, but you won't take credit for that?
Marshall: Clean Energy Works of Oregon contractors use industry best practices and go beyond our requirements. From a cost-effectiveness perspective, the savings from R-30 to R-49 aren't justified. As we work on full implementation of Energy Efficiency and Sustainable Technology Act, EEAST, legislation, the rules are a little different. I don't know about claiming the savings.

Charlie: When they report their savings to you, would you back out those savings?
Marshall: They send us measure-level savings. The customer wants simplicity and the contractor comes with a whole-house package. We recognize savings only for those things that meet our measure-level criteria.

Brent: It opens the door to look at cost effectiveness differently. You can look at data for things that aren't comprehensive.
Marshall: With New Homes, you can look at the cost of going a little better than code. With Existing Homes, we are doing an assessment of homes where they just wanted to do energy improvements and wouldn't otherwise remodel. We can't as easily justify an incremental savings and cost approach.

Kim: Thanks to everyone for throwing out those ideas.

Marshall: Savings Within Reach contractors get the incentives from us and mark customer invoices down. It was aligned with Energize Clackamas, which accelerated activity. We're continuing to work on repayment on-bill for this customer segment, with the hope of coming out with something later this fall to sustain growth with these customers. They are primarily weatherization measures for a group of customers at 180 to 250 percent of federal poverty level. Their income is too high to get low-income services, but they can't pay full-freight for the improvements. There's a lot of potential. We require moderate-income customers to consent that they are informed about low-income services, but customers can decide to participate, based on their income. We promote weatherization measures, ductless heat pumps and gas furnaces.
Fred: The incentives are a little higher for these customers.

Charlie: A snapshot of the costs would be helpful with these.
Kim: We don't analyze trends of levelized costs by measure category. The trends analysis all sectors have been working on focuses on where our savings come from. In trying to split up the various program delivery costs across what went where, we would open up a massive project beyond the savings trends. There are clear technical barriers to doing that type of analysis.

Charlie: Efficiency is great, but it's a combination of savings targets and payment levels. We need to get an idea of expensive vs. inexpensive ones.
Marshall: It becomes difficult when you break out the subprograms. You can't attribute program management and delivery costs clearly to one measure or another.
Charlie: People are interested in costs. Some metrics at the right level may still be good.

Marshall: We intentionally started in about 2009 to shift activities, so that trade allies and market actors had a larger role. We gained Home Performance traction in 2009, largely through the Clean Energy Works of Portland pilot. Clean Energy Works of Oregon started in 2011, and assessments grew dramatically that year. We had a 46 percent follow-through with Home Energy Reviews and about 1.8 measures, and Home Performance assessments ended up with an average of about 3.8 measures and a 60 percent follow-through rate. In Clean Energy Works

of Oregon, we see about one more measure per project than in the standard Home Performance track. The market is doing better at educating customers. That was part of our selection process for the new Program Management Contractor. Fluid wants to put more delivery components in the hands of the trade allies through innovative program design.
Peter: Phone-based Home Energy Reviews went up and direct referrals to contractors also went up. People are still being served, but differently.

Marshall: CSG developed a product so customers could get a phone-based Home Energy Review and receive referrals for a short list of contractors, who could come out to fulfill their needs. An in-person Home Energy Review is expensive with a lower return. Also, the mix of lighting opportunities is dropping, and we're trying to back out of the Energy Saver Kit model.

> We changed the kit offer in 2012, to have survey questions online and find out more about customers' homes and needs. Based on how they answer the questions, we tailor the kits to get more savings from what we send. They get more, or different products based on what's in the home. We ask the customer if they will use what we send. If not, we alter the kit. As a result, realization rates have gone up, and the savings increase is related to more bulbs and showerheads per kit. Water-saving benefits have a lot to do with benefit/cost ratio of the program portfolio.
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> It's a similar story for the gas side. In some cases there isn't overlap in gas and electric territories. If they had CFLs and it was gas-only territory, the overall cost of the kit included wasted CFL costs. We now have a gas-only kit to increase cost effectiveness. We send them to fewer sites and have three times more savings per site. In 2012, we pursued an initiative to follow up with a test Energy Saver Kit to past product participants. Three times more customers followed through than we expected; about 20 percent more than we budgeted for kits, last year. It was one of the levers we talked about, and helped us surpass last year's stretch goals.

Brent: There are no income requirements to be eligible?
Marshall: No. Also, marketing behind it varies. PGE emails have been great, but a utility bill stuffer has also worked. It's difficult to tell between renters, or multifamily and single family.

Brent: On the lighting side, is it general lamps or specialty ones?
Marshall: It can be up to four general and six specialty bulbs, depending on the answers to the survey.

Brent: With retail, you looked at specialty only, but you have general in the kits.
Marshall: Depending on baseline changes, we're not sure when we'll discontinue general lighting. We're in alignment with EISA.

Marshall continued his presentation. Direct installs are the same products but with higher savings per product. They are installed by trade allies. In an effort to save the mobile home duct sealing track, direct installs were added in 2009, and they really helped with cost effectiveness. In 2012, contractors who installed major measures also could install instant-savings measures. The trend loosely follows mobile home fuel type, but we have increased outside of the mobile home track for instant-savings measures.

> Heat pump water heaters started in 2012. We're in a position to move away from standard-tank water heaters and go to tier two heat pump water heaters. There are challenges, but we can discuss those another time. Gas water heaters include upstream work on 0.67 EF water heaters. We worked with NW Natural on promotions in 2011, and

built good momentum. 2012 was like 2011, but we still need to work on greater acceptance for 0.67 water heaters. There are challenges with accelerating quantity.

Kim: Would anyone in this group suggest solutions for this water heater challenge?
Marshall: The challenge is market adoption by trade allies. We had more dollars to put on the table in 2011. We had $150 for distributor incentives, but we couldn't sustain those.
Don: The graph, in absence of the back story, looks great.

Scott: What's the market share? What's the difference in costs between 0.67 and standard ones?
Marshall: We think there are about 55,000 water heaters replaced in our service territory each year. The incremental cost for a 0.67 EF model is about $250.

Karen Horkitz: Do you survey the contractors?
Marshall: Yes, we have the annual trade ally survey going out soon.

Don Jones: Do you have comparisons between like-size replacements? Water heating is a right-now business, and if the available 0.67 tank doesn't fit, that's an issue that cuts into it. Contractors just need to get hot water to the customer in that situation.
Marshall: We think there are products available for like-size, but as you mention this is an emergency replacement market and in some cases if the product is not on the truck it's not going to get installed.

Charlie: Is that combined 55,000? How many are gas?
Marshall: About 25,000 are gas water heaters.

Don MacOdrum: At the trade association level, I saw trends of who was participating, but have you talked to anyone about why they changed behavior and started installing them?
Marshall: Fluid is looking at trends and developing a strategy,now that the contract transition is over.
Peter: It would be worth having a group of contractors who do 0.67 water heaters coming in and looking at it.

Brent: Do customers have to submit an application? It may be good for instant rebate.
Marshall: That's a good point, and we did look at a small subset for instant incentives.

Tim Davis: Most plumbers said that to upgrade from 0.62 to 0.67, the additional step, plus adding seismic strapping and getting the installation up to code, is about a $400 incremental cost. Many plumbers went to tankless.
Don Jones: The gas line probably has to go bigger, also. It's rare that the existing line will work for tankless.
Marshall: Venting is another problem.
Don Jones: It's definitely a different installation. There's also a condensing version that's the next generation.

Marshall: We have two types of incentives for air-source heat pumps. One is for an upgrade from a less efficient heat pump. From 2010 – 2012, there was a decrease. Heat pump replacement has also decreased. Ductless systems may have something to do with the replacement market. Ductless heat pumps have increased dramatically. Since we are phasing out of lighting savings, and with Energy Saver Kits being at the tail end, 2013 is the year we need to count on ductless heat pumps to make up for it. We have accelerated, but have a ways to go. NEEA and BPA have helped with this.

Matt: Upstream intervention from NEEA has really helped with this, and the lack of a market development role from NEEA on gas water heaters in some ways can be used as an indicator on the value from market introduction support.

Marshall: Gas hearths have seen increases, with help from NW Natural. They are about 100,000 therms per year for NW Natural.

Charlie: This is an efficient gas hearth; a replacement? Where do the savings come from?
Marshall: It's an efficient unit with an efficient ignition system.

Matt: The target is the primary heat source.
Marshall: Yes. 20 hours per week during heating season is the target.

Marshall: Because of CSG's training we increased wall insulation between 2009 and 2010.

Garrett Harris: Is that both gas and electric? Would it look similar if broken out?
Marshall: Probably not.

Juliet: Will this go down next year based on things you told us earlier?
Marshall: Yes, that's the forward-looking trend.

Marshall: We have two tiers for windows, and starting in 2010 we introduced an R-5 window. We are currently at 18 percent for the higher tier of windows. We have a lot of these in the pipeline. We see ENERGY STAR changing things, and we have to decide if these are appropriate in the tier.

Matt: 2013 lighting sales are slower than expected, and we're doing more LED products and online sales. Market uplift started with Kmart this year, and we're talking to Sears about the same product categories, so we can raise efficiency within them. The costs don't always justify even instant incentives. We are looking for ways to work with NEEA, West Coast regional utilities and retailer collaborations. If we go with NEEA, and say we represent 16 percent of the U.S. population, retailers listen. We're looking at ways to streamline data-entry for verifiers of new homes through Pivotal, which is software that verifiers can use to certify homes and transmit things electronically. We're working on it for EPS in Oregon. They can go into the database and check what they want to do in the home, and it allows them to get a mix of measures and the ability to report to builders and others. We can integrate it with our systems to avoid incentive applications.

Matt: The 2014 rebid for New Buildings, and others this year, will lead us to request an extension on the PECI New Homes & Products contract for one year.

Kim: Next time we'll be looking at budget concepts, so this is really a preview.

Charlie: Do you think the rebid concept is still a good thing, or is it getting in the way?
Peter: There's good and bad. It's a lot of work and change, and potentially causes market disruptions. We went through this with the board after last year's transition. The board affirmed strongly that competitive rebids are better for the ratepayer. We've had the philosophy to bid things out as often as it made sense. The board is biased toward an openly competitive model and bidding things out even more often. Pacific Power puts theirs out for rebid every three years.

Don Jones: We can have three years and a couple of extensions, but I agree that you should be looking at the market on a schedule.

Peter: It's been a board philosophy from the beginning. These last few times around, we have received more and more responses to RFPs, especially as we signaled that the incumbents don't always win. You do get to select from the best.

Kim: As someone running a competition right now with an RFQ for Custom Track Production Delivery Contractors for the Production Efficiency program, the opportunity to re-tune performance comes with a hunger to win the rebid.

Don: Keeping the intellectual property in your house is good. It's a discipline of saying, "I know it and know how to run it," then bidding it out.

Peter: It's also a risk mitigation strategy, spreading our eggs out. We tried breaking things out even more last year, but found you get economies of scale at the level we're at with single PMC delivery.

Charlie: This is more to get feedback. I love to reaffirm my beliefs, but let the data speak for me.

Fred: We tried to benchmark costs across other's programs and we didn't get anything out of it. There are too many complexities. We tried and got rid of it.

Don: The rebid process is one of those things that will make you stronger if it doesn't kill you first.

Peter: Also, we have ratepayer money, so it's considered a best practice and is well-received by stakeholders.

Juliet: Going back to cost effectiveness and exceptions under UM551, there is a process shift. The staff made a request to Energy Trust that all things not meeting total resource cost tests come before the commission. One set came to us for a two-year exception last fall. As additional things came up, we would do a piece-by-piece review. We recently got another request that we've been working on. Staff is drafting a public meeting memo for a meeting a week from next Tuesday. Rather than doing this piecemeal, we'll request a blanket gas measure exception through 2014. More importantly, Energy Trust should come to us with a complete story of their whole gas program in about July 2014. We want them to make things as lean as possible before then and get rid of unneeded measures. The commissioners want to see the whole landscape. Then there will be a small process with public comment. It's not completely closed door, but only some public comment. By October there should be some decision. There is some interest in looking at a creative alternative, but probably not moving to a utility test solely. That's what we'll propose to the commission.

Don MacOdrum: When you say, "We'll propose it," do you mean the OPUC staff?
Juliet: Yes, we'll go to the commission with the recommendation from staff. Feel free to come support it, or talk about it at that time. Next Friday the memo will be public.

Don MacOdrum: Is there a lot of dialog before staff presents to the commission so they have expectations about how well they'll be received?
Juliet: It won't be a surprise; there has been back and forth discussion about it.

Don MacOdrum: As far as not moving to a utility test, is that just staff thinking, or does the commission's thinking factor into it?
Juliet: It would have to be a major turn in the tide, but there's no want for a long public process. There are compelling cases to consider, so I won't say it couldn't happen.

Don MacOdrum: There are a number of national organizations who want to donate their time to our area and discuss their thinking. It sounds like July through October would be the right timing.
Juliet: Probably leading up to July 2014, too. The commission would like to see proposals maybe in July.

Fred: We'll be spending several months before that framing options, which will entail lots of work. We are looking for some way that would sustain the programs within the framework of the TRC. We want to meet other objectives, but to present an option that will work for the OPUC so long as they stay within the familiar framework.

Kim: There will likely be Conservation Advisory Council agenda items on this topic between now and then.

Juliet: We want Energy Trust to make the programs lean now, so we know what their cost-effectiveness looks like by next July.

Stan Price: On July 23, we are hosting a conversation between Tom Eckman and Sammy Kwajon in Seattle. It will be streamed online, also. That could help with the discussion.

Charlie: What struck me about the presentation today was the remodeling of the kits, and using phones or online resources to do smart marketing. It was a big delta, and the techniques would work in other markets, too.
Marshall: We're looking at ways to evolve our delivery, and online tools are used in other programs very well.

Charlie: It's not a cure-all, but the smarter delivery and research will help.

Scott: I have a comment about condos and multifamily. Since the first of the year, individually owned condos are in Multifamily, and it's confusing for customers and trade allies.

Marshall: We talked about kits earlier, and the utilities classify them differently than we do. Our RFP was only for single-family homes, and we chose to move everything from duplexes on up to Multifamily. On January 1, that became a challenge. There were some customers sorted by ownership type. As Fluid started processing individual condo projects, they disqualified those customers. We had to work to uncover the customers who were disqualified, and help them. Multifamily was designed to reach out to property management companies, not individual condo owners. We're working with the PMCs to help, and are honoring existing incentives for now.

Scott: You're requiring them to use a Multifamily application and asking them to send in a 1099 like a business owner. Unless the whole building is done, they wouldn't qualify for anything.

Marshall: For weatherization, we treat the whole building, but windows can be replaced in an individual unit. It depends on ownership type and having the right measures.

Kim: This topic shows up on the transition slide. The challenges come up in the transitions, and they are trying to dial it in right now. Scott, do you know who to interact with on this?

Scott: I think the transition of condos from single-family has taken many of us by surprise. We're still not sure how to route customers.
Marshall: We will bring an update to the next trade ally stakeholder group.
Kim: I'll find out who you should talk to.

4. Public comment and meeting adjournment
Kim: For July, we have a rich agenda. We have 2014 budget concepts, which are our preliminary ideas before we budget. It's like drinking from a fire hose and there isn't much room to dig in on details, but we hoped these in-depth sector trends presentations we've done over the past three meetings would help prepare the group. Rather than giving you the basic programs in July, we will focus on what's changing. The other agenda item is work about setting our goals that has been done between Energy Trust's Management Team and the OPUC. How we set goals is an important topic for setting our budget. Going forward, I would like to have a few minutes at the end of the meetings to let you ask about other topics we should be discussing at the Conservation Advisory Council.

Kim: We also didn't have time for public comments, today. Did anyone in the audience hope to make comments today?

There were no comments from the public.

Diane: I did want to mention that Taylor Bixby deserves a second mention, and recognition, because of his work on the residential data.

Kim thanked all council members for their participation and adjourned the meeting at 4:35 p.m. The next full council meeting is July 17.