

Briefing Paper

2016 State Legislation Update

February 24, 2016

Summary

This paper highlights bills introduced in the 79th Oregon legislative session.

Background

- The session began February 1, by which time approximately 260 bills were introduced. The session is scheduled to end March 6.
- We monitor bills that could impact Energy Trust and respond to legislative requests for information in coordination with the Oregon Public Utility Commission. We do not take positions on bills.

Discussion

- The report at the end of this summary lists bills we are tracking and provides links to the bills themselves (in the “Bill Number” column). The summary below highlights some of the more significant bills. The first bill, which would have amended the law that underlies Energy Trust electric utility funding, was withdrawn after some supporters could not agree on key provisions.
- **Public purpose charge, SB 1509** (withdrawn) would have required the OPUC to: (1) adopt “cost-effective energy conservation measures and market transformation measures for electric companies to fund”; (2) require utilities to collect a range of funding for either the construction and operation of new renewable energy resources of 20 megawatts or less, or “non-fossil fuel based projects that provide ancillary services and assist in the integration of renewable energy resources into the operation of the overall grid of an electric utility,” or both; (3) require utilities to collect a range of funding for low-income weatherization and specific charges for low-income housing; and (4) apportion some energy conservation funds to school districts.
- **Oregon Clean Electricity and Coal Transition Plan, HB 4036**, would: (1) require electric companies to eliminate coal-fired resources from their electricity supply; (2) increase renewable energy portfolio requirements by degrees, up to 50% in 2040; (3) change standards for use of renewable energy certificates; (4) direct the OPUC to establish stranded cost obligations for electric companies that acquire the service territory of another company and subject the acquiring utility to the same renewable portfolio requirements; (5) authorize the OPUC to include in public bidding the value of long-term access to renewable energy projects past their depreciated and/or expected useful life; (6) require the OPUC to establish a way for electric companies to track and credit or charge customers for the difference between production tax credits included in rates and actual production tax credits received by the company; (7) require utilities to “plan for and pursue” all cost-effective energy efficiency and demand response resources before acquiring new energy resources; (8) require electric companies to file applications with the OPUC to accelerate electrification of vehicles, including investment in customer rebates for vehicle charging and related infrastructure, for which utilities earn a return on investment; and (9) repeal the minimum solar energy capacity standard for electric companies and direct the OPUC to establish a program for community solar projects.

- **Other renewable energy and energy efficiency:**
 - **Solar: HB 4037** would direct the Oregon Business Development Department to establish a 5-year, 150-megawatt program to pay a half-cent per kilowatt hour of electricity generated. **SB 1572** would require the OPUC to establish a program for procurement of electricity from community solar projects.
 - **Biomass: SB 1520**, would add woody biomass to energy technologies for which state agencies must set aside 1.5% of the contract price for building.
- **Greenhouse gases:**
 - **Healthy Climate Act, SB 1574** and **HB 4038** would repeal Oregon's greenhouse gas emissions goals and require the Environmental Quality Commission to adopt goals for 2025, 2035 and 2050.
 - **HB 4101** would require the Environmental Quality Commission to adopt a program to assess the net impacts of state policies and programs that reduce greenhouse gases.

Report (as of February 22, 2016)

Bill Number	Relating Clause	Sponsor	Committee
HB 4036 A	Relating to utility regulation; declaring an emergency.	Pre-session filed	Senate Business and Transportation Passed out of House
HB 4037 A	Relating to solar energy; declaring an emergency.	Pre-session filed	Joint Ways and Means House Energy and Environment recommendation do pass
HB 4051 INTRO	Relating to legislative review of the implementation of legislative policies; declaring an emergency.	Komp; Steiner Hayward; Buckley; Huffman; McLane; Rayfield; Whisnant; Boquist; Monroe; Roblan (Pre-session filed)	Joint Ways and Means House Rules recommendation do pass
HB 4055 INTRO	Relating to transportation; prescribing an effective date; providing for revenue raising that requires approval by a three-fifths majority.	Davis (Pre-session filed)	House Energy and Environment
HB 4068 INTRO	Relating to entities that contribute to greenhouse gas emissions; declaring an emergency.	Buckley; Holvey; Barnhart; Piluso; Taylor (Pre-session filed.)	House Energy and Environment
HB 4101 INTRO	Relating to greenhouse gas emissions; declaring an emergency.	Bentz; Nearman; Whisnant; Whitsett; Wilson (Pre-session filed.)	House Energy and Environment

SB 1509 INTRO	Relating to moneys collected by electric companies; declaring an emergency.	Pre-session filed	Senate Business and Transportation
SB 1520 INTRO	Relating to forest resources; prescribing an effective date.	Knopp; Witt; Boquist; Ferrioli; Girod; Hansell; Olsen; Roblan; Thatcher; Thomsen; Whitsett; Doherty; Hack; Hoyle; Komp; Parrish; Whisnant (Pre-session filed)	Senate Environment and Natural Resources
SB 1547 A	Relating to public utilities.	Olsen; Smith; Johnson; Williamson (Pre-session filed.)	House Energy and Environment Passed out of Senate
SB 1565 A	Relating to property tax benefits; prescribing an effective date.	Boquist; Burdick; Evans; Davis; Beyer; Edwards; Ferrioli; Gelser; Girod; Hass; Knopp; Monnes Anderson; Riley; Rosenbaum; Shields; Steiner Hayward; Thatcher; Thomsen; Barker; Barreto; Boone; Doherty; Esquivel; Fagan; Gilliam; Gomberg; Hack; Hoyle; Kennemer; Krieger; Nosse; Olson; Whisnant; Williamson; Wilson (Pre-session filed.)	House Revenue Passed out of Senate
SB 1572 A SB 1572 Min Rpt	Relating to utility regulation.	Beyer; Holvey (Pre-session filed.)	Senate Rules Senate Business and Transportation recommendation do pass along with minority report
SB 1574 A	Relating to entities that contribute to greenhouse gas emissions; declaring an emergency.	Edwards; Beyer (Pre-session filed.)	Joint Ways and Means Senate Environment and Natural Resources recommendation do pass
SB 1580 INTRO	Relating to the suspension of surcharges imposed for the purpose of removing dams; declaring an emergency.	Whitsett; Baertschiger Jr; Girod; Hansell; Olsen; Thomsen (Pre-session filed.)	Senate Business and Transportation
SJR 202 INTRO	Proposing amendment to Oregon Constitution relating to legislative review of administrative rules.	Girod; Baertschiger Jr; Boquist; Ferrioli; Hansell; Knopp; Kruse; Olsen; Thatcher; Thomsen; Whitsett (Pre-session filed.)	Senate Workforce and General Government

Finance Committee Meeting Notes

February 11, 2016

Attendance

Board members present by phone: Dan Enloe, Anne Root, Susan Brodahl

Staff present: Margie Harris, Courtney Wilton (part), Pati Presnail

Recap of preliminary, unaudited financials for year ending 12/31/2015

1. **Overall revenue was extremely close to budget and significantly less than last year as planned.**
 - a. Revenue ended under budget by 1.2%. Variances are likely due to weather.
 - b. We also ended 10.5% under prior year (down \$17.2m) actuals due to planned and implemented utility rate adjustments.
 - c. Investment revenue is still way over-performing budget—approximately double prior year number and budget - though small dollars in scheme of things. Allison still wants a bonus.
2. **Incentives were way above last year - and also over budget in total - possibly for the first time in organization history.**
 - a. As in 12.4% over last year (\$10.6m / total of \$95.8m) to date and 1.4% above overall budget.
 - b. Solar, new buildings, and new homes and products totals all exceeded annual budgets significantly. Other renewable, new buildings and production efficiency totals lagged 2014 spending; all other sector spending was higher than prior year. We definitely budgeted tighter / budget variances are much smaller. See below graphic for budget to actual and actual to actual variances.
3. **All other operating costs were essentially flat - up .5m, or under 1%.**
 - a. Delivery costs actually shrank a tiny bit from the prior year and were under overall budget due to lower year end incentive awards. That was a surprise, though a good one.
 - b. All other operating costs including staffing were also relatively flat with depreciation comprising largest increase. This trend likely will not repeat given the low current staff vacancies and benefit / wage growth.
4. **Reserves are down as planned:**
 - a. Down \$19.0m for the year from \$87.2 to \$68.2. We budgeted / forecasted ending reserves of \$65.6m, or \$2.6m lower - but in the scheme of things very close.
 - b. PAC efficiency reserves actually ended the year \$1.2m less than budgeted likely necessitating more revenue in 2016 than what was forecast via rate adjustment sheets.
 - c. Note also Cascade ending reserve is quite a bit less than budgeted. We should make sure their annual forecast still shows them ending up in black.

Update on lease extension status

The lease will go out to our attorney for review. A resolution will be prepared for the board of directors meeting on February 24th. Dan suggested we include information about market conditions, and that we expect this decision will save money over the long term.

Update on CFO recruitment / next steps / interim plan

Courtney recused himself from this conversation. Margie summarized where she is in the recruitment process. Committee members had just recently completed interviews and provided feedback to Margie on the candidates. Next steps are to obtain references. Courtney will return to help with Margie's review and to help the new CFO acclimate. In the interim, Pati is acting CFO. Margie also mentioned the executive assistant recruitment is on a fast track.

Dan suggested a special "meet the CFO" gathering prior to the next formal committee meeting. Staff will organize, once the start date is known.

The next meeting will be May 12, 2016 at 2:00pm

Renewable Energy Advisory Council Meeting Notes

February 10, 2016

Attending from the council:

Bruce Barney, Portland General Electric
Jason Busch, Oregon Wave Energy Trust
Kari Greer, Pacific Power
Robert Grott, Northwest Environmental
Business Council
Kendra Hubbard, Oregon Solar Energy
Industries Association
Suzanne Leta-Liou, SunPower
Elaine Prause, Oregon Public Utility
Commission
Dick Wanderscheid, Bonneville
Environmental Foundation
Peter Weisberg, The Climate Trust

Attending from Energy Trust:

Hannah Cruz
Chris Dearth
Sue Fletcher
Matt Getchell

Jeni Hall
Mia Hart
Betsy Kauffman
Dave McClelland
Debbie Menashe
Dave Moldal
Jay Ward
Peter West
Lily Xu

Others attending:

Jeff Bissonnette, Oregon Solar Energy
Industries Association
Alan Meyer, Energy Trust board
Robin Rabirot, IBEW Local 48
Rhonda Rasmussen, Pacific Power
Matt Shane, Oregonians for Renewable
Energy Progress
Sarah Smith, 3 Degrees

1. Welcome and introductions

Betsy Kauffman convened the meeting at 9:30 a.m. The agenda, notes and presentation materials are available on Energy Trust's website at: www.energytrust.org/About/public-meetings/REACouncil.aspx.

2. 2015 preliminary annual results

Betsy provided an overview of 2015 preliminary annual results for renewable energy programs, and Peter West, energy programs director, provided an overview for energy efficiency programs. Results reflect the best available data at this time, and may shift after the release of the annual report to the Oregon Public Utility Commission in April.

Betsy: In 2015, Energy Trust achieved total renewable energy generation of 3.9 average megawatts, achieving 112 percent of goal. There were 1,802 solar installations in 2015, 500 more than were completed in 2014. The Other Renewables program completed four projects: two biopower and two hydropower. Electric and gas savings achieved 102 percent and 116 percent of goals. We exceeded Energy Trust goals and Integrated Resources Plan, IRP, targets for Pacific Power, NW Natural and Cascade Natural Gas, and came close to meeting PGE Energy Trust goal and IRP target.

Robert Grott: Why was Energy Trust's savings goal for PGE less than the IRP target?

Peter: IRPs are set through a regulatory process. They often become outdated toward the end of the planning period. Further, annual circumstances can make hitting the targets variable for any one year of the 20-year plan. Energy Trust works with utilities to examine what we can

achieve each year. By the end of the 2015-2019 Strategic Plan, we need to achieve the cumulative targets for utility IRPs.

Suzanne Leta-Liou: Does Energy Trust incent smart bulbs and smart thermostats?

Peter: Energy Trust provides an incentive for the Nest Learning Thermostat for gas and electric customers. The Ecobee smart thermostat has potential, but our strategy was to test out what people are using the most. We're also working with PGE on demand response.

Bruce Barney: PGE partnered with Nest on a Nest Learning Thermostat pilot that's seeing great success. Customers are seeing a payback period of one to two years. We expect to expand the pilot in the future.

Kari Greer: Pacific Power is examining demand response options in Oregon. An irrigation load control program will be filed soon and will begin for the growing season.

3. Clean Power Plan update

Debbie Menashe, general counsel, provided a high level summary of the Clean Power Plan and an update regarding the U.S. Supreme Court's approval of a stay on enforcement of the plan on February 9. The court approved the stay after 27 states and several industries filed a lawsuit with the Environmental Protection Agency due to concerns surrounding the economic impacts of phasing out coal power plants. The ruling is still in expedited process and the next hearing is in June.

Kendra Hubbard: Are states putting their plans on hold?

Debbie: Unclear at this time.

Suzanne: The Clean Power Plan is one part of many parts of the Clean Air Act. Mercury rules are having a more near-term impact on coal plants.

4. Oregon legislative and docket update

Jay Ward, senior community relations manager, provided an update on legislation considered in Oregon's 2016 session that could impact the renewable energy market in Oregon and Energy Trust's work. Energy Trust does not lobby or take a position on potential or proposed legislation, but staff track and monitor legislation that related to our work.

Jay gave an overview of several bills and amendments related to phasing out coal generation in Oregon and increasing the Regional Portfolio Standard, RPS, to 50 percent by 2040, community solar programs, an incentive program for large solar installations and greenhouse gas emissions goals and limits. One bill will likely not move forward in 2016 session, which would change the way Energy Trust provides incentives to large customers, over 1 MW, change the structure of the public purpose charge and move Energy Trust funding under the OPUC.

Betsy: Has there been a hearing for an amendment mandating 8 percent of generation come from renewable projects less than 20 MW?

Jay: There hasn't been a hearing. It's not clear what the pathway is for that amendment.

Jason Busch: A bill related to wave generation in Newport wasn't properly introduced and did not receive a bill number.

Suzanne: What is the position of investor owned utilities on the community solar bill (SB 1572)?

Jay: They testified and suggested that there's room for improvement.

Elaine Prause provided an overview of Oregon Public Utility Commission dockets.

An order date is expected March 14 for UM 1734 docket on qualified facility projects.

UM 1716 has three parts related to solar. There will be a testimony on June 1 related to solar resource value, cost shifting is on hold and will continue in 2017, and we're awaiting next steps on reliability and resource impacts.

An analysis for UM 1758 studying solar incentive programs is due September 15.

There will be a workshop about the value of energy storage related to UM 1751, which aims to produce guidelines for utilities on energy storage.

Michael O'Brien: At a workshop on UM 1690, the OPUC asked for an example of a voluntary renewable energy tariff for non-residential customers of PGE and Pacific Power.

Suzanne: Is there a minimum program size or cap?

Elaine: There is an aMW cap for each utility.

Betsy: The resource value for solar in UM 1716 could have an impact on net metering. Energy Trust is tracking on this docket because it could change how we calculate above-market costs and our incentive structure.

Suzanne: Has Energy Trust considered providing incentives for energy storage?

Peter: This is early in the game to start talking about energy storage, and we would need to work closely with the utilities. How energy storage fits into utility IRPs presents a larger discussion, which we're starting with demand response and the customer side of the meter.

Suzanne: SunPower would be interested in that dialogue.

Betsy: There's a lot of interest surrounding energy storage, especially in regards to resiliency and disaster preparedness.

Bruce: This is a fast-moving topic with a lot of change. Utilities are still researching how to use energy storage effectively.

5. Topics for 2016 Renewable Energy Advisory Council meetings

Betsy summarized topics discussed during Renewable Energy Advisory Council meetings in 2015, and asked for input and ideas on 2016 meeting topics.

Robert: Can you provide a high level overview of why the Renewable Energy Advisory Council was created?

Betsy: Renewable Energy Advisory Council and Conservation Advisory Council were created as advisory councils to provide energy efficiency and renewable energy expertise for the board of directors. The purpose of the councils is to vet projects, provide input and expertise, and advise Energy Trust staff and board.

Alan Meyer: Renewable Energy Advisory Council topics have been weighted more toward policy and could benefit from hearing the perspective of the people installing renewable energy systems.

Bruce: Shaun Foster works with solar installers and could provide more of that perspective.

Kendra: I agree that there's more opportunity for Renewable Energy Advisory Council to gain new perspectives on the people doing the day-to-day work with renewable energy projects.

Michael: Renewable Energy Certificate, REC, discussions were great, especially having the opportunity to break out into small group discussions. REC policy is a meaty topic and has ramifications beyond Energy Trust.

Suzanne: Renewable Energy Advisory Council members have diverse backgrounds in the renewable energy industry, and this forum is a great opportunity to get into meatier topics that have value for Energy Trust and council members, such as energy storage.

Elaine: The REC discussions and brainstorming session and the presentation about challenges faced by small energy generators were great.

Robert: Budget numbers and activity scorecards are not as valuable to Renewable Energy Advisory Council. Market updates and project proposals are good topics. Discussions about RECs were worthwhile.

Bruce: Renewable Energy Advisory Council is a strategic resource in the renewable energy sector. Energy Trust's budget centers on the operational side and not as much on the strategic side.

Dick Wanderscheid: We don't need to spend as much time on budget. I think you have that under control. It would be a more valuable use of time to use meetings for strategic discussions. For example, the discussion with Jed about how to move hydroelectric power forward.

Renewable Energy Advisory Council members expressed appreciation of the budget 101 presentation at the October meeting.

Betsy: What are some specific topics members would like to see?

Kendra: Growth and change surrounding solar jobs and training and energy storage. Does Energy Trust share the five-year Strategic Plan at Renewable Energy Advisory Council?

Betsy: Renewable Energy Advisory Council discussed the 2015-2019 Strategic Plan while it was in development, and we could consider an update before the next Strategic Plan.

Matt Shane: Having the opportunity to talk about challenges other organizations face is valuable, such as obstacles associated with RECs.

Suzanne: Have we discussed what Energy Trust could do if the budget was larger?

Betsy: No, there have not been many conversations like that at Renewable Energy Advisory Council or among staff.

Elaine: Strategic Plan discussions about where we're going approached that topic, but we haven't quantified how much money it would take to get there.

Jason: Renewable Energy Advisory Council provides a good opportunity to flesh out policy topics. First, the group would benefit from having the foundational discussion of our options and limitations as an organization. Second, it could be valuable to take a project apart from beginning to end, including why it was identified as an opportunity, key decision points, benefits and outcomes. Third, identify policy decisions that could influence the renewable sector.

Suzanne: Given the intersection between energy efficiency and renewable energy in demand response, we could have a combined forum with Conservation Advisory Council and Renewable Energy Advisory Council on these types of topics.

Elaine: Solar programs, trends and outlook for 2017 and 2018.

Dick: I like a mixture of projects and policy. It would be nice to better understand the inner workings of utilities. Bonneville Environmental Foundation sees barriers all the time and Renewable Energy Advisory Council could provide better feedback on program design if we had a better understanding on the utility side.

Alan: There was a very educational utility 101 presentation to the board a couple years ago.

Michael: IRP teams could present to Renewable Energy Advisory Council and Conservation Advisory Council and allow participation for strategic comments. Both advisory councils could also have a combined discussion about the Seventh Power Council Plan.

6. Public comment

There was no additional public comment.

7. Meeting adjournment

The meeting adjourned at 11:40 a.m. The next Renewable Energy Advisory Council meeting is scheduled on March 16, 2016.

Conservation Advisory Council Meeting Notes

February 10, 2016

Attending from the council:

Julia Harper, Northwest Energy Efficiency Alliance
Garrett Harris, Portland General Electric
Scott Inman, Oregon Remodelers Association
Andria Jacob, City of Portland
Don Jones, Jr., Pacific Power
Roger Kainu (for Warren Cook), Oregon Department of Energy
Don MacOdrum, Home Performance Guild of Oregon
Holly Meyer, NW Natural
Tyler Pepple, Industrial Customers of Northwest Utilities
Elaine Prause, Oregon Public Utility Commission

Attending from Energy Trust:

Mike Bailey
Kim Crossman
Phil Degens
Sue Fletcher
Jessica Iplikci
Susan Jowaiszas

Oliver Kesting
Steve Lacey
Spencer Moersfelder
Thad Roth
Kate Scott
Paul Sklar
Julianne Thacher
Katie Wallace
Peter West

Others attending:

Jeremy Anderson, WISE
Dave Backen, Evergreen Consulting
Mark Duty, Rogers Machinery
Carolynn Farrar, NW Natural
Keith Kueny, Community Action Partnership of Oregon
Brian Lynch, AESC
Mary Mann, Goose Hollow Windows
Alan Meyer, Energy Trust board
John Molnar, Rogers Machinery
Faye Rachford
Bob Stull, CLEARResult
Ed Wales
Becky Walker, CLEARResult

1. Welcome and introductions

Kim Crossman convened the meeting at 1:30 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at: www.energytrust.org/About/public-meetings/CACMeetings.aspx.

2. Old business

The council approved the November meeting notes without comments or changes.

Kim: Energy Trust is searching for the next Executive Director. Applications are due on February 22. Please share the opportunity with your contacts.

3. 2015 Preliminary Annual Results

Peter West presented Energy Trust's 2015 preliminary annual results. Official results will be available in the 2015 Annual Report to the OPUC available on April 15, 2016.

Peter: 2015 results were robust across the board. We achieved 102 percent of our electric savings goal, 116 percent of our natural gas savings goal and 112 percent of our renewable

energy generation goal. We achieved goals in three out of four utility territories. We came close in PGE territory at 96 percent of goal as several large industrial projects in PGE territory shifted completion from 2015 to 2016.

Our electric savings peaked in 2012, plateaued for a few years, and are now slightly lower, as planned. 2015 gas savings were the highest ever.

The number of commercial and industrial Strategic Energy Management, SEM, participants has grown significantly. However, businesses participating in SEM were smaller on average in 2015 than in 2014, resulting in overall fewer savings.

We realized mid-2015 that our gas incentives were not sufficient to motivate Existing Buildings customers to take action, which had a negative impact on both gas and dual-fuel projects, especially in PGE territory. We raised incentives and this resulted in more projects, but more for 2016 than 2015. We now have a strong pipeline of Existing Buildings dual-fuel projects in PGE for 2016.

We achieved 78 percent of the goal for NW Natural territory in Washington. We believe this is because our commercial incentives were insufficient in this territory. Incentives in Washington work differently than in Oregon and are set by tariffs. This prevented us from increasing incentives in Washington. This has been corrected for 2016

For the renewable energy sector, savings were very strong for commercial and residential solar projects. In fact, 2015 was the largest year ever for solar installations with 1,800 projects compared to 1,300 projects in 2014. In recent years, solar equipment costs have dropped significantly. In addition, the Solar program received two national awards, including from the Harvard Kennedy School of Business for innovation and from the Interstate Renewable Energy Council for efforts to reduce the soft, or non-hardware, costs of solar installations.

As expected, the Other Renewables program closed four projects in 2015, including two hydropower projects and two biopower projects. Efforts continue in 2016 to engage irrigation districts to install hydropower systems.

Don Jones, Jr: How are goals set for Other Renewables?

Peter: Goals are based on a market characterization assessment and an assessment of known project proposals. Annual goals are based on the renewable energy sector's five-year strategic plan. Note that energy-efficiency budgets are set based on opportunity, but renewable energy budgets are fixed.

A few noteworthy achievements in 2015 included tighter budgeting and forecasting that resulted in an intentional reduction of cash reserves.

We saw the largest ever industrial gas project, which indicated an emerging opportunity for synergy with pollution control and water-saving efforts.

Two years ago, LEDs were a relatively small part of the residential market. In 2015, LEDs were 55 percent of bulbs installed in the residential Products program. LEDs represented 67 percent of bulbs installed in the industrial sector. In 2016, we expect even more lighting to be LEDs.

NEEA achieved 152 percent of its goal, largely due to updates to codes and standards for chargers.

We had 108,000 customer transactions, the most ever and 9 percent more than in 2014. This is especially noteworthy because we also launched a new IT system in 2015.

Elaine Prause: What accounted for the strong success in Cascade Natural Gas territory?

Kim: All programs put extra effort into achievement in Cascade Natural Gas territory, and almost all of them succeeded.

Alan Meyer: 108,000 seems like a lot of transactions. Is that possible?

Peter: Yes, many of the transactions are electronic.

Ed Wales: In light of rapid uptake in LED lighting and General Electric's recent announcement to stop manufacturing CFLs in 2017, does Energy Trust expect a new LED baseline anytime soon?

Peter: We are working now to understand this and the timing of it. The market is moving extremely quickly. One complicating factor is non-ENERGY STAR® certified "value" LEDs are entering the market. The baseline is expected to shift radically between 2017 and 2020.

Mike: It's clear this change will happen, but the timing is difficult to pin down.

Kim: The question of when LED becomes baseline will also be sector specific. For example, while 67 percent of industrial lighting savings in 2015 were from LEDs, we have seen data showing less than 10 percent market penetration of LEDs in industrial high bay applications.

Peter thanked the Conservation Advisory Council, utilities, regulators, Program Management Contractors, Program Delivery Contractors and staff for contributing to these outstanding results.

4. Multifamily windows incentive changes update

Kate Scott, multifamily program manager, presented an update on changes to incentives for multifamily windows. In 2015, Energy Trust revisited all electric measures regarding cost-effectiveness. It was determined that windows for multifamily buildings of five dwelling units or more were no longer cost-effective. We decided to change duplex, triplex and fourplex incentives to align with single-family windows measures.

Since the Conservation Advisory Council meeting in November 2015, staff consulted several multifamily trade allies and attended January trade ally forums around the state to further engage stakeholders.

At this point, the program is still gathering data. Potential exceptions will be discussed with the OPUC shortly. Next month, Kate will return to the Conservation Advisory Council to present final changes and share out assumptions and reasoning. Formal changes are expected to be effective on July 1, 2016.

Scott Inman: What changes are you considering?

Kate: Our initial proposal was to discontinue windows incentives for all large multifamily (5 or more units) buildings. We're now looking at ways to save some subsets of the measure. For example, single-pane aluminum windows with project costs under \$20,000 come closest to cost-effectiveness and could perhaps be a scenario for examining whether they are close enough to merit an OPUC exception to cost-effectiveness.

Scott Inman: Non-energy benefits need to be considered in the equation. Multifamily owners and managers are motivated by non-energy benefits because the tenants, not the owners, reap the energy benefits.

Kate: In our analysis, we are looking at non-energy benefits.

Scott Inman: I'm concerned you're not looking enough at the non-energy benefits.

Peter: We will provide our current analysis. We need to work within standard framework and protocols to determine a solution. UM 551 lists eight exceptions, and we need to work within the boundaries of those exceptions.

Alan: Is this a Total Resource Cost Test issue?

Elaine: Yes.

Alan: I share Scott's feelings. We should be paying incentives on the increment of the energy savings, not the total cost of new windows. Energy savings don't motivate people to put in new windows. There must be another motivation.

Elaine: We've heard that Energy Trust is putting a case together. From UM 1622, we now have a process in place to review potential cost-effectiveness exceptions for minor measures. We need to determine if these fall into the category of minor measures and then address the case. This is the framework we have and we are working within it.

Don Jones, Jr.: Non-energy benefits are difficult to quantify. It might be useful for trade allies active in the market to propose a way to quantify them. As a Regional Technical Forum member, we also struggle with non-energy benefits.

Don MacOdrum: The measures that survived through UM 1622 had a minimum of 0.5 on the Total Resource Cost Test, TRC. I would expect a similar target will be determined for multifamily windows.

Kim: Our intent today was to keep you informed about the process. We will have a more substantive conversation at our next meeting.

Jeremy Anderson, WISE: In past Conservation Advisory Council presentations, the TRC numbers included zero non-energy benefits?

Kate: Correct.

Jeremy: Do quantifiable non-energy benefits get baked into TRC and there they do not require an exception?

Kate: Correct.

Mary Mann, Goose Hollow Windows: The Energy Trust website features a large multifamily project with insulation and windows, and bill savings are stated to be only \$3 a month. That's too low to be possible. I believe this information is wrong.

Peter: We will take a look at the project and follow up with you.

Holly Meyer: I want to make sure there is enough time for us to update marketing materials with mid-year changes. June could be an awkward time for this. Also, if you can quantify non-energy benefits, it's reasonable to bake those benefits into the equation regardless of whether 0.5 is achieved without non-energy benefits.

Peter: To clarify, all quantified non-energy benefits are included in the equation.

5. New Buildings market solutions update

Jessica Iplikci, New Buildings program manager, and Susan Jowaiszas, commercial and industrial senior marketing manager, presented an update on the small commercial market solutions offering.

Jessica: Small commercial buildings represent a large share of new construction. There is a lot of new construction activity right now. When the economy began to recover, we saw a lot of small commercial building construction, and now we are seeing more large commercial new construction that undergo extensive design starting to be built and come online. Small commercial buildings are defined as 100,000 square feet or less. The majority of our small commercial buildings are between 5,000 and 20,000 square feet. These include major renovations and new construction projects. These buildings can be partially or entirely owner occupied, and our program interacts closely with these business owners.

In 2010, New Buildings kicked off a small commercial efficiency pilot and learned how small customers make energy decisions, including how to best reach them and what tools they need. Small commercial buildings are too small for energy modeling to be cost-effective, so these customers typically install prescriptive measures instead of custom measures. We want to move these customers from installing one or two prescriptive measures to installing many prescriptive measures. These customers also like to move quickly, and we need to move at their pace. To address these customers, we created the market solutions offering, featuring packages of prescriptive incentives for small business customer sites and customer-facing workbooks.

Market solutions projects represent 13 percent of all small commercial projects, but 24 percent of electric savings and 30 percent of gas savings for all small commercial projects. *[Post-meeting editorial correction from the incorrect 5 percent originally presented.]*

To date, 160 projects with more than 8 million square feet have enrolled in market solutions. To date, we have closed 117 market solutions projects. Of Good, Better and Best options, 64 percent of owners are pursuing Better or Best packages. Most of the projects are in the Portland Metro area, aligning with construction activity in the state. Market solutions projects have increased since 2013, growing from 17 in 2013 to 52 in 2015. The majority of gas savings are from restaurant projects.

Alan: Why are there so many projects in Portland?

Jessica: In Portland, we have seen an extremely strong construction market with population growth. In particular, multifamily construction that also becomes an anchor for retail and other market segments that follow and build around population centers.

Susan presented the recent "Hey Building" advertising campaign featuring completed new construction projects. Advertising will drive potential customers to a new microsite to learn more and take action.

Jessica: Moving forward, we will update market solutions packages to accommodate changes in code and avoided costs, launch a new offering for large multifamily buildings, add new measures and revise the office and retail packages to include HVAC as an elective instead of a core requirement.

Don Jones, Jr.: Is server room optimization part of any of the market solutions packages?

Jessica: Yes, server rooms are part of our package for offices.

Susan: Workbooks are easy to use and have worked as a great outreach tool.

Don Jones, Jr.: Who is the New Buildings delivery contractor?

Jessica: CLEARResult.

6. Energy Trust pilots

Mike Bailey, engineering manager, presented an overview of current Energy Trust pilot projects.

Mike: Pilots help Energy Trust develop new measures and program approaches. They help us find the best way to deliver energy savings or generation and help us quantify costs, energy savings and energy generation. Pilots are experiments that help us decide what efforts are feasible, necessary and affordable. Energy Trust's process for managing pilots requires formal approval by Energy Trust's Management Team.

Between August 2014 and July 2015, Energy Trust conducted 21 pilots at varying stages, spanning all sectors. Five of those 21 pilots completed in that period. Pilots comprise approximately 2 percent of Energy Trust's total funding.

Cost-effective measures resulting from pilots include smart thermostats, heat pump water heaters with NEEA, SEM for commercial and small industrial customers and multifamily smart power strips. Some pilots are successful even when they do not result in a new measure because they help Energy Trust determine not to pursue a large-scale investment in a potential measure that does not work as expected.

Brent Barclay: How do you overlap with NEEA's work? Do you take these learnings to the Regional Technical Forum?

Mike: Fred and I meet regularly with NEEA's emerging technology team to explore opportunities. NEEA has a slightly different scope for market transformation. For example, NEEA explores influencing codes and standards changes and we don't. We communicate with NEEA to share information, such as what other organizations are exploring similar pilots. We also work with the Regional Technical Forum to gain technical feedback on pilot research plans, and to avoid duplicating efforts of other utilities. For example, Avista is exploring commercial power strips and Energy Trust is exploring residential power strips.

Kim: Are we coordinating enough with Bonneville Power Administration?

Brent: More coordination and sharing of results benefits all of us.

Mike: We're coordinating, but there is more we can do.

Peter: Sometimes pilots look duplicative, but organizations will explore different applications of a certain approach or technology.

7. Planning for the 2016 Conservation Advisory Council

Kim shared Conservation Advisory Council operations principles and possible agenda items for 2016, and requested feedback.

Don MacOdrum: The operating principles look good. I'm wondering how the item about providing on-boarding for new council members has gone.

Brent: We reviewed these relatively recently, so I think they're okay. What do new Conservation Advisory Council members think?

Julia Harper: I like the succinct presentations, but I would like more context and background to review prior to presentations.

Kim: That's great feedback, we'll think about it. I also encourage all of you to ask about context during presentations.

Tyler: I appreciated the new member orientation. I'm learning more through attending meetings.

Holly: I'm not new, but it would be helpful to start presentations with a big picture introduction. It would be good to start presentations by explaining why each topic is important right now.

Council members approved the 2016 operating principles. Kim will distribute the final document at the next meeting.

Alan: The Renewable Energy Advisory Council and Conservation Advisory Council are different, and it could be helpful for Kim and Betsy Kauffman to share best practices.

Holly: Alan, thank you for attending advisory council meetings. I have appreciated your presence and thoughts.

Don MacOdrum: Do we need to review the operating principles annually? I think we could review them less frequently and remove the year from the document.

Kim: Adding the date was a request from Holly.

Holly: It's fine to remove the year from the document as long as we remember to review it regularly.

Don Jones, Jr.: How is Conservation Advisory Council working for staff?

Kim: I'm not sure we've had this internal conversation outside of the Sector Leads and Peter, but we should. I personally would like to see more staff engagement in Conservation Advisory Council meetings. That was one of the reasons we gathered this list of potential 2016 Conservation Advisory Council topics, as a way to get staff thinking creatively about what sorts of topics they'd like to bring to you.

Peter: Staff appreciate the Conservation Advisory Council. I think there are opportunities for improvement. What are the best ways to provide information to and engage Conservation Advisory Council members?

Don Jones, Jr.: Are Conservation Advisory Council meetings the best way to communicate potentially controversial information to the public? Is there a parallel way to be transparent and engage the community?

Alan: You don't want to bring fully baked topics to Conservation Advisory Council, but you don't want to just start baking them in this meeting. What is the best moment to bring controversial topics to Conservation Advisory Council?

Kim: In 2015, we effectively engaged the trade ally community through our trade ally forums, especially with residential changes. We can learn from those efforts on the commercial and multifamily side.

Peter: Conservation Advisory Council is the best place to introduce these issues. It's good to bring topics to Conservation Advisory Council early and then again later when ideas are more baked.

Alan: I think we have useful, productive discussions.

Kim: In my analysis, Conservation Advisory Council only spent about 10 percent of meetings discussing controversial topics.

Andria Jacob: I appreciate presentations from customers to understand how end users work with the programs.

Holly: Are staff getting what you need out of the Conservation Advisory Council?

Kim: Yes. We also struggle with determining what topics to bring to the council and when is the right timing. That's one of the reasons I'm asking for your input.

Holly: I recommend being clear about whether or not you're looking for feedback on topics presented. If you're not looking for feedback, is there really value in sharing the information with the council?

Kim: It is very valuable for us to gauge your reaction and comfort level with information. Also, when a topic is labelled in the agenda as discussion, we are seeking your advice.

Holly: I recommend starting presentations with strategic questions to guide our thinking and get feedback.

Brent: I recommend coaching staff before they present. Coach them to ask specific questions and request specific feedback.

Kim: What topics do you want to hear about in 2016? Do you want more information about the renewable energy sector?

Andria: Yes. High-level information on renewable energy would be very helpful. For example, it was useful to learn that this was the highest ever year for solar system installations.

Holly: What about bigger picture information, like regional policy or NEEA? Bigger picture policy context would be helpful.

Andria: I would like information about the Environmental Protection Agency Clean Power Plan and how it intersects with Energy Trust.

Don Jones, Jr.: Is policy already being addressed at the board level? What is our core mission as Conservation Advisory Council? We should focus on issues within that mission before we expand to topics like renewable energy.

Don MacOdrum: I would like more information about the role Energy Trust plays in the broader energy sector and Energy Trust's relationship to other players. That information is critical to empower us to provide valuable input.

Kim: Legislative updates are featured at Renewable Energy Advisory Council. Should we include them here?

Tyler: I think that could be a good idea when there is relevant legislation.

Holly: This topic falls into the policy context topic.

Peter: Currently, the Regional Portfolio Standard expansion bill could impact us. Also a healthy climate bill.

Kim: In the last three years, the only controversial topics have been about measure changes, and in particular on residential measure changes. Overall, our conversations have been productive and useful. But if you have feedback on how to improve, please email it to me.

Don MacOdrum: Will we have a follow-up presentation on multifamily windows incentive changes?

Kim: Yes.

Don MacOdrum: For measure changes topics, the last slide of each presentation could include information about a future Conservation Advisory Council engagement plan.

Julia: On the list of potential topics for 2016, what is the Avista and Energy Trust topic?

Peter: There's a rate case with Avista regarding decoupling. When similar conversations have happened with NW Natural and Cascade Natural Gas, they ended up participating with Energy Trust. We were asked if we could provide programs in Avista territory in 2016.

Don Jones, Jr.: That would give you gas coverage in Southern Oregon, concurrent with our territory.

Julia: Regarding the AirGenerate topic, NEEA saw a lot of equipment failures in fall 2015. As of the end of January 2016, we have burned through \$160,000 of the available \$200,000 for remediation. If the rate of failure increases, we will run out of funds before June. While a lot of these are in Energy Trust territory, failures appear to be proportional to installations. We will continue analysis. You may want to move this topic up earlier in the year.

Kim: To reiterate what Peter said earlier, thank you for NEEA's savings contribution this year.

Tyler: Do you ever present on the Integrated Resource Planning process?

Kim: It's on our list for 2016.

Holly: A few years ago, we had a cost-effectiveness offsite workshop. That was beneficial and I would like to do that with other topics if needed.

Kim: Please suggest topics for offsite workshops. What do you need to know more about to be a better advisor?

Peter: It would be good for us to know what about the IRP you are most interested in. It is a large topic. Also, consider what you want to hear from each other, like a presentation from Andria about City of Portland benchmarking.

Elaine: Another agenda item could be Energy Trust's role in demand response and demand management.

8. Public comment

Faye Rachford: I recently moved here with an energy-efficiency background. As a newcomer, I'm glad I came. It gave me a greater sense of Energy Trust's purpose and makes it clear that other industry professionals are contributing input to the organization.

9. Meeting adjournment

The next scheduled meeting of the Conservation Advisory Council will be on March 16, 2016, from 1:30 p.m. – 4:30 p.m.