

CONSERVATION ADVISORY COUNCIL

Notes from meeting May 19, 2010

Attending from the Council:

Jim Abrahamson, Cascade Natural Gas
Lauren Shapton, Portland General
Electric
Robin Straughan, ODOE
Paul Case, Oregon Remodelers
Association
Theresa Gibney, Corvallis Sustainability
Coalition
Holly Meyer, NW Natural
Joe Esmonde, IBEW #48
Don Jones, Pacific Power
Charlie Grist, NWPPC
Bill Welch, EWEB
Brent Barclay, BPA

Attending from Energy Trust:

Fred Gordon
Oliver Kesting
John Volkman
Kim Crossman

Ray Hawksley
Peter West
Marshall Johnson
Brien Sipe
Tom Beverly
Jessica Rose
Eric Wilson
Diane Ferington
Scott Swearingen

Attending from the board:

Others attending:

Marilyn Williamson, NW Natural
Carolyn Farrar, NWN
Tom Ivancie, Energy Action NW
Tara DeWeese, CSG
Kevin Duell, Nexant
Peter Gutmann, Gutmann Consulting
Murali Varahasamy, Lockheed Martin
Bob Stull, PECl

1. Welcome and introductions

Peter asked for introductions from the group.

Paul Case asked about a Home Star update, and Peter responded that we are going to meet with ODOE within the next few days to get more input about what will happen with our programs should it pass.

Jim Abrahamson wants to be sure we plan how all of the Home Star considerations mesh with our programs. Need to look at aspects like: savings, jobs, carbon, reporting.

Fred Gordon: We could talk about it all day and still not have answers since it hasn't passed yet.

Peter West: We're concerned about one thing – if news about Home Star gets out, it could stall projects until it passes or goes away. We've seen this happen in solar and small wind as changes or projects were teed up. We've dealt with it before.

Peter requested the group to move on to the agenda.

2. Biofuel Project Process

Kim Crossman discussed a change to the biofuel process. Peter indicated that during the last CAC meeting, we changed the process and had a slight problem because we

did it in the room without everyone present who needed to provide input. Facilities that owned their own fuel source were the problem.

Kim Crossman: Overall process was reviewed by CAC, intention was to bring thermal-only biofuel projects through the custom track, but some special conditions were retained.

Item 6 in the process says that in projects where fossil fuels will act as a backup, special conditions (shown in the Powerpoint slides) will be needed. It is intended for sites that purchase biofuels but keep fossil fuel as a backup. The purpose of Item 6 is to deal with that risk. Extra provisions say we need to a) partially recover incentives if they use more fossil fuels, and b) requires proof of fuel supply through the term of the measure..

Wastewater or forest products plants are good examples of the thermal-only plants with an on-site biofuel source. They are likely to retain fossil fuel backup, because they need them to keep from shutting down their processes. By having the extra conditions, we can't run these projects through the custom track. They can't meet section B of the process.

In our suggested addition, sites that don't have on-site fuel sources need to comply to the conditions in the process document. The new language makes the process not apply for the ones who have their fuel source on-site.

Charlie Grist: Without on-site fuel both A and B apply?

Kim: Any project subject to section A cannot go through the standard Custom Track, will need a special negotiated incentive agreement.

Peter: It's about administrative gain, how are you going to monitor it, and how often will you be on site, and what level of deviation will you allow? What's the reward of taking a project through when it has mostly its own fuel source, and what's the risk that they'll switch back to fossil fuels? This will create more of a discouragement than a value.

Bill Welch: We could have provisions for partial recovery of incentives and the bolded language would kick it out of the custom track based on section A. For example, hog fuel got so expensive that natural gas became the cheaper alternative. You could remove the bolded language and keep section A.

Kim: We know that the project economics lead them to use their own fuel, not to switch back to fossil. We have other ways to account for business or process changes that are common in the industrial sector. In the industrial program we take only 10 year measure lives for most custom track measures, to account for common changes in industrial processes that affect measure life. We are already hitting our savings hard by using 10 year measure lives, even with fluctuations. The customer is only doing this because it makes economic sense. In year 5, things could change. We don't know. This is not a leap for us.

Peter: We'll adopt this change.

Kim: The day after the last meeting, we got a project in just like this.

3. Industrial O&M Incentive Offering

Peter: Ray Hawksley will walk us through the 90 by 90 project. We are doing this in response to the economy and because customers want something cheap and quick, so they can act now. They're likely to be repeat customers, once in the system.

Ray Hawksley: This is our O&M offering within custom track. (See slides.) This is not about putting in capital equipment, but about making changes to existing equipment. The opportunity is there and is in virtually every industrial application there is. There is high energy saving potential at a fairly low cost. Projects can happen quickly; rather than months it's weeks. Savings can be captured quickly. Diagnosis brings in capital projects that may have been missed in scoping opportunities. It brings in additional measures. O&M waste reduction provides lots of benefits, like safety, reliability, labor savings, time wasted fixing things, and product quality. Example: a lumber mill improved drying process by using moisture level content instead of just blowing warm air. It improved the drying time and improved the quality of dried wood.

Kim: Why offer these incentives? Plant managers say that they have already done what they can. They claim nothing is left. Not true. Diagnosis helps this, and we may be able to meet requirements with lower set points and through behavior changes. Need to get management behind changes and sustaining them. They can get to operators to cause change.

Bill Welch: In my experience, plant managers are charged with keeping the plant going at all costs. I saw many things that caused waste just to keep things going. Plant managers don't always know what's happening unless someone is yelling.

Kim: Since the inception of the program, we have always identified low cost measures as part of the study. We have never offered incentives. We found that no one we revisited had done a low cost/no cost measure that we recommended. In the fall of last year we launched IEI and Kaizen Blitz pilots related to behavior change. In July, I will do a longer presentation and possibly move them out of pilot to actual offerings. Savings from these are in O&M. 2009 saw many great compressed air opportunities. The combination of these things meant we needed to book the savings that were realized. The program adopted the Custom O&M measure in 2009.

Ray: These are custom measures with a 3 year life, and we target measures that are very reliant on behavior. Small adjustments to set points can erase the savings. O&M requires persistent strategy/monitoring. Incentive is 8 cents per kWh up to 50% of cost, compared to 25 cents per kWh on normal 10 year measures. Actual incentives paid to date are less than 2 cents per kWh. Low cost to save lots of energy; a bargain per annual kWh saved.

With Kaizen Blitz, a system is in place for metering to be sure the system continues to use the lower energy value compared to before measures happened. There is a checkpoint to ensure measures remain in place. Compressed air projects in numbers. Permanent flow meters help identify dead load without production going on. That allows people to fix leaks. Training in the use of ultrasonic detectors to find leaks is provided. We help with that. Changes to O&M procedures follow to tag leaks and have a maintenance schedule.

Bill Welch: Is this similar to Track and Tune from BPA? That's coming back after a number of years, and offering the same things.

Kim: Yes, we do this too on the Kaizen Blitz, which is the same as the BPA's Track and Tune – BPA based this offering on the Trust's Kaizen Blitz. IEI and Kaizen Blitz are complicated offerings.

There are 16 Custom O&M projects in the pipeline in various stages, from studies to complete. In Kaizen Blitz 4 projects are completed. The Custom O&M studies estimate potential savings of \$9mm and 5.8mm kWh. The one completed Custom O&M project saved 500,000 kWh with \$22,000 in incentives for that. The 4 completed Kaizen Blitz projects saved over 7.5mm kWh with \$138,000 in incentives.

Brent Barclay: Was there a study up front to investigate this?

Kim: For the Kaizen Blitz, we are spending about \$40,000 for up front studies. We'll touch on that in July. We don't usually include tech studies when we consider cost-effectiveness, but this time we did because the tech studies exceed the cash incentive value. Even with technical services, the projects are coming in as highly cost-effective.

Ray: The regular Custom O&M is running \$8,000 to \$14,000 for studies.

Kim: O&M opportunity is there because of bad economy, capital constraints and need for sites to reduce operating costs. We looked at our pipeline for projects and felt that these quick projects could get us to goal this year. We needed to provide more motivation. The goal is to keep levelized costs low, bend down the hockey stick, get projects done early, and ramp up what we already started offering for O&M. We're stepping in further and trying to motivate customers to move. Last year's O&M studies did not move quickly into implementation.

Ray: "90 by 90" helps customers implement these things. If they do any measures within 90 days of the offer, we'll pay up to 90% of the cost up to 8cents per kWh. They have up through 8/31/10 to apply and must implement by 11/30/10. The date Ray signs the offer is their 90 day start date. If they don't make it in 90 days, they are still eligible for the regular offer, so they really can't lose.

Holly Meyer: We are getting too caught up in incentives, and maybe looking at O&M costs is a better way to drive savings. We have to consider that maybe there is a better way to motivate movement than incentives.

Kim: The trick of this is: it's short term, rather than just cash. The short deadline seems to motivate action, according to research. Earlier project owners said they were interested but never got around to it.

Holly: That makes sense, but in the long run the value to customers seems to be more in the consultative role, rather than in the incentive.

Kim: It's a perceptual incentive, rather than cash.

Peter: This is about benefit urgency. When we do have somebody come in this way, we also see the capital opportunities, and they may move to those later.

Charlie Grist: This "Sale ends Friday" approach might help.

Ray: Volume has dramatically increased.

Lauren: Case studies should come out of this. This idea works great, but if you always have a sale, people will just wait for the next one.

Fred: You've got the IEI and Kaizen Blitz already to move people higher up in the planning track, but this is for the people who aren't ready for them.

Lauren: Case studies really will help people.

Don Jones: We'll have some incentives which is a great way to make things happen. Case studies are good and all, but cash for small things that are broken will go a long way. This leads to increased activity on the O&M side, but are the three year measure life impacts a problem?

Kim: It may be we need to take another look at resource potential.

Fred: There is a big ugly blob of something that is probably O&M potential.

Don: We have x measure goal, and we are meeting that with 10 year measure life. With 3 year measures, how often do you go back and pay for it again? Year 4? You should think about it.

Charlie: If you watch over time and get repeat customers, you move them to other tracks, or get them into something else. I think it's great. If you get a lot of stuff at the end of the year, it could be useful to fill the pipe in slow times.

Kim: We're hoping.

Jim: Are there any natural gas savings with these? Would this be an activity where no natural gas dollars are involved?

Kim: IEI is finding them but most aren't eligible for gas incentives. Some people know how to get savings out of boiler tune-ups, so we may want to do this in the future. We'll have to create a custom gas O&M incentive. There are no gas dollars with this currently.

Marilyn Williamson: How do you get the word out?

Kim: Our PDCs do direct outreach to get the word out. We can't broadly offer it to smaller shops yet.

Jim: With small industrial and potential gas savings there may be a split between small and large O&M incentives. Cascade territory would be smaller shops, mostly.

Kim: Small and large gas projects definitely look different, and could be a bigger discussion.

4. Residential Sector New Activities

Peter West: There are sometimes worries about overheating the market, but we shouldn't worry about overheating the economy right now because of slow business.

Scott: We had a situation where we had aggressive savings goals and noise coming through channels about various showerheads initiatives, including collaboration with BPA. We wanted to use unspent dollars from last year and get some value. We will provide 40,000 energy saver kits with CFLs, showerheads and aerators. There will be 20,000 for Pacific Power and 20k for PGE. Some costs split with gas companies because of water saving measures. We estimated 10kWh and 300,000 therms in savings.

Last year PGE did an initiative with George Morlan Plumbing with bill inserts about showerheads and a coupon. They sent out coupons and moved 7,000 showerheads. This year the target is 20,000 with a \$2 buy down on them. We estimate 850kWh and 19,000 therms in savings. PGE is doing all of the marketing. A plumber direct install pilot would offer showerhead installs if they are doing other work in the home. We lifted the restriction that it would only be with a high performance water heater. The offer is to anyone. A \$15 incentive is paid to the plumber for the showerhead, information, and some labor costs to change out the showerhead. We expect 200kWh and 4,500 therms in savings. We've added an item for 4,000 Livingwise kits because Livingwise said demand at this point would support more than the 28,000 kits already planned. Also, additional water saving measures were added to SHOW kits.

On the New Homes side, the BPA regional showerhead initiative is starting, and we are helping with over 20,000 showerheads at \$7 each for an estimated 850,000 kWh and 19,500 therms saved. There is a specialty bulb overage; we'll go over budget for those, but want to offer even more. It could bring in 2.7MM kWh savings. Appliance rebates are going better than expected. The online showerhead initiative worked well for fluid strategies. 4,000 units were moved. A link from our site will let people request a showerhead. Portland Water Bureau gives these away on request but they were very cheap. We are going to step in and offer better quality in hopes they will be installed.

(The budget for LISA solar initiative is in the slides)

Holly Meyer: How is the money being budgeted?

Scott: We are moving money from carryover.

Brent Barclay: How are you reaching parts of the state where you don't have George Morlan?

Scott: We sent out MOUs to about 8 installers, mostly in the I-5 corridor, but it's more of a PGE initiative.

Diane Ferington: We went with these distributors because they keep good records and we have worked with them before. We would be happy to go with others, but we need to keep things lean and mean.

Lauren Shapton: We have to be careful of saying it's at some retailer and then customers find out it's not.

Charlie Grist: How much of the savings is in showerheads?

Scott: A large majority of therms savings come from showerheads. The majority of kWh savings come from specialty bulbs and the CFL's included in Energy Saver Kits.

Bob Stull: About 5MM kWh will come through specialty bulbs. Some showerheads.

Scott: 75% of the therm savings are from showerheads. More than 50% of the kWh savings are from bulbs.

Joe Esmonde: What is a specialty bulb?

Bob: They are special CFLs that are used in specific applications like a flood lamp in a can light, or an A-lamp replacing a normal bulb. Basically the right bulb for the right application.

5. Program Updates

Peter West: The program updates are just a catch up through Q1, and there are no handouts, officially.

Oliver Kesting: (Existing Buildings update) Overall, EB is on track, even with a 30% increase in goals from last year. As of the end of Q1 we were at 10% of our stretch goal for electricity and within the last 6 weeks up to 16%. We have spent about 12% of our incentives at the end of Q1 and about 20% at current date. We have a pipeline showing 89% of our stretch goal based on projects with and without agreements, and we discounted estimates based on that. Our analysis was done on through-the-door prescriptive measures and showed gas savings at 9% in Q1 and 21% of annual goal to date. We have currently spent about 25% of budget. The pipeline is up to about 112% of stretch goal. Lighting is a little lower than expected. We are getting a lot of projects, but they are much smaller than in the past. Economic considerations. Some issues are due to BPA's lucrative program pulling contractors away from our projects. We need to analyze changes first, but we can ramp up quickly.

We raised incentives from 20 to 25 cents for non-lighting measures (presented two months ago) and increased the cap to 50% of project costs. We have mined existing studies and located customers who shelved their projects. We have moved into rooftop tune-up and O&M measures. We offer a kicker for restaurant equipment and insulation incentives are higher.

Lauren Shapton: Break it down by utility, please.

Oliver:

PGE 14%
PAC 19%
NWN 23%
CNG 3%
NWN DSM 23%

Holly Meyer: How do these compare to where we expected to be at this time?

Oliver: These are paid measures. We have identified projects up to about 90% of the goal, but we still need to identify more measures.

Holly: We can look at the calendar and guess, but we don't know they will evenly fall throughout the year. Are we where we should be at this point?

Oliver and Peter: We are ahead for NWN, behind for Cascade. We are trying to ramp up and flatten the hockey stick.

Jim Abrahamson: We usually would be close to 20% at this point in the year, so this is really interesting. CNG has issues around our tariff and we want to get to 2010 budget for CNG.

Murali Varahasamy: How are we doing compared to last year? We are behind, and have very few projects in the pipeline. We are ramping things up to try and fill the pipeline. It's a small goal, but we aren't reaching it. We are trying to flatten the hockey stick by adding O&M and other measures.

Jim: O&M is industrial, or is it different? Commercial? On the issue we talked about during the break, should we utilize carryover to fill the gaps? This is a hot discussion for Kathy at CNG.

Oliver: We'll definitely work on ramp up in CNG territory.

Jim: ETO says it will be running out of carryover and ongoing collections of public purpose funds from Cascade, but understand that I'm having trouble connecting low performance with funds being used up.

Jessica Rose: (New Buildings and Multifamily) NB is doing very well across all utilities up through Q1; better than planned given the state of the economy. March saw high enrollments. There were 46 in March, which is the highest in two years. Total enrollments for Q1 were a little over 550. Movement in marketplace is across market segments. Active areas are data centers and larger retailers, but low margin retail is picking up some.

The unique thing that is happening is we're getting more out of each project in the pipeline than we have in past years. This is a direct result from working closely with each customer, positioning them to drive more savings out of each project. We're very relationship driven.

These are the Q1 savings:

PGE 4%

PPL 10% (77% soon from a megaproject)

NWN 40% to goal

There was a push from Q4 '09 that closed this quarter

Cascade 0% in Q1 but forecasted 250% for later this year. Typically in NB program we go through projects in Q2 and look at our forecast for when they hit. Q2 is when they hit for new commercial.

Lauren: 4% right now? Do you have the forecast?

Jessica: The forecast for PGE is strong.

Joe Esmonde: Is the requirement for New Buildings based on square footage or type of project?

Jessica: It could be anything that is a new commercial building; a data center, 7-11, or anything commercial.

Jessica (Multifamily): We consider multifamily to be anything 5 units and greater. We are increasing our presence among property management firms and owners. These are the key people to move in order to get savings. In Q1 we brought in 17 projects. Our progress so far is:

PGE 6%
PAC 11%
20% of gas goal

We are building the pipeline right now, and working closely with the housing authority in Portland for direct install opportunities. We are tracking well on electric and better on gas.

Lauren: What percentage of new buildings are we capturing?

Jessica: I could get that from the Q1 report but I don't have that off the top of my head.

Kim Crossman (Production Efficiency): In PE we actually started the year at a high percentage of our stretch goals with 55% for electric and 74% for gas at beginning of the year in our pipeline. Now, we have 84% of electric in the pipeline. Factoring these savings by project stage, we are at 60% of electric stretch, but this is not including small industrial and lighting or O&M. Gas savings are at 95% of stretch, right now. Factored by stage, gas is at 62%. We are ahead of where we normally are at this time of the year. We initiated over 360 projects this year, and there were only 250 last year at this time. There were 180 projects completed so far, about the same as last year. We have completed 61 studies this year, and only 45 at this time last year. Studies are a good indicator. The IEI pilot will possibly save 20MM kWh this year. There have been few cancelations or delays, other than two big ones this year. Last year, they dropped like flies. We had 16 new custom O&M projects in the last month. I didn't do utility specific numbers by utility.

Holly Meyer: Are ARRA investments helping? What about other programs?

Kim: Not for the industrial sector.

Jessica: ARRA funds are hitting Oregon Multifamily – we can collaborate with the various agencies but not double dip.

Peter: The state took most of the ARRA funds for state buildings and low and moderate income projects. They are paying more for furnaces and appliances for low income. On the appliance side they are behind across the board. A deadline is looming, starting this fall. They'll lose the money if they don't finish up. Developing the rules took longer than getting the money, and the deadline didn't change.

Diane Ferington: The low income agency ARRA fund money is caught up and is moving fine, but commercial is moving slower.

Marshall Johnson (Existing Homes): We're on target to surpass our conservative goals. Q1 numbers show electric to be 28% greater than Q1 of 2009, but we are 16% short of the stretch goal. Related to Livingwise kits, we'll have 24000 booked in Q2 and can count those savings. On the gas side, savings are 23% higher than last year and represent 82% of stretch goal for the quarter. Numbers of measures are down so far. Mobile home savings are up over 200%, and redefining the effort from last year led to a large increase in primarily electric savings. In Home Performance there was a large increase in savings due to compliance; trade allies are accurately reporting projects as Home Performance instead of regular projects. Our training was modified – we used to provide an HP training incentive but have stopped. We now have 49 trade allies doing Home Performance. The new training incentives will focus more on installer training than on auditors. We're seeing good adoption. There are now 567 trade allies in Existing Homes program, up over 200 from last year. We are looking to manage the volume of new people and manage toward the trade allies who are more involved and are bringing savings. Quality, training, and project numbers are all counting toward that. Our top ten trade allies brought in about 1100 measures.

Clean Energy Works Portland now has two phases completed with about 100 loans and 74 test outs. We have added regional representatives outside the I-5 corridor in Medford, Klamath Falls, and Bend. We also have plans for a person in Pendleton.

As for trends, there was a big reduction in call center volume through Q1. The mild winter may be cause, but there are 25% fewer calls than this time last year. There was decreased demand for home energy reviews; 150 less than expected for the quarter and an 8% reduction from last year. The economy and weather may factor in. We don't have specific utility splits.

We are on track for Cascade Natural Gas, and they will benefit from the regional reps. Solarize Pendleton is bringing in more HERs and we may be able to use them for the EAAST pilot. Our Central Oregon rep is also helpful to drive more savings.

Lauren: PGE's call center saw lots of volume in January, but what would normally be high bill calls were instead payment arrangements, this year. Really lower volume than normal in Q1.

Marilyn: Did not having a furnace incentive change the call volumes? What happened in the past when we did have a furnace incentive?

Marshall and Tara DeWeese: Many of the calls were about gas furnaces in the past.

Jim: We only got a 2009 and 2010 comparison. How are we doing vs. this year's stretch goal?

Marshall: I'll have to get the specifics to you.

Diane (New Homes and Products for Kendall): We got 5 new homes in Pendleton and Baker City area for Cascade Natural Gas! Appliances are showing 110% of where we planned for the year. The New Homes program is looking to fall out at 88% of stretch goal on electric. Manufactured homes are 100% on target. The end of year combined New Homes and Products incentives will be about 106% of budget and savings will be about 114% of planned. On the gas side, appliances are very high at 157% of original plans. Manufactured homes tend to be more electric. It may pan out at 39% of goal for Cascade Natural Gas. Overall therms for the program will be 139% of planned combined. May through October is manufactured home season, so we may see a big increase in gas area manufactured homes.

Theresa Gibney: Gas with dishwashers? You mean gas water heat? You apply incentives to a gas heated home but it's not associated with gas space heating. How do you capture those savings?

Diane: To receive a dishwasher incentive as a gas utility customer they would have to be a home with NWN or Cascade gas water heat

Holly: Can we see the numbers? Also, can we synchronize the numbers and dates we're using? It's hard to compare otherwise, so we need to standardize.

Peter: We'll do that for the next meeting, but this time around we covered things verbally. We aren't panicking, but we aren't where we planned to be. We're trying to get a standardized format, and we are working on the percents you mentioned, Holly. Average by quarter is a meaningless number, and we are struggling with what is a meaningful context in which to show them. In terms of what the goal is; Fred is working on that. There are something like 48 different ways we have to report on goals, based on different audiences. We need to agree on what we need for each audience and what the relevant metrics are. We aren't able to do 48 comparisons. We'll roll this out in July and the group can comment.

Diane: New homes and products statistics are a percent of stretch goals.

6. Evaluation of Clean Energy Works Portland Pilot

Phil Degens (Clean Energy Works Portland Evaluation): The pilot Includes on bill financing, EEAST pilot, and the presentation shows which groups are involved. There is a \$20MM federal grant to expand this to the rest of Oregon. (See presentation)

Phase 1 was a test pilot with 24 projects. It took 60-70 days for projects to go from bid to close.

Phase 1 identified issues: role of energy advocates, addressing existing conditions in homes, and process improvements to manage expectations and the pipeline.

The program made a number of changes that led to more intensive pre-screening to reduce dry holes and to speed up the project. The role of advocates was changed. Fees were more clearly communicated, and a second bid option was offered.

The 2nd pilot approach interviewed energy advocates, contractors and stakeholders. We also surveyed successful participants, but need to look at dropouts.

The pilot started in July 2009 and needs to have 500 homes by September 2010. We need to report to the OPUC in October 2010.

The average loan amount was \$10,700 since February. Savings are estimated at \$500 for each home, annually. Incentives were 6% of total project costs.

There were a wide variety of stakeholder expectations: saving energy, workforce development, customer service, and showing that this pilot can move to a larger scale. Stakeholders are cautiously optimistic. They have been very patient with the community workforce agreement, but there is concern about scaling up. What does financing look like moving forward? Federal government may want other things, too. Can the program deliver on equity expectations? Contractors worry about the project being large enough to actually create work and permanent jobs.

Green for All thinks 10.5 jobs were created per million invested, and LBNL believes it was 8 jobs per million. So far, we have seen 4 jobs created by the pilot. There were lots of different goals, and while ours was clear, utilities wanted customer relations, Shorebank wanted to grow work here, the city wanted to see a successful model in developing these things. For others, it was growing a new sector in the economy.

Financing was still considered a key barrier. Customers needed good rates, simplicity, and fixed payments. Banks wanted a secondary loan market which would be a good idea for resale and standardization. It has come a long way, with better close rate, good collaboration, and a functional relationship. Staff and workload issues remain.

There is a question that we should form a new entity for scale up. Training will be needed to scale up, and a promise of work will be needed to justify the training time and expenses. The community workforce agreements are hard to hit. The timeline needs to speed up and there is not enough job creation. We are finding we are saving jobs rather than creating new ones.

Interest rate increases may turn people away. Rescission rights are also a problem. There is a high cost of carrying receivables for contractors, since the projects are big, and it takes time to receive payments. Data collection requirements from the community workforce agreement also pose a challenge. Program viability from cost effectiveness is a problem.

Contractors say this is getting better and the lines of responsibility are clearer, but there is a long way to go.

The program needs to work on business processes. This is a very complex transaction. Workload issues were a problem, and worries of uneven allocation of projects. Some staff were overworked, especially in tracking and screening. Contractors will need to build relationships with new energy advocates.

Mandatory meetings with short notice and not enough contractor involvement were a problem. There was a feeling the program didn't listen to them and a worry that one big firm would get all the work. Project experience received less weight than training and diversity training. Controlling subcontractors is another problem. The CWA flows down through subcontractors, and is hard to control. CWA applied to contractors but not everyone else involved, so there was an equity concern.

The future is cloudy, and there was a cautious response. Where are the jobs? Will this be permanent? Are we overselling? With CWA there is a prevailing wage requirement, and it could drive costs higher.

Contractors felt that Energy Trust is great, this is an amazing opportunity with larger projects than first assumed and it works well for customers.

The energy advocates bring a communication bridge, a link between customers and contractors, and credibility.

Prescreening reduced dead ends, and there were larger projects than anticipated. Some homes have remaining issues outside the scope of the pilot and financing. People are often unfamiliar with their homes.

Staff needed to answer phones, do paperwork, automate forms and do more data entry. Dropout status is still tough to determine.

Loan documentation is a big part of the paperwork, but paperwork is unpopular. This is more complex than selling smaller projects.

Peter West: If I picked our standard track without the loan, would the paperwork be double for that for Clean Energy Works Portland?

Paul Case: There is a whole other half – financial. This isn't just the normal program paperwork; there is CWA reporting beyond anything normal. This is more complicated than any other program I have worked with. It works, though.

Phil: We are continuing work on transparency about fees, caps, financing, prioritizing measures, and costs. We need to know how to handle competition from outside bids. Participants are shocked at the costs and may not understand all of what's involved.

Median home was 1,500 square feet and built around 1938. Their median income was slightly higher than median for the city. The median for successful participants was \$75k. \$85k was the average for all, and average home was 1,600 square feet.

Successful participants interacted fewer times with their energy advocates. Phase 2 people are either mostly satisfied or very satisfied with the program. Almost all of them would recommend this program to others. They wanted more clarity on interest rates, communications, work time frame, type of financing, and the role of advocates.

People rely on the energy advocate to determine if a deal is fair and if the work is being done successfully.

We need to look at staff workload, clarify roles and who leads what, develop an org chart, and automate paperwork – based on evaluators' suggestions. We should allow for auto-populate of key inputs on forms.

We should clarify the role of the bank – also, if we meet their needs, the product becomes less attractive. We need to leverage limited capital by having more options available.

Bill Welch: Are the loans on the utility bill? If that's true, it's mostly a secure loan, so can the banks lower the rate?

Paul: They are trying to cover their costs. It was 3.99% to start with, and moved to 5.99%.

Bill: There is a .4% default rate on our loans. Basically, power is power.

Phil: The new \$20MM will go into a revolving loan fund.

We need to confirm size, scope and timeline so outlying contractors can plan.

We will survey the pilot dropouts, too.

Lauren Shapton: Talk to people when they are paying their loan back. It's important to us since we're going to be holding the loans for 20 years. We need to remind them why this was good.

Don Jones: Experience has shown that the first homeowner likes it, but other ones may not.

Phil: We also want to know: What do dropouts do? Do they do other things outside of this?

There are remaining questions. The test outs don't meet expected energy savings threshold in some cases. How important is the secondary market for loans? Do we need it?

Marshall Johnson: I want to let everyone know, if you are from Portland, there is a project that went through the process and is on display. It's connected to the Architectural Heritage Center, and is an example of an historic home going through the program. It's challenging to weatherize these kinds of homes.

Have you put together best practices for the processes and the maze of paperwork?

Paul: As a contractor, it's not as big of a transition for me, since I worked with ETO, but new contractors may have more trouble. Learning curve could be problem.

Phil: A lot of the paperwork went to the energy advocates and the customer has to sign. Contractors do some of the work, and the energy advocate does some, and it's a big boon for the customer. We can offer more training to help everyone.

Peter: A flowchart to show who does what on the paperwork exists.

Paul: Kind of a flowchart, but more of a document checklist.

Diane: Various flow charts, diagrams and operating guidelines have been created by the program and by the evaluator during the pilot efforts. The intent of the pilot is ongoing improvement that leads to efficient scale up as a program.

Brent Barclay: Savings have been 20%?

Marshall: Depending on the number of measures, the savings threshold increases. If you are doing a package, it will be higher, but keep in mind we don't have appliances, for example. The modeling is based on precondition of the house. Screening happens on the front end to make sure the house has enough energy usage to make it worthwhile.

Jim Abrahamson: Modeling is done based on what would have been saved.

Paul: Most contractors worry about lead generation and filling the pipeline to keep people busy and meet the workforce agreements. Scaling up is a concern.

Marshall: Until recently there wasn't much marketing because we didn't know how much funding would be there.

Peter: Do we know enough, yet, about the new funding to see what we can do in other areas?

Diane: The named communities in the proposal will share \$4MM, and \$3-4 MM will go toward commercial projects to achieve the leverage requirements, and some will be used for the revolving loan fund. By June 1, the city will have negotiations done. We now have enough demand (looking good) to go into phase 4. We launch it with contractors on Friday. The community phase will be targeting neighborhood approach with an RFP. Demand for filling the phase 4 is almost met based on historic screening.

The plan includes expanded metro area, but we want to get to 10,000 homes per year.

Lauren: Commercial is low, but PGE needs tariff and agreements that will take time to do. We're still shaking things out with Shorebank, and we just received our first payment a short time ago.

Paul: We hear tidal waves are coming, but there are gaps between, and we need to gear up and try to keep people busy between waves. New businesses are hiring from scratch and scoring better than existing businesses for purposes of the CWA. Existing businesses don't need to hire, so they have trouble reaching CWA targets.

Holly Meyer: At the Energy out West conference, it came up about energy advocates' role and how objective they are. If they work in lockstep with contractors, how objective are they? Are they helping customers if they are going to homes with the contractors? Who are they helping? There may not be a built in check if the energy advocate is doing the test out with the contractor. There are estimated savings on models with tons of fluctuations.

Paul: The energy advocate is putting bid information into the modeling program, ensuring cap levels, ensuring sizes of homes and up front things. The EA and the contractor can become very efficient together, with experience.

Peter: Solar inspectors and contractors run into the same thing. If you screen projects in advance, it can stop the objectivity concerns.

Phil: The second bid option helps overcome objectivity concerns. Maybe we can move away from 'advocate' to 'advisor.' Maybe there's an implied meaning with 'advocate.' If participants feel misled, we can change the names.

Holly: Are these more concerns about reality than perceptions? Are they misleading people?

Fred: What QC is there on advocates?

Marshall: Energy Trust's QA inspector checks on advocates.

Paul: The advocate is checking test in and test out for contractors. There is lots of oversight. Whenever a utility person tells the customer something, it becomes a fact. There is a lot of power in us saying that a contractor is prescreened. It keeps contractors out of dead holes.

Holly: Are we paying for the second bid?

Paul: I don't know if they are.

Lauren: the homeowner should have to pay for the blower door test if they drop out. They should have some skin in the game.

Diane: The plan for other communities needs to include all of these questions. The easiest scale up will be Portland area expansion, rural communities may have a slightly different approach to program elements like the advocate role, or appointment scheduling, may be handled in a different way.

Lauren: We could declare victory and move on, but we don't know much yet, and we are still in pilot mode.

Jim: As customers' bills go up, they will need education on their savings. The bills can still go up, and we need to continue reinforcing them. Utilities will be on the hook to explain it.

8. Adjourned at 4:20pm