CONSERVATION ADVISORY COUNCIL
Notes from meeting on October 26, 2011

Attending from the Council:
Anne Snyder-Grassman, PGE
Don MacOdrum, Home Performance Guild
Juliet Johnson, OPUC
Bruce Dobbs, BOMA
Don Jones, Pacific Power
Scott Inman, ORA
Holly Meyer, NW Natural
Wendy Gerlitz, NWEC
Theresa Gibney, ODOE
Charlie Grist, NWPPC
Bill Welch, EWEB
Susan Hermenet, NEEA
Jim Abrahamson, Cascade Natural Gas

Attending from Energy Trust:
Peter West
Diane Ferington
Tom Beverly
Oliver Kesting
Spencer Moersfelder
Sarah Castor
Marshall Johnson
Pete Catching
Lakin Garth
Eric Wilson
Fred Gordon
Matt Braman
Jessica Rose
Amber Cole
Debbie Goldberg-Menashe
Margie Harris
Susan Jamison
Sue Fletcher

Others attending:
Jeremy Anderson, WISE
Kendall Youngblood, PECI
Emily Moore, PECI
Carollyn Farrar, NW Natural
Marilyn Williamson, NW Natural
Phil Damiano, PECI
Wendy Koelfgen, CEWO
Jerry Page, Total Comfort Weatherization
Tracy Scott, Lockheed Martin
Nick Michel, Lockheed Martin
Clark Fisher, Nexant Inc.
Karen Des, PECI
Rob Hall
Jeff Bissonnette, CUB

1. Welcome and introductions

Peter called the meeting to order at 1:35 p.m. He mentioned the move to our new office in November and that our new address starting November 21, 2011, is 421 SW Oak St, Suite 300, Portland. The next meetings will take place there. Peter asked everyone to introduce themselves, and reminded the group that presentation materials will be posted on the website, along with notes from the meeting.

The agenda, meeting packet, notes and presentation materials are available here.

2. Program updates

Peter provided a summary of our progress this year.

Peter: Overall we are tracking with where we should be at this time of year. The first slide shows only booked projects, not projects in the pipeline. The numbers are roughly close to par and slightly ahead on Pacific Power because we're on the tail of one giant project of 1.7 aMW. For NW Natural, we're ahead of pace, and we're right on target for Cascade Natural Gas, but issues may be coming up. Overall, our spending tracks nicely with savings.

The remaining slides show the expected pipeline of projects and forecasts of savings for 2011.

Cascade Natural Gas

For Cascade Natural Gas, we forecast we'll be below conservative goals right now; about 4 percent shy of the conservative goal and within reach of the IRP goal. By themselves, the programs are on track to hit 86 percent of stretch goals without market transformation included. So far we've had six projects through September via Business Energy Tax Credit mitigation; one was from the list of 600 impacted by Business Energy Tax Credit changes and the other five came through on just mitigation incentives. That was a good showing for Cascade. There's four more weeks of data not included here, and it appears that October brought in more projects. Mitigation seems to be working.

We went out with a market transformation savings forecast in New Homes based on state forecasts from permits. This is normally a safe basis for the forecast, but this time it didn't work out, and we were off by about 40 percent, on average. We were 77 percent off from the forecast for Cascade Natural Gas. For context, while the state was forecasting an increase in new homes, we saw a decrease in new housing for the third year. We are at 50 percent of where we were before the crash.

We are doing more outreach and marketing instant savings measures to hit at least IRP goal. More detail is available in the handouts.

Jim Abrahamson: Is there material in the update that describes where we are with the Business Energy Tax Credit mitigation?

Peter: We recorded six unique projects that wouldn't have happened without it. One was part of the 600 in the Business Energy Tax Credit queue. Five others weren't part of that, but wouldn't have gone forward without mitigation incentives. There may be more in the last four weeks of data, and there may be an equal number over the last four weeks.

Jim: I may have other questions later on.

NW Natural

Peter: For NW Natural, there's a similar but not as dramatic hit. For comparison, there's 16 percent unemployment in Cascade Natural Gas territory. NW Natural's territory lines up to state average of 9 percent, so the results line up with economic conditions. For NW Natural we'll be above the conservative goal. While the housing market didn't rebound, we're close to 90 percent of stretch goal with NW Natural, and programs are operating close to goal. There were 26 mitigation projects, and the probable completion of solar thermal projects is not included in the numbers. We didn't include them, but it appears they'll go forward.

Multifamily will hit the conservative goal, and all others will be quite a bit above.

NW Natural asked us to go after low-income capital projects and we have one signed up but delayed until 2012. Mitigation will keep them going, but they are a public housing authority, and pull money from many sources. If one source is delayed, it causes a big scramble for funding between all sources. So far all is still positive, and this project is a big part of NW Natural's 2012 pipeline.

Portland General Electric

On PGE, we're scrambling. We're now at 24 aMW or nine-tenths of a MW short of the goal. The falloff is almost entirely industrial. PGE is a Production Delivery Contractor for us to do outreach, marketing and delivery for customers. Cascade Energy, another PDC, is having a hard time closing capital projects. There has been a lot of work done by those two to rebuild the pipeline, but then the Business Energy Tax Credit cutoff happened, so most so customers stopped. Operations and maintenance (O&M) was our new course, and there's a big pipeline of those projects, but we don't know how many will land. We leaned toward the conservative side, but our guess is they will land. They are repeat customers who have often done energy-efficiency projects. We used last year's number for what might come through, but there's good reason to think we will have more than shown here and can hit the conservative goal.

The forecasted Northwest Energy Efficiency Alliance savings for PGE have been adjusted down. NEEA's TV initiative went out to get retailers to stock and promote better TVs, and the initiative has been pretty successful. However, in reviewing the baseline from other states, we found that consumers buy a better box than we assumed, so we can't count as much savings. NEEA's desktop PC initiative was an effort to create power supply savings, but was canceled because we couldn't make the case for market transformation.

Susan Hermanet: That was a similar situation. The market was transforming on its own, so we chose to back out.

Peter: The electronics business initiative worked with Dell and other suppliers to give a bonus for customers to select more energy-efficient products. In states where we weren't running the initiative people selected them anyway, so we couldn't count as much savings.

We are looking at specialty lighting and a few other efforts to push us over conservative, which is IRP or better. Hitting at least IRP is very important to us.

There were 76 PGE projects with mitigation incentives. It seems to be working very well, especially in lighting. In custom capital it also appears to be working. 20 percent bonuses seemed low, but now appear adequate.

Pacific Power

In Pacific Power, we show net savings on slides. We are looking to be at 16.2 aMW, well above the stretch goal of 15.8 aMW. This takes into account the NEEA shortfall. We had one large project with 1.7 aMW of savings. Otherwise it would be similar to NW Natural. Why? It literally was your call this time last year. We had a bunch of large commercial and industrial projects that delayed until this year. Those projects finished, so we didn't have to go out and sell projects like we did with PGE.

Mitigation with Pacific Power amounts to 51 projects.

Don Jones: Right now we're happy with the results.

Scott Inman: The Business Energy Tax Credit hasn't had any applications since April. When will it start up again?

Peter: Two programs will replace the Business Energy Tax Credit. We'll ask our new representative from the Oregon Department of Energy.

Theresa Gibney, Oregon Department of Energy: Business Energy Tax Credit rule writing is in process, and the comment period has been extended until November 4, with the expectation that the rules will be final in November, and forms will be available at the same time. There is a review of the Residential Energy Tax Credit on October 28.

3. Draft 2012-2013 budgets

Peter handed out one-page budget summaries to the group. He also handed out another look at the budget, utility by utility broken out by program.

Peter: These are the same kinds of things we provide every year, and it seems to work for everyone. The difference this time is we're providing a lot of data up front. This is the beginning of the budget discussion, so today is the unveiling of the first draft. This is the time for comment. Comments over the next two weeks will be more useful and better incorporated into the next draft.

The budget for programs in NW Natural's Washington territory is in a separate packet from the Oregon budget. We do work for NW Natural in Clark, Klickitat and Skamania counties and we have separate accounting for it. Typically it's not in the one-pagers.

On the web are the longer program plans. They go into far more detail on strategies, objectives and measurements than what I handed out today. The presentation slides for today are somewhere between the longer version and the one pagers.

Five-year strategic outlook

In looking at our five-year strategic plan, we're planning to double the amount of savings for all utilities, increase customer service and encourage innovation to exceed higher codes and standards. We need more and better technologies, and we'll invest in it to help bring them to market. We have to balance against the budgets to make sure we're serving the most customers cost-effectively. We will continue to rely on trade allies, ATACs, businesses and others who provide direct services. We need to go deeper in savings, and get through to customers who don't have the same value structure as those we are used to getting. We are also watching our own efficiency to further our transparency goals.

2012 budget themes

In 2012, we have to be responsive to market conditions, such as the slow economic recovery. We have to continually address the economy by offering value to customers. We also propose to address the lost Business Energy Tax Credit with partial mitigations. Between the changed Business Energy Tax Credit and the economy, we have to be able to quickly respond in 2012. We don't like to disrupt things by changing incentives in the middle of the year; however, we need to manage costs and cost effectiveness and this may mean more rapid shifts in programs as the year progresses.

We have 32 market segments we go after in various ways, and we do it for a reason. We want to serve them all, but like any portfolio, you want the diversity to better achieve the IRP targets with more certainty. We'll also engage key market actors, like Clean Energy Works Oregon.

Residential Sector plans

Diane Ferington: I'll cover the overarching themes for the residential sector. We're focused on customer engagement and plan to provide the best fit for customers and guide them based on their needs. We'll continue our efforts to better understand customers and what drives them toward projects. We already have analyses and studies to help us. We're looking at New Homes verification and processes from the Energy Performance Score (EPS) to make it more cost effective. We're looking for mechanisms to simplify interactions between trade ally contractors and customers.

We'll continue our strategic alignment with other organizations, and engage with them and get their feedback to develop win-win situations. We'll also continue our enhanced delivery in rural areas, continuing in new construction in rural areas. The one-page handouts have much more detail.

As a note, Existing Homes also covers small multifamily up to four units, so we also have actions renters can take. In Existing Homes we'll be directly referring trade allies, starting in November 2011. We're looking into bringing electronic forms and paperless processes through a new web format. This web format will help the program avoid the expense of chasing after missing information. We'll also have domestic hot water programs. We're doing a heat pump water heater pilot in alignment with NEEA's strategy, and they are driving training for contractors. We'll develop key product driver accounts. Clean Energy Works Oregon is expanding and is driving more success for Home Performance with ENERGY STAR® contractors.

In New Homes, we'll leverage NEEA's verification structure. There will be a pilot to focus on air sealing techniques in new homes, and that will be available to builders even without ENERGY STAR testing and labeling. There are still savings to be had even without full ENERGY STAR qualifications. This will be a 2012 pilot.

We'll offer more builder support on code changes and new ENERGY STAR specifications. We have to drive builders to go to the new revised ones.

Appliances and lighting will focus on the most efficient equipment tiers. We'll focus on educating retail staff because they are the point of contact and drive sales. We'll develop more channels to distribute lighting to drive savings with PGE. The EISA legislation will focus on lighting applications, and trying to get a 2 percent harvest rate on fridge recycling.

The Existing Homes EPS will launch in the first quarter of 2012 with engagement of realtors and appraisers in what EPS means to the market. It's an educational tool for new homeowners, and encourages improvements. It's also an important tool, perhaps at time of sale, for energy disclosure.

Consumer engagement will continue through the OPOWER behavior-change pilot, with 60,000 homeowners. We'll be able to assess more when we get feedback from this heating season. That feedback will drive 2013 budget and plans.

We're using the Energy Savvy online tool for do-it-yourself home audits, and using different messaging for customers coming through. Online forms will also help consumers experience simple incentive processing. Contractors completing forms can also mean that customers no longer need to fill out forms.

We're also interfacing with Ideas 42 to find out the way people make decisions and their drivers.

Holly: NW Natural has asked for some time to talk about EPS. There are some factors in it we feel are prone to manipulation, and it's not a complete look. It skews things toward electric. We have asked for a review, which hasn't been granted. Now we see it's moving forward for next year.

Peter noted there has never been a formal request to by NW Natural, and this is another instance of the source vs. site issue NW Natural has raised within the fuel switching issue. The OPUC has agreed to take it on.

Don Jones: I guess it would be nice to see more analysis.

Holly: We can send you the analysis. It's not long, and doesn't include numbers, but takes a few minutes to explain.

Commercial Sector plans

Oliver Kesting: Our overall sector objective is to meet IRP goals through incentives and services to help customers invest in projects within their cost constraints. We'll offer a diverse portfolio to a diverse market. We'll support education on codes and adoption of the new lighting code. The second objective is to lay the foundation for future savings, developing long-term implementation plans. We'll develop tools to help with decision making, and engage with customers to get deeper savings. We're engaging with the public sector through our dedicated account manager. The third objective is supporting customers in pending changes to state tax credits.

To ensure that the best qualified contractors are delivering the programs, Energy Trust will issue an RFP for the Existing Buildings program management contract in 2012. We will further diversify the group of contractors providing services through expanded pilot activities.

For Existing Buildings we are looking to adjust incentives and delivery during the year to keep projects moving and maximize incentive effectiveness in the midst of the changing tax credits. We're working with the Oregon Department of Energy to provide input on tax credit rules. We'll enhance outreach to help customers understand tax credits, streamline cross program efficiencies and reduce complexity of participation in the programs. We are providing multiple offerings targeted to diverse market segments, and will offer custom and prescriptive tracks, lighting, O&M and pilots including Strategic Energy Management. We'll enhance program outreach, supporting the network of lighting trade allies and expand the number of trade allies in rural areas to better serve more of the previously underserved customers throughout the state. We'll also develop specialized program teams focused on specific customer groups to offer more efficient customer service. We'll leverage long-term relationships to achieve deeper and sustained savings, offering approaches such as strategic energy management.

Multifamily is looking to improve the customer experience with one point of contact and achieve deeper savings through consistent follow up and analysis of customers portfolios. We'll expand the custom track, which started this year, and will continue in 2012. This approach will have the greatest impact on centrally heated/metered buildings. We will increase our low-income and affordable multifamily focus through tiered incentive offerings and more outreach. Plus, we're planning a low-income multifamily financing pilot with on-bill repayment. We'll continue to expand O&M training for building operators and maintenance staff.

New Buildings is looking to expand market transformation, and supplement code trainings. More resources and tools will be available to communicate best practices to the design community, and we'll add new program offerings for small commercial. We'll integrate program offerings based on lessons learned in the Path to Net Zero and Small Commercial Efficiency pilots. We plan to simplify messaging, provide more enhanced design support, and champion, reward and collaborate with other leaders and advocates. We'll reward innovative design through recognition and incentives.

Planned activities outside of the PMC contracts include Strategic Energy Management pilots, the Enhanced Lighting Design Pilot, which we are working on with NEEA, expansion of the Building Operator Certification and piloting Resource Conservation Management incentives.

Industrial Sector plans

Eric Wilson: We plan to promote innovative technological and behavioral approaches. Behavioral changes will happen through strategic energy management and O&M, with our PDCs as account managers building relationships. Often, customers rely on us to give recommendations on next steps related to energy, and the PDCs can offer that help. Our last strategy is to drive things through well designed incentives. Our incentive levels have been lacking in custom capital on the gas side, and we're trying to bring the portion of project cost we offset with natural gas incentives into alignment with the electric side. To do so, we plan an increase in the incentive per therm in 2012. Another change is the 90 by 90 offering becoming a permanent and ongoing part of the program instead of a limited-time promotion. That will help us build a constant pipeline of O&M projects, instead of having six months each year where we focus on O&M projects.

There will be an emphasis on custom track for medium and large customers. PDCs help find the projects we want to proceed with. Trade ally tracks will be deployed through calculated measures, lighting in particular has proven to be one of the most cost-effective things we do as a program. The small industrial and agriculture initiative is a previously underserved market. We can get into more rural areas where it hasn't been cost effective to serve with the custom track. We plan to up-level agricultural projects in 2012, calling it an Ag Initiative and market more heavily and directly. We think there is more out there for gas and electric in the agriculture market. Traditionally, most of the natural gas savings in our program have come from the agriculture sector.

The Strategic Energy Management initiative will engage employees and executives to foster peer-to-peer exchanges and learning opportunities. We plan to roll out one pilot in 2012, the Small Industrial Strategic Energy Management. We plan to enroll 15-20 small industrial customers into a cohort, and see if what we've learned with our larger customers can be applied to these smaller customers. We expect to see the majority of our gas O&M savings in 2012 to come through this effort.

Bruce Dobbs: On the multifamily side, two things come to mind. One of the biggest things to do with existing multifamily is window improvements. The payback, most of the time, is over 10 years, but they still represent huge savings. Is there any thought to beefing up offers for envelopes or single-pane window replacement?

Oliver: We added a mitigation strategy for window replacement and insulation.

Scott Inman: What is there for multifamily?

Scott Swearingen: They can be custom capital projects, and get the 20 percent kicker on the incentive they are already getting for things like windows with another qualifying shell measure, if the measures already meet the requirements. December 15, 2011, is the deadline.

Scott Inman: For large window projects, that's too short of a timeframe. Maybe okay for 2012.

2012 proposed electric budget and savings

Peter: On the electric side, we expect to land at 40.1 aMW. We want to get back on track toward our stretch goal for next year with 49.4 aMW. To get that growth we'll need 20 percent more than we spent in 2011. The levelized cost is at 3.3 cents per kWh. That compares to the OPUC standard of 3.5 cents. The conservative goal is 15 percent less than the stretch number. If we hit the conservative goal but need to spend all the budget, we have an issue as levelized cost could reach 3.8 cents per kWh.

As we offer deeper savings, the cost goes up. We are extending out to less likely customers, so it takes more to get them to move forward. That's still a good buy for the ratepayer, but we're aware of the higher costs.

The largest increases are in Existing Buildings and Production Efficiency. Those are critical to the IRPs. You can get a lot from residential, but these two bring large savings and IRP potential. That's critical in our five-year plan to double savings, and also to the region's strategy. It's quite critical to keep levelized costs low. These programs are, with very few exceptions, extremely cost effective.

Spending is commensurate with where we want to be. Electric is heavily dominated by commercial and industrial sectors. Spending is 33 percent Residential, 27 percent Industrial and 40 percent Commercial. On the revenue part of the slide, the OPUC stopped doing calculations to split out the commercial and industrial sectors in 2008. Residential may be a smaller share of revenue, probably about 40 percent now.

For savings by sector, we expect to get 29 percent from Residential, 33 percent from Commercial and 38 percent from Industrial.

In 2011, we're not going to meet what we did in 2010. It's partially the economy, but mostly the change in the Business Energy Tax Credit and an end to the large amount of cheap savings through NEEA. We expect to be back on track in 2012, but can't get back fully because it costs more to reach deeper savings between the added mitigation and outreach and marketing to overcome the economy.

Draft Pacific Power budget and savings

Peter: The draft Pacific Power budget shows net savings. Dollars are actually a targeted guess since Pacific Power hasn't yet filed for 2012. We are showing a budget that would achieve IRP savings with the highest probability. This is our estimate. Depending on what Pacific Power files, our numbers will look different.

We plan on a stretch goal of 17.8 aMW and a conservative of 15.1 aMW on the low end, with spending of $44.3 million. This requires a 16 percent increase in budget for 2012.

We propose to increase above base rates for lighting and custom capital, extending to the items Oliver mentioned in multifamily with a 20 percent bonus. It averages less than what we offer now, but extends to a larger set of customers for longer. We'll see things in New Buildings that require mitigation to happen, and we couldn't offer it this year. Changes in the Business Energy Tax Credit impacts 2013 for New Buildings. One reason Pacific Power costs are higher than PGE is that the PGE strategy drives low-cost, no-cost measures. We see more potential for that with PGE than with Pacific Power. Given the mix of industries in its service area, Pacific Power is more reliant on commercial and industrial capital projects for savings, and the mitigation hit is high.

Don: For Pacific Power, it's a customer diversity issue. We have fewer customers but larger ones, so there's not the breadth to go after. We have commodity customers, too.

Peter: The growth in Pacific Power will likely come from Existing Buildings, Production Efficiency and specialty lighting products. The NEEA forecast for 2012 is down from IRP by 0.7 aMW from 2.35 aMW, with their latest numbers. We may be able to make it up on the other side with additional pushes.

Draft PGE program budget and savings

Peter: PGE also has a large budget increase. Levelized cost is 3.3 cents per kWh. Given where we want to go, this will be a 33 percent increase in savings. Getting this savings will mean a 23 percent budget increase in PGE territory. Hitting 85 percent of stretch goal puts us at 26.9 aMW; a little more than IRP. Existing Buildings, Production Efficiency and New Buildings will have projects. New Homes and Products will also be part of it. Bonneville Power lines up very well with what we're doing. The reduction in NEEA savings compared to IRP is one-third of an aMW, down from 2.55 aMW. With other actions, we can weather that.

The dollars shown do not include 5 percent reserves that are held for a variety of reasons.

2012 proposed natural gas budget and savings

Peter: For gas, we are $4.6 million higher than 2011, or a 16 percent increase, and savings are up 18 percent. Levelized cost is under our standard.

For gas we have a much greater reliance on residential programs. Residential is a huge part of gas savings; more than with electrics. It's 29 percent on the electric side, but closer to 50 percent for gas. For spending, it was more like 33 percent on electric and 62 percent on gas.

Marilyn Williamson: On the residential side, what is the majority of projects and Existing Homes savings that you're getting?

Diane: Weatherization and water heating are bringing in gas savings.

Jim Abrahamson: 0.67 water heaters and Clean Energy Works Oregon?

Diane: Shell measures and Clean Energy Works Oregon are driving lots of savings.

Marshall: About 48 percent in NW Natural is coming from weatherization and 16 percent from equipment. In Cascade Natural Gas, it's more like 60 percent weatherization.

Draft Cascade Natural Gas program budget and savings

Peter: Cascade Natural Gas savings will be 12 percent higher and deliver on IRP, and this requires a 17 percent increase in the budget. It's an expensive territory to serve, but the budget includes more regional outreach staff outside of market transformation. Levelized cost is 53.8 cents, just under OPUC standards. Cascade Natural Gas territory is quite rural and a far flung network costs more in delivery than with the others.

Holly: I'm looking at residential, and the difference between electric and gas. You have to spend 60 percent to get 40 percent of gas savings. Electric lines up better. Gas seems to be more expensive on the residential side. Does having more equipment in the mix account for that on the electric side?

Peter: Looking at residential vs. commercial customers you get more for your time on commercial.

Don: It is also lighting, which is relatively cheaper savings.

Matt Braman: There are long measure lives in residential gas, and it's not the same with electric. So for the first year costs are shown on the slides and not levelized costs.

Holly: Because the measures take longer to pay off, you have more expensive savings? This is a snapshot for the first year? Do they level out with longer measure life?

Matt: Yes it is just the first year. The average measure life in gas is much longer and the slide does not take into account the savings lasting longer.

Jim: There was a significant shortfall in 2010 from budgeted level to budgeted expenditures. We went into 2011 expecting more budgeted expenditures. It was less below budget than 2010, but still under budget. Coming into the 2012 discussions, we'll have the same questions. You were below budget in 2010 and 2011, so how sure are you going into 2012?

Peter: This is the total budget; not the revenues utilities provide. We carry things forward if we don't spend it all in one year. This isn't the request that you have to file with the OPUC. In one year, for example, we were able to borrow against coming years, and had good reasons to do it.

Jim: Cascade Natural Gas is unique because of our deferred funding collection mechanism. ETO's actual annual expenditures have been historically below its budgeted levels for Cascade. Cascade's public purpose charge collects a portion of ETO's annual funding needs and the deferred funding mechanism provides the rest. Cascade and ETO can track funding and expenditure levels to help manage any year end carryover of funds. Cascade's recent public purpose charge increases bring collections closer to historical expenditure level, but are still below budgeted levels necessitating the need for the continuation of the deferred mechanism at the present time.

Draft NW Natural program budget and savings

Peter: NW Natural is in two parts, standard and industrial.

Standard—The first column shows savings, with a 17 percent increase in savings and an increase of 18 percent in budget. The IRP is 4.2 million therms and we anticipate that upcoming filings will be much lower than the 4.2. We targeted 4.3 million therms for the stretch goal, with significant growth in Existing Buildings, Production Efficiency and New Homes and Products.

We retain gains in Existing Homes and New Buildings is slightly down from the year before, based on the pipeline.

Industrial—Industrial contains a certain class of customers who agreed to the systems benefit charge and weren't part of the original agreement. This program is maturing and gaining traction with a 54 percent savings increase for a 38 percent increase in budget. Economies of scale are finally there, and we're earning startup costs back. The cost grows from $2.1 million to $2.9 million per year, and we're approaching 900,000 therms. The biggest part is Production Efficiency. Some large customers are big commercial outfits, too.

Next steps

The budget process is same as last year. We need comments by November 8, 2011, for the board meeting on November 9. The website has budget themes and other documentation that's longer than what we handed out. Pending OPUC filings will cause budget changes. The earlier we get input the better we can represent the thinking out there to the board. At the next council meeting on November 30 we'll have the revised budget.

Following the board meeting, there will be individual utility meetings and we'll walk through specific questions. Final board meeting for approval is December 16, 2011.

Jim: Will all of the handouts and materials be up on the web?

Peter: Yes. This PowerPoint we just covered is the last piece that will go up. Talk to any of us with questions or comments, and Tom Beverly also can be a resource—including finding things on the web.

4. Tankless water heaters

Peter: Last time, there were many good questions raised on tankless water heaters, and we received some good information to look at from Kevin York with Rinnai. Lakin Garth will readdress some issues, and Holly Meyer has some slides to walk through at the end.

Lakin: A request was made to separate condensing vs. non-condensing tankless units in the study. They weren't separated before in terms of cost. The average unit cost was $3,060; non-condensing units were $2,850 and condensing units were $3,610. There were 3,100 condensing units installed.

Another request was to see if the benefit cost ratio, BCR, for condensing units was a better opportunity. We looked at whether the more efficient units would change things in terms of BCR and the assumptions were: condensing units with current costs, 126 average therms of savings, current avoided costs and 20-year measure life vs. the 15 used before.

The societal BCR comes out to 0.49 with these new assumptions. It has to be 1 to reach our threshold. In other words, the cost would have to be cut in half to pass the measurement, or it would need to save 176 annual therms.

Bruce Dobbs: It would have to save 252 therms, rather than 176, at the current installed cost?

Don Jones: Is there any assumption that avoided costs go up over time for gas savings?

Lakin: We used current avoided costs.

Don: In that case, 176 might be right.

Bruce: Annual home usage with a couple of people in it is probably 350 therms?

Fred Gordon: Typical Northwest homes use less than we used to think.

Bruce: You would have to save more therms than you actually use?

Lakin: That's really the case, yes.

Lakin: We were asked to show more detailed simple payback. We split that out in three ways on the slides: non-condensing, condensing and both together. The installed cost was what we actually saw on applications. Sixty-five therms in savings were from the actual evaluations, and included both types of units. The chart shows the societal BCR and simple payback in years. I had my first math error on the previous slides, and that brings simple payback down, but it's still a very long payback. Condensing savings are hypothetical, since we haven't evaluated.

Peter West: The societal number is in red, and it's what brought us here. We are required to look at the societal test, which is a total resource test, and also look at a utility test. We are required to manage to these tests, unless we're doing market transformation.

Bruce: I know you have to comply with this, but it always mystifies me a little bit. Basically, this item is being penalized, even though people are willing to pay the cost for it. Even if they are willing to pay more, it doesn't pass the test. I fall off a little bit on the societal test. With the utility one, our incentive buys X savings and that makes sense.

Peter: In my understanding, even though it's imperfect, it is a sort of control for the customer. If you're passing that test, when you're endorsing something through incentives, you aren't driving the uninformed to less desirable uses of money.

Don: I believe there's also a basis in least-cost planning for using this test. Aren't we supposed to compete on a least-cost basis?

Juliet: Yes, I believe that's true.

Bruce: The point's well taken. The levelized cost discussion is about what's more expensive to do, either build a new plant or incentivize a measure of some sort. They do affect each other, but on the other hand, this is more related to the consumer.

Charlie Grist: This is a different test. The whole story behind this is: when the council did its first power plan, we just used utility costs. Utilities said it wasn't right, and we needed to compare all the costs. You are taking money from one ratepayer and giving it to another, so is the measure fair? The idea is: you have to look at all the costs and all the benefits.

Bill Welch: Where does fuel switching enter into it? If a gas power plant is part of meeting the electric load, are these looked at in there?

Charlie: We are finishing a new study on direct use of gas, which is not a lot different than before. It drives back to thermodynamics—conversion at a power plant or water heater? New technologies on the gas and electric side changed the conversion ratio. Heat pumps are a big one. The coefficient of performance is up to 3 on those, but many are only at 1. It drives the underlying economics.

Juliet: If this person is paying for another person to put in a tankless water heater, I get it, but if someone is using their own money, why does it matter?

Charlie: You have a limited amount of money out there in the market, and want to get the best bang for the buck that you have. How much savings are you getting from a given investment?

Don: There is a range of tests based on your perspective and mix; a whole hierarchy of tests to help with that.

Scott Inman: There's only so much money, so you have to pick something right, I suppose.

Bruce: If you look at it from this perspective: if the person wants to spend $10,000 on a water heater, and Energy Trust gives $200, why does it matter?

Charlie: Where would that $200 do the most good for the ratepayers?

Fred: It comes back to: do people see our incentive more as reducing payback, or as a badge of confidence that they are doing the right thing? Should we tell them to do it? Customers don't have this model.

Bruce: In a way it's an implied endorsement; sort of a seal of approval. Nobody really feels they won't sell another water heater without $200, but it's more about the endorsement.

Lakin: We received additional comments, data and perspectives. A few things in summation: tankless water heaters obviously save energy and provide a benefit, but the costs are much higher than the value of energy savings. Some customers using more water will save more. We initially marketed to high users, and those are the people in our evaluations. Hot water consumption in the Northwest is lower than previously thought. Our initial estimate was based on much higher estimated usage. We've had three consecutive studies, compared our notes with other regional utilities and have seen the same savings.

Holly: Have we looked at the cost of a baseline electric water heater against gas tankless?

Margie: We can't estimate costs of switching fuels. At the utility roundtable in October, commissioners Savage and Ackerman gave their nod that the issue of upstream benefits is really theirs. It isn't ours to decide here.

Juliet: At the December 6 meeting, we'll be opening up an investigatory docket about this, so stay tuned.

Marshall Johnson: There is a comment from the field that tankless water heaters are used to address health and safety issues, this was found in Home Performance where combustion appliance zone (CAZ) testing takes place, where you have an atmospherically vented water heater and furnace commonly connected to a flue pipe. Trade allies often decrease air leakage and when they do that, they take out the furnace and replace it with a high-efficiency furnace that draws air from the outside. The water heater may back-draft into the CAZ zone. Tankless water heaters mitigate that, but there are other ways to do it. Peter's water heater has a direct vent, for example. We'll work with contractors to install direct vent water heaters, and the guild and program staff will help educate contractors.

Peter: We have provided some math in the redo that remains unfavorable from a societal standpoint to continue the incentive. We still think there are a lot better applications for this measure we haven't been able to reach and a lot lower costs that need to be reached, but this requires significant market intervention. It's difficult to go after the right customers. We tried it with NW Natural and got a far wider set of participants. Further, we are not usually deeply interventionist in the markets, restricting who can do a measure in the attempt to drive down costs. If we can partner with a credible plan from NW Natural, the Guild and others, we would be willing to try. Supposing there's no relief from the societal test, we have to march down a set path and either find another way to get this measure to parity or transition from offering incentives for it.

Holly Meyer presented NW Natural's perspective on tankless gas water heaters and fuel switching.

Holly: We were sure that tweaking the analysis still wouldn't yield a better result. So we're offering an alternative. When Energy Trust puts together an incentive, if it doesn't pass the societal BCR, it stops unless it's an emerging technology, then there's the possibility of a pilot. If non-energy benefits can be added we can recalculate the societal test. Those may be another factor to consider if it's not an emerging technology.

Charlie: If the non-energy benefits are quantifiable, we put them into the societal test.

Holly: There's an avoided cost for saving the therms. You take that and divide it by installation costs of the equipment. If total costs and program costs decrease, it gets closer to the societal BCR. Gas is very efficient, so the avoided cost between standard and high efficiency is small, so a strict societal BCR won't work. Lowering program delivery costs might help.

Fred: We don't roll-in program costs for a single measure; only for a whole program, unless we can clearly make an association between the two. In the Energy Trust grant agreement there's an OAR that defines conservation. It defines conservation to include fuel switching as allowable. It's not in accordance with the fuel switching policy.

Margie: This is part of SB 1149, which only affects the electrics.

Peter: We had a whole public engagement process, including OPUC involvement, on fuel neutrality. We addressed the OAR and ended up with the policy we have today by agreement with all stakeholder interests.

Holly: This is really about digging into foundational documents. The policy is to be fuel neutral, but there seems to be an inconsistent application of the state's policy. When designing equipment savings and claiming savings, Energy Trust only considers a single fuel. They don't measure across fuels. It's only about standard to high efficiency with the same fuel. The assumption for a gas furnace is that a customer will choose a high-efficiency gas furnace when given a choice, and a heat pump customer will choose a baseline heat pump without an incentive. Incentives don't go toward fuel choice, only toward high efficiency vs. baseline.

Holly: Many NW Natural employees got flyers to install high-efficiency heat pumps and switch from gas. They included Energy Trust incentives on the flyer. Incentives can be driving the choice to switch fuels. When we promote and pay incentives, we take the blinders off. Energy Trust is promoting across and paying across fuels.

Susan Jamison: It was a utility bill insert from PGE, and we asked to be on a different panel to separate ourselves out. The flyer did include a rollup of many incentives and credits, including ours, PGE's and the tax credits.

Holly: We don't get to mail to non-gas customers, so we don't get that kind of help from Energy Trust. The electrics do go to gas customers, and benefit from Energy Trust's help. However, let's avoid that point, since it takes away from the discussion.

Peter: This statement about refusing to get into fuel policy is getting edgy, and we are trying to be as neutral as possible. The EPS request, as does this desire to have us recalibrate on source energy, puts us exactly in the middle between the utilities. This is the whole agenda the OPUC has taken on, and we are not going to usurp their process.

Holly: I feel like we understand the rules you live under, and the way to best navigate so you can follow the rules and go through channels. That's why we went through the OPUC. There's no sense with us that you are trying to hurt NW Natural, and we are trying to go through the right channels to fix a problem.

Margie: I respect what you're trying to do, and they are important issues to raise. The comment about Energy Trust sending materials in bill stuffers to all customers isn't accurate. PGE spent shareholder dollars on those materials. They aren't Energy Trust pieces.

Holly: Energy Trust claims savings from heat pumps replacing gas furnaces, even though the savings aren't there. NW Natural questions those assumptions. We performed an analysis and shared it with the OPUC that fuel neutrality comes at increased expense to participating customers and overall ratepayers, and raises customer costs over time by putting pressure on utility rates.

The OPUC is opening an investigation on fuel switching. While we're waiting for that, we need to recalculate the BCR using standard electric to tankless water heaters. If it's less than 1.0, we should find ways to lower the costs. If it passes, we're requesting that you leave the incentive intact until after the ruling from the OPUC. Pursue an exception under UM551 for non cost-effective measures.

We are asking the council to support this course until the OPUC makes a decision. It doesn't make sense to stop incentives and rebuild momentum if we restart them.

Fred: I'm interested and we are not fully proving them out yet, but some heat pump water heaters have an effective efficiency of 200 percent, as an example. Why should we look at standard electric water heaters now?

Holly: They aren't the baseline. We want to look at the baseline vs. high efficiency gas.

Pete Catching: When you promote to move a market for a while, and lower costs, this didn't work. As I recall, we started with $200 for tankless water heaters in 2007, and it went the opposite direction. Heat pump water heaters are a new technology.

Holly: The section I'm referring to doesn't have that stipulation.

Don: UM551 allows for comprehensive measures that aren't individually cost effective. It's broadly enabling.

Scott Inman: On the bill stuffer, is Energy Trust subsidizing the mailing? If they were, you can mail to those same customers.

Holly: If I'm wrong about the mailing, I wasn't intending to deceive anyone.

Amber Cole: We probably did help support it, since it includes our information and tax credits blended together.

Scott: There's a competing message then, in the mailing.

Holly: It's just the difference in the equipment. Electric is in all homes, but gas isn't. Electric has a promotional advantage.

Peter: We promoted services to oil customers that had our electric services before. It's very similar.

Wendy Gerlitz: From my understanding, the law and Energy Trust's policy on fuel switching are separate. The frustration for the gas companies are obvious, and no fault of Energy Trust's. It seems like what Holly is asking for is contrary to Energy Trust's policy—comparing gas and electric. What are the implications for Energy Trust if the council recommends this?

Peter: Assuming UM551 is read correctly, the statutes say that one can consider this. We looked at it and decided on a fuel neutrality policy; to leave the customer in charge and not make the decision for them. The commission is taking on this question. The board crafted a policy that's not working the way it did eight years ago, and the commission is now stepping back into the dialogue. This sounds like a suspension of the societal BCR for this measure until that public engagement happens. The path forward for NW Natural seems to be asking the OPUC for that.

Margie: When I spoke to Bill Edmonds from NW Natural, I said I will wait for something from the commission on this. We are following our board and expectations of the OPUC. We need to take it to them, and they can suspend it if they choose, while we're waiting.

Don: I suggest you want to request the suspension under UM551, and continue offering an incentive, but without doing the electric to gas calculation. That is not a calculation Energy Trust can do at this point and they should wait for the OPUC process to make changes. I don't want to presuppose the outcome of the process. Don't set precedent by doing the test as NW Natural requests. In the meantime, UM551 was set up for this reason.

Holly: I would like the council to make a recommendation on Don's amended request.

Peter: If we're talking about keeping the incentive at $200 we'll have an issue, because we're trying to incent a 0.67 water heater that's new in the market, and we'll undercut that. We'll have to look at the level and design among the equipment. We can't undercut that new promotion.

Holly: Our request is to keep it at $200.

Peter: We won't be able to do that and undercut the 0.67 promo. It's still good to have the polling, but staff has a concern about that level. The proposal is how would you feel about continuing the incentive under UM551?

Don MacOdrum: Is the hearing about this product or policy in general?

Don Jones: It’s an investigation, and the analytic process will take time.

Peter: The hearing is about policy. This request from Holly is about supporting a temporary exception for this one measure

Bill: There are a few issues: analysis, engineering and marketing equality. The primary issue seems to be keeping an incentive until the process is done with the OPUC.

Holly: Yes, that’s the request.

Bill: It seems fair to maintain consistency until the process is done.

Scott: Marketing messaging is as important as anything here. If Energy Trust is helping pay for your customers to convert, that’s important.

Holly: It’s important to us and we’re taking it up with the OPUC.

Scott: Does this open up the rules to more discussion of specifics?

Holly: We no longer have a furnace incentive, and this one is going away. We only have hearths and tank water heaters.

Anne Snyder-Grassman: It seems reasonable, except for challenges with 0.67 incentives. I’m in line with Don.

Wendy: As a public interest group, we want to see what’s best for customers. NW Natural has brought up interesting questions about how our incentives influence people to do the right things. Waiting for the OPUC seems fair.

Don: I would support it, but I don’t know about holding the incentive at $200. Maybe not drop off the marketing and go to $100.

Scott: It should be a higher incentive anyway, but if it’s going to be continued, I’m not a believer in the societal BCR, so I’m for extending it.

Jim: I like Don’s amendment, and I don’t intend anything to mean that the docket with the OPUC will go on forever. Will this impact both NW Natural and Cascade also?

Peter: It’s about the technology, so it would be you as well. There aren’t as many in your territory, but we like to offer equal incentives for the same equipment across the state.

Bruce: I support it, too. Ultimately, we have to remind ourselves, whatever the Energy Trust does is for the public good, and they aren’t a sales arm of the utilities. However, the incentives need to be equitable, and if this achieves that end, I support it.

Margie: Thank you Holly and to NW Natural for presenting your side. It’s fair and right to hear it. I presented these issues as having unintended consequences in the marketplace. It brings us back to: “What’s our purpose, and how is that spilling over into the utilities’ purposes?” Please participate in the public process.

5. Public comment

There was no public comment.

6. Meeting adjournment

Peter thanked all council members for their participation and adjourned the meeting at 5:00 p.m. The next full council meeting is November 30, 2011, in the new office space: 421 SW Oak Street, Suite 300, Portland, OR 97204.