

## CONSERVATION ADVISORY COUNCIL

Notes from meeting on May 18, 2011

### **Attending from the Council:**

Holly Meyer, NW Natural  
Wendy Gerlitz, NW Energy Coalition  
Lauren Shapton, Portland General Electric  
Andria Jacob, City of Portland  
Bill Welch, Eugene Water and Electric Board  
Don MacOdrum, Home Performance Guild  
Charlie Grist, Northwest Power and Conservation Council  
Brent Barclay, Bonneville Power Administration  
Juliet Johnson, Oregon Public Utility Commission

### **Attending from Energy Trust:**

Tom Beverly  
Peter West  
Fred Gordon  
Oliver Kesting  
Spencer Moersfelder  
Sue Fletcher  
Marshall Johnson  
Kim Crossman

Amber Cole  
Hannah Hacker  
John Volkman  
Matt Braman  
Eric Wilson  
Phil Degens

### **Others attending:**

Jeremy Anderson, WISE  
Marilyn Williamson, NW Natural  
Tim Davis, Conservation Services Group  
Terry Miller, CSG  
Jonathan Tillman, CSG  
Anne Snyder-Grassmann, PGE  
Emily Moore, PECl  
Karen Des, PECl  
Jess Kincaid, CAPO  
Scott Inman, ORA  
Brian Crumrine, Cascade Energy Engineering  
Dave Whitmore, Cascade Energy Engineering  
Will Miller, Lockheed Martin  
Mike Martinez, Lockheed Martin

## **1. Welcome and introductions**

Peter West called the meeting to order at 1:35 p.m. and began with introductions.

Anne Snyder-Grassmann attended from PGE and plans to replace Lauren Shapton on the council. Today was Lauren's last council meeting. Lauren and Anne provided a quick bio: Anne has been with PGE for 10 years, has worked on promotions for the past year and now manages the outreach group.

Scott Inman from ORA attended, and would like to replace Paul Case on the council. Peter said he would follow up after the meeting, since there is a formal approval process for new council members.

*NOTE:* All materials referenced are available on the [Energy Trust website](#).

## **2. Refrigeration Operation Coaching pilot (*Information*)**

Kim Crossman introduced Brian Crumrine from Cascade Energy Engineering. His organization is providing the services for the Refrigeration Operation Coaching pilot, nicknamed ROC.

Kim: Last summer, we did a competition to expand the strategic management work we were doing through the Industrial Energy Improvement initiative and Kaizen Blitz, and tried to broaden the types of services and contractors. Cascade Energy Engineering's plan was one of the plans we accepted, and it was for a coaching effort targeted toward operators. It helps operators learn

how to run their plants more efficiently. For the first year, we are targeting refrigeration systems. It's an area of strength for both Energy Trust and Cascade Energy, and a good place for us to obtain savings. It's a system-focused pilot.

Brian Crumrine has been working on efficiency for 11 years, including six years in industrial efficiency, and has been with Cascade Energy for the past three years. He was also involved in NEEA's continuous energy improvement work, so he brings that experience

Brian: This has been a fun process to work together developing this with the Energy Trust industrial team, and we're just past our first workshop for operators. What makes ROC different? We have learned that managers need to provide support and input, but operators make the changes that deliver savings. The operators are making daily decisions that have the true impact on day-to-day savings. This pilot focuses on operators specifically. Senior management is still involved, but they aren't the target.

The knowledge to make improvements comes from our five half-day workshops, one each month. The operators are used to day-long training, off-site, where the session is more of a one-way lecture/classroom style. Our workshops are different, take place at their sites and have more interaction and two-way communication. They include some lectures, but the bulk is made up of activities that get people talking so they can share ideas and discuss experiences.

Five sites are involved, and even though they are different businesses, the operators speak the same language, since they all deal with refrigeration. The operators leave the workshops with an action plan for things they can immediately implement.

Later, we have technician site-visits to discuss action plans and offer support.

Tools include two years of subscription to E-Site Energy Management Software, and a tune up kit, which has a data logger, transducer, camera, probe and items typically used for Kaizen Blitz.

We will also conduct meter level savings analysis by the end of the year, for each site.

Charlie Grist: Which meter?

Brian: We look at the main utility meter at the site. The bulk of usage at these sites is mostly refrigeration.

Charlie: You'll be able to see the effects in the main meter readings?

Brian: Yes, since refrigeration is such a big part of their load. We've already seen some of the differences based on current changes.

Kim: The models are already built into the software to normalize for the production changes.

Bill Welch: Are you tracking them as the changes happen?

Kim: Yes, just like Kaizen Blitz it's easy to track and normalize.

Brian: Folks can do things to calibrate their systems, do condenser maintenance, make set point changes, do valve group commissioning, defrost optimization, and things that don't take a lot of effort or cost, but have an impact.

Sites were recruited over the past five months, and we looked for sites with a big refrigeration cost. Sites needed at least \$150,000 in annual refrigeration costs, and management had to be willing to send one to three operators to our workshops. They had to be willing to think creatively, share experiences and use their peers as resources.

A handful of sites told us no because food processing sites have a busy summer schedule and they were hesitant to dedicate key resources to the pilot during their busy season. A handful of self-direct customers would have needed to pay for half the training costs, and that was a barrier. The five participants are two food processors, one dairy and two refrigerated warehouses.

Bill: What's the cycle for going back, as in some of your other maintenance programs; repaying to continue the energy-saving practices?

Kim: We didn't go there with this offering, and we're using a different design in this case because we're trying to see what's effective. We're only assuming a three-year life for the savings.

Brian: We just had one workshop, and have another coming up. Each session includes a report-out, a chance to talk through things that didn't go well (and why), and planning content for the next month or so. September will be last workshop, and then we can look at the impacts.

Charlie: You're taking three years on the savings. Will you go back and look again, after that?

Kim: Phil from Evaluations is watching this, which is true for all these initiatives.

Charlie: You're deploying the tools, so you should be able to tell about measure life.

Kim: Yes.

Brian: We're doing a year-end savings evaluation as part of our design, and we're planning to look at persistence. There's no incentive, but if you want one, we discuss that change.

Charlie: Are you having trouble getting production data?

Kim: It's a requirement to participate. When they sign up we're not giving them the software without them providing the data.

Charlie: You're not having trouble getting them to let go of their production data?

Brian, Kim: No. We have a long-term track record with the industry.

Kim: There is market demand now for better energy information—they really want this, are glad for the help in setting it up and wouldn't know what data to pull otherwise.

Brian: We really have to understand their production, and it's very involved.

Bill: You need to know what to collect and keep as part of this.

### **3. Review of Cost-Effectiveness Policy**

Peter: We periodically review all of our policies, and it is time for us to look at our Cost-Effectiveness Policy, which we use to make incentive decisions. Fred will discuss the policy and our planned changes.

Fred: Cost-effectiveness calculations are an established process for how we test whether our investments meet OPUC-established criteria for energy efficiency. It doesn't apply to the renewable energy side. It's quantitative, and based on a long history of policy development at the OPUC and other commissions that predates us. The changes line the policy up with real practices, given what's happened since 2002 in terms of detailed agreements with the OPUC, changes in law and refined practices. We needed to make sure the policy could be implemented, and to make sure that practices line up with the board's intent.

The first slide shows investment tests that are in our policies now. There are three tests in the current policy—societal, utility system and consumer payback.

The societal test compares costs (all costs, including our costs and customers' costs) to the overall benefits of the investments to the utility system and the participant. The benefits are limited to these two parties (utility system, participant) by direction of the OPUC. Benefits include reduction in costs to purchase, generate and deliver electricity and gas. Non-energy benefits enjoyed by the customer are also included. Employment benefits are an example of a benefit that is not included because it is a benefit to Oregon but not to the utility system or the participant.

The utility test compares costs to the utility system, which is Energy Trust's payment for the measure or the program, to the benefits to the utility system.

Juliet Johnson: What goes into the avoided costs for the utility test?

Fred: Any costs for purchasing, generating or delivering power, and a small factor for avoided capacity building for transmission and distribution. Carbon costs are also included. The utilities do this forecast. When programs are tested, Energy Trust costs are all allocated to the programs and all go into this test. This test asks if it's worth it as an investment to the utility system.

Bill Welch: It looks at participants versus non participants?

Fred: It looks at the sum of all ratepayer benefits.

Holly: Are they counted more than once?

Fred: It's not counted twice.

The third test is a program design consideration; a consumer payback test. The payback has to work, and if you don't do it right your program fails. We do this anyway and it doesn't need to be in the policy. There is no single threshold so it's not really a "cost-effectiveness test". Different markets require different paybacks. If programs don't provide the needed payback, the needed technical assistance and the right marketing, the program fails. So it's really a program design criteria.

These tests are not for renewable energy programs; only energy efficiency. Renewable energy programs are governed by different legal requirements.

The cost-effectiveness policy from the board is intended to be consistent with OPUC guidance, and gives a little more detail. Then staff developed a detailed implementation process based on the combined OPUC and board guidance. We use it for testing new measures and programs and also at the back end for evaluating and reporting.

We apply it for prescriptive measures at the beginning. It is applied to the “typical” installation, and then used to qualify all installations. The idea is: you say something is generically cost effective, and most times it is. A compact fluorescent light bulb is a good example. If you plug one in, it will have savings that are pretty close to the average.

Custom measures use the same tool, but only for that particular site and energy study. If you’re doing something custom, it’s done through a detailed energy study, which goes through the cost-effectiveness tests.

Holly: It says here, “applies to gas”. SB 1149 rules don’t apply, but your policy does?

Fred: We work with NW Natural to provide resources through its Integrated Resource Planning process, which is based on the same cost-effectiveness principles. We use the same tools.

The policy was developed in 2002, and we did some housekeeping changes in 2008. The electric side on SB 838 made it clear that these tests were tied closely to utility resource planning. It shows the importance of utility investment criteria in setting our investment criteria. In the policy, the avoided costs were originally coming from the Northwest Power and Conservation Council, but that really wasn’t how we were setting policy. It really ran based on avoided costs for utilities. We cleaned all of it up in practice, but it wasn’t in the policy. The current policy provides others guidance about how we make investments, which seems to overlap with guidance from the board in the strategic plan. Some of the changes are to clean up the cost-effectiveness policy to focus on the cost-effectiveness determination. It’s up or down, pass or fail, and you have to pass both the societal and utility system tests to proceed. The strategic plan in 2009 said a lot about how we make investments, so we are proposing to narrow the cost-effectiveness policy to reduce redundancy and overlap. One example of guidance in the strategic plan is how we balance the risk of innovation and new technologies. The plan guides us to do more of it, but it needs to be done in a certain way.

Our review process started with the board Policy Committee, which led to some clarifications, and has moved to the council. Based on your feedback we’ll take it back to the Policy Committee, and then we’ll go to the board for changes. In parallel, we’ll discuss some new provisions with OPUC staff. Because our decisions are tied to utility IRP, we use utility avoided costs. Once we figure out what’s cost-effective, we work with our program staff to figure out how quickly we can ramp up efficiency programs. For each individual utility’s IRP we use each utility’s avoided costs to serve them better. Out of that comes their IRP plan. The plan does not select efficiency that is more expensive than generation, but selects all the efficiency that is cheaper. The Northwest Power Act provided a 10 percent cost advantage for efficiency used in this process to reflect hard-to-quantify benefits. The OPUC, while not required to operate under the specifics of the Power Act, has adopted this policy.

For internal Energy Trust purposes (selecting measures and programs and reporting) we don’t want to screen on slightly different costs for two gas and two electric utilities, because that would create administrative and program marketing difficulties. The utilities are really in the same power markets but come up with different long-range cost forecasts because of the timing of IRPs, small differences in discount rates and general variability in forecasting. We get together with the OPUC and utilities, and come up with a year-by-year avoided cost forecast,

which is fairly close to each utility's forecast and use that for internal purposes. The policy should say that, but right now it says the Power Council does it.

The current policy directs us to develop capacity costs for power. Energy Trust staff is suggesting that we remove this from the policy because the OPUC has made this the responsibility of the utilities, and we don't have the expertise or tools to weigh in. We need to take it out of the policy because we're not experts in the transmission system; just energy efficiency and renewable energy.

The hedge value adder reflects uncertainty in the costs and the forecasts. If it turns out that power costs and load growth are lower than expected, you may have bought more for efficiency than for another resource, but you got to buy less of the other resource, so it didn't cost you much. If power costs and load growth are higher than expected and you didn't buy enough efficiency, the replacement resource can be very expensive. So the "middle case" forecasts we use to develop avoided costs are biased low with respect to financial risk. The hedge value provides a risk-adjusted middle case for avoided costs. We have this for electric, but no hedge value has been determined for gas.

We worked out how to deal with tax credits with the OPUC. The avoided cost is set by forecasted power or gas costs. Avoided costs are net of all federal and state credits. If we're using that, shouldn't efficiency cost be net of that, too? It's more rational than not using them; not exact, but better.

We're talking to the OPUC about whether this should be done for federal or state programs that align with ours. Clean Energy Works Oregon, CEWO, is an example where the federal government is putting money into programs, and could cause our societal costs to increase significantly. There are reasons for the federal investments that extend beyond energy efficiency, like jobs and fair wages. Should we have those costs included or not?

Bill: The term "total resource costs except," is puzzling. It's never going to be level. It isn't the total project costs?

Fred: We get this conceptual parity that is ragged and sloppy – efficiency tax credits are big for one measure, small for the next. We would rather get it about right than ignore this factor and do it entirely wrong.

If there is evidence we can transform a market and drive costs down, if a product may become a commodity, we can consider future market transformation. Carbon costs are included as costs to the utility—part of the forecasted costs to utilities.

Bill: In what form are carbon costs included?

Fred: When utilities follow guidelines to forecast costs, they have to assume the carbon costs will be there.

We're not carbon experts, although we are sometimes called upon to play that part.

We can sometimes include non-energy costs, like water savings and sewage savings for washers. Non-quantifiable, non-energy benefits are important. Take solar water heating. It has a long payback, but market research suggests that people like building renewable energy because it has more value, has showoff value and you may lead your neighbors to better actions. Different people have a variety of reasons, but they feel strongly enough to put their

money behind the reasons. We take what they pay net of tax credits, pull off the value in bill savings of three years of energy savings, and the remaining amount they paid is a proxy for non-energy benefits.

Holly: How does that impact programs? Through your policy, how does that enable or disable some measures? Is there an example of one that wouldn't make it?

Fred: It's important for solar water heat and some residential measures, and sometimes for commercial and industrial measures. The solar thermal systems have long paybacks compared to other resources. We set the incentives so that the utility costs are comparable to other water heating opportunities, making it a reasonable investment.

We need to decide what to do with things that aren't precise, and stop pretending we can precisely calculate everything that is important. The imputed values are not exact.

We try to prevent the need for doing studies that end in hypothetical values that are no more precise and take up staff time. We can't ignore costs, and need a reason to say that something passes the test if it doesn't pass based on simple analysis—that something expensive will get cheaper, has societal benefit and so on.

Implications of the policy change are few. We're mainly trying to get the board, staff and OPUC aligned. We can continue to pass tests. If there is only a 1 in 5 chance that it's cost effective, we find better things to do.

Bill: What is the timeline for changes?

Fred: Assuming you are comfortable with it, we'll go to the Policy Committee meeting in July, and board meeting in August. In the meantime, we'll talk to the OPUC, especially about federal programs.

Don: Especially with CEWO, if the OPUC speaks favorably, will Home Performance be more cost effective?

Fred: We are not now incorporating federal costs of CEWO into the test—pending OPUC guidance and revision to this policy. If they don't agree, CEWO wouldn't be cost effective. We haven't really had the conversation.

Holly: Can you describe what you talked about again?

Fred: Cost effectiveness on weatherization, but many things come in with federal funding, too. Home Performance is a subset of weatherization, and CEWO is part of that. If we include federal costs, CEWO would not pass the societal test. They are setting up an infrastructure for the long run, but also including provisions that increase costs to meet job and fair wage goals. It would be tested as a large part of our total Existing Homes program, but the entire program might flunk with these costs included.

Holly: Couldn't you add the benefits of what every job feeds back into the economy? You'd add back the costs, but the benefits would be there, too.

Fred: Economic studies show the effects, but it runs against our OPUC guidance to include benefits which are to the utility system or the participant.

Charlie Grist: The policy review committee is a subset of the board, and they've taken a first look. You've done a lot of cleanup, it looks like. What I couldn't find is where you define utility cost tests. I could find societal. We like the total resource cost test. I understand why you're dropping the consumer test.

Fred: Yes, I see that some of the detail about the utility test got edited out. We will include it.

Charlie: Why deploy the utility test in addition to the societal test?

Fred: Firstly, because we're told to. But beyond that, the utility system is making an investment that comes out of rates. It needs to be justified by benefiting the system. Without this, you could, for example say that Energy Trust running a hospital passes the societal test. Running a hospital has societal benefits, but it doesn't have energy system benefits, so it's not an appropriate activity for Energy Trust.

Council member: It's making sure the benefits tie to the source of the money.

Charlie: Do you use net or gross savings in the tests?

Fred: We handled that one elsewhere and kept it out of the policy. It's confusing enough. We've handled it as an administrative policy in consultation with the board.

Charlie: California uses net benefits in the total resource cost test (same as societal test), and they throw away part of the savings.

Fred: Tom Eckman [from Northwest Power and Conservation Council] recently published a paper saying this is not a correct practice. We include savings of everyone, including those who would have done it without us.

Council member: If you're talking about a societal test where we're including costs and benefits to the utility vs. the customer, all the benefits and costs go to one or the other.

Charlie: On the utility system test, you say you're deducting free riders because they would have done it either way.

Fred: We also measure spillover in utility tests because we caused it with our investments. Free riders can't easily be precisely estimated, it's an approximation. We use less precise numbers about the right objective.

That doesn't follow California's practice. Our policy is silent on it.

Charlie: One of the changes is avoided cost is going to be the utility avoided cost. The policy said to use the Power Council number? Avoided cost calculations are in the OPUC guidelines?

Fred: In the late '90s, the OPUC developed a guideline for calculating avoided costs. We are already using utility avoided costs, but it didn't show up in the policy.

#### **4. Commercial sector operations pilot (*Review*)**

Spencer Moersfelder, Existing Buildings program manager, presented the plan for the commercial sector operations pilot.



Spencer: We are excited about the results that the Production Efficiency program has achieved through their operations-based initiatives. We hope to incorporate some of their ideas and run with them. Furthermore, the cost of engineering for small commercial and industrial operations-based measures is high vs. the savings they bring in. This pilot will test our ability to claim savings from operational improvements based on whole-building performance data.

We're also excited because we can provide a low-cost service to customers that will allow us to claim savings, despite the bad economy. It's an opportunity for customers with less capital to invest in energy efficiency.

In structure, this really is three separate pilots. We're looking at EIS, EMS and AOS. EIS or Energy Information System is whole-building monitoring. We're after projects greater than 100,000 square feet in buildings such as offices, hotels and public sector buildings. EMS is different because it has functionality to make adjustments. EMS or Energy Management System provides resolution on the way that a building is operating and the systems can make some adjustments to overcome operational inefficiencies. The price is scaled by the number of monitoring and control points. Target buildings are less than 100,000 square feet such as retail, small offices and restaurants. AOS is Automated Optimization Software. It's good for larger buildings and campuses greater than 250,000 square feet such as colleges, universities and hospitals.

On savings and incentives, we assume savings of 5 percent beyond baseline for EIS, and pay 50 percent of installation and subscription costs. For EMS, we assume 15 percent savings beyond baseline and have the same structure for incentives. For AOS, we assume 25 percent of HVAC baseline, and pay 50 percent of installation cost, up to \$0.25 per kWh. There is a three-year measure life for all systems. We agreed to this with Planning. It may be conservative, but we want to show results before we make the case for longer measure life. So far, it's promising on industrial.

Each system is laid out in the presentation slides. Total expected incentives are \$920,000 out of the Existing Building's approximately \$18,000,000 incentive budget.

Bill Welch: Three-year measure life on AOS and \$0.25 per kWh? I can see why you need to do so much because of the cost, but how do the two link up? One-tenth of that would be intuitive.

Spencer: It's a good question, and we know it will still be cost effective. It's an 8 or 9 cent measure, levelized. The energy savings are cheaper than avoided costs.

Bill: Savings at 25 cents?

Spencer: The 50 percent of installation cost cap will save us. We need to see if we can get the savings to sustain it in the long run. We'll need to verify savings and their persistence, determine impacts on program resources, and decide which product specifications are appropriate for the respective application.

Methods for success include prequalifying sites: selecting sites with dedicated facility managers who have certifications and training such Building Operator Certification training. The products need to have consultant departments that are mature, and can interpret the data for the customer to implement operational improvements. Program and vendor consultants will work together to maximize performance and recommend energy-efficiency measures, bolster communications between operators and decision makers through performance reviews, and bring management and operators together. The hope is the conversation will help the operator

maximize operational efficiency through management buy-in. We'll target buildings with existing service contracts because we need someone to help with adjustments, provide an alert response protocol and track participant satisfaction. We need to provide enough to help them.

Participant requirements are the same for all three system types: we need three years of energy usage history (and will use EZ Sim to normalize and come up with an operational profile we can use for establishing a baseline), the CFO/business owner/building owner will need to sign an application and be cc'd on emails to keep them engaged, the program will have access to the system dashboards (in order to be sure participants are actually using the systems), a three-year commitment to subscription, and the vendor will train the participant on functionality uses. We will have access to reports, and will engage participants in quarterly or semi-annual evaluations.

Lauren Shapton: Two years of history is a piece of cake for PGE, but three years involves a special request and outlay. Are you sure that three years is as important as the cost outlay? It may be a hurdle.

Spencer: Thank you for the insight, and we'll keep it in mind.

We'll do a walk-through to make sure the building is a good candidate to participate in the pilot and gather three years of data. For EIS we will make sure that DDC controls are installed during the walk-through. For AOS, we need to make sure there is a 600-ton chiller or VAV system. After the systems are installed we will conduct a post-installation inspection.

Charlie Grist: You are requiring EIS with some controls? So, you've looked at the dashboards you're going to get?

Spencer: We're expecting some parallels between existing systems and the systems that we hope to install via the pilot. We believe that there are enough buildings with DDC controls for the pilot, and one of the things that will we learn is if there is a broad enough set of buildings with controls to move forward with a larger program.

For data analysis and participant interface, we ideally want to see that actions are being taken to optimize building performance. We need to know exactly how the building is being used. What if there are fewer tenants? We need to know that. We'll do check-ins with the participants by phone or short surveys. We'll try to correlate gains with how the building is operated, and add any recommendations not made by consultants. The program will receive emails of any reports to the participant. We'll log trends, spikes and customer usage, and verify with the consultant.

We're finalizing and blessing the structure. There is a heavily targeted effort to recruit sites. We need to roll it out by mid June; maybe earlier. We'll try to get summer, winter and a shoulder month, and claim savings in 2011. We'll gather results and expand if it makes sense.

Charlie: Which program is going to track it? Who is that?

Spencer: It will be someone at Lockheed Martin; including oversight from Will.

Will Miller: This is the first time we've done this, and we want to see what's required for tracking.

Mike Martinez: We will have people who do this.

Charlie: Will this be a trained person? We want to see how that person learns, and translate it into long run learning. It will take care of reviewing events and logs.

Bill: Success depends on how much feedback you get to building operators.

Fred: Information sitting somewhere doesn't help us. It's what you do with it.

Spencer: The program will stay involved and maintain conversations, but we need the participants, owners and consultants to talk. We'll have access to trends and will track profiles, possibly down to the end use to see what's happening in a building.

Charlie: Someone could go back to historical patterns to see what's happening. The baseline set in EZ Sim weather. That's a monthly bill, so granularity is on a monthly basis. EZ Sim is good at that type of data, and you may want to think of the period of data; it may not always be possible to have a solid understanding from EZ Sim and monthly data.

Spencer: We may want to take a look before installing the system.

Charlie: Looking at RTU as an example, we could look at factors closely, but couldn't see trends on a monthly basis. EIS could give you more granularity to track and maintain a baseline. You might want to install and get the baseline that way, before doing efficiency measures. Sometimes monthly isn't granular enough to get the correlations.

Spencer: Understood.

Andria: Did you look at building types for each system?

Spencer: You can get them off the website with the slides.

Council member: Specific measures are cost effective as measured by the incentive and cost vs. avoided cost. Is this one more of a measure or avoided cost, or something else?

Fred: Some of the costs for monitoring (since this is a pilot) are not included. As a test, we're a little more liberal, and we'll test how much program assistance is needed to get a better picture of the program costs.

Council member: How to avoid higher than necessary costs?

Fred: If it impacts Lockheed Martin's profit margin, it gets addressed.

Spencer: This figures into the budget.

Emily Moore: Do you have vendors in mind, or will you open it up for solicitation?

Spencer: We do have vendors in mind.

Will: There wasn't a solicitation per se. They are people we've been talking to for quite a while and we know their backgrounds. If the pilot demonstrates that the approach results in cost-effective savings we will develop relevant specifications from pilot results and release them for incorporation for an expanded effort.

## **5. Residential customer engagement (*Review*)**

Jonathan Tillman from CSG presented the proposed customer engagement strategy for Existing Homes.

Marshall Johnson: We've talked about engagement strategies on the residential side as a result of the organizational redesign efforts and 2011 budget development last year. What is the new strategy and protocol for residential? This information is for the Existing Homes program only.

Jonathan Tillman with CSG is working on this with us, and oversees the customer experience; interactions between customers and the program. As you know, there is a shift toward emphasizing an improved customer experience. Jonathan will be the primary presenter.

Jonathan: Energy Trust wanted to look closely at the customer experience. We focus on educating homeowners on opportunities, being a resource beyond the first visit and overseeing trade ally contractors. We need to improve the Home Energy Review leave-behind sheet, which shows opportunities, homeowner information and conditions to note. The trade ally contractors' portal on the site has improved. We now have business cards for advisors. More informational pieces are left behind for homeowners. We understand the key themes: points of entry, Energy Trust as a technical resource, how to explain a Home Energy Review and how to use trade allies more in homeowner connections.

From the slides, key themes are:

**Entry points**—Events, calls, past participation, web inquiries and referrals are some. What drives people past that to action? A good bit comes through our contact center.

Jeremy Anderson: These are customers entering into the customer service part, and not overall Energy Trust? The largest portion turns in applications through contractors already, right?

Jonathan: Yes, that's true.

**Establish relationship**—Gather homeowner information and interests, augment information through visit/discussion, offer guidance based on their homes and support their selections of energy-saving offers. That's where we used to stop. Now we want to get them over to an advisor.

**Home Energy Review**—"In-home" was the historical offer. We visit a physical site based on a homeowner call or web request. "Online" is new, the ability to do a profile based on actual assets of the home. We use Energy Savvy and put in basic information. It generates a report and gives a few action items. Speaking with an advisor is an enhancement. Have the question answered by a technical resource, and they are likely to drive you through an online profile exercise.

Lauren Shapton: Which ones were in place before?

Jonathan: In-home is what we have done in the past.

Marshall: We've done thousands of reviews. In 2011 we expect to do around 6,300, and in 2010 we had 6,600. It's an easy call to action to send someone to the house for a walkthrough. It's one way to engage customers, but the goal is to be more efficient and appropriate to their needs.

Jonathan: Trade allies established homeowner expectations. The homeowners now have knowledge to talk with trade allies, who are experts in the field.

Lauren: You're recommending one trade ally or the list of trade allies?

Jonathan: Currently, we are guiding customers to the website and explain how to use the website filter to find a contractor.

**Approach**—We can key in on three points as an example: Customer contacting the contact center with a Home Energy Review request, and the participant did a profile online.

- If they are calling about any regular questions, we can gather the basic information, address the question and offer a direct transfer to an advisor.
- For callers interested in a Home Energy Review—Transfer to an advisor to get in-depth information, which will really be the online profile exercise done behind the scenes using the Energy Savvy profile tool.
- If customers did the online profile—An advisor will call within two business days, and talk through the profile with them.

The online profile is a gathering point. We will augment it and come to a point where the advisor and homeowner agree it's a viable review, they don't need a site visit and they can comfortably call trade allies on their own. The contractor referral method is a key element, but we're not at the point of changing the referral process. Right now, we can search from our existing list, sort, and help marry trade allies on the list with what the customers need. We can encourage them to get referrals, talk to contractors and ask the next questions. We're developing a referral model, with lots of input to make it more efficient. That's down the road. If we don't get an effective review at this point, we'll do the site visit.

Marshall: This is a good time to mention our soft launch of people who have used the online tool.

Jonathan: EnergySavvy (Energy Trust's Home Energy Profile web tool) has been up since November 2010 and about 400 people have used it. We've completed just fewer than 200 phone reviews with participants. Twenty of those have resulted in still needing a home visit. This is anecdotal, only.

Bill Welch: Of the 400, is there any preliminary look at how many did something?

Jonathan: Twenty-three acted; about 5 percent within the first three months.

Fred Gordon: In our history there are some that do it within six months and some within several years.

Marshall: Historical rate has been 35 percent action at the two-year point following the Home Energy Review, consistent for roughly eight years. Potentially, we can further screen the customers and improve that rate by going to the right homes.

Jonathan: We're hoping to encourage them, but give them a long-term roadmap; capture that momentum that we have during the visit. We're shooting for 15 percent after 90 days. That's our basic goal.

Marketing will shift to position us as experts. We'll want them to call us for help, issues and questions instead of calling us for specific offerings. We want to become more of a technical resource, and create a plan with the homeowner with their interests and opportunities in mind.

Scott Inman: More focused on cost effectiveness or savings for projects?

Marshall: The online tool leans toward more savings. If you get under a certain level, it recommends solar, even.

Scott: Cost effectiveness and savings are different things.

Marshall: The tool is more focused on engagement than accuracy in developing a comprehensive listing of energy savings by measure.

Terry Miller: For a more customized audit, based on the customer's needs, wants and finances, the onus is on the advisor to formulate that. The tool is about getting at the low-hanging fruit online.

Scott: Those numbers early on about visits to homes: will they go up or down?

Marshall: We have a robust group of trade allies and a Home Performance assessment incentive is now available. We want the free market to be able to provide that detailed information and we are backing out of in-home reviews as the primary driver for home reviews, favoring a market-based approach. Trade allies have a better close rate than an advisor. The goal is to connect customers with contractors. We've recently launched the Home Performance Assessment incentive to promote contractors doing the home audits. We will still continue to provide in-home reviews for customers who desire the neutral party leading the service. In some regions, in-home reviews will continue to grow, but it's not likely in all areas.

Lauren: You want people to go to contractors for Home Performance. That's a different level of audit.

Marshall: The Home Energy Review is a 50-minute walk through by an advisor, with instant savings measures installed and recommendations provided. Home Performance is diagnostic; air leakage, duct leakage, combustion safety testing, and measures how well the home's components work to save energy. That's two to five hours depending on the home. It's apples and oranges from a detail standpoint.

Jonathan: Our outreach focus is a conversation with the homeowner asking "Would you like to learn more?" We'll move away from "Sign up for a Home Energy Review," as the focus.

Marshall: At the Better Living Show, computers at the show allowed homeowners to walk through the online tool. That was a new focus. We will also train consumers very broadly through Home Energy IQ, and the call for action may be the online tool and to talk with an advisor.

Jonathan: Advisors will be more of a guide, and will need sales skills. We've already done one sales training for them. They need to continue crafting the road map of what we offer, and tell about the trade allies. The contact center answers their questions, but tries to up-sell in a good way—help them understand we can offer more information. Our analysis will include satisfaction

of participants (and we can tell pretty quickly by asking the question “do they value the engagement?”).

**Savings**—We’ll continue to look against historical savings. We want to see if it results in: More conversions? Sooner? Bigger? Deeper savings? We’re shooting for 2.5 measures per project rather than one. We’ll give people a roadmap and help them go beyond the easy things.

Lauren: I applaud this. It’s good to integrate these things. Where does Clean Energy Works fit in?

Marshall: This is an on-ramp. The advisor is of the same training as a CEWO advisor. It will flush out the information needed by the CEWO advisor. If the customer is interested in certain triggers that fit CEWO, we can refer them, multiple measure interest for example.

Those who don’t qualify for CEWO will come through our standard program tracks, and we can still talk to them about opportunities.

Don MacOdrum: CEWO incentive levels in our market have dropped. The CEWO math may not make sense, and ours may, still. Contractors will refer people.

Lauren: If we send them too soon to CEWO, that causes a problem.

Wendy Gerlitz: As a follow-up, is there a trigger for low-income people?

Jonathan: Yes.

Lauren: We’ve had good success with Customer Service Representatives who aren’t salespeople by offering small incentives to the representatives for referrals. It encourages them.

Marshall: We’ll consider that.

Jeremy Anderson: Everything looks good at the high level, and contractors will be thrilled. Contractors will want to be sure that it doesn’t come down to just Home Performance audit or Home Energy Review. There are other options.

Marshall: We’re trying to decide where the logic fits; where a comprehensive plan is needed vs. single measures. If they’ve already done a lot of the measures, maybe Home Performance isn’t right for them. We’ll continue to distinguish the two services for customers.

Peter West: We’ll have basic data, how many discussions we’ve had and where people end up.

Scott: If the chance to sell incentives hasn’t happened before, this is good. We’ve talked more about “You can do this or this,” not a sales approach. Is there follow-up with people?

Jonathan: Yes, there is 90 day follow-up, and we try to figure out what happened.

Marshall: After two follow ups, if they don’t budge, we back off.

Jonathan: We can also offer them a chance to get on the mailing list or email of new offers. Changes in incentives may be the trigger down the road, and we should leverage the up-front investment.

Holly: I really like it. There's thoughtful strategy behind it—linking up resources of what you can offer, and thinking through what's most appropriate, but having everything available. You should see some serious growth or upticks.

Marshall: Part of the strategic plan was to develop a triage mechanism to figure out what path was appropriate for each unique customer. This came out of that process.

Holly: The close rate is fairly low, and this is a thoughtful way to make it better.

Jeremy: What's the timeline on this?

Marshall: June.

## **6. Additional public comment**

There were no additional comments.

## **7. Adjourn**

Peter closed the meeting at 4:05 p.m. The next council meeting will be held July 20, 2011.