

Energy Trust Board of Directors

December 15, 2017



155th Board Meeting Friday, December 15, 2017 421 SW Oak Street, Suite 300, Portland, Oregon

	Agenda	Tab	Purpose
10:30 a.m.	Board Meeting—Call to Order (Debbie Kitchin)Approve agenda		·
	General Public Comment The president may defer specific public comment to the appropriate agenda topic.		
	 Consent Agenda	1	Action
10:35 a.m.	President's Report		Info
10:40 a.m.	PGE Direction and Vision (Maria Pope, President, PGE)		Info
11:10 a.m.	ODOE Energy Survey (Janine Benner)		Info
11:25 a.m.	 Final Proposed 2018 Annual Budget & 2018-19 Action Plan (Michael Colgrove) Adopt 2018 Budget, 2018 Projection and 2018-2019 Action Plan–R827 	Separate Document 2	Info Action
12:15 p.m.	Lunch Break (move to Solar Conference Room for Executive Session)		Info
12:30 p.m.	Executive Session and Board Lunch The board will meet in Executive Session pursuant to bylaws section 3.19.3 to discuss confidential commercial information.		
1:30 p.m.	Break (return to Board Meeting)		
1:40 p.m.	 Committee Reports Audit Committee (Ken Canon) Evaluation Committee (Alan Meyer) Finance Committee (Susan Brodahl) Policy Committee (Roger Hamilton) Strategic Planning Committee (minutes attached only – report given at November board meeting) 	3 4 5 6	Info Info Info Info Info
2:10 p.m.	 Diversity, Equity and Inclusion Initiative Operations Plan Presentation (Debbie Menashe) Diversity, Equity and Inclusion Board Policy Resolution–R828 (Roger Hamilton) 	7	Info Action
3:10 p.m.	Staff ReportHighlights (Mike Colgrove)		Info

The next meeting of the Energy Trust Board of Directors will be Wednesday, February 21, 2018 at 10:30 a.m. at Energy Trust, 421 SW Oak, Suite 300, Portland, OR 97204

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Tab 2 Final Proposed 2018 Annual Budget & 2018-19 Action Plan

• Adopt 2018 Budget, 2018 Projection and 2018-2019 Action Plan-R827

Tab 3 Evaluation Committee

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Tab 1



Board Meeting Minutes—154th Meeting

November 8, 2017

Board members present: Susan Brodahl, Ken Canon, Melissa Cribbins, Dan Enloe, Roger Hamilton, Mark Kendall, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Eddie Sherman, Janine Benner (Oregon Department of Energy special advisor)

Board members absent: Lindsey Hardy, Steve Bloom (OPUC ex officio)

Staff attending: Michael Colgrove, Corey Kehoe, Steve Lacey, Amber Cole, Peter West, Jed Jorgensen, Betsy Kauffman, Dave Moldal, Lily Xu, Fred Gordon, John Volkman, Mike Bailey, Zachary Sippel, Mark Wyman, Dave McClelland, Phil Degens, Thad Roth, Judge Kemp, Dan Rubado, Amanda Potter, Oliver Kesting, Art Sousa, Scott Clark, Julianne Thacher, Gwen Barrow, Quinn Cherf, Jay Ward, Ryan Crews, Pati Presnail

Others attending: JP Batmale (Oregon Public Utility Commission), Rick Hodges (NW Natural), Kari Greer (Pacific Power), Bob Stull (Ecova), Marc Thalacker (Three Sisters Irrigation District), Whitney Rideout (Evergreen Consulting), Desiree Sideroff (Craft3), Ken Nichols

Business Meeting

Debbie Kitchin called the meeting to order at 10:30 a.m. Reminder that consent agenda items can be changed to regular agenda items at any time.

There were no changes to the agenda.

General Public Comments

The president may defer specific public comment to the appropriate agenda topic.

There were no public comments.

Consent Agenda

The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.

MOTION: Approve consent agenda

Consent agenda includes:

- 1. September 27, 2017, board meeting minutes
- 2. Economic Development Policy 4.18.000-P-R818
- 3. Methodology for Evaluating Above-Market Costs of Renewable Resource Projects 4.07.000-P-R819

Moved by: Dan Enloe

Vote:

In favor: 10 Opposed: 0 Seconded by: Anne Root Abstained: 0

President's report

Debbie Kitchin discussed board development. Members of the Energy Trust board of directors dedicate many hours to cover their responsibilities, and the board is doing a good job in their duties. There is always opportunity to improve the board over time, including making sure the board has many different perspectives represented. The current board has diversity in geographic representation, backgrounds and industries including energy, manufacturing, agriculture, insurance and construction. The board needs to improve on ethnic and racial diversity, and this is an area Debbie will be addressing. Ethnic and racial representation is needed not only for the board, but also staff, trade allies and others Energy Trust works with to deliver programs and benefits. The board makeup should also represent different points of view, like different political perspectives and values, to fully represent the state of Oregon. In

December, the board will talk more about Energy Trust's diversity, equity and inclusion strategy, targets and objectives. Debbie noted her efforts to meet more with community leaders, and encouraged other board members to think about their own communities and to enhance their exposure to diversity, equity and inclusion as Energy Trust launches into this work.

Eddie Sherman joined the meeting at 10:38 a.m.

Energy Programs – McKenzie Hydroelectric Facility Project Review

Jed Jorgensen and Lily Xu presented on the project. For any project with a proposed incentive of \$500,000 or more, board review and approval of the incentive is required. The McKenzie hydropower project is an example of a project resulting from the irrigation modernization initiative. Energy Trust contracts with Farmers Conservation Alliance to work with irrigation districts across the state to assess irrigation modernization opportunities. Currently, FCA and Energy Trust are working with 20 irrigation districts, which is about 50 percent of Oregon's irrigated agriculture. There is a tremendous amount of hydropower potential with funding opportunities coming together in the next year. Staff will provide a full irrigation modernization update to the board in spring 2018.

The McKenzie project will be installed within Three Sisters Irrigation District's territory outside Sisters, Oregon. Three Sisters Irrigation District is an early adopter, champion and leader in irrigation modernization. In 2011, the district developed, with Energy Trust support, a 700-kilowatt (kW) hydropower project and completed the project in 2014. Even during the severe 2015 drought, the system operated well. Hydropower is part of a broad package of benefits making the irrigation modernization initiative popular. Three Sisters Irrigation District is about 85 percent of the way through full irrigation modernization. Benefits from this work include piping open ditch canals, eliminating water seepage and evaporation, keeping water in-stream, an increase in on-farm water deliveries during droughts and the ability to remove pumps due to the pressurized water supply. The overall objective of the irrigation modernization initiative is to help irrigation districts assess benefits, bring together funders and make it possible to move projects forward.

Before the board today is the McKenzie hydropower project, a project resulting from a spring 2017 competitive solicitation that brought in three projects. The other two projects requested incentives less than \$500,000. Staff evaluated the projects and will move forward with both projects. One of the two projects is the Watson Reservoir hydropower project at Three Sisters Irrigation District. It is a 200-kW facility next to the existing 700-kW facility. The project qualified for a \$400,000 incentive and will deliver energy to Pacific Power.

The McKenzie hydropower project will use excess pressure from additional piped canals for a 300-kW turbine interconnecting to Central Electric Co-op and wheeling through Bonneville Power Administration (BPA) to Portland General Electric (PGE). Staff evaluated project financials by looking at the project delivering power to either PGE or Pacific Power. The above-market costs were similar regardless of utility. PGE's power purchase agreement for qualifying facility wholesale power rates is about 20 percent higher than Pacific Power's. In addition to a more favorable energy rate, it is beneficial to provide funding out of the Energy Trust budget dedicated to PGE projects. Staff is highly confident the utility will be PGE and this is reflected in the briefing materials and resolution.

As part of the standard project review process, staff evaluated benefits, risks, costs, technology choices and development choices. Jed clarified the power will receive renewable energy avoided cost rates and PGE will take title to Renewable Energy Certificates from the project during the specific times under the contract. Risks of the project include not having concrete costs for interconnection; however, estimates are reasonable and track well with the 700-kW project.

Based on staff analysis of the financial information provided by the project, the above-market costs are \$775,000. Without an incentive from Energy Trust, the project would not pay back within 20 years. Staff is proposing a \$640,000 incentive with various amounts paid based on achieving milestones, including

commercial operation and upon meeting annual generation goals. Payments are structured to provide more funding during the lean years when power rates are lowest.

The board asked whether the generation projections account for unexpected events, like forest fire response strategies utilizing water in the canals. Jed noted if the generation is less than predicted due to less water than anticipated, staff requires the customer to show the efficiency curve of the turbine and indicate if the production matched given the water availability.

Jed described the various charges for the project. The co-op wheeling charge is in dollars per kW per month, based on capacity, while BPA sells transmission space at a set charge per month in 1 MW increments.

The board asked whether there are benefits to bundling the McKenzie and Watson Reservoir projects. Jed noted the projects are in different locations with different power purchase agreements and different rates. It also makes more sense to wheel the McKenzie project to PGE both for Energy Trust's budget and better project revenues. If the project delivered to Pacific Power wheeling costs go down, but the power rates also go down and are lower for an additional three years beyond PGE's rate structure.

The board discussed the merits of wheeling to Pacific Power or PGE. They asked about whether the Central Electric Co-op rates could be negotiated down, and whether this project could come down in cost per average megawatt (aMW). Jed said in terms of making comparisons on energy value, in dollars per aMW, there are other incentives that are included or not included in the other projects depending on their unique financial circumstances. For instance, some projects have higher power rates and others have grants and funding from different sources. It is difficult to make a comparison without accounting for the other moving funding pieces. Staff sees this incentive amount as reasonable for the given power rates. In addition, the project needs to interconnect with Central Electric Co-op regardless of whether the power is delivered to PGE or Pacific Power. If it's PGE, the benefit is a higher energy rate but greater charges to BPA. And if it's Pacific Power, there is a lower BPA charge but also a lower rate. While the differences roughly equal out, Energy Trust would have to make more payments during low cash flow years if the power was delivered to Pacific Power; in addition, there is greater incentive availability in Energy Trust's PGE budget.

Marc Thalacker noted the Central Electric Co-op wheeling tariff is the same for PGE and Pacific Power. BPA has a transmission wheeling tariff for PGE because the PGE interconnect is a further distance than the interconnect for Pacific Power. Marc did approach Central Electric Co-op to try to negotiate lower charges. If the board requires the project to deliver power to Pacific Power, the incentive request will need to increase. Marc noted Three Sisters Irrigation District is running a deficit for the first six years of the project and this would extend another three or four years if Pacific Power was the selected utility. Marc described PGE's long-standing interest in improving fish habitat and flows, which this project supports. Marc noted they tried to bundle both the Watson Reservoir and McKenzie projects but they would need two power purchase agreements and a second transmission increment from BPA.

Jed confirmed the water flow analysis included historical weather variations.

RESOLUTION 820

AUTHORIZING INCENTIVES FOR THE MCKENZIE HYDRO FACILITY

WHEREAS:

 In May 2017 Energy Trust began a competitive process to allocate up to \$3.0 million in incentives for renewable energy facilities in Portland General Electric service territory and \$1 million in Pacific Power territory. Three applications were received, all hydropower, including the McKenzie project, proposed by the Three Sisters Irrigation District.

- 2. By replacing irrigation canals with pressurized pipe, the District can conserve water, eliminate seepage, evaporation and on-farm pumping, and generate hydropower with the excess pressure.
- 3. The proposed project will use a new 5.25-mile long pressurized penstock pipeline that discharges into the McKenzie Reservoir. Water savings will permanently restore 7 cfs of flow to Whychus Creek, benefiting threatened and endangered fish species.
- 4. The District proposes to construct a 30'x30' concrete powerhouse and install a 300kW horizontal Francis turbine with an estimated generation of 922,400 kWh, annually. Power would be wheeled through Central Electric Coop and Bonneville Power Administration for delivery to Portland General Electric (PGE) or Pacific Power. Project construction is expected to begin in spring 2019, commissioning and testing to start in in winter 2019, and commercial operation in spring 2020.
- 5. Staff finds that the project has significant strengths in that it will be built by an entity with a proven track record as a hydropower operator, it will be municipally owned, and it has secured grants. Staff sees no significant permitting challenges and few other risks.
- 6. Above-market costs are \$778,859 (net-present value) if the project delivers to PGE, or \$729,917 if it delivers to Pacific Power. The choice of utility depends on the resolution of certain power delivery feasibility issues.
- 7. Staff proposes an incentive of \$640,000. The first payment would be \$440,000, payable on commercial operation. If the project delivers to PGE, additional payments of \$40,000 would be triggered over five years if the project meets annual generation milestones. If the project delivers to Pacific Power, these additional payments would be \$25,000 a year for eight years. With the proposed incentives, the project would pay back in 15 years.
- 8. On a present-value basis, Energy Trust's incentive is worth \$540,431 to \$558,286 (depending on how many additional payments are made), about 70% of the project's above-market cost. At \$6.1 million/aMW, the incentive is in the upper end of the range for hydropower projects Energy Trust has supported, due primarily to the fact that low power prices require larger incentives.
- 9. Staff proposes to seek Renewable Energy Certificates (RECs) equivalent to 100% of the project's expected generation over 20 years. This is more than required by board policy, but is reasonable because the project is in the upper range of costs.
- 10. Staff proposes to include milestones in the funding agreement with the District to allow Energy Trust to withdraw funding if the project is unable to move forward.

It is RESOLVED that the Executive Director is authorized to negotiate a funding agreement for up to \$640,000 in incentives to offset the above-market cost of the the 300kW McKenzie hydroelectric facility of the Three Sisters Irrigation District, consistent with the terms outlined above.

Moved b	oy: Ken Canon	Seconded by: John Reynolds		
Vote:	In favor: 10	Abstained: 0		
	Opposed: 1			

Jed noted staff will present to the board in spring 2018 on the irrigation modernization initiative, including the available hydropower generation from modernization activities.

Marc said farm end-users pay a capital charge of \$10 per acre for the projects. Three Sisters Irrigation District has been able to reduce costs of the projects by having its own construction crew. After this project, Marc anticipates the final remaining 10 miles of canals will be piped within three years, and by 2020, the district will become carbon neutral.

Committee Reports

Audit/Compensation Committee, Ken Canon

Moss Adams completed the first audit of Energy Trust's 401(k) retirement plan to comply with U.S. Department of Labor requirement for plans with more than 100 participants. Moss Adams identified two items, though neither were material enough to warrant concern. The first finding was two instances when the contribution payment was delayed by several days. The second finding was inconsistency between the plan document's definition of eligible compensation and management practice. Management will modify the plan document for 2018. The auditors commended staff for their cooperation and timely response to requests throughout the audit. The 401(k) plan will continue to be audited annually.

Evaluation Committee, Alan Meyer

The committee reviewed three evaluations at the last meeting. A Nest seasonal savings pilot tested the effects of incrementally adjusting residential thermostat temperatures to save energy. Results showed a demonstrable energy savings effect in winter, some participants noticed the change but many didn't. and the persistence rate is about 80 percent. A pilot tested mid-efficiency heat pumps installed in manufactured homes. The results showed the approach was not cost-effective. Dan Rubado mentioned staff is looking at revising the pilot measure to incorporate cooling benefits in a way that the costeffectiveness would become closer to a 1.0 on the TRC test. Dan R noted the heat pump pilot savings were not as high as anticipated because energy consumption at the sites was lower than predicted. Staff is also doing a separate analysis on ductless heat pumps in manufactured homes. The committee then reviewed the approach to Strategic Energy Management savings modeling. In most cases, a simpler modeling approach is adequate and there are a few instances where a custom approach capturing additional data points would be better. The committee discussed the role of the committee, and is thinking about drafting a committee charter and a tracking document to easily identify which programs have been evaluated. The external experts on the committee are Jennifer Light from the NW Power and Conservation Council, Jamie Woods from Portland State University and Dulane Moran from NEEA.

Finance Committee, Susan Brodahl

The committee heard a presentation on Energy Trust Savings Within Reach loan offering. Susan invited Mark Wyman to give the board a brief overview of the loan product. Mark introduced Desiree Sideroff from Craft3 who is working with Energy Trust on the offering.

Mark described the Savings Within Reach initiative. Savings Within Reach targets low- to moderateincome households whose income is greater than that required to be eligible for no-cost weatherization services. Energy Trust provides a higher incentive amount than the standard track; however, customers still have upfront costs to finance either through a consumer lending product, credit card or other financing approach with high, variable rates. Seeing a gap, Energy Trust partnered with Craft3 to use customers' good standing with their utility, mainly on-time bill payment, to deliver low-cost financing that pairs with Savings Within Reach incentives and the loans are repaid as a line item on utility bills. The loan product started as a pilot with \$600,000, half of which was seeded by Energy Trust in the form of a 10-year loan to Craft3 and the rest from Craft3. The average loan is \$4,500. Energy Trust is moving into a second round given the performance of the first round, where only one instance of loss accrued for less than \$3,000. Energy Trust's exposure on the loan product is in the loss reserve provision. As the portfolio has been performing well, Energy Trust and Craft3 are going to reduce the loss reserve from a 6 to 1 to a 10 to 1 loss exposure, and expand round two to more customers. The proposed second round is \$1 million as a loan to Craft3.

Desiree noted Craft3 has been partnering with Energy Trust for almost 10 years on energy efficiency. The company hears every day the impacts this has on people's lives, like better air quality and health. Overall, the offer is providing a great benefit and has been performing well.

Mark noted Energy Trust is also working with Craft3 to explore replacing older manufactured homes with energy-efficient new manufactured homes since financing products are very limited for these customers.

Desiree mentioned Craft3 provides similar financing approaches in Washington for small commercial buildings, and it is something they are looking into doing in Oregon.

Mark clarified the on-bill repayment is available for NW Natural, Pacific Power and PGE.

Policy Committee, Roger Hamilton

The committee reviewed the McKenzie hydropower project and reviewed two policies accepted today by the board through the consent agenda. There is a correction to the October 5 meeting minutes to remove Roger Hamilton as in attendance.

Strategic Planning Committee

The committee met yesterday and reviewed 11 learning topics that will be developed by staff for the Board Strategic Planning Workshop in May 2018. The learning topics will be presented to the board on an ongoing basis prior to the workshop. The learning topics are to inform the board prior to development of the 2020-2024 Strategic Plan, which will be drafted by the Board Strategic Planning Workshop in May 2019 followed by public comment in summer 2019 and board adoption in fall 2019. Janine Benner noted the Oregon Department of Energy has staff that are familiar with a number of the learning topics and can help Energy Trust in drafting them.

Finance Committee, continued

Susan introduced Resolution 822, to update staff and board members with bank signing authority.

RESOLUTION 822 AUTHORIZING APPROVED BANK SIGNERS

WHEREAS:

- 1. Umpqua Bank and Bank of the Cascades provide general banking services to Energy Trust (collectively, the "Banks").
- 2. Section 7.3 of the Energy Trust bylaws requires that the board of directors authorize officers or agents to sign checks, drafts, or other orders for the payment of money, notes and other evidences of indebtedness ("authorized bank signers") by way of resolution from time to time.
- 3. Effective February 22, 2017, Dan Enloe's term as Energy Trust Board Treasurer ended, and Susan Brodahl was elected Energy Trust Board Treasurer.
- 4. Effective August 11, 2017 Mariet Steenkamp resigned as Chief Financial Officer of Energy Trust.
- 5. Effective August 14, 2017 Pati Presnail was appointed Interim Chief Financial Officer of Energy Trust by Executive Director Michael Colgrove.

It is therefore RESOLVED that,

- 1. Dan Enloe is to be removed from the list of authorized bank signers for the Banks.
- 2. Susan Brodahl is to be added to the list of authorized bank signers for the Banks.
- 3. Mariet Steenkamp is to be removed from the list of authorized bank signers for the Banks.
- 4. Pati Presnail is to be added to the list of authorized bank signers for the Banks.

- 5. The resulting list of authorized bank signers for the Banks is as follows:
 - A. Debbie Kitchin, Board President
 - B. Susan Brodahl, Board Treasurer
 - C. Michael Colgrove, Executive Director
 - D. Pati Presnail, Interim Chief Financial Officer
 - E. Peter West, Director of Programs
 - F. Steve Lacey, Director of Operations
 - G. Debbie Goldberg Menashe, General Counsel
- 6. The General Counsel is authorized to execute all required documentation to implement this resolution.

Moved by: Dan Enloe Vote: In favor: 11 Opposed: 0 Seconded by: Anne Root Abstained: 0

Board took a break from 12:00 p.m. to 12:35 p.m.

Finance Committee, continued

Susan finished the committee report with an introduction to Resolution 821, which authorizes staff to use Organization Contingency Pool (Reserve) funds to respond to an OPUC Request for Proposals (RFP) for a Community Solar program administrator.

Mike described the resolution. The OPUC will be issuing an RFP soliciting a program administrator for a new Community Solar program to secure 160 MW of capacity of community solar pursuant to SB 1547. Staff have discussed the opportunity internally. For many reasons, including the opportunity aligning with the strengths of Energy Trust, staff believe Energy Trust has a reasonable chance in competing for and possibly winning the contract.

Based on conversations with OPUC staff, Energy Trust will not use direct public purpose charge revenues to support this new type of activity, which includes not using such funds to develop the response for the RFP.

The internal team estimates the cost of responding to the RFP will be about \$65,000. If Energy Trust is selected, an additional \$35,000 may be needed to negotiate an agreement.

It is projected approximately two to three new FTE will be needed to administer the program once it is up and running. This program and its expenses would be separate from Energy Trust's core work. Energy Trust would recoup those costs through fees related to administering the program.

To pay for the cost of developing the RFP response, staff propose accessing the Organization Contingency Pool, which is separate from the Emergency Contingency Pool. The policy on Using Reserve Accounts authorizes staff, with board approval, to use Organization Contingency Pool funds "to address other organizational needs" such as revenue shortfall, or for renewable or efficiency projects. Energy Trust has used these funds in the past to support renewable energy projects, and on a short-term basis, to cover revenue shortfall. Beyond these examples, "other organizational needs" is not defined.

Organization Contingency Pool reserve funds are the accumulation of interest earned through shortterm investment of program and organization reserves, thus indirectly derived of ratepayer funds. The Organization Contingency Reserve includes another \$56,200 in unrestricted donations and consulting fees, which are independent of ratepayer funds.

OPUC staff request that the unrestricted funds in the Organization Contingency Pool be spent before any funds in the account derived indirectly from ratepayer funds.

The resolution requests board authorization for staff to use up to \$100,000 from the Organization Contingency Pool reserve fund, including \$56,200 unrestricted and \$43,800 accumulated interest.

The board and staff had a lengthy discussion on staff's proposed use of Organization Contingency Pool funds and staff's consideration of the opportunity to respond to an RFP for program administration of a community solar program. Board members had a number of questions about the appropriateness of using the Organization Contingency Pool for the purposes described. The board also had a number of questions and expressed concerns about pursuit of new business lines by Energy Trust. In addition, there were questions regarding accounting for separate funding streams.

Staff responded to question with reference back to the current strategic plan which identifies being open to new opportunities as an important strategy. Board members, however, expressed concern about not being fully informed about staff's consideration of the community solar program administration opportunity. This opportunity, if Energy Trust were to be awarded a contract for the work, would bring in additional and different funding to the organization in a significant way for the first time.

The board then discussed the resolution presented and asked questions as to whether the board should approve the decision to submit a response to the community solar RFP as well as authorizing funding for a response development. Board members expressed support for community solar and expressed confidence in Energy Trust's experience to serve as a program administrator. However, board members also expressed concern about not having enough information presented about the possible opportunity.

The discussion then turned to the use of the Organization Contingency Pool funds, including the unrestricted funds. Unrestricted funds are funds generated by Energy Trust separate activities and not accumulated interest on public purpose funds. Discussion continued on Energy Trust's use of these funds for developing a proposal and how non-public purpose charge funds are accounted for in the organization. Staff provided information, including information on Energy Trust experience in accounting and maintaining separate funds from NW Natural Washington and grant funds received from U.S. Department of Energy, through the Oregon Department of Energy, for a program to support solar installation in low-income communities.

The discussion continued, both with regard to authorizing funding for the development of a community solar RFP response and making a determination on whether to submit a response to the RFP once it is released. The board turned first to the resolution on funding for the development of a response.

RESOLUTION 821 AUTHORIZING USE OF CONTINGENCY RESERVES TO DEVELOP A COMMUNITY SOLAR PROGRAM PROPOSAL

WHEREAS:

- 1. SB 1547, which the Oregon legislature adopted in 2016, directed the OPUC to develop a Community Solar program.
- 2. Community Solar helps people who want to use solar power, but face barriers to putting panels on their own roof because they are renters, live in places where installation isn't allowed or isn't feasible, or cannot afford their own system.
- 3. The OPUC is inviting proposals for a Community Solar Program administrator to develop and administer a fee-for-serve program. The costs required to fund the administrator for starting up the program will be funded through rates collected from all customers; once the program is operational, the administrator will be funded from program revenues collected from participants.
- 4. Staff estimates the cost of developing such a proposal at less than \$100,000.
- 5. Staff believes that the Energy Trust organization contingency reserve fund, which includes unrestricted income in the amount of \$56,200, is the most appropriate source of funding for

purposes such as this. In adopting a Policy on Use of Reserves, the board specified that "Board action shall be required before staff is permitted to utilize the organization contingency pool to respond to unusual circumstances, such as a shortfall in program reserves, *advantageous renewable projects requiring funds beyond those available or budgeted* and other unanticipated organizational needs consistent with our mission."

6. The contingency reserve currently has a balance of \$4.5 million; using funds for this purpose would not deplete it below the board's target.

It is therefore RESOLVED: Staff is authorized to use up to \$100,000 from the Energy Trust Organization Contingency Reserve account to respond to a Community Solar Program proposal to the OPUC, which includes planning, preparing, and submitting a response as well as participating in the selection and subsequent contracting process. The \$56,200 in unrestricted income in that account will be expended first.

Moved by: John Reynolds Vote: In favor: Directors Brodahl, Cribbins, Hamilton, Kendall, Kitchin, Reynolds and Sherman Abstained: 0 Opposed: Directors Canon, Enloe, Meyer and Root

The board then voted to direct staff to draft a resolution for the December board meeting to allow the board to vote on approving or rejecting Energy Trust submittal of an RFP response after the RFP language has been made public by the OPUC. The vote was moved by Director Enloe, seconded by Director Hamilton, and then supported by all 11 board members present; no directors opposed the decision and no directors abstained. The board was clear that passage of Resolution 821 allows staff to utilize Organization Contingency Pool reserves to prepare the proposed response. Since the RFP language has not yet been posted, the resolution in December will give the board an opportunity to review the RFP language and direct staff on whether or not to respond to the RFP. The board asked to receive an updated copy of a memo prepared by staff in June outlining information about the Community Solar RFP opportunity prior to the December board meeting.

Mike said staff will start preparing and charging time against the Organization Contingency Pool reserve account, and will strive to have an outline of the RFP response in time for the December board meeting.

The board took a break from 1:50 to 1:55 p.m.

Draft 2018 Annual Budget & Draft 2018-19 Action Plan

Mike presented the draft 2018 budget and 2018-2019 action plan. The draft 2018 budget would invest \$199.6 million to save 56.52 average megawatts (aMW) and 6.88 million annual therms at low levelized costs. Renewable generation of 2.18 aMW is a 24 percent reduction from the 2017 budget due to expiration of the state Residential Energy Tax Credit and the lack of non-solar large projects completing in 2018. Overall spending is up less than 1 percent at 0.5 percent and needed revenues are down 3.7 percent. The budget results in minimal to no new rate impacts on customers. Mike clarified the PGE megaproject is over three years, 2017-2019.

Mike reviewed eight key takeaways of the budget. The budget development schedule is more than halfway complete, and staff is on track to delivering a final proposed budget for the board's consideration at the December 15 board meeting.

Mike noted similar presentations at the October Renewable Energy Advisory Council and Conservation Advisory Council meetings resulted in good discussions and a few open questions for staff to respond to. No major changes were made from those presentations to the version today. Peter said the action plans and major drivers of the budget have been supported to date. There's settling out as staff goes through comments that are due on November 17. Staff also scheduled a workshop with the natural gas utilities to discuss changes in New Homes cost allocations.

The board remarked PGE had concerns with last year's budget and asked how the process is going this year. Mike said much of the discussion last year was on resetting the reserve accounts and the impacts on rates. Peter noted the process was also modified to engage earlier with the utilities.

Mike reviewed the four building blocks of the budget and action plan, including expected 2017 achievements contributing to progress to the five-year strategic plan goals.

Steve clarified the term "demand-side management" is the label for the NW Natural customer class of large industrial and commercial customers on interruptible rates.

Mike provided more detail on the third building block on market knowledge and context, discussing changes in technologies and a trend of lower savings per project. For changes in technologies, retail lighting is seeing a large change in savings and, to a lesser extent, costs. As the LED market share increases, efficiency baselines improve, the technology continues improving and costs decrease, the savings decrease for what Energy Trust can report per LED bulb. For the 2018 budget, Energy Trust is seeing an average decline of 66 percent in savings from retail LEDs.

The board asked why the share of halogens increased. Peter said that in order to meet new federal standards, halogens are a technology that qualify.

Eddie Sherman left the meeting at 2:25 p.m.

The board asked whether halogens are a market Energy Trust or NEEA should focus on. Mike said LEDs continue to grab market share, including that of halogens.

Mike noted that while the savings are down 66 percent for retail lighting on average, the average incentive expenditure is going down 25 percent due to supporting the same volume of bulbs and reaching out to rural and other markets. Energy Trust will continue supporting all LED bulb types in 2018; as this savings decline continues in 2019, the program may exit certain bulb types.

Mike described a second piece of the context, a trend of lower savings per project. The lower savings per project trend is being informed by having helped customers complete projects with the highest return or quickest payback, serving smaller and medium-sized businesses, and realization rates decreasing in Existing Buildings. In sum, the volume of projects remains high, there is an increasing cost per unit of savings and underserved markets are a focus moving forward. The downward trend in savings per project is most prominent in Existing Buildings and Production Efficiency projects.

The board noted it would be beneficial to see total square footage within each category on slide 21.

Mike presented on action plan highlights that demonstrate three areas of emphasis for the draft 2018 budget: diversifying participation, enhancing program methods and strategies, and managing change and preparing for the future. The diversifying participation area of emphasis includes driving forward diversity, equity and inclusion strategies and activities that the board will hear more about at the December board meeting. The managing change area of emphasis includes completing the transition to a consolidated residential program contracting structure. The draft budget includes a \$1.6 million decrease in delivery costs through the residential contract consolidation.

Mike reviewed the draft 2018 revenues and expenditures, and presented a comparison of the 2018 draft budget to the 2017 adopted budget. Incentives are down about 2 percent due to decreasing activity on the renewable energy side. External program delivery is flat and internal program delivery is increasing 16 percent. Among other things, the increase is due to processing more projects, investing

in more data analysis, impact evaluations, and IT projects to improve system resiliency, efficiency and effectiveness.

The board asked what happens to the \$2.5 million in professional services in 2017 that won't be spent, and whether the funds flow into 2018. Mike said those costs aren't rolling over into 2018. There will be carryover in staffing costs but not in contracted staffing costs.

Mike said the budget also includes an increase in healthcare costs and an increase in staffing costs, either through agency staff or full-time staff. The budget focuses on using agency staff to allow Energy Trust to adapt to future year changes.

Mike reviewed the draft 2018 energy goals for natural gas efficiency, electric efficiency, renewable generation and NEEA, and presented a table showing draft goals, budgets and costs for each utility. Mike described the changes in staffing costs for 2018, which remain below the Oregon Public Utility Commission annual performance measure. Energy Trust is encouraging public comment related to the staffing aspect of the budget.

The board asked if staff envisions engaging with the OPUC on the staffing performance measure, especially given the trends that are showing in the budget, including that of more and more projects yet smaller savings per project. Mike noted the OPUC commented on last year's budget that Energy Trust should work with OPUC staff on whether the staffing cost performance measure is structured correctly or whether changes should be made. That examination is in progress. JP Batmale said OPUC staff comments last year were around the 7.75 percent expenditure performance measure being tied to the total expenditures, meaning if there is an increase in expenditures, there is more head room in the staffing costs. OPUC staff was surprised by the increase in staffing expenditures this year and as they dug into it, noted the agency contractor costs are currently counted as staffing costs under the metric. OPUC staff may recommend to the commission that the agency contractor costs be separated from the staffing measure.

Susan Brodahl left the meeting at 3:04 p.m.

The board asked whether staff has received any feedback on the length of time the budget is open for comment from the public. Amber Cole said staff has not received any feedback on the timeframe and has been promoting the deadlines in many formats.

Adjourn

The meeting adjourned at 3:05 p.m.

The next meeting of the Energy Trust Board of Directors will be on Friday, December 15, 2017, at 10:30 a.m. at Energy Trust, 421 SW Oak, Suite 300, Portland, Oregon.

Alan Meyer, Secretary

PINK PAPER



Board Decision Authorizing the Executive Director to Amend a Contract with Coates Kokes, Inc.

December 15, 2017

Summary

This resolution authorizes the executive director to amend a contract with Coates Kokes, Inc. ("Coates Kokes") for continued creative agency services through 2018 and to authorize more than \$500,000 in expenditures, which exceeds the executive director's signing authority.

This amendment to extend the Coates Kokes contract allows Energy Trust staff to continue working with the current creative services agency while preparing to issue an RFP in 2018 for creative services.

Background

Energy Trust has contracted with a creative services agency since 2008 to deliver a range of advertising and marketing services for Energy Trust programs and services. Over the years, the agency of record has delivered print, television, and online advertising campaigns promoting specific program offers, marketing templates; imagery, messaging and guidelines for use in program marketing; new web site design and content; market research to inform Energy Trust initiatives, and more.

The agency assists marketing staff in Communications & Customer Service and Energy Programs with marketing strategy, creative development and public relations services to achieve the following objectives:

- Increase awareness of Energy Trust program offerings, services, and web site among eligible customers in all service territories;
- Motivate customer engagement in Energy Trust program offers and services by communicating the value and benefits associated with taking action;
- Promote simple and clear action steps to get customers started on the path to making energy efficiency and renewable energy improvements;
- Accomplish energy efficiency savings and renewable generation goals through customer participation in programs and services;
- Support a positive customer experience through relatable marketing and customer communications—delivered via direct outreach, direct mail and email, energytrust.org and social media, earned media, and paid advertising.

As the Energy Trust creative services agency of record since 2011, Coates Kokes has provided strategic direction for advertising of Energy Trust program offers and services, and developed a number of advertisements and marketing concepts Energy Trust has used to successfully motivate and engage residential and business customers.

All programs, those managed internally and those delivered by Program Management Contractors, develop marketing communications using brand guidelines established by Energy Trust with support from Coates Kokes to ensure an identifiable, consistent brand and voice. Coates Kokes has helped Energy Trust develop messaging to engage customers. Specific examples of marketing and creative services work delivered by Coates Kokes in recent years include:

- Program Awareness advertising, including radio and TV "Get More"
- Business sector advertising, including radio and TV "My Business"
- Residential sector advertising, including radio and TV "My Home"
- Focus Groups in Medford and Portland to learn about racially diverse and rural small business owners' perception of Energy Trust, its messaging and marketing tactics

Discussion

- In 2015, Coates Kokes was selected through a competitive request for proposals (RFP) process to be Energy Trust's creative agency, and Energy Trust and Coates Kokes entered into a two-year contract for creative agency services after the selection, with options to extend the contract for as many as three additional one year terms.
- The objectives of the Coates Kokes contract are consistent with emerging areas of strategic direction for Energy Trust, and may be further refined with the adoption of the Energy Trust Diversity, Equity and Inclusion Operations Plan.
- Coates Kokes has provided excellent service and direction to Energy Trust, consistently delivering creative concepts on time and within expectations, expanding the range of options for engagement with customers and the media, and supporting qualitative research helping us better understand diverse customer perspectives.
- Energy Trust has the option to extend the Coates Kokes contract by one year and has identified projects in the 2018 Action Plan that need creative agency support. Coates Kokes has the expertise to complete this work. A board-approved 2018 Energy Trust budget would authorize sufficient funds for these creative agency services.
- Included in the 2018 budget are funds to develop and support an updated general program awareness advertising strategy, a significant multi-year advertising campaign that includes social norming as a method to encourage program participation. Funds are also included to adjust and update advertising content for commercial and residential programs.
- Energy Trust and Coates Kokes have identified a 2018 budget of \$216,000 for these efforts. This would bring the total three-year contract amount to nearly \$700,000, exceeding the executive director's contract signing authority.
- Energy Trust staff, therefore, proposes adding funds to and extending the current Coates Kokes contract and expanding the creative agency scope to include deliverables outlined in the 2018 Action Plan. In addition, staff proposes extending the Coates Kokes contract for an additional one-year term through December 2018 with permission to negotiate 2018 scope and contract payments by staff consistent with the 2018 board-adopted annual budget.
- Energy Trust expects to issue an RFP for creative agency services in the third quarter of 2018 for a new creative services agency contract to be established in 2019.
- Staff plans to integrate goals and deliverables related to the Diversity Equity and Inclusion Operations plan into the 2018 RFP for creative services. An extension of this contract enables planned creative services work to continue in early 2018, while allowing staff time to incorporate new DEI goals into planning for creative services work in upcoming years.

Recommendation

Authorize the executive director to sign contract amendment with Coates Kokes, Inc. to extend its current creative agency services agreement with Energy Trust through December 2018 and authorize funding for the full three-year agreement to exceed \$500,000 consistent with the 2018 board approved budget.

RESOLUTION 824

AUTHORIZE THE EXECUTIVE DIRECTOR TO AMEND A CONTRACT WITH COATES KOKES, INC.

WHEREAS:

- 1. In January 2016, Energy Trust chose Coates Kokes, Inc. ("Coates Kokes") to perform creative agency services following a competitive process.
- The contract awarded to Coates Kokes, Inc. in 2016 provides for a two-year term beginning in January 2016, with an agreement that an additional three one-year terms could be added if the parties agreed (the "2016 Agreement") Contract funding authorized under the 2016 Agreement was less than \$500,000, thereby within the Energy Trust executive director's signing authority.
- 3. Energy Trust wishes to act on the approved one-year extension approved by the 2016 Agreement to provide for the renewal of multi-year advertising campaign to achieve increased customer awareness of programs and services.
- 4. To accomplish these efforts, Energy Trust proposes an extension of the 2016 Agreement through December 31, 2018, and to authorize additional funding for the contract of \$500,000 for 2016 and 2017 and amounts for 2018 consistent with a board-approved 2018 budget and action plan, an amount above the \$500,000 limit of the executive director's signing authority.
- 5. At its meeting on November 20, 2017, the Policy Committee of the Board of Directors reviewed the proposal to amend the Agreement and recommended forwarding this resolution to the full board on its next consent agenda.

It is therefore RESOLVED:

That the Board of Directors of Energy Trust of Oregon, Inc., hereby authorizes the executive director to sign amendments to the Coates Kokes current contract for creative agency services to (1) extend such contract through December 2018 and (2) authorize expenditures above \$500,000 and in amounts consistent with the board's annual budgets and action plans.

Moved by:Seconded by:Vote:In favor:Abstained:Opposed: [list name(s) and, if requested, reason for "no" vote]

PINK PAPER

Board Decision Authorizing the Executive Director to Approve a Contract with Affiliated Media, LLC to Purchase Advertising in Excess of \$500,000 in 2018

December 15, 2017

Summary

Authorize executive director to a sign a new contract with Affiliated Media, LLC (Affiliated Media) for expenditure of up to \$650,000 for purchasing advertising on behalf of Energy Trust in 2018. This contract would engage Affiliated Media to purchase advertising at approximately 25 media companies in Oregon.

Background and Discussion

- By purchasing advertising at media companies in Oregon, Energy Trust is able to reach customers through print, radio, TV and online channels, creating program awareness, and promoting services, programs, and products throughout our service territory.
- Advertising is how the majority of participating customers first hear of Energy Trust and directly supports the acquisition of savings and generation.
- Advertising represents the greatest portion of overall marketing costs and is a focus of ongoing cost-efficiency efforts. Each year program objectives and observed outcomes from prior year advertising investments are assessed. Staff adjust plans as needed to meet business goals, increase reach and identify cost efficiencies.
- Advertising investment has remained at roughly the same level over the last few years. The mix of advertising purchased has changed to make sure we are reaching all customers, achieving goals and maintaining visibility in all parts of the service territory. This has meant increased advertising spending for radio and TV reaching rural communities, and adding advertising in online channels.
- Staff have explored various methods to manage planning and procurement of advertising using staff and contracted resources. Several years ago, Energy Trust tried using an advertising agency service, and later discontinued the service due to the agency commission rates that were required in addition to the media commission. Currently, the majority of Energy Trust advertising in Oregon print, radio, TV and online publications is purchased by internal Energy Trust staff executing contracts with each media company. This is a time-consuming process, especially for advertising purchases with broadcast TV and radio. In addition to planning and purchasing advertising placements, time is spent by Communications and Customer Service and Finance staff each month processing invoices.
- In 2015, Energy Trust staff again sought ways to reduce advertising costs and free up staff time for other priorities. Staff conducted a review of media buying companies in the Oregon market and determined that one company, Affiliated Media, offers media planning and buying service with no fee to its clients. Affiliated Media is paid on commission by media companies, rather than by clients such as Energy Trust.

Other media buying services charge a fee on top of commission. Affiliated Media leverages over \$11 million in media buying power of clients like OMSI, Legacy Health, Portland Art Museum, Spirit Mountain Casino to increase the value of advertising placements. Their experience, practices and planning capabilities stem from decades of work in media sales, and there are no associated service fees for their work.

- In 2016, as part of a trial approach, staff contracted with Affiliated Media to purchase Energy Trust radio advertising at 14 media companies, rather than Energy Trust executing individual contracts with each company. The maximum contracted amount was \$240,000, an amount which did not require board approval.
- The change reduced staff time, resulted in no increase in overall advertising costs, and increased Energy Trust's buying power by leveraging Affiliated Media's market knowledge, and expertise. Under the contract terms, Energy Trust staff pay one invoice to Affiliated Media monthly, and are sent copies of invoices from each media company so that all monthly costs can be recorded and referenced.
- In 2017, Affiliated Media managed TV and radio contracts with a total spend of \$490,000 although \$650,000 was budgeted. The commercial TV campaign in Q3 was canceled because it wasn't needed.
- Staff proposes to continue its work with Affiliated Media in 2018 which includes TV and radio advertising with the total amount spent on advertising purchased by Affiliated Media of \$650,000 in 2018 with a greater reach specifically in communities in southern and eastern Oregon where we have traditionally had lower levels of awareness and participation.
- The amount available for advertising each year is determined through the budget process. The proposed contract amount with Affiliated Media in 2018 is consistent with the advertising budget amount proposed for approval through the 2018 budget process.
- Energy Trust board approval is required to provide the executive director with contract signing authority since the amount proposed for the 2018 contract exceeds \$500,000. Because Affiliated Media is the only company offering this service with no fees to clients, no Request for Proposals was executed for this service.
- Energy Trust can terminate a contract with Affiliated Media at any time and revert to current practices of purchasing advertising directly from media companies.

Recommendation

Authorize the executive director to sign a contract with Affiliated Media for up to \$650,000 for purchase of broadcast radio and TV media in 2018.

RESOLUTION 825 AUTHORIZING A CONTRACT WITH AFFILIATED MEDIA, LLC

WHEREAS:

- 1. Media buying at Energy Trust allows programs to advertise in print, radio, TV and online, creating program awareness, and promoting services, programs, and products.
- 2. Advertising is how the majority of participating customers first hear of us, and there is a clear connection between advertising and customer awareness and engagement, leading to savings and generation. Increased advertising would allow Energy Trust to expand customer participation by increasing the number of times people see our message.
- 3. Media planning and buying is currently done on an annual basis, requiring staff time in Communications & Customer Service and Finance over several months to plan and process invoices for roughly 70 contracts.
- 4. A test in the first half of 2016 indicated that there is cost savings associated with using the consolidated model presented by Affiliated Media, enabling Energy Trust to buy more advertising with no increase in budget. Given the resources involved in completing separate contracts with media outlets, a contract with Affiliated Media permits the redirection of staff resources to other priority projects in web-based and social media marketing, market research and other initiatives to expand and diversify participation.
- 5. Affiliated Media is able to leverage \$11 million in media buying power of its many and varied clients such as OMSI, Legacy Health, Portland Art Museum and Spirit Mountain Casino to increase our visibility in our service territory. Their media planning capabilities stem from decades of work in media sales, and there are no associated fees for their work.
- 6. Staff proposes to execute a contract with Affiliated Media to authorize up to \$650,000 in funding, consistent with the 2018 board approved budget, for the purchase of broadcast radio and TV in 2018.
- 7. Staff believe Affiliated Media is uniquely suited to do this work and has demonstrated skill in media buying without the fees that other media buyers in the market charge to clients.
- 8. At its meeting on November 20, 2017, the Policy Committee of the Board of Directors recommended forwarding this resolution to the full board on its next consent agenda.

It is therefore RESOLVED, that the board of directors of Energy Trust of Oregon, Inc. authorizes the executive director to:

• Sign a contract with Affiliated Media authorizing up to \$650,000 for the purchase of broadcast radio and TV media on behalf of Energy Trust in 2018.

Moved by:Seconded by:Vote:In favor:Abstained:Opposed: [list name(s) and, if requested, reason for "no" vote]

PINK PAPER

Briefing Paper and Board Decision Annual REC Value and Cost Review, Staff Recommendations



December 15, 2017

Summary

Energy Trust's Renewable Energy Certificate (REC) Policy requires staff annually to report on the market value of RECs to the Renewable Advisory Committee (RAC) and the board and, where the market value of any given REC category is less than the cost of registering them, recommend whether to continue to register them in the Western Renewable Energy Generation Information System (WREGIS). Staff has completed consultations, and based on the attached report, recommends that WREGIS registration not be required: (1) for Other Renewables program and large, custom solar projects where neither the project owner nor the utility is willing to pay for WREGIS registration; and (2) for solar program projects, where there continues to be no cost-effective way to register them.

Background

- In November, 2015 the board changed Energy Trust's REC Policy to provide that the RECs need not be registered in WREGIS where the board concludes the effort and expense are disproportionate to the REC market value (see Attachment 1). This determination would be based on market value analysis by Energy Trust staff after consultation with the utilities and the OPUC. The policy amendments were prompted by experience with small, net-metered solar projects, large in number, for which the cost of WREGIS registration so far exceeded REC market value as to be prohibitive.
- Staff has consulted with the utilities, the OPUC and the RAC, completed a report on REC values in relation to WREGIS registration cost (see **Attachment 2**), and developed recommendations on WREGIS registration.

Discussion

- Voluntary REC market prices continue to be low (see Voluntary Market price graph in Attachment 2). This is the market in which the large majority of Energy Trust projects fall.
- For some small to medium projects Energy Trust projects, neither the owner nor the utility is willing to in register RECs in WREGIS.
- Small solar projects are subject to the same WREGIS metering and reporting requirements as other renewable energy projects. Between 2010 and 2015, staff spent significant time and energy working with the utilities, OPUC staff, Oregon Department of Energy staff and others looking for cost-effective ways to register small project RECs in WREGIS, or otherwise to make these RECs count. No costeffective method has yet been identified.

Recommendations

- RECs generated by projects funded through the Energy Trust Other Renewables program and custom solar projects: continue to take title to project RECs, but do not require WREGIS registration if neither the project owner nor the utility are willing to pay registration costs.
- RECs generated by Energy Trust Solar Program projects: do not require WREGIS registration for Solar program projects absent a cost-effective option for registration.

RESOLUTION 826

ANNUAL DETERMINATION REGARDING REC REGISTRATION REQUIREMENTS

WHEREAS:

- 1. RECs represent renewable energy values that should be protected for ratepayers in Energy Trust programs.
- 2. Energy Trust's board policy regarding RECs, as amended in 2015, requires that staff "track the cost and effort involved in registering RECs and report to the RAC and board at least annually in order for the board to determine whether the cost and effort entailed in registering RECs of a given type is disproportionate to the market and other values associated with RECs...."
- 3. This REC policy provision recognizes that in protecting the renewable energy values for ratepayers, there may be circumstances in which the cost of registering RECs in WREGIS is prohibitive;
- 4. In 2015, with the approval of the board upon determination that the cost of WREGIS registration was disproportionate to their value, Energy Trust staff retained contractual title only to RECs generated through the Solar program and through Other Renewables program and custom solar projects where neither the project owner nor the utility are willing to pay for WREGIS registration costs;
- 5. Energy Trust staff continues to track the market value of RECs and the cost and effort in registering them, and reported on these conditions to the Policy Committee and the RAC in November 2017, and recommends a continuation of the current approach REC registration for the coming year.

It is therefore RESOLVED that the Board of Directors hereby concludes that:

- 1. The cost and effort of registering RECs are disproportionate to current REC market value for RECs generated through projects in the (a) Energy Trust Other Renewables program and through custom solar projects where, in both cases, neither the project owner nor the utility are willing to pay REC registration costs and (b) Energy Trust Solar program; and
- 2. For RECs generated in the types of projects described in #1 above, Energy Trust staff shall continue to retain contractual title to project RECs, but are not required to register such RECs in WREGIS.

Vote on resolution

Moved by: Vote: In favor: Opposed: Seconded by: Abstained:

ATTACHMENT 1

ENERGY TRUST REC POLICY

4.15.000-P Renewable Energy Certificate (REC) Policy

History							
Source	Date	Action/Notes	Next Review Date				
Board Decision	March 3, 2004	Approved (R256)	February 2005				
Board Decision	February 16, 2005	Amended (R313)					
	(residential tags)						
Board Decision	April 6, 2005	Rescind R313	February 2008				
Board Decision	March 28, 2007	Amended R433	February 2010				
Policy Committee	October 12, 2010	Reviewed, no changes	October 2013				
Board Decision	May 4, 2011	Amended R584	May 2014				

PRINCIPLES

The following principles should guide Energy Trust's ownership of renewable energy certificates (RECs) generated by renewable resources:

- RECs generated by renewable energy are one of the multiple values for Oregonians provided through investing in renewable resources.
- Energy Trust RECs should be used for the long-term benefit of customers of Pacific Power and Portland General Electric, as long as the effort and expense associated with registering them is not disproportionate to their value.
- The disposition (retention, transfer) of RECs will coordinate with and further the goals of Energy Trust, state policies and regulatory requirements.
- Where Energy Trust takes ownership of RECs, its ownership should reflect both the REC value and the support provided by Energy Trust.
- Energy Trust should coordinate its REC policy with utility green power programs and rate processes.
- Energy Trust ownership of RECs and the mode of delivery of RECs to Energy Trust should be flexible over time, while reinforcing incentives for long-term project performance.

POLICY

- 1. Annual Board Review
 - Energy Trust will ascertain market values and forward price curves for relevant types of RECs and update them periodically.
 - In order to ascertain market values and forward prices curves for relevant types of RECs, Energy Trust will consult with PGE, Pacific Power and the OPUC staff and will give consideration to federal and state policies that may affect such values and forward price curves.
 - Energy Trust will track the cost and effort involved in registering RECs and report it to the RAC and the board at least annually, and where the market value of any given REC category is less than the cost of registering them, recommend whether to continue to register them in WREGIS.
 - Where the board determines, after RAC review, that the cost and effort entailed in registering RECs of a given type is disproportionate to the market and other values associated with RECs, the board may authorize staff to take title to the RECs without registering them in WREGIS and shall effectuate such authority by board resolution.

2. Ownership

- Where the board determines that Energy Trust should secure RECs for the benefit of ratepayers, the quantity of RECs for which Energy Trust will take ownership rights will be based on the ratio between Energy Trust's incentive and above-market cost, with an adjustment in cases where the REC market value exceeds the per-REC value of the incentive, determined as follows:
 - Step 1: Multiply the number of RECs that would be generated by a project over the term of the funding agreement with Energy Trust by the percentage of the above-market cost represented by Energy Trust's incentive.
 - Step 2: Divide the incentive amount by the quantity of RECs calculated in Step 1.
 - Step 3: Compare the per-REC value of Energy Trust's incentive to the REC market value ascertained in Section 1 of this policy.
 - Step 4: If the per-REC value of the incentive exceeds the per-REC market value, Energy Trust will take the full amount of RECs calculated in Step 1. If, however, the per-REC market value exceeds the per-REC incentive value, Energy Trust will reduce its REC ownership so that the per-REC incentive value is equivalent to the per-REC market value.
- Energy Trust will reduce its ownership of RECs to the extent that a utility retains RECs for the benefit of its ratepayers pursuant to the utility's green power program or power purchase agreements.
- 3. Delivery of RECs
 - Unless the Energy Trust board determines under Section 1 that a type of REC need not be registered in WREGIS, RECs should be delivered to a utility WREGIS account specified by Energy Trust.
 - Energy Trust may agree to up-front retention of RECs by a developer or project owner if there are contractual assurances that future RECs will revert to Energy Trust.

ATTACHMENT 2

Annual REC Value and Cost Review November 10, 2017

In November 2015, Energy Trust's board amended Energy Trust's Renewable Energy Certificate (REC) Policy. In summary, the policy requires Energy Trust staff to:

- 1. Ascertain market values and future prices for relevant RECs in consultation with utilities and the Oregon Public Utility Commission (OPUC);
- 2. Consider state and federal policies that may affect REC values and future prices;
- 3. Track the cost and effort involved in registering RECs [in the Western Renewable Energy Generation Information System (WREGIS)] and report annually to the RAC and board;
- 4. Recommend whether to continue to register RECs [in WREGIS] if their cost is less than the cost of registering them; then,
- 5. Following a RAC review of the market value of RECS and the cost of registering [in WREGIS], the Board may authorize staff, through a board resolution, to take title to RECs without registering them in WREGIS.

This memo is prepared in accordance with the policy and will be shared with the RAC at its November 2017 meeting and the Board at its December 2017 meeting.

The conclusions of this memo are identical to the 2016 report to the RAC and Board. In accordance with Policy

4.15.000-P, staff are not recommending any changes to current REC management practices.

REC Value

From the utility perspective, REC value is driven by compliance with Oregon's Renewable Portfolio Standard (RPS) mandate. Presently, Portland General Electric (PGE) and PacifiCorp (PAC) are in compliance: for approximately four years in the case of PGE, and approximately 11 years for PAC. As RPS compliance mandates grow, especially with required increases from SB 1547, Energy Trust's REC portfolio <u>becomes a smaller portion</u> of the total the utility needs to deliver.

The OPUC concluded that PAC and PGE met their RPS compliance targets and RPS reporting requirements. In October 2017, OPUC staff filed comments on *PGE's 2016 RPS Compliance Report*:

RPS Compliance and Renewable Energy Credits RPS compliance must be demonstrated through the retirement of RECs that are maintained through the Western Renewable Energy Generation Information system (WREGIS). RECs may be either bundled with energy or exchanged separately (unbundled). One REC is issued per megawatt-hour of generation produced.

As a result of SB 1547, only certain RECs can be banked indefinitely while others can be banked for a maximum of five years. RECs procured before March 31, 2017 may be used for 2016 RPS compliance. In addition, only 20 percent of a regulated utility's RPS compliance obligation may be satisfied using unbundled RECs in any given compliance year.

There are two mechanisms that serve as cost protections for Oregon consumers – an alternative compliance payment (ACP) mechanism and a cost cap on RPS expenditures equal to four percent of annual revenue requirement....

...PGE's 2016 RPS Compliance Report demonstrates compliance with the RPS through the use of 2,035,290 bundled RECs and 508,822 unbundled RECs. PGE's unbundled REC retirement amount falls under the 20 percent limit allowed by ORS 469A.145(1).¹

¹ <u>http://edocs.puc.state.or.us/efdocs/HAC/um1847hac95037.pdf</u>

In October 2017, OPUC staff filed comments on PAC's 2016 RPS Compliance Report, and concluded:

...PacifiCorp's 2016 RPS Compliance Report demonstrates compliance with the RPS through the use of 1,685,228 bundled RECs and 245,118 unbundled RECs. PacifiCorp's unbundled REC retirement amount falls under the 20 percent limit allowed by ORS 469A.145(1)...²

In September 2016, the OPUC adopted Order 16362³ regarding Alternative Compliance Payment value under the RPS. That order also provides data regarding the value of RECs to the utilities:

Regional REC wholesale prices: PGE's 2015 RPS Compliance Report reports the average weighted cost of unbundled renewable energy certificates (REC) at about \$3.30 per MWh. (An unbundled REC represents the environmental attributes of the underlying power that is generated but is purchased separately from the power).

This value is greater than national voluntary REC prices as tracked by the U.S. Dept. of Energy. In March 2016, nationally sourced RECs were trading at ~\$0.34 per MWh, consistent with prices observed in 2017. The graph from the National Renewable Energy Lab below⁴ shows REC prices nationally steadily declining from ~\$1 / MWh in 2010 to about \$0.035 / MWh and dropping slowly since then. This reinforces reports from *Bloomberg* that RPS driven supply in the west precludes any upward pressure in the REC market.

² <u>http://edocs.puc.state.or.us/efdocs/HAC/um1846hac94820.pdf</u>

³ <u>http://apps.puc.state.or.us/orders/2016ords/16-362.pdf</u>

⁴ <u>https://www.nrel.gov/docs/fy18osti/70174.pdf</u>

5

REC Pricing Trends

REC prices continued to remain low throughout 2016, after peaking at around \$1.13/MWh⁹ in January 2014 (Figure 19). 2016 REC prices averaged around \$0.35/MWh. The continuation of low REC prices likely explains the increase in much of the unbundled RECs market from 2015 to 2016. Purchasers with a set budget for purchasing renewable energy can purchase more RECs at lower prices.



As reported in the 2016 report, and again for 2017, most renewable energy project owners are not able to get more than \$1 - \$2 for RECs. The voluntary market remains illiquid and the Oregon compliance market is essentially nonexistent for the projects that Energy Trust supports.

Cost / Effort Registering RECs

Energy Trust tracks the cost and effort involved in registering RECs for projects independently by program, separating 'Other Renewables' projects and Solar projects. The main cost drivers are the same, however to meet WREGIS registration standards project generation has to be metered and monitored according to approved standards.

The following analysis mirrors what staff reported in the 2016 Annual REC Value and Cost Review.

Other Renewables

Utility grade metering increases cost for larger renewable energy generation projects, especially those where power is used on site⁶. The recent biopower projects at the water resource recovery facilities owned by the City of Gresham and Clean Water Services required meters and associated infrastructure, which added approximately \$15,000 in costs to each project.

⁵ <u>https://www.nrel.gov/docs/fy18osti/70174.pdf</u>

⁶ For qualifying facilities, additional metering cost is not usually necessary as a utility meter will already be required and included in the above-market cost.

REC registration efforts by Energy Trust staff are focused in two areas: project incentive negotiations and registration activities. The amount of effort required by Energy Trust staff in negotiation varies according to the interest the project owner has in retaining and registering their share of RECs. On average 5-10 hours of staff time is spent on internal and external REC negotiations per project.

The amount of effort related to REC registration activities varies based on the registration methodology being employed by the project. For projects undertaking registration activities themselves, annual tracking by staff requires 2-6 hours of time annually, per project. If the utility is going to register the project 2-6 hours of Energy Trust staff time is required for the initial setup but less than an hour is required annually moving forward.

A problem area exists for projects where neither the owner nor the utility is interested in registering RECs in WREGIS. Energy Trust has encountered this situation in small to medium projects for which WREGIS registration or utility transaction costs are considered prohibitive.

For example, PAC declined to pursue metering and WREGIS registration activities for the City of Medford's biogas project at its water resource recovery facility. Energy Trust's contract claims 45,000 RECs from the project over 20 years.

As in 2016, Energy Trust staff recommend not requiring WREGIS REC registration in project funding agreements for projects where neither the project owner nor the utility want to register their share of RECs. Energy Trust would still take contractual ownership of the RECs in these situations, but not pursue registration activities. By taking contractual ownership Energy Trust preserves its ability to register RECs in the future if the utilities desire.

<u>Staff recommendation</u>: Continue the current practice of retaining contractual title to project RECs, and not requiring WREGIS registration for 'Other Renewables' program projects where neither the project owner nor the utility are willing to pay REC registration costs.

Solar Program

Solar projects are subject to the same WREGIS metering and reporting requirements as 'Other Renewable' energy projects and cannot be cost efficiently registered in WREGIS. Staff expended significant time and energy between 2010-2015 working with the utilities, OPUC, Oregon Department of Energy, and others to effect new pathways both within and outside of WREGIS to make solar program RECs count in a cost-efficient manner. That work was not successful.

At the end of 2015 the Energy Trust board agreed that contractual title to project RECs should be retained, but not require WREGIS registration for Solar program projects until a cost-efficient solution for their registration is created by a third party or REC values make registration cost-efficient.

Despite the continuing inability to register solar RECs cost-efficiently, the utilities do get an RPS benefit from net-metered solar projects, among the other benefits these systems provide. This RPS benefit is realized as a reduction in load, which directly reduces a utility's RPS requirement. Were RECs able to be registered cost efficiently, they would be in addition to the load-reduction benefit.

<u>Staff recommendation:</u> Continue the current policy of retaining contractual title to project RECs, but do not require WREGIS registration for Solar program projects until a cost-efficient solution for their registration is created by a third party or REC values make registration cost-efficient.

Tab 2



Board Decision

Adopt 2018 Budget, 2019 Projection and 2018-2019 Action Plan

December 15, 2017

Summary

To adopt the Energy Trust 2018 Annual Budget, 2019 Annual Budget Projection, and 2018-2019 Action Plan.

Background

- The Energy Trust grant agreement with the Oregon Public Utility Commission requires Energy Trust to update its two-year Action Plan annually and describe the activities the organization will undertake to accomplish over the coming two years.
- This updating occurs each year in connection with the preparation and finalization of the following year's budget.
- The 2018-2019 Action Plan outlines activities Energy Trust will undertake in 2018 and 2019 to achieve its strategic and annual goals.

Discussion

- The Draft 2018 Annual Budget and 2019 Projections (the draft budget) and the Draft 2018-2019 Action Plan (the action plan) were presented to and discussed by the board at its meeting on November 8, 2017.
- The draft budget and action plan were posted on the Energy Trust website on November 1, 2017, with a recorded webinar made available November 7, 2017.
- The Conservation and Renewable Energy Advisory Councils were presented highlights from the • draft budget and action plan at their respective meetings on October 25 and November 17, 2017.
- The Finance Committee reviewed the draft budget and the action plan on October 26, 2017.
- The Oregon Public Utility Commission staff was briefed on the draft budget and action plan on October 24, 2017, and the materials were presented to OPUC commissioners at a public workshop on November 16, 2017.
- Portland General Electric, Pacific Power, NW Natural, Cascade Nature Gas and Avista were engaged by Energy Trust in budget concept development starting in July. Utility representatives reviewed and discussed draft budget and action plan information through subsequent individual coordination meetings in late summer and fall, and via Conservation and Renewable Energy Advisory Council presentations on September 13 and 15, October 25 and November 17, 2017.
- Public comments were due November 17, 2017.
- The board will hear public comment and discuss the final proposed budget and action plan at its meeting on December 15, 2017.

Recommendation

Staff recommends adoption of the Energy Trust 2018 Budget, 2019 Projection and 2018-2019 Action Plan.

RESOLUTION 827 ADOPT 2018 BUDGET, 2019 PROJECTION AND 2018-2019 ACTION PLAN

BE IT RESOLVED That Energy Trust of Oregon, Inc. Board of Directors approves the Energy Trust 2018 Budget, 2019 Projection and 2018-2019 Action Plan as presented in the board packet.

Moved by: Vote: In favor: Opposed: Seconded by: Abstained:

Tab 3


Existing Manufactured Homes Heat Pump Pilot Evaluation Final Report

November 7, 2017

Energy Trust of Oregon 421 SW Oak St #300 Portland, OR 97204

The Cadmus Group, Inc.

An Employee-Owned Company · www.cadmusgroup.com



Prepared by: Trent Hardman Alex Chamberlain Matei Perussi Cynthia Kan, Ph.D. Karen Horkitz

The Cadmus Group LLC

CADMUS

Executive Summary

Energy Trust of Oregon (Energy Trust), as part of its Existing Homes Program, ran a pilot to install ducted air-source heat pumps in manufactured homes that previously used electric resistance force air furnace systems. The pilot had two primary objectives: test market acceptance of \$1,000 fixed-cost heat pump installations in manufactured homes and verify the energy savings produced by the retrofit. Heat pump installations occurred from November 2015 to August 2016.

Participating contractors installed 110 heat pumps through the pilot.¹ As a part of a subpilot, contractors also installed a Nest thermostat in 20 participating homes to allow CLEAResult, the program management contractor (PMC), to test the viability of conducting remote quality assurance (QA) on new heat pump installations.

Evaluation Objectives and Methodology

Cadmus conducted a process and impact evaluation of the pilot. In the process evaluation, we documented the pilot's outcomes and lessons learned, measured stakeholder satisfaction, assessed the effectiveness of remote QAs, and determined if manufactured home owners and installation contractors found the \$1,000 fixed-cost installation an attractive offering.

Cadmus used the follow methods to conduct the process evaluation:

- In-depth interviews with stakeholders, including Energy Trust staff, installation contractors, and PMC staff
- Participant surveys
- Document and data reviews, including pilot documentation and tracking data

As a part of the impact evaluation, we conducted a billing analysis to assess energy savings of the pilot participants relative to a group of matched nonparticipants. Specifically, we used a variable degree-day, household-level regression modeling method, similar to the Princeton Scorekeeping Method (PRISM). The final adjusted gross savings are derived from the difference in energy use before and after the installation for these groups:

- Energy Trust Manufactured Homes Heat Pump Pilot participants
- Matched nonparticipant homes that served as the comparison group

Conclusions and Recommendations

The pilot was successful. The pilot exceeded its initial goal of 100 participants. Surveyed participants reported they were very satisfied with the quality of the contractors' work, heat pump performance, and overall pilot experience. Additionally, surveyed participants and contractors reported high

¹ Energy Trust capped the pilot at 110 installations. The PMC reported that many more installations could have occurred had there not been a cap.

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satisfaction with the simplicity of the fixed-cost offer, minimal paperwork, and ease of participation. Overall, the pilot effectively balanced various program design considerations (e.g., system performance, retrofit feasibility, overall and upfront costs, the number of participating contractors).

• **Recommendation:** If cost-effective, roll out the pilot as a full-scale program offering.

Pilot staff effectively selected, listened to, and worked with contractors. Through a request for proposals (RFP) process, PMC staff used contractors' feedback to fine-tune the pilot design and selected four contractors to deliver the pilot, two of whom drove the majority of participation. These two contractors' success arose from their familiarity with the target sector and from effective marketing. Participants said their contractors' knowledge influenced their decisions to sign up for the pilot. Furthermore, the pilot's timing (during one contractor's slow season) allowed that contractor to focus on the pilot-sponsored installations. The less successful contractors (i.e., only completed a few installations) lacked effective marketing and were less engaged because they did not think the pilot would be profitable enough.

- **Recommendation:** This program design can succeed with fewer but more engaged contractors. If Energy Trust expands the pilot, it should seek contractors with experience in the target market and a strong marketing plan. Encourage contractors to minimize costs through bulk purchases from suppliers. Energy Trust could also assist with lead generation to keep contractors' costs low by identifying potential customers previously served through its programs and by coordinating with other agencies that may have provided weatherization services to this market.
- **Recommendation:** Contractors said they preferred to install ductless heat pump systems because they are higher efficiency and have lower upfront costs. Investigate whether ducted or ductless heat pumps better fit the existing manufactured homes market.

The pilot effectively attracted the intended market. The fixed-price offer achieved rapid uptake by eligible customers, who tended to have slightly lower household incomes than the general population of Oregon. Targeting manufactured homes, however, did not result in significantly higher participation rates among low-income households² (as discussed in Appendix A); the percentage of participating low-income households was similar to the State of Oregon's general low-income population.

• **Recommendation:** To target low-income participants, work with agencies that provide lowincome weatherization assistance. These agencies serve income-verified customers with wellsealed homes.

² Oregon Housing and Community Services. "Weatherization Programs Income Guidelines." <u>https://www.oregon.gov/ohcs/Pages/weatherization-oregon-income-guidelines.aspx</u>

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Participants may be willing to accept a slightly higher fixed price. Over half of the surveyed participants said they would pay more for the heat pump installed through the pilot, particularly those who were above the low-income threshold. However, two contractors said that increasing the price would dramatically reduce the participation rate, while a third contractor (who had high participation) said customers could easily accommodate a \$1,000 increase. One of the contractors who said increasing the price would reduce the participation rate also ran into difficulties collecting the full participant fee from multiple customers.

- **Recommendation:** If Energy Trust reduces the incentive amount in a scaled-up program, keep the \$1,000 fixed-fee offer for low-income customers and consider a fee between \$1,000 and \$2,000 for customers with higher incomes.
- **Recommendation:** Require contractors to have a plan to independently resolve nonpayment situations, and encourage them to collect participation fees up front and use an eligibility checklist.

Pilot participants realized significant energy savings in comparison to nonparticipants. Pilot participants realized 75% of expected savings (3,269 kWh of the expected 4,367 annual kWh). Part of these savings resulted from increased consumption in the comparison group during the post-retrofit period (834 kWh), which increased the adjusted participant savings. As a percentage of pre-installation usage, savings remained relatively constant (20% to 23%) across climate zones and pre-usage quartiles. Absolute savings appeared to be somewhat higher for heating zone 2 and for homes with higher pre-pilot energy use, as expected.

The subpilot found remote QA to be a valuable program tool. The subpilot demonstrated that the PMC could use Wi-Fi thermostats in multiple ways to conduct program QA: to validate the thermostat serial number; to confirm correct configuration and installation of thermostats; and to conduct long-term performance monitoring. The remote QA process allowed the PMC to detect and correct (or investigate) issues during each project stage.

• **Recommendation:** Incorporate remote QA using Wi-Fi thermostats into future heat pump programs, where feasible. Ensure that program staff can access the data and that the thermostat vendor remains engaged and aligned with the program's vision.



MEMO

Date: December 4, 2017

- To: Board of Directors
- **From:** Marshall Johnson, Residential Sector Senior Program Manager Dan Rubado, Evaluation Project Manager
- Subject: Staff Response to the Evaluation of the Heat Pumps in Manufactured Homes Pilot

Energy Trust's Heat Pumps in Manufactured Homes Pilot aimed to displace electric forced air furnaces with mid-efficiency central heat pump systems at a low cost to participants. The evaluation showed that the pilot was very successful in reaching its target audience, providing a quality customer experience, and producing significant energy savings in manufactured homes. If the energy savings from the pilot prove to be cost-effective, given the installation costs, Energy Trust will roll out a broader program offering. However, the nature of this offering will depend on the results of an ongoing research project on ductless heat pumps in manufactured homes, which may achieve a similar level of energy savings at a lower cost. Although Energy Trust promotes ducted and ductless heat pumps in the market, if one technology provides substantially more cost-effective energy savings in manufactured homes, the program will likely focus future efforts on the more successful technology.

The pilot offer was very popular among participants, who generally felt like they were getting a good deal through the fixed-price offer, and had high satisfaction with the systems, especially the added cooling benefit. The participating contractors were also satisfied with the pilot, the boost in business, and the simple requirements and paperwork. Some of the elements of the pilot that the program will strive to replicate in a broader offering for manufactured homes are use of a select group of qualified HVAC installers, simple installation requirements and paperwork, a flat incentive to contractors based on system size, a fixed-price offer for participants, and remote quality assurance using smart thermostats.

The program will incorporate additional elements into future offerings, including:

- A tiered participant fee structure based on income
- Working with appropriate community action agencies to target low-income customers to leverage investments and maximize participant benefits where possible
- Selecting contractors that are engaged with Energy Trust and experienced in the manufactured homes market
- Encouraging bulk purchases of equipment to drive costs down
- Assisting contractors with lead generation
- Working with interested community organizations to help expand participation to lagging markets, underserved communities, and diverse customer types

Tab 4



<u>Revenue</u>

YTD Revenues remain slightly above budget and significantly above last year's revenue. We recorded a small amount of revenue this month for work done to support a Low Income Solar grant. We received revenue payment for NWN Washington in September rather than October, which decreased receipts \$938K this month.

	YTD Actual	YTD Budget	YTD Var	<u>YTD %</u>	PY
PGE	86,638,159	85,240,252	1,397,907	2%	65,551,639
PAC	54,431,964	49,906,288	4,525,676	9%	44,304,524
NWN	24,029,447	22,745,227	1,284,220	6%	15,992,099
CNG	2,142,539	1,935,427	207,112	11%	1,307,484
Avista	740,523	691,995	48,528	7%	140,400
Grant Revenue	30,865		30,865	0%	
Investment Income	343,442	190,000	153,442	81%	486,967
Total	168,356,939	160,709,189	7,647,750	5%	127,783,113

Reserves

Reserves in October increased almost \$2.4 million due mostly to \$1.9 million under budget spending on incentives. Other Reserves is the Community Solar amount approved by the board, less YTD expenses. Starting in November, we will be drawing reserves down significantly for year-end incentive payments.

Reserves	10/31/17 <u>Amount</u>	Actual 12/31/16 <u>Amount</u>	% Change from Year End
PGE	21,638,263	6,507,279	233%
PacifiCorp	14,213,721	644,839	2104%
NW Natural	5,693,779	1,485,656	283%
Cascade	383,572	-	-
Avista	23,390	68,620	-66%
NWN Industrial	4,653,920	1,028,150	353%
NWN Washington	482,364	283,171	70%
PGE Renewables	7,437,240	7,543,333	-1%
PAC Renewables	6,713,158	7,376,941	-9%
Program Reserves	61,239,407	24,937,989	146%
Other Reserves	47,398	-	-
Contingency Reserve	5,000,000	5,000,000	0%
Contingency Available	4,559,051	3,935,314	16%
Total	70,845,850	33,873,295	109%

Expenses

October expenses came in 14% below budget - \$14.4 actual million vs. \$16.7 budgeted. Year-to-date expenses are \$131 million, \$9.7 million below budget. The variance is primarily due to lower than expected spending in incentives (\$5.1 million YTD) and Professional services (\$3.1 million YTD). Overall expenses are \$3.3 million less than last year at this time.

October incentives came in \$1.9 million less than budgeted. They are within 7% of the budgeted amount for the year. Total incentives in 2017 are \$6 million less than 2016 (\$66 million vs. \$72 million).



In continue they Onto her 2017	Total Incentives										
Incentives thru October 2017	Actual	Budget	Variance	<u>Var %</u>							
Existing Buildings	17,899,229	17,049,385	(849,844)	-5%							
New Buildings	5,608,794	7,880,468	2,271,674	29%							
Production Efficiency	11,341,725	10,629,201	(712,524)	-7%							
Existing Homes	6,410,036	7,734,436	1,324,400	17%							
New Homes & Products	13,652,621	14,750,681	1,098,060	7%							
Washington Programs - All	776,786	546,600	(230,186)	-42%							
Solar	6,972,778	8,311,033	1,338,256	16%							
Other Renewables	3,273,303	4,149,791	876,487	21%							
Total Incentives	65,935,272	71,051,595	5,116,323	7%							
Energy Efficiency Only	55,689,191	58,590,771	2,901,580	5%							

		Total Incenti	ves	
Oct 2017 vs. Oct 2016	Y	ear-to-Year Comp	arison	
	Current Year	Prior Year	Variance	<u>Var %</u>
Existing Buildings	17,899,229	20,441,119	2,541,890	12%
New Buildings	5,608,794	6,021,935	413,141	7%
Production Efficiency	11,341,725	9,631,466	(1,710,259)	-18%
Existing Homes	6,410,036	7,678,037	1,268,001	17%
New Homes & Products	13,652,621	15,262,549	1,609,928	11%
Washington Programs - All	776,786	581,813	(194,974)	-34%
Solar	6,972,778	8,854,573	1,881,795	21%
Other Renewables	3,273,303	3,457,471	184,168	5%
Total Incentives	65,935,272	71,928,963	5,993,687	8%
Energy Efficiency Only	55,689,191	59,616,919	3,927,728	7%

Investment Status

The graphs below show the type of investments we hold and the locations where our funds are held. We invested a bit more this month, leading to an increase in CP holdings. Lower expenses than anticipated led to an increase in Cash despite this investment. Until the year-end forecast was complete, we continued to keep a very short term outlook on our investments to make sure we would have sufficient funds for year-end incentive payments.





PINK PAPER

Energy Trust of Oregon BALANCE SHEET October 31, 2017 (Unaudited)

	October 2017	September 2017	Dec 2016	October 2016	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	48,638,180	46,864,420	44,471,035	35,113,903	1,773,760	4,167,145	13,524,277
Investments	30,736,191	29,221,261	19,350,134	33,386,758	1,514,930	11,386,056	(2,650,568)
Receivables	123,851	75,571	86,058	127,160	48,280	37,793	(3,309)
Prepaid Expenses	386,299	330,236	280,347	408,892	56,063	105,952	(22,592)
Advances to Vendors	1,489,306	2,233,949	2,050,126	1,428,365	(744,643)	(560,820)	60,941
Total Current Assets	81,373,827	78,725,436	66,237,700	70,465,079	2,648,391	15,136,127	10,908,748
Fixed Assets							
Computer Hardware and Software	3,733,082	3,733,082	3,696,232	3,671,135	-	36,849.84	61,947
Software Development in Progress	178,975		-	-	178,975.30	178,975.30	178,975
Leasehold Improvements	595,027	595,027	318,964	318,964	-	276,062	276,062
Office Equipment and Furniture	815,056	815,056	716,876	701,604	-	98,181	113,452
Total Fixed Assets	5,322,140	5,143,164	4,732,072	4,691,703	178,975.30	590,068	630,437
Less Depreciation	(4,306,228)	(4,237,608)	(3,598,867)	(3,457,260)	(68,620)	(707,361)	(848,968)
Net Fixed Assets	1,015,911	905,556	1,133,205	1,234,443	110,355	(117,293)	(218,532)
Other Assets							
Deposits	237,314	237,314	223,339	223,339	-	13,975	13,975
Deferred Compensation Asset	864,618	879,459	849,522	796,877	(14,840)	15,096	67,741
Note Receivable, net of allowance	263,669	263,669	260,891	288,909	-	2,779	(25,240)
Total Other Assets	1,365,602	1,380,442	1,333,752	1,309,125	(14,840)	31,850	56,477
Total Assets	83,755,340	81,011,434	68,704,656	73,008,647	2,743,906	15,050,684	10,746,693
Current Liabilities							
Accounts Pavable and Accruals	10.184.983	9.888.749	32.588.773	9.513.280	296.234	(22,403,790)	671,703
Salaries, Taxes, & Benefits Payable	874,048	881,046	827,526	819,919	(6,998)	46,522	54,129
Total Current Liabilities	11,059,031	10,769,795	33,416,299	10,333,199	289,236	(22,357,268)	725,832
Long Term Liabilities							
Deferred Rent	964.252	950.252	559.253	529.383	14.000	404.998	434.869
Deferred Compensation Payable	884,918	883,009	853,072	796,877	1,910	31,846	88,041
Other Long-Term Liabilities	1,290	2,315	2,110	2,110	(1,025.00)	(820)	(820)
Total Long-Term Liabilities	1,850,460	1,835,575	1,414,435	1,328,370	14,884	436,024	522,090
Total Liabilities	12,909,491	12,605,370	34,830,735	11,661,569	304,121	(21,921,244)	1,247,922
Net Assets							
Unrestricted Net Assets	70,845,850	68,406,064	33,873,922	61,347,078	2,439,786	36,971,928	9,498,772
Total Net Assets	70,845,850	68,406,064	33,873,922	61,347,078	2,439,786	36,971,928	9,498,772
Total Liabilities and Net Assets	83,755,340	81,011,434	68,704,656	73,008,647	2,743,906	15,050,684	10,746,693

Energy Trust of Oregon Cash Flow Statement-Indirect Method Monthly 2017

	January	February	March	<u>April</u>	May	June	July	August	September	October	Year to Date
Operating Activities:											
Revenue less Expenses	\$ 9,021,323 \$	11,985,541	7,297,639	3,428,944	(906,648)	(4,408,611)	5,943,771	(670,945)	2,841,126	2,439,785	\$ 36,971,925
Non-cash items: Depreciation Change in Reserve on Long Term Note Loss on disposal of assets	70,722	70,512	69,965	70,662	72,383	70,979	71,372	74,139	68,620	68,620	707,974 - -
Receivables Interest Receivable Advances to Vendors Prepaid expenses and other costs Accounts payable Payroll and related accruals Deferred rent and other	9 (5,311) 660,492 17,387 (21,595,003) 12,024 4,262	(38,100) 660,492 (338,051) (2,386,675) 42,941 (585)	(50) 11,304 (1,489,806) 27,347 (256,773) 253,852 14,000	400 (41,168) 739,643 48,843 341,108 (151,351) 14,205	136,841 33,111 585,111 (21,451) 468,466 19,195 13,999	17,834 (1,239,195) 93,559 (82,140) 25,628 14,000	136,861 (14,056) 711,123 5,575 (350,716) (67,842) 14,000	(135,000) (36,218) 711,123 82,574 792,581 (31,549) 279,612	- 80,882 (1,522,806) 11,961 232,268 (19,441) 13,388	(30,890) (17,390) 744,643 (41,223) 296,233 (5,089) 12,975	108,171 (9,113) 560,820 (113,479) (22,540,651) 78,368 379,856
Cash rec'd from / (used in) Operating Activities	(11,814,095)	9,996,075	5,927,478	4,451,286	401,007	(5,507,946)	6,450,088	1,066,317	1,705,998	3,467,664	16,143,872
Investing Activities: Investment Activity (1) (Acquisition)/Disposal of Capital Assets Cash rec'd from / (used in) Investing Activities	(992,696) (992,696)	(3,749,267) (7,194) (3,756,461)	(5,787,813) (75,180) (5,862,993)	2,537,756	(5,555,047) (36,850) (5,591,897)	3,923,246 3,923,246	(2,252,546) (23,612) (2,276,158)	(1,984,708) (265,612) (2,250,320)	3,989,948 (3,256) 3,986,692	(1,514,930) (178,975) (1,693,905)	(11,386,057) (590,679) (11,976,736)
Cash at beginning of Period	44,471,035	31,664,245	37,903,859	37,968,346	44,957,390	39,766,501	38,181,801	42,355,732	41,171,730	46,864,420	44,471,035
Increase/(Decrease) in Cash	(12,806,791)	6,239,614	64,485	6,989,042	(5,190,890)	(1,584,700)	4,173,930	(1,184,003)	5,692,689	1,773,759	4,167,135
Cash at end of period	\$ 31,664,245 \$	37,903,859	\$ 37,968,346	\$ 44,957,390	\$ 39,766,501 \$	38,181,801	\$ 42,355,732	\$ 41,171,730	\$ 46,864,420 \$	48,638,180	\$ 48,638,180

(1) As investments mature, they are rolled into the Repo account.

Investments that are made during the month reduce available cash.

Energy Trust of Oregon Cash Flow Projection January 2017 - December 2018

		Actual											
	January	February	March	April	Мау	June	July	August	September	October	November	December	
Cash In:													
Public purpose and Incr funding	15,758,534	21,457,118	21,917,554	17,402,020	15,025,545	13,768,287	15,620,550	14,041,155	16,183,984	16,807,886	11,230,874	13,503,494	
Investment Income	17,648	(14,444)	25,634	(2,155)	64,393	53,021	28,294	6,910	128,778	26,251	30,000	30,000	
From Other Sources	9	0	(50)	400	136,841		136,861	(135,000)	0	(25)			
Total cash in	15,776,191	21,442,674	21,943,138	17,400,265	15,226,779	13,821,308	15,785,705	13,913,065	16,312,762	16,834,112	11,260,874	13,533,494	
Cash Out:	(27,590,279)	(11,453,791)	(16,090,835)	(12,948,972)	(14,862,622)	(19,329,250)	(9,359,224)	(13,112,356)	(14,610,016)	(13,545,421)	(20, 123, 185)	(23,018,779)	
Net cash flow for the month	(11,814,088)	9,988,883	5,852,303	4,451,293	364,157	(5,507,946)	6,426,481	800,708	1,702,746	3,288,690	(8,862,311)	(9,485,285)	
Cash Flow from/to Investments	(992,696)	(3,749,267)	(5,787,813)	2,537,756	(5,555,047)	3,923,246	(2,252,546)	(1,984,708)	3,989,948	(1,514,930)	-	-	
Beginning Balance: Cash & MM	44,471,035	31,664,245	37,903,859	37,968,345	44,957,390	39,766,501	38,181,805	42,355,732	41,171,741	46,864,420	48,638,180	39,775,869	
Ending cash & MM	31,664,245	37,903,859	37,968,346	44,957,390	39,766,501	38,181,801	42,355,732	41,171,730	46,864,420	48,638,180	39,775,869	30,290,584	

Future Commitments	
Renewable Incentives	6,700,
Efficiency Incentives	69,500,

Total Commitments	81,200,000	79,900,000	94,400,000	92,700,000	92,700,000	100,000,000	98,400,000	98,200,000	103,200,000	102,600,000	99,600,000	96,800,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Efficiency Incentives	69,500,000	69,100,000	81,600,000	80,800,000	80,800,000	86,700,000	86,000,000	86,900,000	88,600,000	88,600,000	86,100,000	84,200,000
Renewable Incentives	6,700,000	5,800,000	7,800,000	6,900,000	6,900,000	8,300,000	7,400,000	6,300,000	9,600,000	9,000,000	8,500,000	7,600,000

(1) Included in "Ending cash & MM" above

 Dedicated funds adjustment:
 reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements

 Committed funds adjustment:
 reduction in available cash for commitments to Efficiency program projects with signed agreements

 Cash reserve:
 reduction in available cash for commitments to Efficiency program projects with signed agreements

 Excrow:
 dedicated funds set aside in separate bank accounts

Energy Trust of Oregon Cash Flow Projection January 2017 - December 2018

		2018 R2 Budget											
	January	February	March	April	Мау	June	July	September	September	October	November	December	
Cash In:													
Public purpose and Incr funding	19,000,000	20,400,000	17,800,000	17,700,000	13,900,000	13,000,000	15,800,000	14,400,000	15,700,000	17,200,000	14,800,000	18,100,000	
Investment Income	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
From Other Sources													
Total cash in	19,010,000	20,410,000	17,810,000	17,710,000	13,910,000	13,010,000	15,810,000	14,410,000	15,710,000	17,210,000	14,810,000	18,110,000	
Cash Out:	(31,054,420)	(11,522,562)	(12,143,651)	(13,249,709)	(12,974,034)	(13,751,122)	(16,010,687)	(13,675,485)	(14,988,146)	(17,133,101)	(18,752,720)	(20,759,756)	
Net cash flow for the month	(12,044,420)	8,887,438	5,666,349	4,460,291	935,966	(741,122)	(200,687)	734,515	721,854	76,899	(3,942,720)	(2,649,756)	
Cash Flow from/to Investments	-	-	-	-	-	-	-	-	-	-	-	-	
Beginning Balance: Cash & MM	30,290,584	18,246,164	27,133,603	32,799,952	37,260,243	38,196,209	37,455,087	37,254,400	37,988,915	38,710,769	38,787,668	34,844,948	
Ending cash & MM	18,246,164	27,133,603	32,799,952	37,260,243	38,196,209	37,455,087	37,254,400	37,988,915	38,710,769	38,787,668	34,844,948	32,195,193	
Future Commitments	7 600 000	8 000 000	8 700 000	8 700 000	8 700 000	8 700 000	8 700 000	8 700 000	8 700 000	8 700 000	8 700 000	8 700 000	
Inchewable Incentives	7,600,000	5,000,000	6,700,000	0,700,000	6,700,000	0,700,000	0,700,000	5,700,000	6,700,000	6,700,000	6,700,000	6,700,000	

Renewable Incentives	7,600,000	8,000,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000
Efficiency Incentives	83,500,000	84,300,000	83,000,000	84,000,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Commitments	96,100,000	97,300,000	96,700,000	97,700,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000

(1) Included in "Ending cash & MM" above

 Dedicated funds adjustment:
 reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements

 Committed funds adjustment:
 reduction in available cash for commitments to Efficiency program projects with signed agreements

 Cash reserve:
 reduction in available cash for commitments to Efficiency program projects with signed agreements

 Escrow:
 reduction in available cash to cover cashflow variability and winter revenue risk

 dedicated funds set aide in separate bank accounts
 reduction

Energy Trust of Oregon Income Statement - Actual and YTD Budget Comparison For the Ten Months Ending October 31, 2017 (Unaudited)

		Octob	er		YTD			
	Actual	Budget	Budget Variance	Variance %	Actual	Budget	Budget Variance	Variance %
REVENUES								
Public Purpose Funds-PGE	3,235,046	3,251,633	(16,587)	-1%	32,684,347	31,714,695	969,652	3%
Public Purpose Funds-PacifiCorp	2,287,484	2,173,607	113,877	5%	24,720,727	22,548,055	2,172,672	10%
Public Purpose Funds-NW Natural	587,716	626,149	(38,434)	-6%	16,088,017	14,803,797	1,284,220	9%
Public Purpose Funds-Cascade	88,409	110,622	(22,213)	-20%	2,142,539	1,935,427	207,112	11%
Public Purpose Funds-Avista	65,125	39,552	25,573	65%	740,523	691,995	48,528	7%
Total Public Purpose Funds	6,263,780	6,201,564	62,216	1%	76,376,154	71,693,969	4,682,184	7%
Incremental Funds - PGE	5,649,272	5,262,862	386,411	7%	53,953,812	53,525,557	428,255	1%
Incremental Funds - PacifiCorp	2,694,833	3,212,497	(517,663)	-16%	29,711,237	27,358,233	2,353,004	9%
NW Natural - Industrial DSM	2,200,000	2,200,000	-	-	5,920,596	5,920,596	-	-
NW Natural - Washington		938,367	(938,367)	-	2,020,834	2,020,834	-	-
Grant Revenue	30,865		30,865	-	30,865		30,865	-
Revenue from Investments	43,641	10,000	33,641	336%	343,442	190,000	153,442	81%
TOTAL REVENUE	16,882,392	17,825,290	(942,898)	-5%	168,356,939	160,709,190	7,647,749	5%
EXPENSES								
Program Subcontracts	4,970,641	5,027,863	57,221	1%	46,992,211	47,880,343	888,133	2%
Incentives	7,591,558	9,502,037	1,910,479	20%	65,935,272	71,051,595	5,116,323	7%
Salaries and Related Expenses	1,122,652	1,149,677	27,025	2%	11,121,960	11,475,605	353,645	3%
Professional Services	490,016	770,097	280,082	36%	4,732,905	7,876,608	3,143,703	40%
Supplies	4,393	4,050	(343)	-8%	32,589	40,500	7,911	20%
Telephone	4,203	5,825	1,622	28%	44,429	58,250	13,822	24%
Postage and Shipping Expenses	1,077	1,500	423	28%	9,007	15,000	5,993	40%
Occupancy Expenses	76,639	79,203	2,564	3%	772,361	792,028	19,667	2%
Noncapitalized Equip. & Depr.	95,984	112,655	16,671	15%	974,994	1,116,416	141,422	13%
Call Center	12,567	16,667	4,100	25%	120,013	166,667	46,654	28%
Printing and Publications	291.33	1,171	880	75%	4658.59	14,208	9,550	67%
Travel	25,162	17,753	(7,410)	-42%	175,384	173,194	(2,190)	-1%
Conference, Training & Mtng Exp	12,368	18,204	5,836	32%	161,877	173,041	11,165	6%
Interest Expense and Bank Fees		125	125	100%	1677.27	3,750	2,073	55%
Insurance	8,803	9,167	364	4%	87,867	91,667	3,800	4%
Miscellaneous Expenses	2,384	250	(2,134)	-854%	37,370	2,500	(34,870)	-1395%
Dues, Licenses and Fees	23,869	8,783	(15,086)	-172%	180,439	121,411	(59,028)	-49%
TOTAL EXPENSES	14,442,607	16,725,026	2,282,420	14%	131,385,014	141,052,782	9,667,768	7%
TOTAL REVENUE LESS EXPENSES	2,439,786	1,100,263	1,339,522	-122%	36,971,928	19,656,408	17,315,520	88%

Energy Trust of Oregon Income Statement - Actual and Prior Yr Comparison For the Ten Months Ending October 31, 2017 (Unaudited)

		Octo	ber			YTD		
DEVENUES	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
REVENUES	0.005.040	0.444.000	00.047	0.01	00.004.047	00.045.554	0.000 700	70/
Public Purpose Funds-PGE	3,235,046	3,141,999	93,047	3%	32,684,347	30,645,551	2,038,796	7%
Public Purpose Funds-PacifiCorp	2,287,484	2,246,967	40,517	2%	24,720,727	23,308,114	1,412,613	6%
Public Purpose Funds-NW Natural	587,716	483,338	104,377	22%	16,088,017	11,427,367	4,660,650	41%
Public Purpose Funds-Cascade	88,409	74,731	13,678	18%	2,142,539	1,307,484	835,055	64%
Public Purpose Funds-Avista	65,125	31200	33,925	109%	740,523	140,400	600,123	427%
Total Public Purpose Funds	6,263,780	5,978,236	285,544	5%	76,376,154	66,828,915	9,547,238	14%
Incremental Funds - PGE	5,649,272	3,432,116	2,217,156	65%	53,953,812	34,906,088	19,047,724	55%
Incremental Funds - PacifiCorp	2,694,833	2,465,470	229,363	9%	29,711,237	20,996,410	8,714,826	42%
NW Natural - Industrial DSM	2,200,000	1,009,018	1,190,982	118%	5,920,596	3,027,053	2,893,543	96%
NW Natural - Washington	-	-	-	-	2,020,834	1,537,679	483,155	31%
Grant Revenue	30,865	-	30,865		30,865	-	30,865	-
Revenue from Investments	43,641	34,212	9,429	28%	343,442	486,967	(143,525)	-29%
TOTAL REVENUE	16,882,392	12,919,052	3,963,340	31%	168,356,939	127,783,113	40,573,826	32%
EXPENSES								
Program Subcontracts	4,970,641	4,805,024	(165,617)	-3%	46,992,211	44,221,266	(2,770,945)	-6%
Incentives	7,591,558	8,086,560	495,002	6%	65,935,272	71,928,963	5,993,691	8%
Salaries and Related Expenses	1,122,652	1,030,554	(92,098)	-9%	11,121,960	10,047,331	(1,074,629)	-11%
Professional Services	490,016	488,173	(1,843)	0%	4,732,905	5,997,282	1,264,378	21%
Supplies	4,393	2,156	(2,237)	-104%	32,589	23,976	(8,614)	-36%
Telephone	4,203	4,968	766	15%	44,429	50,171	5,742	11%
Postage and Shipping Expenses	1,077	1,500	423	28%	9,007	8,839	(168)	-2%
Occupancy Expenses	76,639	73,470	(3,169)	-4%	772,361	656,439	(115,922)	-18%
Noncapitalized Equip. & Depr.	95,984	104,150	8,166	8%	974,994	1,035,625	60,631	6%
Call Center	12,567	11,878	(689)	-6%	120,013	137,335	17,322	13%
Printing and Publications	291	327	36		4,659	5,448	789	14%
Travel	25,162	19,627	(5,535)	-28%	175,384	162,237	(13,147)	-8%
Conference, Training & Mtng Exp	12,368	13,365	997	7%	161,877	130,616	(31,261)	-24%
Interest Expense and Bank Fees			0		1,677	1,621	(56)	-3%
Insurance	8,803	12,046	3,243	27%	87,867	88,400	533	1%
Miscellaneous Expenses	2,384	619	(1,765)	-285%	37,370	80,152	42,782	53%
Dues, Licenses and Fees	23,869	16,428	(7,442)	-45%	180,439	93,631	(86,808)	-93%
TOTAL EXPENSES	14,442,607	14,670,845	228,238	2%	131,385,014	134,669,331	3,284,317	2%
TOTAL REVENUE LESS EXPENSES	2,439,786	(1,751,793)	4,191,579	239%	36,971,928	(6,886,218)	43,858,146	637%

Energy Trust of Oregon Statement of Functional Expenses For the Ten Months Ending October 31, 2017 (Unaudited)

	Energy Efficiency	Renewable Energy	Solar LMI	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Community Solar Expenses	Total	Budget	Variance	% Var
Program Expenses												
Incentives	55,689,191	10,246,081		65,935,272					65,935,272	71,051,595	5,116,323	7%
Program Management & Delivery	46,592,075	400,136		46,992,211					46,992,211	47,880,343	888,132	2%
Payroll and Related Expenses	3,197,892	975,359	20,075	4,193,326	1,998,359	1,378,462	3,376,821	8,723	7,578,870	7,684,885	106,015	1%
Outsourced Services	2,680,458	615,045	5,800	3,301,303	383,888	689,050	1,072,938		4,374,241	7,419,476	3,045,235	41%
Planning and Evaluation	1,990,936	119,856		2,110,792	4,439	104,319	108,758		2,219,550	2,438,481	218,931	9%
Customer Service Management	253,706	117,806		371,512					371,512	458,841	87,329	19%
Trade Allies Network	292,150	15,930		308,080					308,080	332,167	24,087	7%
Total Program Expenses	110,696,409	12,490,213	25,875	123,212,496	2,386,686	2,171,831	4,558,517	8,723	127,779,736	137,265,788	9,486,052	7%
Program Support Costs												
Supplies	8,018	2,707	8	10,733	9,011	4,370	13,381		24,114	29,612	5,498	19%
Postage and Shipping Expenses	1,868	631	2	2,501	2,721	839	3,560		6,061	10,582	4,521	43%
Telephone	2,084	704	2	2,790	1,104	937	2,040		4,830	6,982	2,152	31%
Printing and Publications	760	126		886	2,931	168	3,099		3,985	11,716	7,731	66%
Occupancy Expenses	228,730	77,268	227	306,225	121,134	102,798	223,931		530,156	538,466	8,310	2%
Insurance	26,021	8,790	26	34,837	13,781	11,695	25,475		60,313	62,320	2,007	3%
Equipment	4,262	87,645	4	91,912	2,257	1,916	4,173		96,085	125,115	29,030	23%
Travel	35,276	19,415		54,691	38,126	45,874	84,000	79	138,770	155,694	16,924	11%
Meetings, Trainings & Conferences	30,569	17,816	2,184	50,570	54,791	16,318	71,110		121,679	116,041	(5,638)	-5%
Interest Expense and Bank Fees					1,677		1,677		1,677	3,750	2,073	55%
Depreciation & Amortization	23,335	7,883	23	31,242	12,358	10,488	22,846		54,088	50,031	(4,057)	-8%
Dues, Licenses and Fees	94,729	9,535		104,264	10,535	18,750	29,284		133,548	95,278	(38,270)	-40%
Miscellaneous Expenses	35,885	211	1	36,097	331	281	612		36,708	1,700	(35,008)	-2059%
IT Services	1,525,275	220,031	612	1,745,918	362,959	284,383	647,342		2,393,260	2,579,708	186,448	7%
Total Program Support Costs	2,016,814	452,763	3,089	2,472,666	633,716	498,815	1,132,531	79	3,605,275	3,786,995	181,720	5%
TOTAL EXPENSES	112,713,224	12,942,977	28,963	125,685,163	3,020,401	2,670,647	5,691,049	8,803	131,385,014	141,052,782	9,667,768	7%

OPUC Measure vs. 8%	4.9%
Program Support Costs Total Admin Exp and Community Solar	2,472,666 5,699,852
Total Support and Administrative	8,172,518 divided by
Total Utility Revenue (without Int Income)	167,982,632
OPUC %	4.9%

ENERGY TRUST OF OREGON Summary of All Units For the Ten Months Ending October 31, 2017

					ENERGY E	FFICIENCY				
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
DEVENUES										
REVENUES Dublia Durpaga Funding	25 272 726	10 070 777	44 646 602		16 099 017	2 1 4 2 5 2 0	740 500	62 617 592		62 617 592
Public Pulpose Funding	20,070,720	19,272,777	44,040,000	- 5 020 506	10,000,017	2,142,559	740,525	03,017,303	2 0 2 0 9 2 4	03,017,303
Incremental Funding	53,953,812	29,711,237	83,005,049	5,920,596				89,585,645	2,020,834	91,606,479
Grant Revenue										
Contributions										
	70 207 520	40.004.044	400 244 552	E 020 E06	46 000 047	2 4 4 2 5 2 0	740 500	452 202 220	2 020 024	455 004 060
TOTAL PROGRAM REVENUE	19,321,530	40,904,014	120,311,352	5,920,590	10,000,017	2,142,559	740,525	155,205,220	2,020,034	155,224,062
EXPENSES										
Program Management (Note 3)	2,958,207	1,661,213	4,619,421	154,945	545,795	63,334	38,169	5,421,663	97,654	5,519,317
Program Delivery	22,394,096	12,923,873	35,317,971	755,761	4,076,642	537,902	248,359	40,936,636	390,038	41,326,674
Incentives	30,906,926	16,332,034	47,238,961	1,169,174	5,483,129	648,796	372,345	54,912,405	776,786	55,689,191
Program Eval & Planning Svcs.	1,676,767	946,900	2,623,666	54,375	286,121	31,932	20,409	3,016,504	126,514	3,143,018
Program Marketing/Outreach	2,056,016	1,218,579	3,274,594	19,926	611,710	47,273	44,862	3,998,367	61,318	4,059,685
Program Legal Services	-	-	-	-	-	-	-	-	-	-
Program Quality Assurance	30,776.00	16,042.00	46,818.00	-	7,018.00	778.00	376.00	54,990.00	4,200.00	59,190.00
Outsourced Services	179,254	107,489	286,741	1,018	52,476	3,170	3,963	347,366	6,113	353,479
Trade Allies & Cust. Svc. Mgmt.	257,334	153,951	411,284	5,819	85,064	6,502	6,321	514,991	30,866	545,857
IT Services	793,865	442,455	1,236,320	24,505	194,923	18,885	13,977	1,488,610	36,665	1,525,275
Other Program Expenses - all	252,058	140,712	392,767	9,900	42,434	5,038	2,927	453,066	38,472	491,538
TOTAL PROGRAM EXPENSES	61,505,299	33,943,248	95,448,543	2,195,423	11,385,312	1,363,610	751,708	111,144,598	1,568,626	112,713,224
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	1 / 28 326	781 171	2 200 406	52 756	262 488	31 574	18.068	2 574 383	13/ 282	2 708 665
Communications & Customer Svc (Notes 1 & 2)	1 262 020	690 713	1 953 643	46 647	232,400	27 018	15,000	2,074,000	118 733	2,700,000
Total Administrative Costs	2,691,255	1,471,884	4,163,139	99,403	494,582	59,492	34,045	4,850,661	253,015	5,103,676
	<u> </u>							, ,	,	
TOTAL PROG & ADMIN EXPENSES	64,196,554	35,415,132	99,611,682	2,294,826	11,879,894	1,423,102	785,753	115,995,259	1,821,641	117,816,900
TOTAL REVENUE LESS EXPENSES	15,130,984	13,568,882	28,699,870	3,625,770	4,208,123	719,437	(45,230)	37,207,969	199,193	37,407,162
NET ASSETS - RESERVES										
Cumulative Carryover at 12/31/16	6,507,279	644,839	7,152,117	1,028,150	1,485,656	-	68,620	9,734,531	283,171	10,017,701
Net Assets Reattributed from prior year						(335,865)		(335,865)		(335,865)
Change in net assets this year	15,130,984	13,568,882	28,699,870	3,625,770	4,208,123	719,437	(45,230)	37,207,969	199,193	37,407,162
Ending Net Assets - Reserves	21,638,263	14,213,721	35,851,987	4,653,920	5,693,779	383,572	23,390	46,606,635	482,364	47,088,998
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	21 638 263	14 213 721	35 851 987	4 653 920	5 693 779	383 572	23 390	46 606 635	482 364	47 088 998
Operational Contingency Pool	21,000,200	. 1,210,721	50,001,001	1,000,020	5,000,110	000,012	20,000	10,000,000	102,004	11,000,000
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	21,638,263	14,213,721	35,851,987	4,653,920	5,693,779	383,572	23,390	46,606,635	482,364	47,088,998

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.

Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits does not allow allocation of admin costs to program expenses.

Note 3) Program Management costs include both outsourced and internal staff.

ENERGY TRUST OF OREGON Summary of All Units For the Ten Months Ending October 31, 2017

	REN	EWABLE EN	ERGY				TOTAL			
	PGE	PacifiCorp	Total	Solar LMI	Community Solar	Other	All Programs	Approved budget	Change	% Change
REVENUES										
Public Purpose Funding Incremental Funding	7,310,621	5,447,950	12,758,571	-	-	-	76,376,154 91,606,479	71,693,969 88,825,220	(4,682,185) (2,781,259)	-7% -3%
Grant Revenue Contributions				30,865			30,865		(30,865) -	
Revenue from Investments TOTAL PROGRAM REVENUE	7,310,621	5,447,950	12,758,571	30,865	0	343,442 343,442	343,442 168,356,939	190,000 160,709,189	(153,442) 7,647,750	-81% 5%
EXPENSES										
Program Management (Note 3)	525 801	457 892	983 692	20 074	8 723		6 531 806	6 489 135	(42 671)	-1%
Program Delivery	225 664	166 139	391 802		-		41 718 476	42 217 095	498 619	1%
Incentives	5 659 242	4 586 839	10 246 081	-	-		65 935 272	71 051 596	5 116 324	7%
Program Eval & Planning Svcs	76 834	61 653	138 488	-	-		3 281 506	4 277 911	996 405	23%
Program Marketing/Outreach	96 677	70 823	167 499	-	-		4 227 184	4 715 650	488 466	10%
Program Legal Services	-	-	-	-	-		-	16 666	16 666	100%
Program Quality Assurance	-	-	-	-	-		59 190 00	70 833	11 643	16%
Outsourced Services	185 229	243 683	428 912	5 800	-		788 191	2 131 559	1 343 368	63%
Trade Allies & Cust Svc Mamt	72 676	51 060	123 736	-	-		669 593	782 675	113 082	14%
IT Services	118 059	101 973	220 031	612	-		1 745 918	1 881 935	136 017	7%
Other Program Expenses - all	135 581	107 152	242 732	2 477	79		736 826	705 817	(31,009)	-4%
TOTAL PROGRAM EXPENSES	7,095,763	5,847,214	12,942,973	28,963	8,802	-	125,693,962	134,340,872	8,646,910	6%
ADMINISTRATIVE COSTS										
Management & Ceneral (Notes 1 & 2)	170 338	1/0 388	310 726	1 000			3 020 400	3 475 057	455 556	13%
Communications & Customer Syc (Notes 1 & 2)	170,550	194 131	274 744	1,009	-		2 670 648	3 235 054	400,000	17%
Total Administrative Costs	320,951	264,519	585,470	1,902	-		5,691,050	6,711,911	1,020,861	15%
TOTAL PROG & ADMIN EXPENSES	7,416,714	6,111,733	13,528,443	30,865	8,802		131,385,014	141,052,782	9,667,768	7%
TOTAL REVENUE LESS EXPENSES	(106,093)	(663,783)	(769,872)	-	(8,802)	343,442	36,971,928	19,656,406	(17,315,521)	88%
NET ASSETS - RESERVES	7 5 40 000	7 070 044	44,000,070			0.005.044	00.070.004	00 000 005	4 5 4 4 000	50/
Cumulative Carryover at 12/31/16	7,543,333	7,376,941	14,920,276		50.000	8,935,944	33,873,921	32,329,685	1,544,236	5%
Net Assets Reattributed from prior year	(400.000)	(000 700)	(700.070)		56,200	279,665	-	40.050.400	47.045.500	000/
Change in net assets this year	(106,093)	(663,783)	(769,872)	-	(8,802)	343,442	36,971,928	19,656,406	17,315,522	88%
Ending Net Assets - Reserves	7,437,240	6,713,158	14,150,404	-	47,398	9,559,051	70,845,850	51,986,091	(18,859,759)	30%
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	7,437,240	6,713,158	14,150,404	-	47,398		70,845,850	51,986,091	(18,859,759)	
Operational Contingency Pool						4,559,051				
Emergency Contingency Pool						5,000,000				
TOTAL NET ASSETS CUMULATIVE	7,437,240	6,713,158	14,150,404	-	47,398	9,559,051	70,845,850	51,986,091	(18,859,759)	36%

Energy Trust of Oregon Program Expense by Service Territory For the Ten Months Ending October 31, 2017 (Unaudited)

	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	Solar LMI	Community Solar	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency																
Commercial																
Existing Buildings	21,876,964	11,633,476	33,510,440	913,604	2,421,993	561,413	180,007	4,077,017	37,587,457	644,925	-	-	38,232,382	39,072,640	840,258	2%
New Buildings	7,629,290	3,013,750	10,643,039	183,505	1,037,346	194,701	52,449	1,468,001	12,111,040				12,111,040	15,184,327	3,073,287	20%
NEEA	1,078,387	749,388	1,827,775		113,781	12,185		125,965	1,953,740	12,809			1,966,549	2,345,817	379,268	16%
Total Commercial	30,584,641	15,396,613	45,981,254	1,097,109	3,573,120	768,299	232,456	5,670,983	51,652,237	657,734	-	-	52,309,971	56,602,784	4,292,813	8%
Industrial																
Production Efficiency	14,071,460	7,645,526	21,716,986	1,197,718	376,286	148,937	19,753	1,742,694	23,459,680				23,459,680	22,814,247	(645,433)	-3%
NEEA	214,202	148,853	363,055						363,055				363,055	188,424	(174,631)	-93%
Total Industrial	14,285,662	7,794,379	22,080,041	1,197,718	376,286	148,937	19,753	1,742,694	23,822,735	-	-	-	23,822,735	23,002,671	(820,064)	-4%
Residential																
Existing Homes	4,705,962	4,239,159	8,945,120	-	4,628,673	141,478	381,982	5,152,133	14,097,253	388,527	-	-	14,485,780	16,464,321	1,978,541	12%
New Homes/Products	12,523,618	6,527,968	19,051,586	-	2,830,988	313,968	151,562	3,296,518	22,348,104	538,016	-	-	22,886,120	24,680,591	1,794,471	7%
NEEA	2,190,308	1,522,083	3,712,391		491,857	52,672		544,529	4,256,920	55,370	-	-	4,312,290	4,315,709	3,419	0%
Total Residential	19,419,887	12,289,210	31,709,097	-	7,951,518	508,118	533,544	8,993,180	40,702,277	981,913	-	-	41,684,190	45,460,621	3,776,431	8%
Energy Efficiency Program Costs	64,290,190	35,480,203	99,770,392	2,294,827	11,900,925	1,425,353	785,752	16,406,856	116,177,249	1,639,647	-	-	117,816,896	125,066,076	7,249,180	6%
Renewables																
Solar Electric (Photovoltaic)	5.343.281	3.754.069	9.097.350	-	-	-	-		9.097.350	-	30.865	-	9.128.215	10.617.868	1.489.653	14%
Other Renewable	2.073.431	2.357.664	4,431,095						4,431,095		,		4,431,094	5.368.838	937,744	17%
Renewables Program Costs	7,416,712	6,111,733	13,528,445	-	-	-	-	-	13,528,445	-	30,865	-	13,559,310	15,986,706	2,427,396	15%
Cost Grand Total	71,706,901	41,591,936	113,298,837	2,294,827	11,900,925	1,425,353	785,752	16,406,856	129,705,694	1,639,647	30,865		131,376,206	141,052,782	9,676,574	7%

Energy Trust of Oregon Administrative Expenses For the Ten Months Ending October 31, 2017 (Unaudited)

		MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
		QUARTERLY	,		YTD			QUARTER	LY		YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	
EXPENSES													
Outsourced Services	\$15,536	\$121,625	\$106,089	\$366,221	\$544,750	\$178,529	\$137,011	\$355,250	\$218,239	\$689,050	\$1,184,167	\$495,116	
Legal Services	2,548	3,000	452	17,667	10,000	(7,667)							
Salaries and Related Expenses	199,008	663,679	464,670	1,998,359	2,214,762	216,403	151,761	429,351	277,590	1,378,462	1,431,171	52,709	
Supplies	1,486	1,500	14	4,774	5,000	226		250	250	775	833	59	
Postage and Shipping Expenses		625	625	1,731	2,083	352							
Printing and Publications		1,125	1,125	2,734	3,750	1,016		375	375		3,750	3,750	
Travel	2,950	15,363	12,412	38,126	51,208	13,082	5,505	11,250	5,745	45,874	37,500	(8,373)	
Conference, Training & Mtngs	3,572	21,463	17,891	54,760	61,541	6,781	1,704	3,125	1,421	16,292	10,417	(5,876)	
Interest Expense and Bank Fees		375	375	1,677	3,750	2,073							
Dues, Licenses and Fees	335	2,938	2,603	10,519	12,972	2,453	1,214	4,125	2,911	18,737	13,750	(4,987)	
Shared Allocation (Note 1)	15,481	51,008	35,528	156,434	170,028	13,594	15,537	39,966	24,429	132,755	133,219	465	
IT Service Allocation (Note 2)	35,328	116,522	81,194	362,959	391,235	28,277	27,680	91,297	63,617	284,383	306,538	22,155	
Planning & Eval	534	1,529	995	4,439	4,877	438	12,545	35,937	23,392	104,319	114,609	10,290	
TOTAL EXPENSES	276,778	1,000,751	723,973	3,020,400	3,475,956	455,556	352,956	970,926	617,970	2,670,647	3,235,954	565,307	

Note 1) Represents allocation of Shared (General Office Management) Costs Note 2) Represents allocation of Shared IT Costs

Administrative Expenses 1st Month of Quarter









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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
	Admin	istration Total:	13,284,296	4,730,681	8,553,614		
Communications							
	Commur	nications Total:	4,278,185	3,056,770	1,221,415		
Energy Efficiency							
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	36,142,871	19,831,912	16,310,959	1/1/2015	7/1/2020
ICF Resources, LLC	2017 BE PMC	Fairfax	14,303,850	10,949,622	3,354,228	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 HES PMC	Austin	6,540,508	4,884,080	1,656,428	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NBE PMC	Austin	6,207,078	4,825,916	1,381,162	1/1/2017	12/31/2017
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	6,200,354	2,168,595	4,031,759	1/1/2015	7/1/2020
Lockheed Martin Corporation	2017 MF PMC	Grand Prairie	4,586,068	3,466,381	1,119,687	1/1/2017	12/31/2017
Ecova Inc	2017 Products PMC	Spokane	3,907,587	2,900,223	1,007,364	1/1/2017	12/31/2017
Energy 350 Inc	PDC - PE 2017	Portland	3,144,460	2,633,070	511,390	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NH PMC	Austin	3,137,693	2,256,395	881,298	1/1/2017	12/31/2017
Intel Corporation	EE Project Incentive Agmt	Hillsboro	2,400,000	0	2,400,000	11/13/2015	12/31/2019
Portland General Electric	PDC - PE 2017	Portland	2,017,000	1,919,467	97,533	1/1/2017	12/31/2017
Northwest Power & Conservation Council	RTF Funding Agreement		1,825,000	989,020	835,980	2/25/2015	12/31/2019
Cascade Energy, Inc.	PDC - PE 2017	Walla Walla	1,784,368	1,420,114	364,254	1/1/2017	12/31/2017
RHT Energy Inc.	PDC - PE 2017	Medford	1,740,434	1,379,872	360,562	1/1/2017	12/31/2017
Evergreen Consulting Group, LLC	PE Lighting PDC 2017	Tigard	1,555,700	1,262,674	293,026	1/1/2017	12/31/2017
KEMA Incorporated	EB & SEM 15-16 Evaluation	Oakland	575,000	256,675	318,325	6/8/2017	5/31/2018
SBW Consulting, Inc.	PE Program Impact Evaluation	Bellevue	540,000	499,261	40,739	5/1/2016	1/31/2018
Clean Energy Works, Inc.	EE Incentive & Services Agmt	Portland	457,550	432,710	24,840	7/1/2014	12/31/2017
Michaels Energy, Inc.	New Buildings '14 Impact Evalu	La Crosse	328,000	327,997	3	5/23/2016	5/31/2017
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
CLEAResult Consulting Inc	2017 HES WA PMC	Austin	285,746	212,029	73,717	1/1/2017	12/31/2017
ICF Resources, LLC	2017 BE DSM PMC	Fairfax	274,746	237,520	37,226	1/1/2017	12/31/2017
EnergySavvy Inc.	Optix Engage Online Audit Tool	Seattle	273,600	178,167	95,433	6/1/2016	5/31/2018
Pivotal Energy Solutions LLC	License Agreement	Gilbert	270,500	174,612	95,888	3/1/2014	12/31/2017
Alternative Energy Systems Consulting, Inc.	PE Mobile App Scoping Tool	Carlsbad	249,830	234,101	15,729	6/1/2016	4/30/2018
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	248,625	127,944	120,681	4/27/2015	12/31/2017
ICF Resources, LLC	2017 BE NWN WA PMC	Fairfax	246,200	179,442	66,758	1/1/2017	12/31/2017
TRC Engineers Inc.	Transition Agreement	Irvine	214,216	86,743	127,473	9/1/2017	12/31/2017
CLEAResult Consulting Inc	RES PMC Transition	Austin	212,603	91,164	121,439	9/1/2017	12/31/2017

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Alliance For Sustainable Energy, LLC	Technical Services Agreement	Lakewood	104,989	89,215	15,774	10/30/2015	11/30/2017
Alternative Energy Systems Consulting, Inc.	PE Review of Technical Studies	Carlsbad	100,000	10,290	89,710	5/22/2017	12/31/2017
1000 Broadway Building L.P.	Pay-for-Performance Pilot	Portland	88,125	58,750	29,375	10/17/2014	11/1/2018
The Cadmus Group Inc.	Residental Air Conditioning	Watertown	83,550	28,836	54,714	7/1/2017	12/31/2017
CLEAResult Consulting Inc	Professional Services/Trans	Austin	81,688	69,170	12,518	10/15/2014	10/15/2018
Evergreen Economics	Research Cannabis Market	Portland	80,130	67,231	12,899	6/23/2017	4/30/2018
WegoWise Inc	benchmarking license	Boston	77,472	33,912	43,560	6/15/2014	12/31/2018
Abt SRBI Inc.	Fast Feedback Surveys 2017	New York	70,000	47,836	22,164	2/1/2017	2/28/2018
Energy 350 Inc	Professional Services	Portland	64,062	63,993	70	12/10/2014	12/10/2018
Apex Analytics LLC	Nest Seasonal Savings Eval	Boulder	59,000	51,213	7,788	8/29/2016	12/31/2017
The Cadmus Group Inc.	Existing Homes Pilot Eval	Watertown	53,000	52,999	1	2/18/2016	12/31/2017
Research Into Action, Inc.	Evaluation MHR Pilot	Portland	52,000	7,081	44,919	5/1/2017	2/28/2019
Ecotope, Inc.	NB - NEEA Impact Evaluation	Seattle	50,000	0	50,000	10/23/2017	12/31/2018
Green Motors Practice Group	Green Motors Incentive Funding	Boise	50,000	12,116	37,884	1/1/2017	12/31/2017
Earth Advantage, Inc.	Home Energy Score Analysis	Portland	45,000	28,000	17,000	6/27/2017	12/31/2017
KEMA Incorporated	O&M & SEM Persistence Research	Oakland	45,000	43,939	1,062	12/1/2016	11/30/2017
MetaResource Group	Intel DX1 Mod 1&2 Megaproject	Portland	45,000	29,276	15,724	4/1/2015	12/31/2017
Navigant Consulting Inc	Evaluation Cosultant-DSM Proj.	Boulder	45,000	19,876	25,124	6/15/2017	6/1/2019
Evergreen Economics	New Home Pilot- DHP	Portland	44,000	0	44,000	11/1/2017	3/31/2019
Brightworks Sustainability LLC	Net Zero Fellowship Grant Agmt	Portland	43,500	0	43,500	4/5/2017	8/31/2018
The Cadmus Group Inc.	Existing Homes DHP Study	Watertown	40,000	27,932	12,068	9/25/2017	3/31/2019
Ecova Inc	RES PDC Transition Agreement	Spokane	39,948	3,996	35,952	9/1/2017	12/31/2017
Cadeo Group LLC	Evaluation Consulting	Washington	35,000	22,043	12,958	4/25/2017	3/31/2018
KEMA Incorporated	Billing Analysis Review	Oakland	35,000	3,351	31,649	3/15/2015	12/31/2017
The Cadmus Group Inc.	Air Conditioning Measures	Watertown	32,950	22,660	10,290	8/22/2016	8/22/2018
Northwest Energy Efficiency Council	Tool Lending Lbry Sponsorship	Seattle	30,500	30,500	0	9/21/2016	12/31/2017
Cadeo Group LLC	Retail Lighting Mkt Analysis	Washington	29,545	17,514	12,031	7/10/2017	12/31/2017
BASE zero LLC	Quality Assurance Services	Bend	27,325	25,838	1,488	3/1/2016	12/31/2017
Energy Center of Wisconsin	Billing Analysis Review	Madison	25,000	1,710	23,290	3/15/2015	12/31/2017
Northwest Food Processors Association	NW Industrial EE Summit 2017	Portland	25,000	0	25,000	1/1/2017	12/31/2017
Sustainable Northwest	Klamath Industiral/Ag Programs	Portland	24,992	24,992	0	1/1/2017	11/1/2017
Consortium for Energy Efficiency	Perform. Benchmark Sponsorship		22,255	22,255	0	1/1/2017	12/31/2017
Consortium for Energy Efficiency	Membership Dues - 2017		21,448	21,448	0	1/1/2017	12/31/2017
Bridgetown Printing Company	2017 Bill Insert	Portland	20,000	13,356	6,644	1/18/2017	12/31/2017

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Portland General Electric	Workshop/Training Agreement	Portland	15,000	8,252	6,748	1/1/2017	12/31/2017
EES Consulting, Inc	Professional Services Agmt	Kirkland	14,800	8,640	6,160	10/1/2016	9/30/2018
Research Into Action, Inc.	Evaluation - APS Pilot	Portland	14,600	13,240	1,361	7/1/2017	12/31/2018
KEMA Incorporated	New Bldg Evaluation	Oakland	13,000	707	12,293	10/1/2017	3/31/2019
Flink Energy Consulting	Smart Grid Modeling	Portland	12,120	12,120	0	7/12/2016	12/30/2017
LightTracker, Inc.	Lighting Market Analysis	Boulder	12,000	12,000	0	7/17/2017	3/31/2018
FMYI, INC	Subscription Agreement	Portland	11,150	5,150	6,000	4/25/2016	11/1/2017
Earth Advantage, Inc.	2017 Sponsorship	Portland	10,250	10,250	0	3/1/2017	2/28/2018
American Council for and Energy Efficient Economy	Intelligen Effncy Sponsorship		10,000	10,000	0	4/4/2017	12/31/2017
American Council for and Energy Efficient Economy	EE & Wtr Consrv. Sponsorship		10,000	10,000	0	4/4/2017	12/31/2017
The Leede Research Group Inc	Evaluation Consultant	Manitowoc	9,000	0	9,000	5/1/2017	12/31/2017
City of Portland Bureau of Planning & Sustainability	Sponsorhip - 2017	Portland	8,000	8,000	0	1/5/2017	12/31/2017
The Cadmus Group Inc.	NB Evaluation Plan	Watertown	6,500	0	6,500	10/1/2017	3/31/2019
Northwest Energy Efficiency Council	BOC 2017 Sponsorship	Seattle	6,000	6,000	0	2/14/2017	12/31/2017
Shades of Green	Shades of Green Sponsorship	Portland	5,000	5,000	0	11/6/2017	10/30/2018
Social Enterprises Inc.	GoGreen Sponsorship - 2017	Portland	5,000	5,000	0	3/21/2017	12/31/2017
	Energy E	Efficiency Total:	101,822,486	65,291,390	36,531,095		
Joint Programs							
E Source Companies LLC	E Source Service Agreement	Boulder	133,350	133,350	0	2/1/2014	1/31/2018
Portland State University	GIS Data Research		71,992	25,664	46,328	1/1/2017	12/31/2017
Structured Communications Systems, Inc.	ShoreTel Phone System Install		65,345	65,287	59	1/1/2017	12/31/2017
CoStar Realty Information Inc	Property Data	Baltimore	48,020	42,062	5,958	6/1/2011	5/31/2018
Grounded Research and Consulting, LLC	Education Background Research	Oakland	25,000	24,972	28	3/13/2017	6/30/2017
American Council for and Energy Efficient Economy	ACEEE Sponsorship - 2017		12,500	12,500	0	1/1/2017	12/31/2017
Navigant Consulting Inc	Resource Assessment Updates	Boulder	10,600	9,825	775	8/26/2016	8/26/2018
Peggy Merchant Events, LLC	T.A. Forum Venue Research	Portland	5,000	765	4,235	7/24/2017	11/30/2017
	Joint I	Programs Total:	371,807	314,424	57,384		
Renewable Energy							
Sunway 3, LLC	Prologis PV installation		3,405,000	3,261,044	143,956	9/30/2008	9/30/2028
Clean Water Services	Project Funding Agreement		3,000,000	2,013,106	986,894	11/25/2014	11/25/2039
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	9/11/2012	9/11/2032
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	1,000,000	0	10/25/2012	10/25/2027
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	1,000,000	0	4/25/2012	9/30/2032
Farmers Irrigation District	FID - Plant 2 Hydro	Hood River	900,000	900,000	0	4/1/2014	4/1/2034
Klamath Falls Solar 2 LLC	PV Project Funding Agreement	San Mateo	850,000	0	850,000	7/11/2016	7/10/2041

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Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	490,000	0	5/29/2015	5/28/2030
City of Medford	750kW Combined Heat & Power	Medford	450,000	450,000	0	10/20/2011	10/20/2031
City of Pendleton	Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/2012	4/20/2032
RES - Ag FGO LLC	Biogas Manure Digester Project	Washington	441,660	441,660	0	10/27/2010	10/27/2025
RES - Ag FGO LLC	Biogas Manure Digester - FGO	Washington	441,660	438,660	3,000	10/27/2010	10/27/2025
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
Clty of Gresham	City of Gresham Cogen 2		350,000	334,523	15,477	4/9/2014	7/9/2034
BSA Enterprises Inc	Solar Verifier Services	Sisters	200,000	100,012	99,988	8/1/2016	7/31/2018
Farmers Conservation Alliance	Outreach Activities	Hood River	200,000	199,953	47	1/1/2017	12/31/2017
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	200,000	82,401	117,599	8/1/2016	7/31/2018
Luxurious Plumbing and Heating, Inc.	Solar Verifier Services	West Linn	200,000	124,948	75,052	8/1/2016	7/31/2018
RHT Energy Inc.	Verifier Services Agmt - Solar	Medford	200,000	104,273	95,728	8/1/2016	7/31/2018
City of Astoria	Bear Creek Funding Agreement	Astoria	143,000	143,000	0	3/24/2014	3/24/2034
Solar Oregon	2015 Outreach Agreement	Portland	123,300	95,900	27,400	1/1/2015	4/30/2018
Clean Power Research, LLC	PowerClerk License	Napa	109,175	109,175	0	7/1/2017	6/30/2018
SPS of Oregon Inc	Project Funding Agreement	Wallowa	75,000	74,513	488	10/15/2015	10/31/2036
Kendrick Business Services LLC	Small Business Support Agmt	Albany	60,000	2,725	57,275	11/1/2016	6/30/2018
Future Resource Stragtegies, LLC	Backfill for RE Staff	Salem	50,000	0	50,000	6/7/2017	10/8/2017
Kendrick Business Services LLC	TA Business Development	Albany	50,000	6,839	43,161	1/1/2017	12/31/2017
Kleinschmidt Associates	Evaluation Services	Pittsfield	47,400	47,609	(209)	1/1/2017	11/30/2018
OSEIA-Oregon Solar Energy Industries Assoc	Technical Training Course Dev		41,650	18,600	23,050	1/1/2017	4/30/2018
The Cadmus Group Inc.	Solar Verification	Watertown	41,000	18,633	22,368	8/24/2017	2/28/2018
Clean Energy States Alliance	2017 CESA Sponsorship		39,500	39,500	0	7/1/2016	6/30/2017
Clean Energy States Alliance	CESA Membership 17-18		39,500	39,500	0	7/1/2017	6/30/2018
ENERGYneering Solutions Inc	Biopower & Hydro Evaluations	Sisters	25,000	24,954	46	12/6/2016	11/30/2018
University of Oregon	UO SRML Contribution - 2017	Eugene	24,999	24,999	0	3/9/2017	3/8/2018
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach		24,999	22,808	2,191	2/1/2016	1/30/2018
Robert Migliori	42kW wind energy system	Newberg	24,125	24,125	0	4/11/2007	1/31/2024
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/2005	10/1/2020
Oregon Solar Energy Industries Association	Sponsorship 2017	Portland	7,500	7,500	0	1/1/2017	12/31/2017
OSEIA-Oregon Solar Energy Industries Assoc	OSEIA 2018 Conf. Sponsorship		7,500	7,500	0	9/1/2017	12/31/2018
Bonneville Environmental Foundation	REC/WRC Purchase 2016	Portland	7,290	2,430	4,860	1/1/2016	12/31/2018
Community Energy Project, Inc.	LMI Solar Working Group	Portland	5,000	1,600	3,400	9/11/2017	3/31/2018
Verde	LMI Solar Working Group	Portland	5,000	0	5,000	9/11/2017	3/31/2018

Energy Trust of Oregon Contract Status Summary Report

For contracts with costs through: 11/1/2017

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		136,417,593	87,114,620	49,302,972			
	Renewable Energy Total:		16,660,820	13,721,355	2,939,465		
REACH Community Development Inc	Solar LMI Strategies	Portland	3,000	1,000	2,000	9/11/2017	3/31/2018
Native American Youth & Family Center	LMI Solar Working Group	Portland	3,000	1,000	2,000	9/1/2017	3/31/2018
Constructing Hope	LMI Solar Working Group	Portland	3,000	1,000	2,000	9/11/2017	3/31/2018
350 Deschutes	LMI Solar Working Group	Bend	4,000	1,200	2,800	9/11/2017	3/31/2018

PINK PAPER



Financial Glossary

(for internal use) - updated December 1, 2017

Administrative Costs

Costs that, by nonprofit accounting standards, have general objectives which enable an organization's programs to function. The organization's programs in turn provide direct services to the organization's constituents and fulfill the mission of the organization. i.e. management and general and general communication and outreach expenses.

Administrative costs are part of, but not all of the cost included in an OPUC performance metric. See **Program Delivery Efficiency** metric for further information about the metric.

I. Management and General

- Includes governance/board activities, interest/financing costs, accounting, payroll, human resources, general legal support, and other general organizational management costs.
- Receives an allocated share of indirect costs.

II. General Communications and Outreach

- Expenditures of a general nature, conveying the nonprofit mission of the organization and general public awareness.
- Receives an allocated share of indirect costs.

Allocation

- A way of grouping costs together and applying them to a program as one pool based upon an allocation base that most closely represents the activity driver of the costs in the pool.
- Used as an alternative to charging programs on an invoice-by-invoice basis for accounting efficiency purposes.
- An example would be accumulating all of the costs associated with customer management (call center operations, Energy Trust customer service personnel, complaint tracking, etc). The accumulated costs are then spread to the programs that benefited by using the ratio of calls into the call center by program (i.e. the allocation base).

Allocation Cost Pools

- Employee benefits and taxes.
- Office operations. Includes rent, telephone, utilities, supplies, etc.
- Information Technology (IT) services.
- Planning and evaluation general costs.
- Customer service and trade ally support costs.
- General communications and outreach costs.
- Management and general costs.
- Shared costs for electric utilities.
- Shared costs for gas utilities.
- Shared costs for all utilities.

Auditor's Opinion

• An accountant's or auditor's opinion is a report by an independent CPA presented to the board of directors describing the scope of the examination of the organization's books, and certifying that the financial statements meet the AICPA (American Institute of

Certified Public Accountants) requirements of GAAP (generally accepted accounting principles).

- Depending on the audit findings, the opinion can be unmodified or modified regarding specific items. Energy Trust strives for and has achieved in all its years an unmodified opinion.
- An unmodified opinion indicates agreement by the auditors that the financial statements present an accurate assessment of the organization's financial results.
- The OPUC Grant Agreement requires an unmodified opinion regarding Energy Trust's financial statements.
- Failure to follow generally accepted accounting principles (GAAP) can result in a qualified opinion.

Board-approved Annual Budget

- Funds approved by the board for *expenditures* during the budget year (subject to board approved program funding caps and associated policy) for the stated functions.
- Funds approved for *capital* asset expenditures.
- Approval of the general allocation of funds including commitments and cash outlays.
- Approval of expenditures is based on assumed revenues from utilities as forecasted in their annual projections of public purpose collections and/or contracted revenues.

Reserves

- In any one year, the amount by which revenues exceed expenses for that year in a designated category that will be added to the cumulative balance and brought forward for expenditure to the next budget year.
- In any one year, if expenditures exceed revenues, the negative difference is applied against the cumulative carryover balance.
- Does not equal the cash on hand due to noncash expense items such as depreciation.
- Tracked by major utility funder and at high level program area--by EE vs RE, not tracked by program.

Committed Funds

- Represents funds obligated to identified efficiency program participants in the form of signed applications or agreements and tracked in the project forecasting system.
- If the project is not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Funds are expensed when the project is completed.
- Funds may be held in the operating cash account, or in escrow accounts.

Contract obligations

- A signed contract for goods or services that creates a legal obligation.
- Reported in the monthly Contract Status Summary Report.

Cost-Effectiveness Calculation

- Programs and measures are evaluated for cost-effectiveness.
- The cost of program savings must be lower than the cost to produce the energy from both a utility and societal perspective.
- Expressed as a ratio of energy savings cost divided by the presumed avoided utility and societal cost of energy.
- Program cost-effectiveness evaluation is "fully allocated," i.e. includes all of the program costs plus a portion of Energy Trust administrative costs.

Dedicated Funds

- Represents funds obligated to identified renewable program participants in the form of signed applications or agreements and tracked in the project forecasting system.
- May include commitments, escrows, contracts, board designations, master agreements.
- Methodology utilized to develop renewable energy activity-based budgets amounts.

Direct Program Costs

• Can be directly linked to and reflect a causal relationship to one individual program/project; or can easily be allocated to two or more programs based upon usage, cause, or benefit.

Direct Program Evaluation & Planning Services

- Evaluation services for a specific program rather than for a group of programs.
- Costs incurred in evaluating programs and projects and included in determining total program funding caps.
- Planning services for a specific program rather than for a group of programs.
- Costs incurred in planning programs and projects and are included in determining program funding expenditures and caps.
- Evaluation and planning services attributable to a number of programs are recorded in a cost pool and are subsequently allocated to individual programs.

Escrowed Program (Incentive) Funds

- Cash deposited into a separate bank account that will be paid out pursuant to a contractual obligation requiring a certain event or result to occur. Funds can be returned to Energy Trust if such event or result does not occur. Therefore, the funds are still "owned" by Energy Trust and will remain on the balance sheet.
- The funds are within the control of the bank in accordance with the terms of the escrow agreement.
- When the event or result occurs, the funds are considered "earned" and are transferred out of the escrow account ("paid out") and then are reflected as an expense on the income statement for the current period.

Expenditures/Expenses

• Amounts for which there is an obligation for payment of goods and/or services that have been received or earned within the month or year.

Project Tracking Projects Forecasting

Module developed in Project Tracking system (PT) to provide information about the timing of future incentive payments, with the following definitions:

- Estimated-Project data may be inaccurate or incomplete. Rough estimate of energy savings, incentives and completion date by project and by service territory.
- Proposed-Project that has received a written incentive offer but no agreement or application has been signed. Energy savings, incentives and completion date to be documented by programs using this phase. For Renewable projects-project that has received Board approval.
- Accepted-Used for renewable energy projects in 2nd round of application; projects that have reached a stage where approval process can begin.
- Committed-Project that has a signed agreement or application reserving incentive dollars until project completion. Energy savings/generations, incentives and completion date by project and by service territory must be documented in project records and in PT. If project not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Dedicated-Renewable project that has been committed, has a signed agreement, and if required, has been approved by the board of directors.

Incentives

I. Residential Incentives

• Incentives paid to a residential program participant (party responsible for payment for utility service in particular dwelling unit) exclusively for energy efficiency and renewable energy measures in the homes or apartments of such residential customers.

II. Business Incentives

- Incentives paid to a participant other than a residential program participant as defined above following the installation of an energy efficiency or renewable energy measure.
- Above market cost for a particular renewable energy project.

III. Service Incentives

- Incentives paid to an installation contractor which serves as a reduction in the final cost to the participant for the installation of an energy efficiency or renewable energy measure.
- Payment for services delivered to participants by contractors such as home reviews and technical analysis studies.
- End-user training, enhancing participant technical knowledge or energy efficiency practices proficiency such as Strategic Energy Management programs, where some level of tracking of particular sites and participants is part of the program design.
- Lighting, hot water, and energy control devices through retailer buy down, on line fulfillment, and direct installation.

Indirect Costs

- Shared costs that are "allocated" for accounting purposes rather than assigning individual charges to programs.
- Allocated to all programs and administration functions based on a standard basis such as hours worked, square footage, customer phone calls, etc.
- Examples include rent/facilities, supplies, computer equipment and support, and depreciation.

IT Support Services

- Information technology costs incurred as a result of supporting all programs.
- Includes energy savings and incentive tracking software, data tracking support of PMCs and for the program evaluation functions.
- Includes technical architecture design and physical infrastructure.
- Receives an allocation of indirect shared costs.
- Total costs subsequently allocated to programs and administrative units.

Outsourced Services

- Miscellaneous professional services contracted to third parties rather than performed by internal staff.
- Can be incurred for program or administrative reasons and will be identified as such.

Program Costs

- Expenditures made to fulfill the purposes or mission for which the organization exists and are authorized through the program approval process.
- Includes program management, incentives, program staff salaries, planning, evaluation, quality assurance, program-specific marketing and other costs incurred solely for program purposes.
- Can be direct or indirect (i.e. allocated based on program usage.)

Program Delivery Efficiency Measure

The program delivery efficiency measure is a maximum threshold for administrative and program support costs as a percentage of total annual revenues.

Administrative costs adhere to generally accepted accounting practices for nonprofit organizations. Program support costs were defined in coordination with the Commission to enable comparison with other recipients of public purpose funding. For the purposes of this measure, program support costs are defined as program costs, except for direct program costs, in the following areas: program management, program delivery, program incentives, program payroll and related expenses, outsourced services, planning and evaluation services, customer service management, and trade ally network management. [source: OPUC Docket No. UM 1158]

Program Delivery Expense

- This will include all PMC labor and direct costs associated with: incentive processing, program coordination, program support, trade ally communications, and program delivery contractors.
- Includes contract payments to NEEA for market transformation efforts.
- Includes performance compensation incentives paid to program management contractors under contract agreement if certain incentive goals are met.
- Includes professional services for items such as solar inspections, anemometer maintenance and general renewable energy consulting.

Program Legal Services

• External legal expenditures and internal legal services utilized in the development of a program-specific contract.

Program Management Expense

- PMC billings associated with program contract oversight, program support, staff management, etc.
- ETO program management staff salaries, taxes and benefits.

Program Marketing/Outreach

- PMC labor and direct costs associated with marketing/outreach/awareness efforts to communicate program opportunities and benefits to rate payers/program participants.
- Awareness campaigns and outreach efforts designed to reach participants of individual programs.
- Co-op advertising with trade allies and vendors to promote a particular program benefit to the public.

Program Quality Assurance

• Independent in-house or outsourced services for the quality assurance efforts of a particular program (distinguished from program quality control).
Program Reserves

• Negotiated with utilities annually, with a goal of providing a cushion of approximately 5% above funds needed to fulfill annual budgeted costs. Management may access up to 50% of annual program reserve without prior board approval (resolution 633, 2012).

Program Support Costs

- Source of information is contained in statement of functional expense report.
- Portion of costs in OPUC performance measure for program administration and support costs.
 - Includes expenses incurred directly by the program.
 - Includes allocation of shared and indirect costs incurred in the following categories: supplies; postage and shipping; telephone; printing and publications; occupancy expenses; insurance; equipment; travel; business meetings; conferences and training; depreciation and amortization; dues, licenses, subscriptions and fees; miscellaneous expense; and an allocation of information technology department cost.

Project Specific Costs (for Renewable Energy)

- Expenses directly related to identified projects or identified customers to assist them in constructing or operating renewable projects. Includes services to prospective as well as current customers.
- Must involve <u>direct contact</u> with the project or customer, individually or in groups, <u>and</u> provide a service the customer would otherwise incur at their own expense.
- Does not include general program costs to reach a broad (unidentified) audience such as websites, advertising, program development, or program management.
- Project-Specific costs may be in the categories of; Incentives, Staff salaries, Program delivery, Legal services, Public relations, Creative services, Professional services, Travel, Business meetings, Telephone, or Escrow account bank fees.

Savings Types

- Working Savings/Generation: the estimate of savings/generation that is used for data entry by program personnel as they approve individual projects. They are based on deemed savings/generation for prescriptive measures, and engineering calculations for custom measures. They do not incorporate any evaluation or transmission and distribution factors.
- **Reportable Savings/Generation, also known as Net Savings:** the estimate of savings/generation that will be used for public reporting of Energy Trust results. This includes transmission and distribution factors, and evaluation factors of free riders, spillover and savings realization rates, plus any other corrections required to the original working values. These values are updated annually, and are subject to revision each year during the "true-up" as a result of new information or identified errors.
- **Gross Savings/Generation:** the estimate of savings from program participants, regardless of whether they are free-riders.
- **Contract Savings**: the estimate of savings that will be used to compare against annual contract goals. These savings figures are generally the same as the reportable savings at the time that the contract year started. For purposes of adjusting working savings to arrive at this number, a single adjustment percentage (a SRAF, as defined below) is agreed to at the beginning of the contract year and is applied to all program measures. This is based on the sum of the adjustments between working and reportable numbers in the forecast developed for the program year.
- Savings Realization Adjustment Factors (SRAF): are savings realization adjustment factors applied to electric and gas working savings measures in order to reflect more accurate savings information through the benefit of evaluation and other studies. These

factors are determined by the Energy Trust and used for annual contract amendments. The factors are determined based on the best available information from:

- Program evaluations and/or other research that account for free riders, spill-over effects and measure impacts to date; and
- Published transmission and distribution line loss information resulting from electric measure savings.

Total Program and Admin Expenses (line item on income statement)

- Used only for cost effectiveness calculations, levelized cost calculations and in management reports used to track funds spent/remaining by service territory.
- Includes all costs of the organization--direct, indirect, and an allocation of administration costs to programs.
- Should not be used for external financial reporting (not GAAP).

Total Program Expenses (line item on income statement)

- All indirect costs have been allocated to program costs with the exception of administration (management and general costs and communications & outreach).
- Per the requirements of Generally Accepted Accounting Principles (GAAP) for nonprofits, administrative costs should not be allocated to programs.
- There is no causal relationship—costs would not go away if the program did not exist.

Trade Ally Programs & Customer Service Management

- Costs associated with Energy Trust sponsorship of training and development of a trade ally network for a variety of programs.
- Trade Ally costs are tracked and allocated to programs based on the number of allies associated with that program.
- Costs in support of assisting customers which benefit all Energy Trust programs such as call center operations, customer service manager, complaint handling, etc.
- Customer service costs are tracked and allocated based on # of calls into the call center per month.

True Up

- True-up is a once-a-year process where we take everything we've learned about how much energy programs actually save or generate, and update our reports of historic performance and our software tools for forecasting and analyzing future savings.
- Information incorporated includes improved engineering models of savings (new data factor), anticipated results of future evaluations based on what prior evaluations of similar programs have shown (anticipated evaluation factor), and results from actual evaluations of the program and the year of activity in question (evaluation factor).
- Results are incorporated in the Annual Report (for the year just past) and the True-up Report (for prior years).
- Sometimes the best data on program savings or generation is not available for 2-3 years, especially for market transformation programs. So for some programs, the savings are updated through the annual true-up 2 or 3 times

Tab 5

Policy Committee Meeting



November 20, 2017, 1:00 p.m

Attending by teleconference

Ken Canon, Mike Colgrove, Roger Hamilton, Debbie Kitchin, Alan Meyer, John Reynolds, Eddie Sherman

Attending at Energy Trust offices

Amber Cole, Shelly Carlton, Sue Fletcher, Fred Gordon, Jed Jorgensen, Corey Kehoe, Steve Lacey, Debbie Menashe, Dave Moldal, Pati Presnail, Cameron Starr

Policies for Review

Update on Heat Pump Water Heater Remediation Efforts

Cameron Starr provided an update on the sunset of the current Heat Pump Water Heater (HPWH) remediation efforts for an AirGenerate HPHW product. Air Generate was delisted from the Northwest Energy Efficiency Alliance (NEEA) Qualified Product List in March 2015 for not maintaining a required 10-year warranty for equipment installed under the specifications required for participation in Energy Trust's HPWH program. In June 2015, NEEA approved \$200,000 in funds to support customer remediation for failing AirGenerate units and Energy Trust developed the remediation plan. The plan in its current form will sunset on December 31, 2017, however, Energy Trust will provide support for remediation in amounts up to \$1,000 on an exception basis. The Residential program will continue to track on the failure rate in addition to the number of exceptions processed as a request of Portland General Electric (PGE) and the Oregon Public Utilities Commission (OPUC). The data will be used for a check-in with PGE and OPUC in Q3 of 2018 to determine if the exception procedure should then sunset or continue in 2019.

Roger Hamilton asked if Energy Trust has ever had to extend a remediation previously. Sue Fletcher responded that past remediations have never been on this scale. There was region-wide promotion of the product through NEEA, and then staff worked closely with NEEA on remediation for customers. She noted that Puget Sound Energy also had an HPWH remediation plan.

Ken Canon inquired whether it is anticipated that all of the HPWHs will fail. Cameron said the expectation for the failure rate is that some will continue to work and others will fail. Energy Trust will direct customers to the existing incentives for water heater failure and that some customers have swapped them out without notifying us.

Mike Colgrove asked if staff has been in discussion with NEEA and if they are aware of the our current approach to the remediation plan. Cameron affirmed that staff has been in communication with NEEA on this plan.

Board Meeting Preview Presentation on Proposal to Amend and Extend Creative Services Contract with Coates Kokes

Shelly Carlton previewed a proposal to amend the current creative services contract with Coates Kokes. She said the proposed amendment would extend the contract for another year, and is consistent with the board-approved annual budget and the extension provisions in the contract. She noted that the contract extension would allow staff to continue working with Coates Kokes while preparing to issue a Request for Proposal (RFP) in 2018 for creative services. Ken asked if the extension would put Energy Trust in the third year of a five-year contract. Shelly confirmed and said the contract was purposely set up in this timeline, permitting extensions for a total contract of up to five years. However, we do not anticipate extending the current contract for the entire five years. Debbie Menashe added that extending the contract an additional year would bring it over the \$500,000 threshold, and while there isn't a specific budget cap identified in the resolution, the resolution would approve the contract extension with a budget that is consistent with a board-approved budget for 2018. The committee agreed to refer the amendment on the consent agenda for the December 15, 2017 board meeting.

Shelly previewed another contract that may go over the \$500,000 threshold. Energy Trust has previously contracted with Affiliated Media and would like to contract again for their services. Affiliated Media provides media buying service for Energy Trust, with funds to the vendor that are then passed through to media outlets for Energy Trust advertising. She said that the Affiliated Media media buying service has provided us with good value and many contacts throughout the market. Shelly advised that staff is still finalizing plans for media buys, but it is likely that the amount planned would exceed \$500,000 and offered to give a short presentation. In the event that the contract with Affiliated Media does exceed the threshold amount for 2018, the committee approved adding this amendment to the consent agenda.

Preview of Annual REC Value Update

Dave Moldal provided a recap of the annual Renewable Energy Certificate (REC) policy requirements and changes. When the REC policy was last revised, a requirement was added that the Energy Trust staff report annually to the Renewable Energy Advisory Committee (RAC) and to the board on the market value of the RECs. The annual review permits the board to consider whether the cost effort of registering RECs in Western Renewable Energy Generation Information System (WREGIS) is disproportionate to their value and to recommend action accordingly. Staff reported to RAC on November 17, 2017. Dave said that there has been a steady decline of REC prices since 2010, and staff recommends continuing current practices as follows: Energy Trust will continue to take contractual title to RECs, but RECs generated by projects funded through Energy Trust's Other Renewables program and custom solar projects are not registered in WREGIS unless the project owner or the utility pay registration costs; RECs generated by Energy Trust Solar Program projects are not registered in WREGIS. Roger asked whether any trends that REC values have increased. Jed replied that they are not trending upward, especially given the state mandates for renewable projects.

Policies for Review and Discussion

Update on Diversity, Equity and Inclusion (DEI) Initiative and Second Review of Draft DEI Policy

Energy Trust staff has been continuing work on DEI activities. Currently, staff has focused on putting together a comprehensive DEI Operations Plan with DEI goals and objectives. At the same time, staff has been working with the Policy Committee on a board level DEI policy. At the September committee meeting, staff presented revisions to the current DEI policy which is up for its regular three-year review. Staff also proposed a change to broaden the breadth if the policy with regard to customer base. The policy has been reviewed by the DEI Committee, internal staff, the Renewable Energy Advisory Committee (RAC), Conservation Advisory Committee (CAC) and the National Association for the Advancement of Colored People (NAACP). Debbie Menashe and the DEI Committee have also engaged Dani Ledezma of the Coalition of Communities of Color (CCC) to provide guidance and feedback.

Debbie noted the input from the reviewer groups. The committee reviewed the draft policy and reviewed information on input from reviewer groups. The committee engaged in discussion around underserved customers and communities and what kind of data Energy Trust collects to track information to inform this policy. Mike Colgrove said that there is a strong perception in our area that minority communities are underserved. Eddie Sherman said he has spoken with local community groups who do feel underserved by Energy Trust programs and initiatives. He added that a number of stakeholders have been paying into the system but do not perceive the benefits. Roger inquired whether the state has data on population breakdown and demographics. Fred Gordon responded that there is a lot of data, but it depends on where it is gathered and how it is used. Energy Trust will need to look at the data in a much different manner than current practices. Debbie said that the OPUC, through the Grant Agreement, has always required Energy Trust to consider its program outreach from an equity and social justice perspective, but serving all communities is also important to reach our savings and other goals. Ken suggested looking at the DEI goals as a way to achieve the Energy Trust goals for which we were established.

The committee discussed proposed revisions to the draft policy. The policy refers to the establishment of a Diversity Advisory Council (DAC). Margie Harris, former Energy Trust Executive Director, working with Eddie, connected with 43 community based organizations and individuals to discuss the establishment of a DAC and has prepared an initial recommendation supporting such a committee. Ken asked how the DAC could best provide resources and initiatives to the board. Debbie replied that the DAC would be designed like RAC and CAC where the board could participate in this model as a process of engagement. The intent is to compose a committee membership of diversity experts around the state and that the committee would evolve and change over time.

Debbie reported that at the September committee meeting, a provision was added that would put this policy on a one-year rotating cycle in order to permit the board to continue engaging in this topic and also to allow staff to gather ongoing board feedback. She said staff is recommending either a full board discussion on the DEI Operations Plan in December or push to February 2018 to provide further committee review at the January 25, 2018 meeting. Debbie asked the committee whether the policy revisions in current form are ready for board approval at the December meeting as she will be giving a DEI presentation at that time.

Ken said that he has more concerns with the operations plan than the policy and feels they are two separate things. Debbie Kitchin said she believes the policy is ready to go before the board in December and that they can and then they can examine the operations plan either at that time or at a later date. The committee recommends forwarding the policy to the full board, but this recommendation was not unanimous.

Executive Summary of DEI Operations Plan

Debbie Menashe provided overview of the DEI Operations Plan. The summary provides an outline of why Energy Trust is engaged in this work. Debbie said an equity lens will be used for internal use as a document and questionnaire that staff will complete when they make certain decisions in their work. Training on use of the lens and trials in its use are scheduled for the next few months.

The committee then reviewed the DEI goals and objectives that are contained in the DEI Operations Plan and discussed language and definition edits. Debbie said that the DEI goals were developed internally with the DEI Committee and Dani and were reviewed by the management team. There were originally 10 goals, but the management team identified a missing goal regarding the execution of contracts, so now there are 11 goals in total.

The committee discussed whether an operations plan goal on board composition was appropriate. Committee members suggested that the full operations plan be provided to the board for review in advance of the December board meeting. At this committee's next meeting in January, Debbie will schedule time for a discussion on the operations plan and next steps on the plan for the full board. Debbie will include a discussion in the draft of the DEI Operations Plan on how the policy relates to the plan and accompanying discussion points will focus on the board's formal role and its diversification. Language will be added to incorporate the formation of an ad hoc committee to consider enhancing board diversity.

Mike asked the committee to consider how the DEI Operations Plan would relate to the strategic plan. In addition, he asked that conversations begin on how DEI concepts could be incorporated into the next strategic plan document. He suggested that the plan be introduced to the full board in December followed by further discussion at the February 2018 meeting.

Pursuing External Sources of Funding

Mike reported that a "go/no go" resolution will be presented at the December board meeting. He said that the Community Solar Request for Proposal (RFP) has been delayed at this time and is hoping to have the release prior to the board meeting for analysis. He has scheduled time during the board meeting for questions. At that time, staff could present a go/no go resolution or the board could postpone the decision knowing that a vote would take place outside of a formal meeting.

Meeting adjourned at 3:01 p.m.

Next Meeting: Thursday, January 25, 2018, 3:00 p.m.

Tab 6



Strategic Planning Committee Meeting

November 7, 2017 3:00 p.m.

Attendees: Mark Kendall, *Chair*, Susan Brodahl (phone), Ken Canon (phone) Amber Cole, Mike Colgrove, Fred Gordon, Corey Kehoe, Debbie Menashe, Spencer Moersfelder, John Reynolds (phone), John Volkman

Review Purpose and Substance and Proposed Presentation Timeline of Board Learning Topics for Coming Year

Committee members reviewed the Board Learning Topics document. Mike Colgrove said that he will work with those teams who are assigned to each topic to move the concepts forward. The next steps are to make slight tweaks to the delivery schedule for delivery and presentation to the board beginning in early 2018 and through the board Strategic Planning Workshop in May 2018. Mark Kendall asked what the response has been so far and what is needed to further the work. Mike responded that the idea of the papers is to provide a base level of information to all board members in advance of the May workshop and to provide background for all on topics we expect to discuss.

The final product should be digestible for all readers and participants. Debbie Menashe asked whether some of these topics should be presented to this committee before the board and how the committee felt about the timeline. The committee discussed ways to roll out the topics and appropriate timing. Ken Canon noted that it would be helpful to provide early opportunities for committee to look at the topics first to allow for feedback, but that neither should slow the process down. He also cautioned use of acronyms in the documents. Mike said that There are many sources available to us in the preparation of documents, including ESource. We will see the bulk of the information in March and April 2018 through briefings and one-pagers.

Recap Overall Strategic Planning Timeline (working back from October 2019)

Mike, Debbie and John Volkman met to discuss the strategic planning schedule. The next Energy Trust Strategic Plan would cover 2020 through 2024. The board would approve a new strategic plan in October 2019 and the process would commence in the fall of 2018 to include the necessary research in order to bring a draft of the plan to the Strategic Planning Workshop in May 2019. The grant agreement calls for a community engagement process to take place prior to adoption of the plan. The document developed at this year's Strategic Planning Workshop will be circulated for comments in order for the board to approve plan in October 2019. Energy Trust will offer roundtables or community events in order to gather feedback and stakeholder engagement along with Renewable Energy Advisory Council (RAC) and Conservation Advisory Council (CAC) involvement. We will also utilize the Diversity, Equity and Inclusion (DEI) equity lens in order to involve all communities. Mark asked what assistance this committee could give in community stakeholder events. Amber Cole responded that the committee could attend stakeholder events where possible to provide opportunities to engage and capture feedback.

Review and Discuss Draft Agenda for May 2018 Workshop – Is It Heading in the Right Direction?

Debbie Menashe described a possible agenda for the May workshop. As in previous years, the workshop would start with a review of the Strategic Plan dashboard. Staff reports on the Organization Review and Budget Review projects could follow. Then, the board would begin to discuss and provide direction for the work to develop the next strategic plan.

Debbie proposed offering a strengths and values exercise for the board as a good opportunity to talk about vision setting and would inform the learning objective papers and serve as an additional exercise to talk to board about activities and strengths. The committee engaged in discussion around previous workshop topics and dynamics and ways to avoid focusing only on perceived threats, but rather facilitating the conversation around goals of immediate focus and those that go beyond energy efficiency and generation. Mike asked the committee to consider what niche we want to occupy within these contexts and how to facilitate the conversation around prioritizing and risk assessment. He stressed the need to be able to surface that proposal among the board in order to whittle down to four or five strategic areas. Ken said we also should consider the possible legislative impact of upcoming sessions and adjust as needed. Committee members asked that the Oregon Public Utilities Commission (OPUC) can provide input along the way as part of this committee.

Staff will meet with workshop consultant Nick Viele before the end of the year and Debbie will report out further at the February 1, 2018 meeting.

Adjourned at 4:50 p.m.

Next meeting: Thursday, February 1, 2018, 3:00 – 5:00 p.m.

Tab 7



Board Decision 4.08.000_P Diversity, Equity, and Inclusion Policy

December 20, 2017

Summary

Authorize revision of the board's current Equity Policy into a Diversity, Equity, and Inclusion Policy.

Background

- The board Equity Policy came up for routine, three-year review in October 2017.
- In anticipation of that routine review, and as part of Energy Trust's diversity, equity and inclusion organizational strategy, Energy Trust staff engaged Tsai Comms and Thomas Bruner to assist in research and policy development for an expanded policy on equity.
- Thomas Bruner, who has a long non-profit leadership history, previously served as the Red Cross Diversity, Equity and Inclusion Officer, interviewed utility industry representatives and other community organizations. He provided recommendations to staff and the board's Policy Committee on diversity, equity, and inclusion policy language.
- The Policy Committee reviewed proposals for a revised policy and a summary of Thomas Bruner's research and recommendations at its meeting on September 7, 2017.
- Given the nature of the proposed policy changes, the Policy Committee recommended that staff continue its review of the draft policy and seek comments from the Energy Trust staff DEI Committee and other external reviewers.
- Staff circulated the draft policy to Energy Trust's internal DEI Committee and other staff groups, NAACP representatives, Dani Ledezma, DEI consultant, and the RAC and CAC for review and comment and then returned to the Policy Committee on November 20, 2017 for further discussion.
- After a lengthy discussion about the proposed revised Equity Policy, a revision to a Diversity, Equity, and Inclusion Policy, the Policy Committee recommends forwarding the attached proposed policy to the full board for review. The committee recommendation, however, is not unanimous.
- Since the board's November Policy Committee, the proposed draft policy has been further revised to include a provision for the establishment of an ad hoc board committee to identify goals and objectives to enhance the diversity of the board.
- Copies of the revised proposed draft policy, as well as the current draft of Energy Trust's Diversity, Equity, and Inclusion Operations plan, which contains goals and objectives for Energy Trust's programs and operations, were forwarded to all board members in an email from Michael Colgrove on November 29, 2017.

Discussion

- Energy Trust has been engaged in a diversity, equity, and inclusion initiative since 2013 to focus on strategies to sure that Energy Trust programs are able to reach all ratepayers who pay into the public purpose charge. Then Executive Director Margie Harris presented the business case for the initiative at the board's 2015 Strategic Planning Workshop.
- As reflected in Energy Trust's current Equity Policy, Energy Trust recognizes that it must make programs available to all eligible customers. The current policy mandates that "Energy Trust will pay particular attention to programs for underserved customers."

- Through its diversity, equity, and inclusion work, Energy Trust will focus on specific
 organizational strategies, including review of demographic and firmographic, to identify
 opportunities to increase participation rates among customers who are presumed to
 participate at lower rates in order to more effectively target those customers for
 participation.
- The proposed policy revision sets out additional detail and directive to take actions focused on enhancing diversity, equity, and inclusion at Energy Trust including direction to (i) use a diversity, equity, and inclusion lens to inform program design and evaluation, (ii) develop a diversity, equity, and inclusion operations plan, (iii) establish a Diversity Advisory Council, and (iv) establish an ad hoc committee of the board to examine ways to enhance the diversity of the board.
- Given the breadth of the revisions to the policy, the Policy Committee recommended an annual review cycle for the policy, more frequent than the three-year review cycle used for other board policies. This more frequent review policy permits the Policy Committee and the board to more frequently monitor the policy's application and impact and to take in stakeholder and community comment on a more frequent basis.
- Staff proposes that the full board consider this revised policy at its December meeting and in conjunction with a presentation on Energy Trust's Diversity, Equity, and Inclusion initiative.
- A diversity, equity, and inclusion board-level policy signals a commitment to diversity, equity, and inclusion at the highest levels of the Energy Trust.

Recommendation

Authorize a revision of the Board's Equity Policy into a Diversity, Equity, and Inclusion Policy as shown below.

RESOLUTION 828 DIVERSITY, EQUITY, AND INCLUSION POLICY

WHEREAS:

- 1. Energy Trust's board of directors adopted its Equity Policy in 2002 to ensure that Energy Trust are designed, evaluated and monitor programs to ensure they are available to all eligible utility customers.
- 2. Energy Trust has been engaged in a diversity, equity, and inclusion initiative since 2015 to focus on how the organization can ensure that its programs are designed to be available to and utilized by all eligible customers.
- As part of the diversity, equity, and inclusion initiative, Energy Trust proposes revisions to its current Equity Policy to (i) outline more specific strategies to ensure that all eligible utility customers benefit from Energy Trust programs and (ii) demonstrate commitment to these strategies by the highest level of the organization.
- 4. Acknowledging the breadth of revisions to the board's current Equity Policy that this proposed Diversity, Equity, and Inclusion Policy represents, the Policy Committee inserted an annual review cycle for the policy to permit the Policy Committee and the board to more frequently monitor the application and impact of the policy and to take in and consider stakeholder and community comment on a more frequent basis.
- Energy Trust's board Policy Committee has reviewed the proposed policy revision at its committee meetings on September 7, 2017 and November 20, 2017, and recommends forwarding the proposed revision to the full board for its review and approval. The recommendation from the Policy Committee is not unanimous.

It is therefore RESOLVED that the Energy Trust Equity Policy is revised to be a Diversity, Equity, and Inclusion Policy as shown in Attachment 1.

Moved by:		Seconded by:
Vote:	In favor: 10	Abstained: 0
Opposed: 0		

ATTACHMENT 1

4.08.000-P Diversity, Equity, and Inclusion Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 22, 2002	Approved (R104)	May 2005
Policy Committee	March 5, 2005	Postpone review	11/05
Board Decision	September 7, 2005	Revised (R352)	September 2008
Policy Committee	December 2, 2008	Replaced	September 2011
		references to	
		numerical electric	
		and gas goals	
Board Decision	October 5, 2011	Revised (R595)	October 2014
Board Decision	October 1. 2014	Revised (R714)	October 2017

Introduction

Energy Trust envisions a high quality of life, a vibrant economy and a healthy environment and climate for generations to come, built with renewable energy, efficient energy use and conservation. Energy Trust recognizes that to achieve this vision, all utility customers must benefit from our programs, but certain customers are presumed to be underserved by our programs such as communities of color, rural communities, and low income customers.

Energy Trust commits to enhancing diversity, equity and inclusion in our programs and in internal operations in order to work to serve all communities and reach critical Energy Trust goals. We will advance diversity, equity and inclusion in our programs and internal operations through meaningful collaboration with our utility funders, trade allies, program allies, and customers and with geographic and culturally specific communities, organizations and businesses.

Policy

- Energy Trust will make programs available to all eligible electricity and gas customer classes by implementing programs in the residential, commercial, and industrial sectors.
- Energy Trust will monitor participation rates for all programs and adjust them as needed to ensure that all investor-owned utility electricity and gas customer classes in Energy Trust territory are being served.
- In addition to providing programs to reach all customer groups, Energy Trust will design and implement program strategies specifically to reach customers who are presumed to have been underserved by Energy Trust programs, such as rural customers, communities of color, and low-income communities in Energy Trust service territory.
- Energy Trust will use a diversity, equity and inclusion lens through which to:
 - a. strategize and plan for Energy Trust program delivery
 - b. deliver programs and services
 - c. partner and collaborate
 - d. allocate resources
 - e. communicate and market
 - f. build our workforce
 - g. evaluate our work

- Energy Trust will develop a diversity, equity and inclusion operations plan that:
 - o includes goals, objectives and activities
 - assesses and measures progress
 - learns from mistakes and successes
 - \circ shares progress publicly on no less than an annual basis
- Energy Trust will establish a Diversity Advisory Council to provide advice and resources to the board of directors to support Energy Trust's diversity, equity and inclusion operations plan and to advise the board of directors on assessing and measuring progress toward goals of such plan.
- Energy Trust will enhance diversity, equity and inclusion on the board of directors. In order to enhance diversity, equity and inclusion on the board of directors, the board of directors shall appoint an ad hoc committee to identify goals and objectives for increasing racial and ethnic representation on the board of directors while achieving gender and geographic diversity.
- For the first three years after adoption of these 2017 changes, the Energy Trust Policy Committee will review this policy annually to take account of new information and experience.

Tab 8



Renewable Energy Advisory Council Meeting Notes

November 17, 2017

Attending from the council:

Erik Anderson, Pacific Power Bruce Barney, Portland General Electric JP Batmale, Oregon Public Utility Commission (by phone) Jason Busch, Oregon Wave Energy Trust

Attending from Energy Trust:

Gwen Barrow Hannah Cruz Michael Colgrove Matt Getchell Jeni Hall Betsy Kauffman

Others attending:

Berit Kling, Pacific Power Caroline Moore, Pacific Power Kendra Hubbard, Oregon Solar Energy Industries Association (by phone) Suzanne Leta-Liou, SunPower Michael O'Brien, Renewable Northwest Adam Shultz, Oregon Department of Energy Frank Vignola, University of Oregon Peter Weisberg, The Climate Trust

Judge Kemp Debbie Menashe Joshua Reed Lizzie Rubado Peter West Rachel Wilson Lily Xu

John Reynolds, Energy Trust Board of Directors Silvia Tanner, Renewable Northwest Jason Zappe, Portland General Electric

1. Welcome, Introductions and Updates

Betsy Kauffman convened the meeting at 9:30 a.m. The agenda, notes and presentation materials are available on Energy Trust's website at: <u>https://www.energytrust.org/about/public-</u>meetings/renewable-energy-advisory-council-meetings/.

2. Update on Community Solar

Lizzie Rubado, renewables program strategies manager, presented an update on Oregon's Community Solar request for proposals. Senate Bill 1547 (Clean Electricity and Coal Transition Plan, also referred to as Coal to Clean bill) was passed by the Oregon Legislature in 2016, and included a directive to the OPUC to establish a community solar program for customers of Portland General Electric, Pacific Power and Idaho Power. The community solar program will be administered by a program administrator, and the OPUC will use a competitive bidding process to select a program administrator.

Energy Trust is planning to apply for the administrator role. Energy Trust wants Oregon's Community Solar program to be successful, and believes Energy Trust is well-qualified to administer the program. Oregon's Community Solar program aligns with Energy Trust's mission to support the development of new sources of clean, renewable energy generation. It would also allow Energy Trust to expand to serve new customers. Serving Oregon customers of Idaho Power would be a new opportunity.

Energy Trust's plan to submit a proposal hinges on final approval from the board of directors in December. This is an opportunity for the Renewable Energy Advisory Council to make comments to the board of directors.

Jason Busch: Can you define what constitutes community solar?

Lizzie Rubado: Community solar projects are between 25 kilowatts and 3 megawatts in size. They have a minimum of five participants, and 50 percent of those participants need to be small commercial or residential customers. Ten percent of the 50 percent must be low-income residential customers. The participants must also be within the service territory of the utility to which that the project is interconnected.

Jason Busch: Does the term participants include investors? Lizzie Rubado: Participants can be partial owners of or subscribers to a projects.

Peter Weisberg: Who's at the table?

Lizzie Rubado: A diverse array of organizations. The utilities have been actively involved. Clean energy advocates have been involved, including Renewable NW, Spark NW, Oregon Solar Energy Industries Association (OSEIA), Northwest Energy Coalition (NWEC) and Interstate Renewable Energy Council (IREC). There have also been low-income service providers, municipalities and rural-serving organizations. It's the longest service list I've seen on an OPUC docket.

Peter Weisberg: How do potential service projects overlap? Is there a conflict of interest? Lizzie Rubado: For Energy Trust, one primary challenge is how the Renewable Energy Certificates (RECs) are handled. By rule, RECs stay with participants and can't be transferred or sold. If Energy Trust participates, we would not be able to take ownership of any RECs from participants, which poses a challenge for our REC policy.

John Reynolds: How will the 10 percent low-income capacity be delivered to customers? Lizzie Rubado: In the order, commissioners established that 5 percent requirement per project and 10 percent for program. They left the door open that if the administrator, commission staff and lowincome facilitators agree to a better design, they would be open to adopt a new methodology.

Kendra Hubbard: I want to hear what you think the pros and cons are for Energy Trust managing this program.

Lizzie Rubado: Pros include how closely aligned Community Solar is with Energy Trust's mission. It would also help us to achieve goals we have around expanding participation, access and distributed generation. There are, however, risks to be considered on the other side. We've weighed those with our management team, and will talk through those risks in more detail with our board in December. I would be interested in hearing from you about any concerns that you see in moving forward. Kendra Hubbard: It does align with Energy Trust's mission and the low-income outreach you have been doing over the past year. You're familiar with the work. At initial glance, OSEIA would be in support of this.

Lizzie Rubado: This will be part of the conversation with the board on December 15. Since this is a competitive solicitation, we may be limited in what we are able to share publicly from that conversation. While thinking through those risks, we appreciate any insights you have. We'll share with you what we can.

Kendra Hubbard: I'm happy to take any concerns back to OSEIA's board for more feedback. Initially, I'm in support of this project.

Jason Busch: I want to understand the way this works. You're not forcing the utility to buy the output? This is privately owned project?

Lizzie Rubado: Utilities are obligated to purchase output from the project. There is a power purchase agreement between the project operators, called project managers, and the utility to act as a backstop for any unsubscribed generation from the project. For the capacity that does have a customer subscriber or owner, that energy will be valued at whatever bill credit rate is applicable. The rate will be established by the time the program launches.

Silvia Tanner, Renewable Northwest: The unsubscribed power is valued at an as-available market rate.

Jason Busch: In considering this program, Energy Trust is evolving as an organization. It seems like a natural opportunity to apply your expertise.

Bruce Barney: Have you thought about roles and hiring new people? Will your response to the RFP cover those costs?

Lizzie Rubado: If we become the administrator, the program would be handled under a separate agreement with the OPUC and would have its own funding source. It's important to us that we put walls in place—as well as transparency—to ensure that public purpose dollars are not inadvertently going to this program. We think we're well-positioned to do this in a transparent way because we are very experienced and successful at keeping a multitude of funding sources separate. We anticipate having dedicated staff to run the program. One asset we have is the expertise on staff, who would act as consultants, particularly during the start-up stage of the program. While there will be some general ratepayer support for getting the program set up and running, ultimately, the program needs to be self-funding through fees recovered from participants in the community solar projects. Thus, there is pressure to be cost-effective in delivery and in administration of the program. That lens of being good stewards of ratepayer funding is something we apply on a regular basis.

Frank Vignola: Let's say that the project wants to include storage. Would that be something Energy Trust could consider funding?

Lizzie Rubado: The question is about whether Energy Trust could support community solar projects with higher value is a good one. I don't know. It's an open question. Nothing would preclude storage from being part of community solar projects. All of the generation from these projects is exported to the utility—they do not serve on-site loads. There have been discussions on how including storage might positively impact the bill credit rate for a project.

3. Review of Renewable Energy Certificate Costs

Betsy Kauffman presented an annual review of Renewable Energy Certificate (REC) prices and implications for current REC management practices. Each year, Energy Trust makes a recommendation on whether to continue the practice of taking contractual title to RECs, but not registering RECs in the Western Renewable Energy Generation Information System (WREGIS). This recommendation is based on REC prices and whether it costs more to register in WREGIS than the RECs are worth. Energy Trust has not seen conditions change over the last year. Energy Trust's recommendation this year is to continue the current practice of taking contractual title to some RECs from all projects, but not registering RECs in WREGIS for projects where neither the project owner nor the utility want to register their share of the RECs. For solar, our recommendation is to continue the current policy of retaining title to project RECs, but not to require WREGIS registration until it is cost-efficient.

Peter Weisberg: If Energy Trust takes ownership, then of course the project owner won't want to register. Is there a threshold where you have to be taking less than 75 percent? Could it be cost-effective, but Energy Trust has all the ownership?

Betsy Kauffman: We take title to RECs in proportion to the above-market costs we cover. We also look at what the RECs are worth when we determine our incentive and how many RECs to which we

will take title. In many cases, we don't take title to 100 percent of the RECs. For example, solar project owners own the first five years of RECs and we take the last 15 years of the expected life of the project. After that, ownership would go back to the project owner. In some cases, we have split ownership 80/20 percent. For many projects, we own 100 percent of the RECs. We're supposed to provide them to the utilities to help them meet their renewable portfolio standard (RPS)

requirements. The utility doesn't need them at this point because they have sufficient RECs to meet their obligations. Some project owners who have large numbers of RECs may end up registering. WREGIS is really designed for large projects.

Peter Weisberg: Project owners taking 100 percent of RECs might not rely on a utility's assessment of cost-effectiveness. They rely on Energy Trust's assessment.

JP Batmale: Is there insight you could share on national REC prices? What's driving down prices? Is there data on REC prices in Oregon or western Washington?

Betsy Kauffman: I would ask the utilities if they have thoughts on this.

Caroline Moore: We might be willing to share that information with you, JP. I'm not sure if we would tell you what we're looking at this year. It's not reflective of the northwest market.

Betsy Kauffman: In the last few years, we haven't heard any project owners say that they've been able to get lucrative REC contracts that outweigh getting our incentives. My sense is that RECs aren't very valuable. Jed will get back to you.

Caroline Moore: I'm curious about what REC ownership means for claims. Does that factor into decisions to register?

Betsy Kauffman: No, it factors into decisions about using our funding. Some projects have decided not to use our funding so they can make claims about renewable generation. Sometimes we take title to RECs after the first few years of project life, so project owners can make green claims in the first few years. The primary concerns are economic—around energy cost reduction—and the greenness of the energy is secondary. If needed to make claims, project owners can often buy RECs to pair with existing generation. That's a suboptimal situation, but they consider it.

Betsy Kauffman continued her presentation. There continues to be no cost-effective way to register RECs in WREGIS. We will continue taking title, but not registering. This is our recommendation to the board.

Michael O'Brien: In the packet, you said the voluntary market remains illiquid. Betsy Kauffman: If you have RECs to sell into a voluntary market, you probably won't be able to find a buyer. I will check with Jed.

Peter Weisberg: In environmental markets, if you pay upfront, you see the value in performance. If you're not registering, is there another way to track performance? Betsy Kauffman: We track the generation from projects. All of our budgeted goals refer to generation. We're not making claims on RECs provided to meet RPS obligations, and we do talk about the amount of renewable generation produced by our projects.

Bruce Barney: Is there any obligation to register? Is there a problem if utilities are not getting the benefit that the charter says they should?

Betsy Kauffman: The statute under which Energy Trust was formed, Senate Bill 1149, does not mention RECs. Taking title to RECs is an Energy Trust board policy; we're not out of compliance with the statute. We have worked with the board to adjust policy to match market conditions. Debbie Menashe: Yes, it is a board policy developed early on. In the last few years, the board has discussed how the market has impacted our ability to register.

Betsy Kauffman: When compared to similar organizations across the country, Energy Trust is unusual in taking title to RECs. Most organizations do not.

Bruce Barney: I'm confused about the phrase "retired RECs." If Energy Trust is not providing RECs to the utility, does the utility get anything out of it?

Betsy Kauffman: The utility gets a reduction in load which results in a reduction in RPS obligations. This is a benefit utilities get even if the REC is unregistered.

Peter Weisberg: That's true on the renewables side too, not just in energy-efficiency?

Betsy Kauffman: Yes, it's true on the renewables side. If you have a solar system, you're using less electricity.

Betsy Kauffman: Renewables add value to the system through reduced transmission and distribution costs. Without registering RECs, projects aren't valueless. The state is doing a Resource Value of Solar docket, which should show the range of values of solar.

4. Diversity, Equity and Inclusion Strategy

Debbie Menashe presented Energy Trust's Diversity, Equity and Inclusion strategy. Diversity, Equity and Inclusion is one approach to making sure that Energy Trust is reaching out to all customers and being innovative in designing programs. This work has been going on for several years, and Energy Trust's proposed 2018-19 Budget and Action Plan proposes resources for Diversity, Equity and Inclusion program and operations work. To implement this strategy, Energy Trust expects to contract with many community-based organizations. Energy Trust is adopting an organization-wide Diversity, Equity and Inclusion operations plan with comprehensive objectives and 11 specific goals. Energy Trust has also developed a Diversity, Equity and Inclusion Lens questionnaire that workgroups will fill out to inform decisions. In 2018, this work will focus on developing benchmarks.

Michael O'Brien: Does the lens consider diversity, then equity, then inclusion? Do you have working definitions of each?

Debbie Menashe: Yes, we have working glossaries. Diversity refers to any and all differences between and among people. Equity is the state, quality or ideal of begin just, impartial and fair. Inclusion is the action or state of including or being including within a group or structure. We have not mapped the questions in the Diversity, Equity and Inclusion Lens back to see if diversity, equity and inclusion are covered. That's a good question.

Frank Vignola: There is some diversity already, and some missing. It's a work in progress. Debbie Menashe: Yes, and we're exploring the concept of targeted universalism. Focusing on a couple of groups in the beginning can have a universal effect. People will become more aware of us. Frank Vignola: It would be nice to see recommendations to Renewable Energy Advisory Council on Diversity, Equity and Inclusion.

Jason Busch: Has Energy Trust ever provided incentives to push customers toward businesses who have taken those steps?

Debbie Menashe: We haven't, but it's those kinds of ideas that we want to discuss. We'll talk later.

Debbie Menashe continued her presentation. Energy Trust's current equity policy is not specific. It does direct Energy Trust to expand to all customers, even if the cost in one sector is higher. This year, Energy Trust is working with the board policy committee to expand the equity policy into a Diversity, Equity and Inclusion policy. The board policy committee will review the policy each year.

5. Draft 2018 Budget and 2018-2019 Action Plan Update

Betsy Kauffman introduced an update on the Draft 2018 Budget and 2018-2019 Action Plan. Round one (R1) was presented at the October Renewable Energy Advisory Council meeting. Since then, Energy Trust has re-calculated and produced round two (R2) of the draft budget. The presentation covered changes between R1 and R2 as well as high-level comments.

Peter West: We appreciate your advice throughout the year. You have until the end of today to submit public comments. Feedback from public presentations indicates broad support for the Draft 2018 Budget and 2018-2019 Action Plan. Gas companies raised concerns about savings and costs, especially for residential offerings. Shifts in how we calculated have to do with value to the utilities from ratepayers on the resources side. We're in dialogue with the utilities. We'll work in 2018 to see if there is a different allocation to explore.

The OPUC expressed concerns about staffing and administration costs, asking that year-toyear changes not exceed 10 percent and that we segregate contractor costs from staffing costs. Those changes start in 2019.

The residential LED market has largely been transformed. LEDs have gone from 10 percent of residential bulb sales to 50-60 percent of sales. The shift is causing us to look at an exit in that market. We'll do the same amount of bulbs in 2018, but savings will diminish. The OPUC is interested in seeing how fast we exit the market in 2019.

Overall, the OPUC is supportive. In this budget, we looked at where 2018 projects could extend to 2019. We're not looking at anything that will adjust our savings or generation goals. We're slowing down web enhancements. We're experimenting to see how we can do things cheaper and faster.

Frank Vignola: By extending projects to 2019, are you changing the budget?

Peter West: We're taking the same budget and, rather than doing it in one year, we're doing it in two. The budget has the same dollar amount.

Frank Vignola: Does that mean you'll spend half in 2018? Or that parts of it will be reduced? What happens to extra money?

Peter West: We're lowering what we ask for in utilities and rates. We're lowering our expenditures.

Betsy Kauffman: The efficiency side of operation changes in the amount of revenue coming in, what is spent and how much efficiency we can achieve. The renewables budget is fixed. We can't claim that we can get more savings if they give us more money. There is flexibility on the efficiency side that doesn't exist on the renewables side.

Peter West: In SB 838, there is a provision for the state to acquire all available energy efficiency. We explain everything we can do, and this becomes a funding request to the utilities.

Frank Vignola: How does the budget for efficiency compare?

Peter West: In 2018, we're 0.2 percent higher than in 2017.

Frank Vignola: So it's not a big change?

Peter West: No. The overall percentage change from R1 to R2 is relatively small. It's not going to change our generation or efficiency goals. The bigger change is in the allocations that Betsy is about to talk about.

Betsy continued the presentation, providing information on the changes in the renewable energy budget. The big change from R1 to R2 is in money coming back into the budget from the cancellation of a solar installation project at Medford Airport. We adjusted the cash carryover calculations.

John Reynolds: The Medford Airport project has been cancelled? Betsy Kauffman: Yes, we've cancelled our incentive. They could reapply. We can't hold those funds for more than two years.

Caroline Moore: Do those funds remain designated as customer incentive funds?

Betsy Kauffman: The funds came back in as general purpose renewable energy funds, not designated specifically for incentives. They are Pacific Power dollars.

Betsy Kauffman continued her presentation. The other change to the budget is that spending and generation for 2018 decreased in R2.

Bruce Barney: What was the driver for the decrease?

Betsy Kauffman: When the Medford Airport funds came back in, some funds went to project development assistance (not generation). Some funds were allocated to a project that won't complete in 2018. Generation for 2019 went up slightly as a result. If we had created an R1 2020 budget, we would likely have seen a generation increase between 2020 R1 and 2020 R2. Some dedications that will be made in 2018 will likely result in project completions in 2020.

Kendra Hubbard: Is there anything you can share about why the Medford project is not moving forward?

Peter West: It is related to the developer's needs versus the public entity's needs, the length of the contract and the financial feasability of the project. Medford wanted more flexibility in the power purchase agreement with the developer than the developer could finance.

Suzanne Leta-Liou: Is there anything Energy Trust would have done differently in due diligence? Betsy Kauffman: No, it looked like a good project at the time. We built in milestones to be able to pull funds. Our commitment worked as it should. We can't hold funds for projects that are not moving forward. Problems like this are difficult to foresee.

Peter West: Public sector projects take patience. It's worth erring on the side of more patience. Betsy Kauffman: We gave them two years. That was a long time.

Suzanne Leta-Liou: Does Energy Trust expect to have funds available for another open solicitation? Betsy Kauffman: No. Some funds went to project development assistance, some into standard solar incentive funds and some into the Watson Hydropower Project.

John Reynolds: Are we meeting the OPUC benchmark for generation? Betsy Kauffman: We used to have a 3-year rolling average benchmark of 3 aMW. It no longer exists. We're meeting all current OPUC benchmarks, but these are different now than what they used to be. For solar, we're exceeding the benchmark of meeting 85 percent of the budgeted goal for generation. We're also expecting to exceed our budgeted renewables goal for 2017.

Betsy Kauffman continued presenting on changes between R1 and R2. A larger amount of money is available for 2018. Incentives are going up for the residential solar program, which was going to be tight. It's a huge relief. The accomplishments we presented in October will not change, as these accomplishments were optimistic. Now with more funding in the budget, we are more confident.

6. Public Comment

There was no public comment.

7. Meeting Adjournment

Betsy Kauffman adjourned the meeting at 11:30 a.m. The next scheduled meeting of the Renewable Energy Advisory Council is on February 7, 2018.

PINK PAPER



Conservation Advisory Council Meeting Notes

November 17, 2017

Attending from the council:

JP Batmale, Oregon Public Utility Commission Holly Braun, NW Natural Julia Harper, Northwest Energy Efficiency Alliance Wendy Gerlitz (NW Energy Coalition) Kari Greer (for Don Jones, Jr.), Pacific Power

Attending from Energy Trust:

Kathleen Belkhayat Tom Beverly Amber Cole Mike Colgrove Hannah Cruz Sue Fletcher Fred Gordon Jackie Goss

Others attending:

Lindsey Hardy, Energy Trust board (by phone) Don MacOdrum, TRC Charlie Grist, NW Power Planning Council Roger Kainu (for Warren Cook), Oregon Department of Energy Garrett Harris, Portland General Electric Liz Jones, Citizens' Utility Board of Oregon Lisa McGarity, Avista Carrie Nelson, Bonneville Power Administration (for Brent Barclay) Allison Spector, Cascade Natural Gas

Judge Kemp Oliver Kesting Steve Lacey Amanda Potter Thad Roth Kenji Spielman Art Sousa Peter West Mark Wyman

Lonnie Peet, Nexant Elaine Prause, OPUC Bob Stull, CLEAResult

1. Welcome, Old Business and Short Takes

Hannah Cruz convened the meeting at 1:30 p.m. The agenda, notes and presentation materials are available on Energy Trust's website at <u>www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings/. The residential staffing agenda item was moved to the February meeting.</u>

Amanda Potter provided an update on funding for Portland General Electric large customers. An increased funding cap for PGE large commercial and industrial customers put forth by various stakeholders through PGE's rate case (UE 319) was approved by the OPUC. The change raises the cap from 18.4 percent to 20 percent. Staff incorporated the potential for this change when developing the draft 2018 budget; therefore, no changes to the budget are needed.

Charlie Grist: Was there much discussion about it with the commission? JP Batmale: In the PGE rate case, Citizens' Utility Board pushed for it. There were issues around equitable distribution of funding from people who pay into SB 838 and the benefits they receive, leading to an investigation about the stipulation. Because UE 319 is a contested rate case, it was not a public discussion. This change was one of the stipulations from the rate case and there are a number of others. Hannah Cruz: As a reminder, please send me any comments on the previous Conservation Advisory Council notes, so we can make any necessary changes.

2. Measure Updates

As part of our annual measure development and budgeting processes, staff have engaged Conservation Advisory Council more often this year about measures that were submitted to the OPUC for cost-effectiveness exceptions. Jackie Goss presented a final update on the costeffectiveness exception requests that were discussed earlier this year. There were seven major measures for which staff requested cost-effectiveness exceptions, and all of them were granted. The length of time given for exceptions was shorter than expected in some cases. The Conservation Advisory Council packet online includes a slide with a complete list of measure exception requests and timing.

Julia Harper: Are there other measures relying on exceptions? Jackie Goss: This is all we expect in 2018. There are others close to the line, but not for this year.

Holly Braun: What is the New Manufactured Homes package of incentives? Jackie Goss: That's for eco-rated or ENERGY STAR[®] home packages on manufactured homes sited in our territory. It's paid to retailers when they upsell customers on more efficient homes.

Peter West: Just like with the large customer funding decision, we anticipated these exceptions would be granted and we incorporated them into the draft 2018 budget.

Marshall Johnson provided an update on two 2018 measure changes. First, there was interest in maintaining the market-rate gas furnace incentive in Eastern Oregon for Avista customers, so staff investigated further whether the incentive was necessary for high-efficiency gas furnaces. Staff found that top performing contractors are already installing high-efficiency condensing equipment in that area. With that information, the market-rate gas furnace incentive for Avista customers will sunset at the end of March 2018, and staff will not differentiate between Eastern Oregon and Southern Oregon.

Second, Energy Trust currently provides a \$75 incentive for clothes washers that will be reduced to \$65 in 2018. It works for territories with both electric and gas, but not gas only. We didn't include it earlier in our adjustments. The value is lower with the new avoided costs.

There was some confusion at the October Conservation Advisory Council meeting about the new heat pump offering. The incentive for an 8.5 HSPF heat pump is \$700. In a home heated by an electric forced air furnace or baseboard heat, we are encouraging an 8.5 HSPF heat pump. You can combine that with heat pump controls for \$250, making the total \$950. We currently have two tiers of incentives for 9.0 and 9.5 HSPF heat pumps. We want to replace electric resistance heat with heat pumps with the compressor running down to 35 degrees. The goal of the incentive is to get people who install a heat pump to go with high efficiency. We're seeing more 9.5 HSPF heat pumps installed, and the incremental cost between 9.0 and 9.5 is large compared to the differential in savings. This increased volume of 9.5 units and the expiration of the Residential Energy Tax Credit have left the current structure unworkable for the future. We encourage controls on any heat pump installed and there's no HSPF requirement. This applies to existing heat pumps, too. The smart thermostat incentive for 2018 will be consistent with this year.

3. Pilots Update

Kenji Spielman reviewed Energy Trust's approach to pilots. With pilots, we are looking at strategies we expect to be cost effective or new ways to approach a technology. We develop pilots internally, but work with Program Management Contractors on specifics. We maintain leadership and ownership for better prioritization of resources. We try to work out researchable questions, and there are ways to check in on whether or not the pilots match our assumptions. The goal of a successful pilot is to obtain actionable results. Sometimes we learn they will work well. Other times we learn

about major roadblocks. Both are useful. Pilots are also useful for measuring behavioral change efforts, which tend to be difficult to quantify.

The heat pump pilot in manufactured homes is wrapping up. This pilot looks at creating a block of customers where a contractor can replace heat pumps in a specific group of homes. We're trying to find ways to identify a defined group, like a manufactured home park. We found that it reduced the costs to us and the residents, so we are moving to measure development.

An evaluation process follows each pilot. We use data from the pilot to help us structure and quantify research. We use what we learn from a pilot to develop a new savings strategy.

JP Batmale: How do you prioritize which pilots come forward? By technology or savings? Peter West: Both are considered. We're looking forward at the Integrated Resource Plan along with what's emerging in the markets in other areas—things that are new to our region that worked well somewhere else. It's part of our strategy of looking for the next possible savings sources. It's sometimes done in conjunction with Northwest Energy Efficiency Alliance. It may be the next version of equipment that needs to be field tested. Can we deploy it cost-effectively? That question can be equally important to whether it will work. It includes our own engineering on the program and what Energy Trust staff hear in the markets about new technologies.

JP Batmale: Hannah and her team put together a pipeline chart for the board. Can that be shared with Conservation Advisory Council?

Hannah Cruz: One of the items we prepare for the annual board strategic planning workshop is an emerging technologies pipeline chart, including NEEA's work and ours. I'm happy to provide this information, which is a few levels down from Kenji's presentation.

Holly Braun: Do you also coordinate with Bonneville Power Administration on its pilots and research?

Kenji Spielman: Yes. We are also coordinating with the Regional Emerging Technologies Advisory Committee (RETAC).

Charlie Grist: In the Seventh Power Plan, we looked at a productive way of working with RETAC that looks at new directions and technologies. It seems to be going well. It's good to see you continue your work on new technologies. Sometimes savings don't emerge for a long time, if ever.

Peter West: We also look at the market. We have a list of criteria, and we judge what we have capacity to launch. We think of three levels. Does this measure have large savings if deployed widely? What is the setup? Shat has to happen for other things to move forward? Do we have the capacity to manage it? An example of a small thing that has large implications is the Nest Thermostats, which don't have big savings by themselves but enable other things to move forward. Demand response is a linkage, along with heat pump controls measures. Each of these Nest Thermostats have a little bit of savings, but we gain more using them for other strategies.

Charlie Grist: You prepare the list of pilots every May for the board. Do you feel constrained by the amount you can work on in pilots?

Peter West: We report what's concluding or about to begin. There's some sifting between now and May about what we'll do. It's a matter of capacity. It's done with NEEA and the utilities to make that determination.

Julia Harper: We've made progress on getting annual joint planning meetings between NEEA and Energy Trust on the calendar each year.

Elaine Prause: If you can share that graphic, it's helpful. From the commission's perspective, designing pilots well is a key concern, and I think your framework is good. An annual assessment of your learnings for the year would be a good addition.

JP Batmale: Are there plans to put things that are in the pipeline into a back-of-the-envelope guesstimate for potential savings and market penetration?

Peter West: We do a qualitative look at budget and potential savings. We want to learn if it can work and where it will work, then do the subsequent math to determine if it's worth it to go forward. The market may be tiny.

Kenji Spielman: By design, we keep it simple early in the process.

Charlie Grist: The post-evaluation wrap-up meeting sounds great. Are you looping in the RETAC? They could benefit.

Kenji Spielman: It's internal, but for RETAC we could post the full evaluation results. The report can take a while to be published.

Commercial Pay for Performance Pilot

Kathleen Belkayat gave an overview of Pay for Performance pilot design in May, and is presenting an update today. There is an operations and maintenance pathway and a capital pathway. The capital pathway does include operations and maintenance, but only if greater than 50 percent of savings come from capital. We put together an ally guide, recruited allies and put together a forms workbook for the project phases. We included a cost-effectiveness calculator, a calculator for lighting and a modeling support tool. We now have three allies after the training, and they are recruiting customers using the list we helped put together. There is a tight timeline and we wanted to give them as much time as possible. The buildings must be larger than 50,000 square feet. Once they find customers, they will submit them to determine eligibility and then they'll construct a savings plan.

The clock will start in mid-2018. We expect about 500,000 kilowatt-hours per year, per project. We listed considerations and budgeted for an impact evaluation to start in 2018. We expect an adjustment factor to come out of the evaluation. Are they over or under estimating savings? Are things becoming code? Incentive levels may need to be adjusted based on what will motivate a customer. Modeling is complicated, based on our Strategic Energy Management experience. We'll open the pool of allies depending on what will be feasible. We want to avoid projects with few measures. We want more measures and deeper savings.

Lisa McGarity: Are your three allies based in Portland? Will recruitment be in other areas? What building types are included?

Kathleen Belkhayat: The list is broader than Portland, and we encouraged project and geographic diversity. The allies are in Portland. We are looking at grocery stores, retail, office and medical office buildings. These are standard operating buildings.

Charlie Grist: Is there likely advanced metering infrastructure (AMI) for these buildings? Garrett Harris: In PGE territory, yes.

Charlie Grist: That will help the evaluators.

Kari Greer: Pacific Power begins the infrastructure installation for AMI in January.

Kathleen Belkhayat: We're on a monthly data basis for modeling.

Charlie Grist: Consumption patterns will help you target things. It will be another great use.

Wendy Gerlitz: I suggest another evaluation topic: a payback period of three years may limit things. The longer period may be more attractive for both you and the customers. There may be some opportunity to take that to the commission.

Lonnie Peet: What are the barriers? There's only a small number of allies on board. Kathleen Belkhayat: We had a pool of about 30 Allied Technical Assistance Contractors. They were retro-commissioning companies. All were invited. The timeline was somewhat of an issue. We'll find out more about other barriers, like potential structure and requirements.

Elaine Prause: Are any other implementers doing this? What's the landscape?

Kathleen Belkhayat: New Jersey is doing something similar. Seattle City Light is about on our same timeline, so they are sharing with us.

Wendy Gerlitz: Puget Sound Energy is also doing something like this.

Charlie Grist: I think Snohomish Public Utility District is also working on this. All of them are at about the same place as our area, as far as I know.

Wendy Gerlitz: Seattle included a multifamily building, which is interesting.

JP Batmale: What did the program settle on for the actual performance and limitations? If they over or underperform in the contract, what happens?

Kathleen Belkhayat: There's a cap of 200 percent of first year on the operations and maintenance pathway and 150 percent on the capital pathway.

JP Batmale: It sounds like, if they over achieve, there's still something there for them.

New Manufactured Homes Replacement Pilot

Mark Wyman presented on the development for the Manufactured Homes Replacement Pilot. In the past, we have treated manufactured homes similarly to existing homes. We have found that there's a reason to tailor our engagements and look at them differently.

Prior to 1976, there was no code on manufactured homes. U.S. Department of Housing and Urban Development created some guidelines in the 1990s. Older homes reach a point where the repairs may not make sense. They remain in use despite their deteriorated state. We used county tax records to determine the rate of replacement but found that the homes are there and not going away.

We're working with manufactured home parks owned by nonprofits. St. Vincent DePaul, Casa of Oregon and Neighborworks Umpqua, which acquired a park in Roseburg. We use participant interviews and utility bill evaluations, and capture the costs of projects as we replace them.

We are creating a financial model with partners to create a viable measure. We're assembling a critical mass of interested parties and thinking about the funding cycles for repairs. We are working together to frontload the investments to make a more lasting impact. We need to develop safe and affordable lending products to serve this market, and we are lining up enough grants so the balance of costs can be affordable. The United States Department of Agriculture Rural Development 502 direct program may be able to adapt to a leased-land structure like this. We are working on a new class of personal property loan with Craft3. A working group was convened to determine the best way to tackle the problem of lending. We need to work together with communities to determine something that won't put people in a default position.

Lisa McGarity: What is owed by the homeowner after all the funding kicks in? At what interest rate? Mark Wyman: There aren't any projects yet, but current financing available through manufactured home dealerships now would start at 10 percent for 10 years, which isn't workable. The target is to keep payments around \$200 to \$250 per month. The balance of cost is about \$30,000. The product can go out to 30 years depending on borrower criteria. Multnomah County is working with us on the Oak Leaf community. Properties there are rental housing. The balance of cost will be about \$25,000 per unit. The process of determining eligibility is still in the works.

Mark continued his presentation. We look at the climate zone and age of unit, starting at a base level of \$20,000 per project. We're looking at ways to close the gap.

Holly Braun: It's nice to see traction and forward movement. BPA had a workshop on this recently. Mark Wyman: There's a savings value from the Regional Technical Forum allowing BPA to include home replacement in its measures. We need to determine how we will work with providers at each step in the process. We need to work with partners at different phases, and on the financing side. We need to jump in and create a blueprint for how to do this. We're working with BPA on the logistics they're putting in place. Everything we learn will be shared with others.

Holly Braun: Are you figuring out how to keep costs separated to avoid double counting of savings? How do you keep all of those value streams and costs distinct?

Mark Wyman: Costs will be segmented. There are a number of options to avoid double counting of savings, including segmentation of support for given measures. Energy Trust, OHCS and the OPUC have been in dialog, and have agreed on reporting and project segmentation protocols to delineate roles and attribution. This is a complex issue. We believe it is best resolved through a coordinated public investment model.

4. Draft 2018 Budget and 2018-2019 Action Plan Update

Peter West reviewed comments received and changes made to the Draft 2018 Budget and 2018-2019 Action Plan based on those comments and standard quality control checks and internal reviews. Budget comments are due today. Staff has so far heard supportive feedback on the budget and action plans. Concerns were raised about changes in gas savings and costs, and shifts in relative value of program costs for gas in New Homes.

Staff provided more information for Cascade Natural Gas on the differences between Avista and Cascade Natural Gas levelized costs. There are some differences because there is a different mix of programs. As we mature with Avista, they'll probably match other utilities. Costs seem low for Avista right now, since we inherited some projects with New Buildings where we didn't need to do studies. We could complete the projects without extra costs. We also were slow to get going in such programs with relatively higher costs, such as New Homes.

Changes were made to NEEA electric market transformation savings and allocations based on a comment made at the October Conservation Advisory Council meeting. Staff met with NEEA's planning staff to review the allocation methodology between PGE and Pacific Power. The draft budget used a modified allocation methodology that will be reverted back to the previous methodology. We need to look at it again in the future, but the shift we made was too soon. Consequently, in the final proposed budget, PGE savings and costs will go down and Pacific Power savings and costs will go up. Overall savings and costs will not change.

OPUC comments will be on the OPUC website over the next month; the OPUC staff memo is already online. The commission supported our budget and action plans at a public workshop this week. The commission and staff expressed concerns with staffing and administrative costs. We addressed these by lowering overall staffing costs modestly.

Efficiency expenditures are changing by less than 1 percent. We realized we can press harder on lighting, particularly in Pacific Power territory. We also may be able to get more out of smart thermostats. Both these things increased overall costs from the draft budget to the in-progress final proposed budget.

We realized that the New Homes forecast in Eastern Oregon wasn't as robust as we thought it should be and we lowered the goal. This primarily affects Cascade Natural Gas. The drop in PGE savings is the shift of NEEA back over to Pacific Power. NW Natural goes up slightly. The Cascade Natural Gas drop is primarily due to getting fewer new homes. Savings Within Reach and Nest thermostats, along with new homes, caused a slight bump up for Avista.

Overall, we reduced staffing costs by about \$375,000 in response to the OPUC staff comments. We decided to roll several projects out over time. Portals can be delayed, as can updates to calculators on our website. We also removed a Solar process evaluation and reduced the time for a New Buildings evaluation. We'll look at the measure development and approval processes, and work to gain significant efficiencies there. We also pulled back from

targeted demand-side management projects for the next two years. We will do the follow-on from Pacific Power in Albany, and continue the planning for NW Natural.

Charlie Grist: What does targeted demand-side management mean?

Peter West: We take what we're doing now and target it to a certain area in a short period to get fast results and alleviate capacity constraints.

Holly Braun: You mentioned staff related costs and staff cost reductions of \$375,000. Were the examples you gave reductions in staff costs?

Peter West: They were to reduce staffing and contractor costs. Our budget includes contractors hired to run these projects and staff time to hire and manage them. Our staffing cost increases, per the OPUC, will be capped at 10 percent in subsequent years. We are not changing savings or generation goals and expenditures.

Holly Braun: Are these staff or staffing related costs? Peter: These are staffing related costs.

Julia Harper: What are key drivers for the variation of levelized cost differences between gas utilities?

Peter West: We are still rolling out Avista programs, and the mix of efforts is different in different utilities. The customers and the opportunities aren't the same.

Charlie Grist: When we look at current and historical costs of savings on the electric side in the region, we see the upward cost pressure for the same reasons you mentioned. It used to be much higher on lighting and we drove it down. It was driven by technology. We may see it go back up and we should keep an eye on it.

Elaine Prause: Resource demands on staff are a concern. Does that mean the budget was designed so you have to say no to things, or is there some room as more demands surface? Peter West: We did say no to some things in response to staff comments and goals. We have to say it more to other things in 2018. Year-over-year growth in projects keeps increasing. Record new home and new building starts create a lot more demand from us for meeting market levels of activity. Elaine Prause: I understand it takes more delivery, people and time to get the same results. Are there other external demands on delivery?

Peter West: Overall, we are involved in more Integrated Resource Plans than before. Six IRPs are planned for 2018. We added a new utility this year in 2017, and the second year is past the startup phase. The Washington Utilities and Transportation Commission does things differently than the OPUC, so we have to work with two regulatory structures. We are still growing demand and launching new things to meet the markets, but we can't completely let go of older efforts yet. We've been involved in three or four OPUC dockets, and there have been external demands to do more. Schools are demanding more of us. These demands all require more staff time, and we will face more tradeoffs in 2018-19 to manage all the competing demands.

Charlie Grist: I don't recall your volume metrics. Delivery mechanisms are reasonable things to look at for change. Not all are valued in the same way, and it may be valuable to add this to reporting.

Hannah Cruz: We will continue refining the draft budget into a final proposed budget that will go online December 8. We value your input over the past four meetings on budget-related material. Next year, I want to reach out early in the summer to identify what information really resonates and what you're giving input on, and to ensure the process and time continues to be valuable to us and is valuable to you, also.

5. Update on Diversity, Equity and Inclusion Strategy

Debbie Menashe presented on Energy Trust's Diversity, Equity and Inclusion initiative. The draft 2018 budget includes specific diversity, equity and inclusion strategies and the first action plan dedicated to them. Debbie reviewed highlights of the action plan. The draft budget also proposes support for continued Energy Trust organizational activities that are focused on diversity, equity and

inclusion. Among those activities are continued outreach to community-based organizations. Outreach to community-based organizations has helped build relationships among Energy Trust staff and communities around our region. Internally, Energy Trust is also deploying A Diversity, Equity, and Inclusion Lens to its work. The lens is a form that each internal workgroup will consider when they make decisions, asking questions like how will this decision impact different communities? What kind of input do those communities have? What outreach will happen? Holly Braun: Will some of the information you get on the back end include qualitative information? Debbie Menashe: The goals are quantitative for the most part, but the work continues to evolve. We did an Intercultural Effectiveness Survey of staff last year to measure those improvements and developments, so there are ways in which we will measure qualitative progress too

Debbie continued her presentation. In addition to the activities mentioned, the board has also been examining diversity, equity and inclusion issues through revisions to its current equity policy. The OPUC included equity and service to all customers in Energy Trust's original goals, and the board adopted an equity policy early on. In reviewing the policy in 2017, staff worked with several experts to determine what other boards are doing in this area, and found little to work with. The board is working on an expanded policy, which is being reviewed. They are interested in continuous learning and review each year, which is more often than other board policies. They are interested in Conservation Advisory Council feedback.

Holly Braun: How do you recognize and reconcile your diversity, equity and inclusion goals with public purpose charge earmarked money?

Debbie Menashe: It doesn't deviate from our other obligations. We coordinate with OHCS on lowincome considerations and program coordination. We coordinate with Community Action Partnership of Oregon in the same way. Our programs need to be inclusive without deviating from other policies. Holly Braun: If money goes into serving a customer group that already has money earmarked for them, I want to better understand how you coordinate and possibly fill gaps in service and don't work cross purposes.

Debbie Menashe: We have a low-income working group internally to ensure we coordinate with utilities and OHCS.

Lisa McGarity: You mention building the workforce. What does that mean? Debbie Menashe: Demographics are changing in Oregon. We are looking at recruiting strategies, along with internship programs, for people of color and young women in IT that give us a more diverse pool of candidates.

Charlie Grist: Can you give us a flavor of the five questions in the lens? Debbie Menashe: Have you reached out to impacted communities? Have you considered the impact on these communities?

Kari Greer: There are carve-outs for schools and low-income customers in SB 1149. That doesn't exist in SB 838. Does SB 838 have a gate those customers can't get through? Are we limiting ourselves when we don't have to?

Debbie Menashe: Recognizing that SB 838 is paid by those groups and flows directly to Energy Trust instead of to schools and OHCS, we are looking at how SB 838 funds are used and go back to them.

Kari Greer: We would be supportive of that.

Mike Colgrove: I want to point out that low-income isn't all we're talking about with diversity. Not all communities of color are low-income. There are multiple dimensions and we're talking about all those dimensions.

Debbie Menashe: The changes to the board's equity policy are open for ongoing comment, but it may be recommended to go forward in December.

Holly Braun: When we attempt to be more inclusive and evolve our thinking, it's good that we have these questions to help bring about a shift in the organizational culture.

6. Public Comment

Don MacOdrum: I would like to add congratulations to Energy Trust for another good year.

There were no other public comments.

7. Meeting Adjournment

The meeting adjourned at 4:40 p.m. The next Conservation Advisory Council meeting is Wednesday, February 7, 2018.

Hannah Cruz: Thank you for the time you spend with us in these meetings and all of the reading that goes along with it. We appreciate your time, efforts and input.

Tab 9


Energy Trust of Oregon Glossary of Key Terms and Program Descriptions

Updated April 2017

Key terms

Allied technical assistance contractors: Allied technical assistance contractors provide technical analysis and studies to help industrial customers identify energy-efficiency upgrades.

Avoided cost: The amount of money that an electric utility would spend for the next increment of electric generation it would need to either produce or purchase if not for the reduction in demand due to energy-efficiency savings or the energy that a co-generator or small-power producer provides. Federal law establishes broad guidelines for determining how much a qualifying facility gets paid for power sold to the utility.

Benefit/cost ratio: Energy Trust ensures investment in cost-effective energy efficiency based on the Total Resource Cost Test benefit/cost ratio and the Utility Cost Test benefit/cost ratio. Together, the tests assess the value of the energy-efficiency investment compared to a utility supplying the same amount of energy, and determine whether energy efficiency is the best energy buy for a utility and for all utility customers.

Total Resource Cost Test: This is the main test that determines whether Energy Trust can offer an incentive for a project. Benefits include the value of energy savings to the ratepayers of the utility system over the expected life of the energy-efficiency resource (otherwise known as the avoided cost of energy), and in some cases benefits also include quantifiable non-energy benefits, such as water savings and operations and maintenance benefits. Costs include the total cost of the energy-efficiency resource, including Energy Trust incentives and the project cost paid by the participating customer.

Utility Cost Test: This test is used to indicate the incentive amount for a project. It helps Energy Trust determine whether providing an incentive is cost effective for the utility system. Benefits include the value of energy savings to the ratepayers of the utility system over the expected life of the energy-efficiency resource (otherwise known as the avoided cost of energy). Costs include the cost of the Energy Trust incentive.

Multnomah County Property Fit initiative (formerly Commercial Property Assessed Clean Energy): Started in Q3 2015, the pilot provides 100 percent of funding to commercial property owners that complete comprehensive energy-efficiency and renewable energy projects, with standard incentives from Energy Trust and long-term loans from the Portland Development Commission repaid through energy savings or electricity production.

Cost-effectiveness: The OPUC has a definition that refers to ORS 469.631 (4) stating that an energy resource, facility or conservation measure during its life cycle results in delivered power costs to the ultimate consumer no greater than the comparable incremental cost of the least-cost alternative new energy resource, facility or conservation measure. Cost comparison under this definition shall include but not be limited to: (a) cost escalations and future availability of fuels; (b) waste disposal and decommissioning cost; (c) transmission and distribution costs; (d) geographic, climatic and other differences in the state; and (e) environmental impact. ORS

757.612 (4) (SB 1149) exempts utilities from the requirements of ORS 469.631 to 469.645 when the public purpose charge is implemented.

By law, Oregon public purpose funds may be invested only in cost-effective energy-efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources, unless exempted by the OPUC.

Demand response: A load management strategy, it is the reduction in electricity consumption by end-use customers from their normal pattern of consumption during times of peak energy use, when wholesale electricity prices are high and/or when system reliability is jeopardized. Customers are often compensated for participating in demand response programs.

Energy Saver Kit: Customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas can order free Energy Saver Kits from Energy Trust's website, including energy-saving LEDs, showerheads and faucet aerators.

EPS[™]: Builders can receive cash incentives for new homes constructed to EPS energy performance requirements, indicating low energy consumption, utility costs and carbon footprint. The score helps homebuyers assess and compare the energy use and costs of similarly sized homes.

Irrigation modernization: A collaborative effort by Energy Trust and Farmers Conservation Alliance, irrigation modernization connects irrigation districts and farmers with tools to invest in modern irrigation infrastructure, saving water and energy, improving habitats for fish and generating clean energy through small-scale hydropower systems installed in pipes.

Levelized cost: The level of payment necessary each year to recover the total investment and interest payments (at a specified interest rate) over the life of a measure.

LivingWise kits: LivingWise kits and curriculum are delivered to sixth-grade students in Oregon schools. Energy Trust provides free LivingWise science curriculum to teachers, and offers energy-saving LEDs and showerheads for students to install in homes.

Market solutions: Tailored market solutions incentive packages help businesses make quick decisions and achieve deeper energy savings when constructing small restaurant, grocery, multifamily, office, school or retail buildings less than 70,000 square feet.

Market transformation: Lasting structural or behavioral change in the marketplace and/or changes to energy codes and equipment standards that increases the adoption of energy-efficient technologies and practices.

Megaproject: Large commercial or industrial projects receiving more than \$500,000 in Energy Trust incentives for energy-efficiency upgrades are considered megaprojects. These projects are reviewed and approved by Energy Trust's Board of Directors.

Midstream incentive: Midstream incentives are provided to distributors and to retailers, with savings passed onto customers. Downstream incentives are provided directly to customers.

Path to Net Zero: The Path to Net Zero offering provides increased design, technical assistance, construction, and measurement and reporting incentives to new commercial construction projects that aim to exceed energy code by 40 percent through a combination of energy-efficiency and renewable energy features.

Pay for Performance: The Pay for Performance offering for commercial customers offers incentives for capital and operations and maintenance improvements over a multiyear period to help achieve additional energy savings for more comprehensive projects.

Program Management Contractor (PMC): Company contracted with to deliver and implement a program or major program track. PMCs keeps costs low for utility customers, draw from existing expertise and skills in the market, and allow Energy Trust to remain flexible and nimble as the market changes. PMC contracts are competitively selected, reviewed by a committee with internal staff and external representatives, and approved by the board. Contracts are rebid on a regular basis.

Program Delivery Contractor (PDC): Company contracted with to implement a specific program track. PDCs keeps costs low for utility customers, draw from existing expertise and skills in the market, and allow Energy Trust to remain flexible and nimble as the market changes. PDC contracts are competitively selected, reviewed by a committee with internal staff and external representatives, and approved by the board. Contracts are rebid on a regular basis.

Project development assistance: Incentives and support for early-stage development of Other Renewables projects helps build a pipeline of future renewable energy projects.

Retrocommissioning: A systematic process for identifying less-than-optimal performance in commercial equipment, lighting and control systems and improving the energy efficiency of these existing systems.

Savings Within Reach: Owners of single-family or manufactured homes who meet moderate-income qualifications can receive enhanced Savings Within Reach incentives for qualifying projects.

Strategic Energy Management: Energy Trust helps industrial and commercial customers reduce energy use and save money through behavioral and low-cost operations and maintenance improvements.

Verifier: Trade ally verifiers provide technical guidance and inspection to home builders, ensuring that homes rated with EPS save energy through energy-efficient windows, HVAC, appliances and weatherization.

Program descriptions

Existing Buildings. The Existing Buildings program offers energy-efficient improvements for existing commercial buildings of all sizes. Incentives are available for custom projects, including capital upgrades and operations and maintenance improvements; standard upgrades; lighting upgrades; and energy management offerings with tools, training, technical assistance and Strategic Energy Management offerings to help customers reduce energy use through behavioral and operations improvements.

Existing Multifamily. The Existing Multifamily program serves existing multifamily buildings with two or more units, including market-rate housing, affordable housing, homeowners associations, individual unit owners, and assisted living and campus living facilities. The program offers standard incentives for water heaters, HVAC equipment, weatherization, appliances and foodservice equipment; free in-unit installation of LEDs, showerheads

and faucet aerators and distribution of advanced power strips; custom incentives for capital improvements; incentives for lighting upgrades in common areas; and incentives paid to distributors to reduce costs of efficient lighting and equipment for customers.

New Buildings. The New Buildings program supports design and construction of high-performance commercial buildings and major renovations of all sizes and building types. Staff engage with building owners, developers, business owners and design professionals to provide standard prescriptive incentives, market solutions incentive packages and custom incentives. Tailored market solutions incentive packages help businesses make quick decisions and achieve deeper energy savings when constructing small restaurant, grocery, multifamily, office, school or retail buildings less than 70,000 square feet.

Production Efficiency. The Production Efficiency program offers technical assistance and incentives to industrial and agricultural businesses, including incentives for custom projects, standard lighting and equipment upgrades delivered by trade allies, and an industrial Strategic Energy Management offering to help customers achieve persistent energy savings through behavioral and operations and maintenance improvements.

Existing Homes. The Existing Homes program serves single-family homeowners, renters and owners of existing manufactured homes with energy-saving recommendations, referrals to qualified trade ally contractors, cash incentives for heating and water heating equipment, smart thermostats, insulation and windows, and LEDs, showerheads and faucet aerators delivered through kits. Enhanced Savings Within Reach incentives are available for moderate-income residents.

New Homes. The New Homes program works with trade ally builders, subcontractors and verifiers to construct energy-efficient homes that exceed code through construction of EPS-rated homes and prescriptive incentives for individual equipment.

Products. The Products program offers cash incentives for residential ENERGY STAR qualified products, including lighting, clothes washers and showerheads. The program also provides energy-saving kits to food pantries to deliver to their clients, and distributes showerheads through water bureaus and districts. In addition, the program encourages the sale of energy-efficient new manufactured homes.

Solar Electric. The Solar program aims to create a vigorous and sustainable market for solar energy by offering cash incentives that lower above-market costs for small solar projects, educating consumers, creating and enforcing quality standards and ensuring a robust network of qualified trade ally contractors. Staff review incentive levels regularly and gradually reduce them to manage budget and respond to decreases in solar costs. The Solar program supports installation of standard solar systems on residential and commercial properties, and also large custom projects if funding is available.

Other Renewables. The Other Renewables program provides project development assistance and incentives that lower above-market costs for projects that generate renewable energy from hydropower, biopower, wind and geothermal resources. Project development assistance supports early-stage development and helps build a pipeline of future renewable energy installation projects. In 2016, staff focused on projects that provide a wide range of benefits, including biogas projects generating energy from anaerobic digestion of organic waste and hydropower projects at irrigation districts.

Northwest Energy Efficiency Alliance. NEEA is a nonprofit organization working to maximize energy efficiency to meet our future energy needs. Michael Colgrove, Energy Trust executive director, serves as a board member. NEEA is supported by and works in partnership with Bonneville Power Administration, Energy Trust and more than 100 Northwest utilities for the benefit of more than 12 million energy consumers. NEEA uses the market power of the region to accelerate innovation and adoption of energy-efficient products, services and practices. NEEA has delivered market transformation savings under contract to Energy Trust since 2002.