Board Strategic Planning Workshop
Reed College, Portland, Oregon

June 7, 2013

Board members present: Rick Applegate, Julie Brandis, Ken Canon, Roger Hamilton, Mark Kendall, Jeff King, Alan Meyer, John Reynolds, Anne Root, Dave Slavensky, John Savage (OPUC *ex officio*), Anne Donnelly (by phone for the morning session)

Board members absent: Dan Enloe, Debbie Kitchin, Lisa Schwartz (ODOE special advisor)

Staff attending: Scott Clark, Amber Cole, Kim Crossman, Diane Ferington, Fred Gordon, Margie Harris, Oliver Kesting, Steve Lacey, Debbie Menashe, Ana Morel, Peter West, Elaine Prause, Jessica Rose, Sue Meyer Sample, Jan Schaeffer, Scott Swearingen, John Volkman, Marshall Johnson

Others attending: Nick Viele, *Facilitator* (c3 Strategy), Jim Abrahamson (Cascade Natural Gas), Jeremy Anderson (WISE), Bill Edmonds (NW Natural), Jason Eisdorfer (OPUC), Joe Esmonde (IBEW #48), Tom Foley, Robert Hamerly (GreenSavers), Jeff Harris (NEEA), Juliet Johnson (OPUC), Tom Kelly (Neil Kelly Co.), Jeremy Litow (PECI), Don MacOdrum (Home Performance Guild), Holly Meyer (NW Natural), Steve Nadel (ACEEE), Amanda Potter (PECI), Lis Saunders (NEEA), Lauren Shapton (PGE)

Call to order and welcome

President John Reynolds called the workshop to order at 8:00 a.m. He observed that the board Strategic Planning Committee had done a lot of work on the retreat agenda and background papers, and expressed thanks. He then introduced Rick Applegate, chair of the board's Strategic Planning Committee.

Rick: we are entering even more challenging times around energy policy in our country. He welcomed Tom Foley, former president, and thanked John Reynolds for his leadership. This gathering provides an opportunity to step back from routine agendas and take a strategic view, which is important as we develop another five-year strategic plan. We have had three strategic plans—the first in 2002, when the organization was formed, one in 2007, and the current plan developed in 2009—spurred by "seismic events" in Salem with legislation that extended the public purpose charge. Starting next year we will begin preparing our next five-year strategic plan. Today is our initial foray into that effort. We do not need to decide anything today.

Rick referred to page 27 of the workshop packet and referenced the request for a "gut check" from the board on some issues through the course of today. He and John Volkman will be making a list of interesting topics for the strategic plan. We will review them at the end of the day.

Rick referenced the agenda and speakers for the day and thanked them.

He referred to Figure 9 on page 12 in the packet. What is the load in our region without Energy Trust, and what is the load with Energy Trust? There are many benefits caught up in the gap you see on this chart. This is the backdrop, the result, the bottom line for what we have been able to accomplish.

Rick turned the meeting over to Nick Viele, facilitator, who provided some ground rules.

Margie introduced Steve Nadel of the American Council for an Energy-Efficient Economy (ACEEE), noting his 30 years of experience in energy efficiency and influence on national energy policy, and thanked him for his efforts. He has been executive director at ACEEE since Energy Trust began in 2001.

Bleeding edge/cutting edge issues in energy efficiency

Steve Nadel said he is always looking for good ideas to share between states. His presentation showed energy efficiency spending 1993-2015. Half the states have energy efficiency targets with some consequences for not meeting them. Oregon is included because we have multi-year goals. A study last year showed most states are on track with their goals.

Ken Canon asked which line on Steve's graph is Oregon; Steve showed a line in the middle of the pack. The top line is Massachusetts, which has some of the most aggressive goals. Vermont's are very aggressive as well.

A slide demonstrated that energy efficiency is the least-cost resource, which is why so many more people are investing. Most states are addressing the business case, so that utility shareholders do not lose by doing efficiency. Only eight states are not providing any benefits to shareholders. A slide depicted possible coal plant retirements. Oregon is not on the list because it has only one coal plant. States may be retiring 50-60 gigawatts; the total announced and "ripe" equals 88 gigawatts. ICF International forecasts natural gas prices bottomed out in 2011-12 but are increasing and expected to continue increasing a demand surge in 2018-20, as new power plants are built, etc. Prices are forecast to increase from the current $4 per million BTU to maybe $5 per million BTU, but will not reach the $10 per million BTU of the past. Nuclear plant retirements in 2030 and beyond will move prices up again.

Steve reviewed states' ranking on ACEEE's energy efficiency scorecard. Oregon is fourth and always scores in the top 10 in ACEEE's and others' rankings. Southern states used to be at the bottom of the pack but this is changing.

Dave Slavensky: is there a relationship between weather and state investments in efficiency?
Steve: no, California ranks number two and has mild weather. It comes down to political commitment.

Steve reviewed Oregon's scores on all the scorecard areas. It is in the top 10 on all seven. Oregon was in sixth place in 2010 savings as a percent of retail sales. This ranking likely will go up in 2011.

He reviewed challenges facing Energy Trust, including:

- Maintaining annual savings as new minimum efficiency standards take effect
- Achieving cost-effectiveness with low natural gas prices
- Integrating programs with those of public utilities and others
- Capturing industrial savings

As an example, he compared fluorescent fixtures over time. Old four-lamp fixtures used 180 watts, the latest two-lamp uses 50 watts, and one-lamp plus task lighting uses less.

He reviewed the long-term efficiency resource, what can be achieved by 2050. He said by 2050 energy use could be reduced by 40 percent.

Policy opportunities to increase savings going forward include programs like one in Massachusetts. NStar targets the top 150 customers, representing 50 percent of sales, to develop multiyear memorandums of understanding (MOUs), whereby the customer pledges to reduce energy and NStar

pledges support to help the companies achieve this. So far 15 companies have signed MOUs. After two full years, savings are around 180 GWh/year. The first signer was MIT, committing to save 15 percent over three years.

Another variation is Efficiency Vermont's Energy Efficiency Challenge. This targets the 300 largest customers, asking them to commit to 7.5 percent savings over two years, with customized technical assistance to help each of them. Thus far there are 69 participants. As of April 2013, 16 companies had met their challenge goals, and 13 companies were close.

Roger Hamilton: how closely correlated is the cost per unit of electricity and the existence of these programs?
Steve said it is easier to sell these programs to a customer if rates are high, but even on the East Coast industrial rates tend to be low.

He reviewed industrial process opportunities. The vast majority of industrial savings are in processes, not lighting. These can produce inexpensive savings. To top this requires process knowledge by industry, focus on major industries, timing and patience. ISO 50001 Strategic Energy Management is a useful tool.

Regarding market transformation, Steve showed the classic diffusion curve that starts with research and development and moves up through commercialization to codes and standards. He noted the history of building code revisions in the United States. Opportunities include adopting the latest codes (90.1-2010) and 2012 IECC (International Energy Conservation Code). He noted Massachusetts works with municipalities interested in developing "reach codes," making these easier to be adopted statewide. Improving code implementation is also important—through technical assistance and training. Oregon is doing an above-average job on this.

Opportunities for future code improvements include ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) 90.1-2013, which would reduce energy use by 50 percent. He believes it is possible at some unknown future point to have net zero codes.

He recommended doing a code compliance study, as New York did recently. This study found residential basement walls and commercial recovery and cooling efficiency to be most frequently below code.

Potential future efficiency standards could increase savings significantly, for those products that standards can influence. These include residential electric water heaters, incandescent reflector lamps, residential air handlers, walk-in coolers and other equipment.

Lighting design continues to be an opportunity, particularly in tenant build-out, when lighting is often changed.

High IEER (integrated energy efficiency ratio) rooftop systems are an opportunity. The average unit now is 12; US Department of Energy is promoting IEER 18. Energy Trust has been a leader in operations and maintenance. Chillers can be optimized and changed to water-cooled.

The holy grail for many energy efficiency programs is multi-measure retrofits, such as Home Performance with ENERGY STAR®. Many utilities are using only the utility cost test, to allow customers more flexibility in choosing measures. Oregon should consider this.

Connecticut combines blower door testing with duct sealing and other measures, at $1,000/home. Multifamily has opportunities. Multi-measure retrofits are not easy and will require a lot of trial and error. ACEEE is studying current efforts and will have results at the end of the year.

Approaches to building energy management are promising. These include retro-commissioning, continuous commissioning and data mining.

Regarding combined heat and power (CHP), he said ODOE is targeting this with a paper on barriers and incentives. Post superstorm Sandy there's more interest in equipping critical facilities with CHP systems.

A slide showed the top 20 residential MELs (miscellaneous energy loads). An ACEEE study on this is coming out soon.

Benchmarking and disclosure policies allow purchasers to access the energy use profile of properties. Washington State has adopted a commercial policy; discussions are underway in Oregon.

Financing has been a hot area. It is useful for customers without capital, but these are in the minority. A lot of financing programs have low participation rates thus far.

A hot area within financing is on-bill repayment. New York, California and Hawaii are doing major programs. New York, California and Hawaii are about to sell on the secondary market. Commercial PACE is gaining traction.

Regarding behavior, OPower is averaging about 2 percent electric savings. In-home displays are averaging 4 percent savings, most from a limited number of "cyber-sensitive" customers. There are lot of opportunities to influence behavior in the commercial sector. Savings of 4-12 percent have been documented. Programs involve education and competition.

He reviewed opportunities—up to 20 percent savings—from Crosscutting Intelligence Infrastructure.

In summary, Steve thinks new opportunities have a potential to save up to 30 percent.

Alan: Do programs you cited have the freedom to collect funds from all industrial programs or are they limited to directing funds from the contributing entities?
Steve: the successful programs offer flexibility. Some have success with self-direct variations, including putting funds into a "savings pot" that will revert to a general fund if the company does not use it within, say, three years. Companies committed to energy management will get back more than they invest.

John Savage: I have three questions. First, when you mention CHP do you mean CHP or distributed generation? Second, is anyone making benchmarking mandatory? And third, is anyone tying on-bill repayments to the meter?
Steve said most are. Benchmarking disclosures are mandatory in some cities, including New York City, Philadelphia and Boston. Regarding CHP, ACEEE is interested in efficiency through CHP—heat and power, not distributed generation. Only a couple of places have tied on-bill repayment to the meter.

Ken: Can you comment on the energy efficiency component of pre-pay meters and voltage optimization?
Steve: utilities are supposed to provide 120-125 volts. Voltage optimization involves measuring

voltage at the end of the line to see if voltage sent out can be reduced. He said pre-payment is a double-edged sword. It may mean that for a period of time people do without power. However, it can be effective producing savings.

Julie Brandis: what about energy efficiency as a system? I am interested in the MIT example, which might pertain to Oregon institutions. How do you decide which buildings to prioritize?
Steve: this is complex and gets into heavy engineering, looking at where energy is being used, where it is being wasted, identifying priorities. Engaging students in the analysis guarantees them a job for the rest of their lives. For example, fume hoods are large energy users and tend to be left on too much of the time.

Roger: what about block rates?
Steve: places like California are exploring doing away with declining block rates. This benefits thrifty users.

John Reynolds: can you elaborate on rooftop HVAC?
Steve: traditionally they are rated for effectiveness at 95 degrees. The trade association and ASHRAE collaborated to create IEER (the I equals integrated), which is better suited to places where temperatures rarely hit 95 degrees.

Mark Kendall: I'm interested in issues about meters. Regarding MOUs with large customers, to what extent is it about baselining and getting meters straight?
Steve: some may be getting into metering issues, but there is a lot you can do without getting sophisticated.

Roger: what about sources of projected natural gas cost increases?
John R: and is gas export factored in?
Steve: In the forecast I showed, most of it relates to gas demand tied to price. Gas exports are assumed at a moderate level (10 percent).

Stage-setting

Margie Harris welcomed everyone to the meeting and introduced the Strategic Planning Committee from the staff—Debbie Menashe, John Volkman, Fred Gordon and Elaine Prause. Kim Crossman wrote the chapter on industrial efficiency. Margie mentioned that her presentation uses Prezi software.

Today kicks off planning for the 2015-19 strategic plan. She said our recent double-digit growth has been exhilarating—savings increasing at a faster rate and lower cost than predicted. Electric growth 2012 vs 2011 is up 12 percent; gas savings are up 22 percent. We think our double-digit growth will level off by 2015 and begin declining starting in 2016. We would still have energy efficiency resources to attack, but savings growth will slow.

She outlined influences affecting our work, each tied to agenda topics, including:

- Advances in the energy efficiency field
- Changes in energy plans and policies
- Technology has changed; NEEA brings new technologies to market
- Economics and rules change
- Market strategies change; we test them through pilots

Margie noted the importance of:

- Making it ridiculously easy for people to act
    - Speak a language people understand

    - Offer financing to those needing it
    - More social media
    - More on-line forms
- Serving everyone
    - Everyone contributes to the public purpose charge; everyone should have an opportunity to be served
    - Reach deeper into diverse communities, such rural and urban, people who speak different languages
    - The green community needs more colors
- Leveraging momentum created by local sustainability efforts
    - Governor's 10-year energy plan
    - Energize Clackamas; efforts in southern and eastern Oregon
    - Go outside typical energy boundaries to build connections to other aspects of sustainability, such as water, waste, etc.
- Defining influence in new ways
    - How do we identify our influence in the marketplace, when there are so many actors who have woven efficiency into their business models
    - Customers now demand efficiency
    - Going forward, we need to raise the level with codes and standards, influencing behavior, and focusing on market sectors that might be lagging
    - Find and use new ways to measure our influence and our success

We need to focus on the next five years, 2015-19, with new ideas and approaches. I am very proud of Energy Trust's successes. I am personally interested in climate change, and public concerns are shifting. Energy Trust's culture, talented staff, and goal-driven work will play a role. Margie invited questions and comments.

Joe Esmonde: I want to echo what Margie said about reaching out to diverse groups.

Ken: This question does not necessarily reflect my personal point of view but is important. You stated we should be concerned about who we serve. This makes us sound like a social service entity. This needs to be balanced against meeting climate goals, for instance, which suggests the advantage of obtaining the least-cost efficiency.
Margie: are these really mutually exclusive? We need to attempt to help everyone who contributes.

Rick: Isn't this the issue we have wrestled with at each of our strategic planning retreats—balancing equity with results? The issues are not mutually exclusive but they affect each other.

Alan: you lost me when you said we need everyone who contributes to participate. People participate out of free will. Our right place is somewhere in the middle of a focus on serving all and targeting the most cost-effective energy savings.
Margie: we are researching who participates now, to determine whether our assumption is correct that they are mostly middle class and white. More diverse communities do not travel in our circles and need different communication and awareness-building approaches.

Big picture of the Energy Trust efficiency program

Fred Gordon and Elaine Prause presented. Elaine said she will explain how we are doing now, what factors limit growth and how to address them.

Elaine reviewed current goals:

- 2010-14 range of savings

- Budget and action plans, updated annually
- Utility Integrated Resource Plans (IRP)
- Governor's 10-year energy action plan

So far, we are doing very well against our goals:

- We expect to end 2 aMW above the 2010-14 strategic plan goals
- We will formulate only one combined savings goal per utility going forward, and no longer set different goals for the stretch scenario, conservative case and IRP
- We expect to achieve the 2014 strategic goal on gas as well

Elaine's analysis of successful strategies to date, over the past 11 years, shows no single, long-term strategy to credit but, rather, a combination of many approaches. Successful strategies include:

- Supersaturating key technologies
- Opportunism—data centers, megaprojects, combined heat and power (CHP), Strategic Energy Management (SEM)
- Innovations in delivery and program design—packaged approaches, contractor models, pilot process
- Customer experience should be "ridiculously easy"
- Teaming with regional partners
- Anticipation of trends

Our impact on electric load growth is dramatic: loads would have been more than eight percent higher had Energy Trust not been active. Elaine showed the trend toward declining added savings each year in the period 2015-19. This has to do with the prospect that the remaining resource for electric efficiency is declining, low natural gas prices are affecting gas efficiency, and our 10 years of success. She noted the volatility of natural gas forecasting—different forecasts portray very different estimates of future use. If we were able to maintain the cost-effectiveness of our measures, savings would not decline.

Rick: why did Energy Trust achieve only 38 percent of the 10-year "achievable potential."
Fred: "achievable potential" assumed unlimited cash. For its first years, Energy Trust was limited to a set amount of funding under SB1149.

Elaine noted that, to reach the Governor's 10-year plan goal, Energy Trust has a role but other state agencies and utility organizations also will need to contribute. She outlined coordination topics for Energy Trust and ODOE.

In order to maintain our level of annual savings, we need to increase spending efficiency through spending less to get more savings, and to identify new cost-effective resources. Strategies for more efficiency spending include:

- Transactional efficiencies, enhanced by new PMCs
- Cost-effective measure mix
- Targeting high use customers, supported by better data access
- Upstream incentives for retailers to sell more high-efficiency items

This list suggests an incremental shift in emphasis from other goals like equity toward dollar efficiency.

Ken: I am interested in benchmarking, and how Energy Trust compares to other utilities, including Puget Sound Energy (PSE).
Fred: It has been difficult to interpret the data we can get, because the information provided by each

utility is not consistent in many ways. From what we have collected we conclude we are in the ballpark.
Ken: I am interested in the comparison to Puget Sound Energy, and I wonder what the advantages are of the Energy Trust model compared to the utility-delivery model.
Fred: transparency, influence of evaluations and innovation.
Margie: at a recent NEEA meeting, member utilities talked about constraining spending on energy efficiency. We do not have that issue. We are mission-driven, single-purpose, focused. Utility efficiency programs need to fight with other utility programs for corporate support. We have a lot in common with PSE but we do not have to fight to do our work.
John S: PSE is a good comparison, because they provide both gas and electric. It is wise to benchmark ourselves against others.
Margie: we also provide renewables.

Fred: a contractor assigned to do a benchmarking study for Energy Trust concluded that benchmarking savings and cost did not work because of problems with the comparability of data and situations. They recommend that we benchmark on best practices for program management as being more meaningful.

Alan: are you including SB 838-funded results in our 10-year numbers?
Rick: did you compare the percentage attainment of cost-effective efficiency?
Elaine: we could not obtain this level of detail. We could obtain how much was spent per customer.

John R: I wonder about the value and practice of defining “large users,” noting a small, uninsulated home occupied by a lower-income family can have higher use per square foot than in a high-total-use home that is larger and middle class. Should we target the small home?
Fred: for folks with limited income and smaller loads, savings are limited. We either need to pay a lot for the limited savings or they need to spend a lot of their own money to produce savings.

Mark: what kind of metrics are we going to establish to determine whether we are getting broader reach versus greater cost-effectiveness.
Fred: we differentiate among business types and sizes. To get at ethnic and income diversity, we need to identify who they are and how to reach them. We do not currently collect information on ethnicity or language for our participants, so we will try to get indicators of these factors by looking at participation by census tract.

Ken: what about upstream incentives, and how our work coordinates with NEEA’s?
Fred: there are areas they lead and areas we lead. For example, we are doing a Market Lift pilot for lighting that NEEA is watching to see if it is regionally applicable.

Nick Viele requested questions on any of the material covered thus far today, focused on what work Energy Trust should continue, what work should stop, what new work should begin?

Mark: we want to continue the level of performance verification we have had in the past. We need to tighten our ability to forecast with rigor.

Ken: the questions are so absolute. So much of our work has been evolutionary. As we continue the programs we have, we need to consider how to target areas where we have had less success.
Rick: It is hard out of the chute to say what things we should stop. These questions seemed like good ones when the committee formulated them, but we generally rely on iterative conversation.
Alan: these are very generic questions so I will provide a generic answer. We should continue what we are doing that is successful and cost effective, and stop the things that are not.

Jeff King: I cannot respond to these questions. We need further elaboration to be able to respond intelligently.

John R: back to targeting, I remember early on we targeted restaurants and succeeded with pre-rinse sprayers. We made almost no progress on other measures, such as rooftop units.
Fred: we began our relationship with the Restaurant Association, then later came upon the opportunity with pre-rinse sprayers and achieved a lot of savings. When we figured out how to do rooftop tune-ups, we began making headway. Over time, we slowly found the things restaurants want to do, but they were not necessarily what we first envisioned. We are getting close to having served a large percentage of some building types, such as large groceries. Office and retail have a huge number of buildings, and even though we have reached many, there is a bigger unsaturated market. We are breaking this down into size, type, owners in order to better understand who is not participating that we need to target.

Rick: I do not think we have a groundswell of members who want something stopped, nor any focus on something we want to begin. I wonder if stakeholders have expressed thoughts on these points.

Margie: I think the question gets at how we are measuring our success, including cost-effectiveness. The low cost of natural gas, combined with current cost-effectiveness components, could require stopping some of our current activities.

John S: OPUC will host a public meeting in July. We will ask Energy Trust to put a hold on all waiver requests and bring results from current programs about this time next year. We will run these results through a screen that includes criteria like market transformation and social benefits that are outside the definition of cost-effectiveness. From there we will decide whether to change criteria for determining cost-effectiveness.

Ken: are there changes contemplated in how we use utility and total resource cost (TRC) tests?

John S: I do not want to go there. At the same time, I do not want you spending too much time trying to quantify all the social benefits. I would rather have clear criteria to give you guidance about whether or not to continue a program.

Mark: It is important to continue simplifying information and participation in order to engage those not currently participating. I support more web forms and promoting greater use of them.

John S: you are continually adjusting to deliver programs better, faster, cheaper. This is what you should be doing. Regardless of the governor's goal, you would still be doing all you are doing. Look at this operation as a business and ask yourselves, should we be putting more money here or there?
Margie: our newly granted access to customer data can help us target communities we are missing.

Rick: by not taking a harder look at those more-difficult-to-quantify benefits, are we confident that we are not undershooting cost-effective conservation.
John S: no, you are not undershooting. Energy Trust's cost-effectiveness formula is solid. The main benefit of Energy Trust is keeping energy costs down for all. If a measure produces huge water savings for a customer, the customer should pay a larger share of the cost.
Margie: I see that as going to where the customer is, as an entry point. If there are water and energy savings from a measure, it's a win-win.

Steve N: let's say a customer's projects meet the cost-effectiveness test and they want to do windows, can they? John S: yes, because it's not a stand-alone.

Alan: no one replaces windows in order to save energy. If by incentivizing efficient windows we can get them to buy other efficiency measures, why can't we do this?
John S: it makes sense for windows.
Fred: this comes down to some less tangible values such as comfort or health, which drive some customers but not all. Where it is hard to quantify, we are working on reaching agreement with the OPUC on how these benefits should be factored into decisions.
Alan: if it passes the utility test, who cares? I do not understand why we apply the societal test. Who are we to be making a judgment about how people invest their money?
Fred: the societal test is about how all Oregonians, considered as a group, become wealthier if we reduce the cost of energy.

Anne asked Margie for more on the ethnicity issue. Are you saying we are missing the mark on residential? Industrial? Is language the barrier?
Margie: We are at the very beginning of defining it. It has many dimensions. Ours is largely a white industry. There is something inherently beneficial in looking at how to reach different, ethnically diverse segments of the market. Everyone contributes; not everyone knows about us. This affects how we hire and procure, as well.
Anne: are you thinking about marketing? Who we work with?
Margie: we are not connected with all these groups, and they are not connected with us. It is more a series of questions and opportunities. It reflects a certain vulnerability we have by not serving all those who contribute.
Anne: you're looking at cultural pockets, not necessarily ethnic groups?
Margie: yes, for instance, we communicate in Spanish, but there are many other communities we do not communicate with.

Rick: I do not think of us as a social service organization. We are ratepayer-funded, and must respond to ratepayers. Back to an earlier question: confirming that we are not undershooting results because of cost-effectiveness definitions.
John S: you saved over 50 aMW this year—an astounding result. The bigger issue for you is sustaining this.

Dave: as we pilot new things, such as reaching more diverse audiences, it would be helpful to quantify the level of effort required.
Margie: we could do this as part of the budget.

John S: 10 percent of the public purpose fund goes to low-income housing. Are we collaborating with low-income agencies?
Margie: we work with affordable housing agencies to make sure remodeled buildings are of higher efficiency than they otherwise would be.
Diane: we coordinate quarterly with low-income agencies. We have overlap with food pantry programs and offer kits with CFLs and water aerators. We have the Savings Within Reach track, which starts at income levels where CAP agencies end. Our refrigerator recycling program serves low income populations as well as others. We have done a lot of work in that space.

John S: do you have a specific budget for pilots?
Margie: we do not create a pre-designated amount of money, but we do have a specific approach to qualifying pilots.

Ken: I view the diversity discussion as involving customer groups, each with different characteristics. They are all customers of Energy Trust. It is important to reach them. Equal opportunity does not mean we need to have equal outcome.

Steve N: to clarify what I said about financing, it is useful to some customers, but is not going to solve all problems. It needs to be complemented with other kinds of assistance. Regarding the last question, I suggest re-wording to ask what things should be expanded and what might be cut back. We should spend more effort on industrial process, water-related programs, codes and standards, intelligent efficiency and commercial behavior. A number of states, such as New Jersey, have affordable housing financing agencies, and collaboration with these organizations can produce results.
Roger noted new estimates of the social cost of carbon. The former estimate was $42/ton; it is now up to $60 or $70/ton. How does that work its way into how we evaluate the effectiveness of our programs?
Margie: a carbon adder is used in integrated resource planning.
Fred: the OPUC's charter involves cost to ratepayers. They try to forecast the cost of carbon that utilities and their ratepayers will need to pay. Without cap and trade or a carbon tax, or another federal or state policy which puts concrete costs on carbon, the forecasters are not sure that utilities will see a cost, or when, so it is hard to forecast this cost. They discount for the possibility that it might not happen, or happen soon. We do not have a big carbon adder right now as a result.
John Volkman: I was at a Northwest Power Council workshop recently when these results were reported. The Northwest Power Council has not decided what to do, but recognizes these are real costs and need to be accounted for. The issue is very much in motion.
John S: right now the cost-effectiveness calculation includes all avoidable cost, including carbon.

Tom Foley: I remember back at the first retreat, John R advocated for behavioral conservation. We had no ability to tap that then, but now we do. It is cheap and available, and Energy Trust should go way beyond its goals and achieve the vision John R talked about at that first retreat. This will help as Smart Grid comes into play, and buildings have the ability to understand more about their energy use.

The board took a lunch break at 11:30 a.m. and resumed at 12:35 p.m. John Savage left the workshop during lunch.

Large customer electric efficiency

Kim Crossman noted that Energy Trust already is doing most of the innovative practices for the industrial sector mentioned this morning by Steve Nadel. These practices led ACEEE to name our industrial program as one of three "exemplary" programs in the nation this spring.

The program just hosted its twice-annual Breakfast of Champions yesterday at Gunderson. On the topic of diversity addressed earlier by Margie, there are more than 70 languages spoken at that site. Gunderson did SEM with us. One element of SEM is employee engagement. We can learn from them how they engage employees speaking so many languages. They do this every day.

When Energy Trust began, more than 20 large industrial customers eligible for self-direction (over one aMW at their sites) chose to self-direct their public purpose fund payments. Today only seven companies self-direct for conservation. (Self-directors are eligible for 50% of normal incentives on projects that they do not use to meet their self-direct requirement. They do not have to stop self-directing in order to do this. If they want full incentives, then they have to stop for at least 36 months.)
Ken: I think some of the self-directors stopped because they sought Energy Trust advice. The rest may have stopped knowing they will receive greater benefits by participating with Energy Trust.

Dave: what about SB 838 funding?
Kim explained that SB 838 excludes customers over 1 aMW. She said Energy Trust established a methodology to identify how much Energy Trust had been spending on large customers before SB 838 passed, and we keep the average percentage at or below those historic levels. We are re-

examining this methodology with the OPUC.
Rick: Was there a board decision related to this?
Fred: the percentage cap came out of multiparty negotiations. It was not a board decision.

Kim: after 2012, we are very close to exceeding the historic percentage of spending on large customers in PGE territory. When we trigger this, we will need to constrain spending on these customers until we can bring the average spending on them back down. If this were to occur, we would lose savings; our first estimate is 8-12 aMW over the next five years in PGE territory. The loss of lower-than-average-cost savings increases overall portfolio costs. In addition, the side effects of curtailing funds could magnify these losses over the longer term. We could be damaging customers' perceptions of the value of efficiency and relationships that we have worked very hard to develop.

The planning team is determining whether the methodology is viable, understood and accepted by the OPUC. It is quantifying how the limit impacts our costs and affects 2015-19 savings. The program team is identifying the least damaging actions to reduce large customer spending when we need to, and determining what new or expanded program strategies can help make up some of the lost savings. However, we have a near-term issue, another potential megaproject in PGE territory. It is practically a sure thing that saying yes to this megaproject will send PGE spending over the limit.

Alan: you have not hit the cap yet so you may not need to reduce spending.
Fred: if we go over, we are cumulatively over; to get back in balance, we will need to reduce spending.

Kim: we will need to spend less, but this does not *necessarily* mean lower savings. We are considering how to:

- Minimize loss of savings
- Minimize damage to customer relationships and their attitude toward energy efficiency
- Keep it simple, avoid creating new inefficiencies in program operations, make changes easy to explain

She reviewed potential low-risk program actions:

- No new megaproject in PGE territory while funding is constrained
- Reduce annual cap on incentives from $1million per year to $500,000 per site.

Dave: how does the $500,000 limit compare to what a large organization pays into the fund?
Kim: I can give you an anecdotal number. As we begin to lower our site caps, the incentive for large sites to self-direct increases. At $1 million per year, the benefits of full participation far outweigh self-direction.

Alan: the megaproject site was self-directing until receiving megaproject status.

Mark: how many clients would be affected by lowering the cap to $500,000?
Kim: we have not had clear visibility into who is or is not using more than 1 aMW. I think there are 150 customers across PGE and Pacific Power. Only a few customers a year receive more than $500,000 in a year.

Ken: is $500,000 enough on an annual basis?
Kim: we need to do the math. There seem to be big projects coming—data centers, CHP, semi-conductor. These will create new opportunities; the cutback will set us up to say no to those companies.

Alan: tell us again why we give any money to self-directors?
Kim: it is a board policy from early years. We are only working with them above and beyond their self-direct requirements. Self-directors tend to be slow to see the value of energy savings; they have more of a compliance mindset about their self-direct requirements, but we can influence them to go beyond this. We get cheap savings, at 50 percent of incentives.

Kim suggested a mid-risk strategy:

- Lower site caps for self-directors to 50 percent of standard cap ($250,000)

And some additional potential actions:

- Budget cap on PGE incentives to large customers across all programs serving them
  - Tends to lead to less savings across the programs
  - Requires reservation systems, with its consequences
- Discontinue funding for self-directors
  - Would result in lower savings and loss of lowest cost savings

We could develop new sources of savings:

- Focus innovation on smaller businesses
  - Custom PDC support and SEM to small industries
  - Scale up small commercial packages of measures
  - Costs will increase; not sure how much
- Continue offering SEM for large customers
  - Keep them deeply engaged in energy efficiency and Energy Trust despite possible capital funding limitations
  - SEM is a two-edged sword at a time when we are trying to limit spending on larger customers; it comes with inexpensive savings but stimulates further engagement; they know how to get done what they want to do

She outlined discussion questions:

- What is your gut reaction to the actions we are considering implementing when we reach the funding threshold for these customers? What else should we be considering or watching?
- What other aspects of this issue would you like to explore for the 2015-19 plan?

John R mentioned the most infamous megaproject, Blue Heron, which has ceased operating. He asked for savings from megaprojects.

Kim: we have done six megaprojects, three in PGE territory and three in Pacific Power territory. Two of these, Blue Heron and SP Newsprint, saved less than we hoped but were still a good deal. We paid 1.4 cents/kWh on the projects that saved significantly less than we had hoped. The average across all megaprojects is 1 cent/kWh.

Alan: how do we know that we are allocating the dollars properly? Why such a discrepancy between Pacific Power (27 percent) and PGE (18 percent). Early on we had more effective personnel working in Pacific Power. Should the percent breakdown be maintained?
Kim: The market situation has changed; we are working effectively with large customers of PGE now. We are examining this.

Rick: should a larger group be engaged in this discussion, as Oregon is affected statewide?
Ken: both issues (electric large customer limit, transport gas customers) probably will engage others outside Energy Trust. It is probably more of a role for OPUC, ICNU, gas companies, food processors, other stakeholders to consider alternatives. Legislative change is an alternative, but not the only one.

We need strong data and a focus on lost opportunities.
Margie: I agree with Ken and would bring more large customers to the table, such as high tech and utilities. Bringing parties to the table is an OPUC role. We are in the role of bringing information to the table. There is a benefit to claiming these low-cost savings for all consumers.
Fred: the OPUC staff is looking to a process much like the one Ken described.
Ken: the challenge is to find the right type of 1-5 aMW customers to participate.
Mark: in the long run can we expect to get the same cost-effectiveness in the future? I would need more data to consider advantages of the mid-risk options.
Alan: do not wait too long to address this.
Rick: I am glad we have elevated this issue. It has some very important consequences. A lot of this can be fleshed out and our role defined before we complete the new strategic plan.

Dave: are we going to have this issue before us fairly soon through the megaproject?
Kim: within 4-6 months.
Dave: can we use our interest reserve for this?
Kim: not proactively. We would make a commitment over several years and would need to curtail spending with other customers.

Fred: it is important to know that, absent a major adjustment on how to draw the line, we are going to face these limits before the legislature can make any changes.
Rick: we would hope the discussion can get going, not as part of the strategic plan, but parallel and independently.

Kim: while we need to engage this topic now, I do not think we want to go to the market and tell them there may be a funding constraint in the future. We will want to talk with some industries, such as food processors; but by and large we need to keep offering our program or we risk losing savings.

Ken: these businesses have had the rug pulled out of them before, such as when BETC was cut out. We need to be open and honest with customers, even if they do not like what they hear.

New technologies and methods

Fred Gordon said the presentation is in two parts: what we are doing at Energy Trust, and NEEA's efforts in this area.

Long-term forecasts of the amount of efficiency that Energy Trust will acquire influence utility generation and infrastructure plans, Energy Trust business plans and state carbon management plans.

These electric conservation acquisition forecasts show a slowing of the pace as we rapidly move through the more straightforward opportunities. For gas the big question is cost-effectiveness.

This slowing is because much of the remaining available electric efficiency opportunities are expensive, have complex marketing issues, or can be acquired only when new equipment or buildings are built or bought.

But the forecasts have a bias. They are based on energy efficiency opportunities that are proven, cost-effective and available in the market today. We know that over time more efficient technologies have entered the market and that we expect more to do so in the future, and these will have a significant impact. We do not know how big that impact will be. As part of the Boardman settlement, PGE brought in Bonneville Environmental Foundation to consider the effects of technology into the future. Energy Trust staff worked with them to do a first-cut analysis of the impact on efficiency supply

of emerging technology. We agreed that this is a good start but that the estimates are not reliable enough to use in program or resource planning.

ACEEE did a 50-year look. That may be too broad to use in resource planning over 20 years. NEEA has a planning team for new technologies looking at 300 MW in the next 20 years. We are trying to thread the needle to compile a realistic picture of possibilities. Our tentative approach is not to try to build up a reliable estimate from the details of individual measuares, but to try two or three ways to develop quantitative scenarios, and perhaps use them to establish an upper and lower bound on how much new cost-effective efficiency we can expect.

Dave: in the last four years we have not built many buildings. There is a surge of new construction now. Do we track that?
Fred: we base our forecasts on utility load growth forecasts, which are based on new construction permits and plans. We are getting 70 percent of new commercial efficiency floor space and 25 percent of new homes.
John R: we used the down market as a time to educate builders. I am hoping to see that market share go up to prove out our investment.
Peter: we were at 12 percent of the new homes market when the recession hit. Now we are at 25 percent, so our approach worked.

NEEA's stage-gate process on technology identification and development

Jeff Harris said everybody is talking about emerging technologies but not all of them are ready for the market nor are they cost-effective. NEEA's view about the path of innovation is: it is a long, slow ramp-up until everyone gets it, and it takes off. NEEA is in the business of increasing market share sooner. If we are successful, we will lower the cost to everyone. CFLs cost $15 in 1990; now you can buy a 12-pack for this amount.

I am talking today about the very front end of that process. To get to the inflection point takes a lot of work. The NEEA process begins with concept identification, then through real-world testing, through a mature market, and long-term monitoring. At the front end, we throw out three out of every four things that come in the door.

Jeff showed a graphic depicting technologies fully developed, and level of effort supporting them, along with higher cost, higher risk technologies that are less far along.

Another slide showed NEEA savings over the years from 1999 and into the future (2029). Each funding cycle is depicted in a color. Past performance guides forecast for the future.

High-efficiency televisions have been a major savings generator. Over time, the savings from televisions begin to shrink as the market is transformed. Another significant technology is ductless heat pumps, in development since 2010. Heat pump water heaters will grow dramatically after 2025, when federal standards are expected to take effect.

Heat pump water heaters save 40-50 percent of the energy that an ordinary resistance water heater would use. They are quiet and come with full microprocessor controls. There is interest in using these things for interactive communications to manage demand. The cost is $2,000 plus installation. We are early on the S-curve. When federal standards kick in, Jeff expects the cost to come way down.

Ductless heat pumps operate down to -15°F. They produce two units of heat out for each unit of electric input. A single system's installed cost is $3,500. For the audience that still has baseboard

heat, this single unit may be all they need or can afford. Customers give the product high scores for comfort, although comfort is not yet included among the product's non-energy benefits.

Luminaire level lighting controls allow controlling of individual fixtures.

For the industrial sector, there is a "pumping system in a box" that gains savings up to 50 percent.

Jeff's last example was Home Energy Management. Comcast supplies this in Seattle for $30/month; it monitors security systems and much more along with energy.

Jeff said NEEA collaborates with Energy Trust in early stage demonstrations of emerging technologies. Through pilots, Energy Trust helps NEEA find sites for these technologies. Energy Trust benefits because costs are shared regionally.

Rick: the emerging technologies Jeff mentioned are not displayed on Fred's graph on page 14 of the packet.

Roger: what was NEEA's role on the Bullitt Foundation net zero building?
Jeff: efficiency was the biggest contributor to the net zero performance of the building, including HVAC, lighting, miscellaneous loads. NEEA's design lab contributed.

Mark: NEEA does not do much in gas efficiency. Rankine heat capture systems have huge potential.
Jeff: NEEA's mission is fuel-blind energy efficiency, but at the moment no gas revenues fund NEEA.

Roger: did you say you did work on renewable energy technologies?
Jeff: Our mission is focused on energy efficiency, but many of our technologies can do renewable system integration.

Effects of low gas prices on cost-effectiveness

Diane Ferington: the Existing Homes portfolio currently is achieving 0.8 cost-effectiveness on gas weatherization. She described some remedial measures, including stopping incentives for duct sealing, which qualifies for ODOE incentives, and modification of measure level thresholds using insulation requirement changes as an example. On-line forms are being developed and are more broadly used to decrease administrative costs. The requirement for modeling by contractors has been removed to make their processes more efficient. Responsibility for marketing has been moved toward contractors, and we are developing an on-line tool to help drive traffic to contractors which eventually they will be able to monitor the effectiveness of their particular marketing pieces and project close rates.

Weatherization contractor panel discussion

Diane introduced the weatherization contractor panel: Jeremy Anderson (Weatherization Industries Save Energy WISE), Robert Hamerly (GreenSavers USA), Tom Kelly (Neil Kelly Company), and Don MacOdrum (Home Performance Contractors Guild).

How will you manage your efficiency business, given cost-effectiveness constraints and falling gas prices?

Robert Hamerly: falling gas prices means falling rebates. Rebates stimulate interest, endorse product, create urgency. With lowered rebates, the sales team has to work harder and push non-energy benefits. He believes the people open to the non-energy benefits (indoor air quality, reliability, home

health, etc.) may be higher income. With lower rebates, we do not serve that segment of the market that well.

Jeremy Anderson: there is no cost-effective gas efficiency market right now. Minor adjustments around the edges are not going to double savings. The only answer left short of changing legislation is to change the definition of cost-effectiveness. If we do not solve this problem, we lose the gas weatherization program—which is Energy Trust's flagship offer. Cost-effectiveness is defined in law only as consumer-based. He noted the half of Existing Homes program spending that is not incentives is not required to pass a cost-effectiveness test. The board should get involved and ask OPUC if the TRC test can be dropped.

Tom Kelly agreed that rebates get customers interested. He also agreed that talking to customers about energy savings will not get them to do all possible measures. His marketing focuses on comfort, air quality, etc. Neil Kelly's sales are up 63 percent this year. They will continue on a growth curve so long as incentives do not disappear altogether.

Don MacOdrum advocated similarly to Jeremy for a new way to value cost-effective energy efficiency. This is a challenge not only in our market but across the nation. He is working with national groups to stimulate a dialogue nationally and regionally. He hopes to work with program staff on incremental savings. We are working on ways to bring down costs, and to help transfer certain program functions to the market. The Guild conducts Energy IQ workshops. We are setting goals around Fluid's goals on kWh and therms and lead generation. Their new brand message: "get a plan, do the tests, trust the results."

Alan: SB 1149 does not apply to gas. This morning someone advocated dropping TRC and going with utility cost in determining cost-effectiveness.
Tom: if rebates go away, my business will go down by 50 percent. The societal test supports the integrity of the industry.
Alan: I was the one advocating getting rid of the TRC. We are here subsidizing the savings, not the non-energy benefits. There seemed to be a concern that the fact we are offering a rebate may be a factor in their decision to do projects.
Robert: rebates help and are a factor in decision-making. Price matters. Home Performance is on the front end of the curve. Comfort and home health as values are only just beginning to resonate with customers. It may be a different story 10 years down the road, when we may have developed to the point we can sustain business without rebates.
Jeremy: when incentives are used best, they augment a customer's budget and allow purchasing more measures. A large percentage of customers simply do not have capital. TRC uses avoided cost. The customer does not care about avoided cost; they are paying retail cost.
Don: let's identify what we lose if we move away from TRC. I have begun making a list. If we can identify these items, we can begin to identify other tools for delivering the lost functions.

Ken: there are several types of incentives. Do you see any interest in a financing incentive?
Tom: interest rates are low. The lower the rate, the better the chance the consumer will go ahead. They are used to 0 interest loans on new cars. Perhaps we could offer lower rates than they are right now.
Robert: financing is huge and has been a huge stimulus for the growth in his industry. It does not serve all market segments. Having tools to serve other residents would be a good step forward.
Jeremy: I work in Salem. People in Salem do not like to finance. If we have an attractive loan, without strings attached, we could widen that pool. CEWO products have a lot of strings attached. There is a time value of an incentive. Waiting 6-8 weeks is a long time. A significant improvement would be to pay incentives directly to the contractors.
Don: CEWO opened the door to Home Performance financing in Oregon. They have been so efficient

in getting lenders to step up that CEWO no longer considers financing to be one of its brand identifiers. Other ARRA-funded programs have had success with lowering interest rates. The lender ally program that Energy Trust is developing has great potential.

Tom: I think as soon as some of the export facilities are in place, gas prices will go up more than predicted in the workshop materials. Some of my customers are motivated to do projects because of the declining cost of gas. They do not feel this represents how the fuel should be priced.

How do you innovate and "close the deal" in the field?

Tom: we found simplification is better than complexity unless we are dealing with an engineer. Our sales technique is to sell to what they prioritize—energy savings or comfort or whatever. When we got into the business, our auditors were also selling and spent a lot of time explaining technical details to customers. Their eyes glazed over.

Ken: how much of your business is from referrals?
Tom: 20-30 percent. This is not unusual in the remodeling business in general. We underpromise and overdeliver. If we tell a customer they will get a 30 percent savings and they get 50 percent, they become a strong advocate for us.

John R: are folks interested in the resale value of their home?
Tom: yes, but it is not a primary motivator for most. Astute folks are interested in the energy performance score (EPS).
John R: do a lot of your customers seek an EPS before they sell a house?
Tom: no, but we get a lot who do, having just bought a house. Getting a home energy inspection is as important as a structural inspection when you buy a house.
Robert: on the transaction side, many people who buy older homes want to bring the shell up to more efficient levels. We found effective selling cannot be referencing only dollars saved. It is like shopping at New Seasons or Whole Foods.

Tom: my past experience in the remodeling industry has shown when new things come along, a lot of bad actors are attracted. That has not happened in this case.

Jeremy: the company I am most familiar with has been doing whole-house upgrades for 30 years and gets 75 percent from referrals. Salem Electric, the utility company for West Salem, pays half the money and makes some of the calls. McMinnville Electric decided in 2009 to get all their savings in one year and established high incentives to do so.

Don: Tom said he did not want to share his approaches to closing sales with Robert....but he already has. "I'm trying to get a customer for life." Develop a plan that they can use over time. The Guild is engaging with USDOE developing Home Performance with Energy Star® marketing pilots. Helping drive the lenders is a key for us. The Oregon legislature is taking the EPS Energy Trust developed statewide.

Ken: what part does benchmarking with other states or other parts of the nation play in the work of the Guild? Are there other entities doing similar functions and how do you compare to them?
Don: just about everything we do is measured and measured again. I have mentored establishment of Home Performance programs across the nation and in Canada. I am heading to a national leadership summit in July. The goal around this is try not to recreate the wheel whenever possible, and trying to replicate good ideas from others.

Tom: we are in Seattle, too. When we first got there things were not working well. Now they have basically adopted what we do here.

Anne: where is interest across the state in Home Performance?
Don: we have members concentrated in Portland but also have members in Hood River, Bend and Southern Oregon, driven by CEWO.

Jeremy: a note of caution regarding EPS. Every dollar we spend measuring something is a dollar we do not spend doing something. It is a large and varied state with many types of customers.

Within this environment of energy efficiency constraints, how can Energy Trust strengthen its working relationship with contractors?

Robert: the management of Energy Trust has embarked on this already. In the past few years I have been pleasantly surprised by your willingness to listen and put our suggestions into action. The biggest thing is consistency. We do not want to bear the cost of retraining staff multiple times a year on program changes. Reducing paperwork is great. Broad education is helpful to our industry. It is hard for contractors to do broad educational campaigns.

Ken: are you making a distinction between education and marketing?
Robert: there is overlap.
Ken: do you see any advantage in having a generic marketing toolkit you could put your name on and use?
Robert: a lot of the time we want to differentiate ourselves from our competitors. Help with broader marketing is welcome.
Jeremy: if you made “Energy Trust” a little smaller and contractor name larger we might want to use generic marketing materials. Assigning incentives to contractors would be a big improvement. ODOE had an opportunity announcement for multifamily that had some computer modeling requirements that the industry could not handle but Energy Trust could. He would like Energy Trust to assist contractors in such instances. Changing benefit/cost rules is important.

Tom: getting a customer to sign up for an audit is important. Energy Trust and CEWO messages can have more effect with customers. You are talking to the largest businesses here. A lot of the smaller businesses can use help with marketing.
Don: marketing would help, such as defining energy efficiency. There are not enough ads that say Energy Trust and energy efficiency in the same sentence. Addressing this involves education, marketing and outreach. The association is happy to play a role. Energy Trust involvement in trade associations is helpful. We have an Energy Trust representative on our board. This helps build the ranks of the top tier energy efficiency contractors. This entails building the pool of experts, not just the pool of trade allies. Direct lines of communication, through trade ally roundtables and sitting on the Conservation Advisory Council, are helpful.

Julie noted that we talked earlier today about reaching underserved markets. Perhaps we could work together to address this.

Tom suggested the creation of a carbon tax to fund low income efficiency.

Robert: financing that could serve those groups.

Jeremy: better coordination with ODOE to reach rental households. ODOE will match Energy Trust incentives. It is a problem that the landlord often does not get the benefit. So the cost to the owner needs to be lower with more direct outreach.

Don: Energy Trust has a limited role in advocacy but is able to provide consulting services and education. Energy Trust does not have to drive an agenda, but you could suggest ideas and opportunities to organizations like ours.

Mark: regarding the other values that can drive sales (comfort, health), I hope we are looking for data.

Tom: an example is sound-deadening from new windows. We have actually been marketing to busy streets because of this.

Mark: it costs as much to transact a $7,500 loan for some efficiency as a $25,000-40,000 loan. There is an economy of scale in partnering with a lender. How long is a remodeling job happening alongside an energy efficiency job?

Tom: CEWO is more liberal about this. We offer an audit to remodel customers, which generates efficiency business. On the other hand, few efficiency jobs include remodeling elements.

Steve N: of the 43 states we surveyed, only 30 do measure-by-measure cost-effectiveness, while the rest test the cost-effectiveness of the whole program.

The board took an afternoon break at 3:40 p.m. and resumed at 3:55 p.m. Julie Brandis left the workshop during the break.

Introduction of upcoming 5-year strategic planning process

Rick Applegate referred to the strategic planning timeline in the packet. He noted the timeline is laid out in general form without narrative. From today's discussion, particularly John Savage's comments, I think we have to add the OPUC cost-effectiveness process next year. It makes the schedule a little tight but I think we should engage with it.

We are in the preliminary work phase now. A lot of staff work will go on and intensify in January. Staff will do a lot of analysis through spring, working on a draft plan. Early in 2014 we will have conversations with CAC and RAC and the strategic utility roundtable. By the June board strategic planning retreat, we hope to have a draft plan. The budget process begins in summer. In September, as we get to the draft final plan, staff will be working on the budget. The strategic plan will be adopted in October 2014, leading logically to the budget and action plan. This gives you a rough idea of what 2014 looks like.

Margie noted the outreach plan is not fully reflected here—for example, to utilities.

Ken: does the strategic planning process require more board meetings?
Margie: in the past we have not added board meetings.

Anne asked if the legislative action should be reflected in this timeline.
Margie: we do not initiate legislation. We are reactive.

Roger: does Rick anticipate a scenario approach?
Rick: this is what commonly occurs.

John R: at some point during the process, scenarios could be presented to the board. He noted the board tends to rely on its committees and asked if the whole board should be involved.
Rick: yes, in March.

Roger: Make sure we look at the environment within which our entity operates, and anticipate different futures. We cannot plan on just one future but need to plan alternative futures that might be very different.

Dave: we need to get the issues around the IRP and goals resolved before the strategic plan, so this can be reflected in the strategic plan.
Margie: we plan to bring you resolution on that by the end of July.

Roger: does the plan have a five-year horizon?
Margie said yes, but noted some of her colleagues in other states are planning on a three-year horizon.
Roger said a utility IRP needs a 20-year horizon with updates every two years.
Rick: you can do a five-year plan but be ready to update if needed. You want flexibility.
Margie: five years is required in our OPUC grant agreement. We can update or revise a plan before the five years is over, if needed.

Rick noted John V and others on staff have teased out potential areas to explore in the strategic plan:

- Target larger energy users with multiyear MOUs, etc.
- Leverage codes and standards
- Disaggregate “other” sources of savings
- Add more colors to “green” programs
- In considering where we engage and how much, identify level of effort (e.g., financing)
- Behavioral savings, intelligent energy technologies and management systems

Ken: how do we add more items to the list after we have had time to reflect?
John V: we are not jelling a concept for the plan until January.
Rick: to the extent board members have other ideas, we could collect these and route them to the Strategic Planning Committee later in 2013.

John V: I took the first three topics from Steve Nadel’s presentation. First topic: targeting large energy users.

Ken: I am interested to know what we are thinking with respect to strategic versus tactical.
Roger: it may be that strategic matters cover a longer timeframe. It is hard to separate the two.
John V: these might be things the board wants us to look into and then decide whether to include them in a strategic framework.

Rick: we could ask if we could afford to leave out large energy user contributions.
Ken: large energy users in SB 1149 is a different question than when applied in the residential sector. We need crisp definitions.

John V: leveraging codes and standards was on Steve N’s list, as was the need to disaggregate “other” sources of savings. Adding more colors to the green program was a suggestion from Margie.
Rick: this goes to diversity, hard to reach, extra effort, etc.

John V: also on the list is getting a handle on how much effort a particular initiative warrants. Finally, the reference to behavioral savings and intelligent energy technologies stemmed from Tom Foley's comment.

Alan: the missing topic is cost-effectiveness. I was surprised by how much agreement there was that TRC should go away—all but the OPUC.
Roger: the TRC is not bad but it is incomplete. He agrees this issue should be included on the list.

Rick: I would add what we should do about the gas pricing problem.

Jeff: it would be helpful to me to understand how cost-effective criteria are arrived at.
Ken: this suggests another list: what kind of information would be helpful to us and others as we develop the strategic plan.

Mark: I am interested in where we leverage ourselves in the market. To what extent do we leverage contractors' ability to offer low costs by providing incentives directly to them? What additional market motivators are there that need to be more adequately described? This may be more tactical than strategic. Should we provide incentives directly to contractors?

Dave: this plan will take us out to 2019, and considering the downward trend currently forecast, should we add innovative technologies to the list?

Ken: strategically what should Energy Trust be thinking about when we enter an era when results are not as good as in prior years? How do we manage risk and vulnerability here?

Dave: how do we use comparisons to other states to leverage participation? This might involve broad messaging such as "did you know we are trying to become the highest energy efficiency state?"

Alan: regarding Don MacOdrum's statement that people do not equate Energy Trust with energy efficiency, should we address this?
Mark: we should seek data first. I think our brand recognition is quite high. Let's examine how we can use benchmarking to motivate taking action. There is evidence that it does motivate, but we do not have enough benchmarking data to do this.

Rick: I am concerned about saying we are concerned about how Energy Trust is characterized in an era of declining savings—it is not just about how Energy Trust describes itself.

John R: increased savings is not the only measure of success.

Rick asked Steve Nadel for comment.

Steve: is there a strategic option to sustain cost-effective savings?

Mark: one other area in which we may be missing an opportunity has to do with the tightness in the industrial market, as Kim reflected. Can we maintain large-user savings without more money?

Ken: are we striking the right balance between efficiency and equity?
Rick: we come back to that quite regularly.

Mark: is there a role for defining the boundaries of state agencies and other entities in the market? We sometimes get unfunded mandates.

Rick: are there aspects of other state strategic plans that would be helpful?

Roger: should we make sure our strategic plan is correlated with the Governor's 10-year plan and the NW Power Council plan?

Mark: metrics on financing have some leveraging potential. We want to understand that better so we are strategically engaged in that market.

Ken: is there a difference between this and item #4?

Anne: bullet five is addressing everything we are doing. The new bullet is addressing just financing.

Dave: one of the things we wrestle with in our organization is how to prioritize a list like this. What's the most important?
John V: staff is going to need to sort through these. We could take them to the Strategic Planning Committee and bring a priority order back to the board.

Rick: Margie, is this list what you were hoping for?
Margie: a lot of what is on this list is on the list I shared at the beginning. I think this is one of our better retreats.
Roger: a big shout out to the Strategic Planning Committee.

Mark: I want to make sure we heed Margie's mom's advice and write like people talk.

Anne thanked Steve Nadel for coming out. It was fantastic to see how we compare to other states. There was consensus that it was one of the best presentations the board has seen at a retreat.

Closing remarks

Margie: We still do not have a good way to measure our influence and success. I am so impressed by the board, your commitment and your time. I am very pleased with the quality of what we covered today. I would like to retain the techniques used today, including the panels. We might bring panels into board meetings.

John R: I have a suspicion that cost-effectiveness does not include the costs to the environment from standard fuels. I did not hear the word "coal" today. I need more information on fracking and tar sands. I need this information to be able to push for a better definition of cost-effectiveness. There is a lot more that goes into a decision to take energy efficiency actions that is not related to cost-effectiveness. This includes the moral question of how to live on the planet and not use more than you should. There is a huge opportunity to achieve more savings by appealing to what is best in human nature. An example is the Bullitt building, where people are willing to go to a whole new system of printers. There is so much potential for living differently that supports a stronger push to think about why people do things and why they change.

Adjourn

The meeting adjourned at 5:00 p.m.

/s/ Alan Meyer
Alan Meyer, Secretary