

Board Meeting Minutes – 99th Meeting

July 28, 2010

Board members present: Dan Davis, Jason Eisdorfer (arrived 3 pm), Dan Enloe, Roger Hamilton, Julie Hammond, Al Jubitz, Debbie Kitchin, John Klosterman (joining via teleconference), Bob Repine (ODOE special advisor), Caddy McKeown, Alan Meyer, Preston Michie (arrived 12:45 pm) and John Reynolds

Board members absent: Rick Applegate, John Savage (ex officio)

Staff attending: Debbie Blanchard, Kacia Brockman, Sarah Castor, Pete Catching, Amber Cole, Tara Crookshank, Kim Crossman, Phil Degens, Cheryle Easton, Sue Fletcher, Fred Gordon, Margie Harris, Susan Jamison, Betsy Kauffman, Oliver Kesting, Nancy Klass, Steve Lacey, Dave McClelland, Elaine Prause, Jessica Rose, Lizzie Rubado, Sue Meyer Sample, Sloan Schang, Brien Sipe, John Volkman, Ed Wales, Peter West

Others attending: Jim Abrahamson, Cascade Natural Gas; Phil Damiano, PECI; Robin Denney, Carol Dillin, PGE; Bill Edmonds, NW Natural; Claire Fulenwider, Ph.D., NEEA; Jerry Kalimanis, MIS Consulting Services, Inc.; Jan Schaeffer; Lauren Shapton, PGE;

Business Meeting

President John Reynolds called the meeting to order at 12:07 pm.

General Public Comments

There were none.

Consent Agenda

MOTION: Approve Consent Agenda. John Reynolds noted a correction to the May 5 board meeting notes on page 2 as noted in italics: The building is laid out so all work spaces are *within* 2.5 H (height of window) *of a daylight source.*

Dan Enloe noted a correction to the notes from the worksession, table on page 22, "wwd" should read "wind."

Moved by: Alan Meyer Seconded by: Debbie Kitchin

Vote: In favor: 10 Abstained: 0

Opposed: 0

May 5, 2010, meeting minutes adopted as part of the Consent Agenda

June 12, 2010, meeting minutes adopted as part of the Consent Agenda

June 11-12, 2010, strategic planning workshop minutes adopted as part of the Consent Agenda

Resolution 557, Amending the Funding Conservation in Schools policy adopted as part of the Consent Agenda

RESOLUTION 557

AMEND POLICY ON FUNDING ENERGY CONSERVATION IN SCHOOLS

WHEREAS:

- 1. SB 1149 requires that the first 10 percent of revenue from the charge be distributed to education service districts located in the service territory of the electric company that collected the funds. The Oregon Department of Energy (ODOE) administers these funds on behalf of the education service districts.
- 2. These funds must be used first to pay for energy audits, and then to weatherize and upgrade the energy efficiency of school facilities, to provide energy conservation education programs, to purchase electricity from environmentally-focused sources and to invest in renewable energy.
- 3. Energy Trust provides additional funding for energy conservation in schools where SB 1149 audits have been done, and the funds managed by ODOE are exhausted.
- 4. Currently, Energy Trust invests funds in electric and gas measures through the Existing and New Building Efficiency programs.

It is therefore RESOLVED:

1. The Board of Directors of the Energy Trust of Oregon, Inc., hereby amends the "Conservation Funding in Schools" policy to reflect that schools funding now includes gas and electric measures, and is administered through the Existing and New Building Efficiency programs, as shown in Attachment 1.

Moved by: Alan Meyer			Seconded by: Debbie Kitchin		
Vote:	In favor:	10	Abstained:	0	

Opposed:0

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 8, 2001	Adopted (R27)	November 28, 2001
Board	November 28, 2001	Reviewed/Revis ed (R58)	February 27, 2002
Board	February 27, 2002	Reviewed/Revis ed (R87)	February 2005
Board	October 6, 2004	Amended (R295)	October 2007
Board	April 6, 2005	Amended (R328) – see R331	April 2006
Board	May 4, 2005	Amended (R331)	June 2008
Board	February 14, 2007	Authorized funding to 2007 (R426)	June 2010

ATTACHMENT 1: Conservation Funding for Schools

Summary:

The Energy Trust needs to coordinate its funding and programs with the <u>Oregon Department of</u> <u>Energy (ODOE)</u> schools conservation program.

Purpose:

SB 1149 provides that <u>education service districts</u> <u>schools</u> get the first ten percent of the public purposes funding to implement <u>electric</u> energy efficiency audits and install cost effective energy saving measures in schools in the service territories of the utilities that collect the funds. <u>These</u> funds must be used first to pay for energy audits, and then to weatherize and upgrade the energy efficiency of school facilities, and other energy purposes. <u>The Board needs to decide</u> whether schools would also be eligible for funding from the Energy Trust. <u>This policy describes</u> how Energy Trust may complement this funding using other SB 1149 electric funds, and gas funds.

Utilities are currently providing assistance to audit and implement conservation savings in the schools. The utilities are asking the Trust for guidance on whether to continue to provide these services. Schools appear ready to implement audits and energy saving measures independent of the utilities.

Policy:

1. For 2005-2006, Energy Trust will make <u>electric and gas</u> funds available for SB 1149 schools as previously approved, and in future years will decide whether to approve additional funds in the annual budget processthrough its New and Existing Buildings programs, provided the proposed measures meet the relevant cost-effectiveness criteria.

- SB 1149 schools may not use Energy Trust funds and other SB 1149 school funds on may not be used for the same electric energy efficiency measure.
- 3. Each electric energy efficiency measure will be required to pass the applicable cost-effectiveness test for the Building Efficiency program or the New Building Efficiency program to receive an incentive.
- 4. Energy savings estimates, measures costs and other data identified in the school district audits will be accepted by the <u>Existing and New</u> Building Efficiency and New Building Efficiency programs.

Adopted on May 4, 2005, by Energy Trust of Oregon Inc., Board of Directors.

President's Report

John Reynolds read a letter of resignation from Preston Michie, effective tomorrow. Margie thanked Preston for his thoughtful participation and leadership. She presented a gift, an Energy Trust bowling shirt. Preston said he's working on the wind integration program at Bonneville. They're putting in a program to allow the wind projects to do this themselves, to find other resources in the region that can achieve the balance. It is one of the country's first programs to do this. He's also looking at expanding transmission between regions, to increase the efficiencies of wind power integration. He noted solar PV integration will become an issue in the future. Wave power will be helpful, as it flows west to east (other transmission flows east to west), is more steady than wind. John Reynolds acknowledged this expert information as representative of what the board will miss with Preston gone.

Energy Programs

Resolution 559, Increase Goal for New Building Program. Margie introduced this item, which increases the New Buildings gas goal with no increase in program management costs. Jessica Rose elaborated that we intend to more than double the 2010 therm goal to 733,675 therms with a 35 percent increase in the overall budget and no increase in the delivery budget. She explained the market forces behind the increased demand for gas equipment. Roger asked about unallocated carryover of NW Natural funds and asked if this growth is sustainable. Peter noted the action taps about a third of the carryover funds. He noted developers are speeding completion of buildings to get some revenue stream. He and Jessica doubt the increase will be sustained although the market keeps surprising them. Dan Enloe asked if there was a particular building type; Jessica said no. Debbie Kitchin suggested characterizing the availability of additional carryover funds in terms of month burn rate, which would help her understand how much longer this higher level could be sustained.

RESOLUTION #559

INCREASE GOAL FOR NEW BUILDING PROGRAM

- 1. WHEREAS: The program management contract for the New Buildings Program, approved by the board September 3, 2008, includes the following 2010 saving goals for NW Natural gas: level one goal of 287,333 therms, level 2 goal of 338,039 therms, and level 3 goal of 371,843 therms (each goal level is associated with different levels of performance compensation).
- 2. In its outreach work, PECI, the Program Management Contractor for the New Buildings Program, has identified more savings in NW Natural territory than anticipated.
- 3. The board policy on Contract Execution and Oversight provides that major changes in contract terms, including more than 20% change in energy saved or produced, requires board approval. The additional savings identified by PECI would involve more than 20% increase in gas goals of the PECI program management contract.
- 4. The additional savings will require Energy Trust to expend an additional \$536,128 in incentives. PECI's management and other charges under the contract would not increase. There are sufficient unallocated NWN carryover funds from the 2009 budget to pay these incentives.

It is therefore RESOLVED:

The Executive Director is authorized to amend the New Buildings program management contract to increase the 2010 savings gas goals to 623,624 therms (from 287,333), the level 2 goal to 733,675 therms (from 338,039), and level three goal to 807,043 therms (from 371,843).

Moved by: Alan Meyer			Seconded by: Caddy McKeown	
Vote:	In favor:	10	Abstained:	0

Opposed:0

Adopted on July 28, 2010, by Energy Trust Board of Directors.

Impact of feed-in tariff on Energy Trust solar program. Kacia Brockman presented. She noted the 2009 Oregon legislature required PGE, Pacific Power and Idaho Power to offer production-based incentives for solar electric systems as a five-year pilot program. The power companies buy solar power generated on rooftops over 15 years at a rate of 55 to 65 cents per kilowatt hour. She noted there are different reasons why customers would choose this approach. Customers with loans may find the production-based payment helpful in offsetting loan payments. Customers needing lower up front costs may benefit more from Energy Trust incentives. She noted the first capacity allocation July 1 was fully subscribed in 15 minutes.

Alan asked how we ensure customers are not double dipping—getting both the productionbased payment and Energy Trust incentives. Kacia said utilities send us project addresses. John Reynolds asked Bob Repine how RETC changes factor into this. Bob noted the new, temporary RETC rules. He said the timing caught everyone off guard. It said if you are under contract by July 14 you have until July 31 to tap the previous rates. New rules require subtracting the value of Energy Trust incentives from the amount used to calculate RETC. He said ODOE is writing an amendment to the rules, coming out Friday, granting a longer period—probably through the end of the year—for contract signing and installation for projects underway. They will then enter into permanent rule-making, with public meetings and input.

Kacia showed graphs comparing Energy Trust and production tariff paybacks. Commercial projects can pay back in as little as five years, while the production tariff takes longer to achieve payback. She showed comparisons of residential payback before and after the change to RETC.

Margie noted Kacia participated in the OPUC rulemaking for the feed-in tariff. She noted that she and Bob met earlier this week and have a shared commitment to collaborating on future rule-making, temporary and permanent. Al Jubitz asked what happens upon sale of a property. Kacia said the new owner can pick up the remaining payments on the 15-year contract. Alternatively, the original owner can reinstall the system on a new property and continue to receive payments, so long as the system stays within the same utility territory.

John Reynolds said his friends in other states marvel that we have solar in Oregon, given the cloud cover and low utility rates.

Dan suggested using "online negotiation events" to achieve a better match between price and demand. Kacia said for larger projects the rules set a competitive process. The utilities are expected to go back to OPUC to file lower rates for the next offering in September.

Bob Repine observed the larger-scale Solarize efforts have created the demand for the feed-in tariff. He noted the importance of getting homebuilders to incorporate solar and efficiency measures.

Sector Strategic Plans

Draft Strategic Plans for Business, Homes and Renewable Energy Sectors. Margie introduced this topic, and recognized Carol Dillin and Jim Abrahamson, utility representatives. Bill Edmonds joined later. She noted their presence is an outgrowth of the June strategic planning worksession, at which utilities asked to be included earlier in the strategic planning process.

Peter West noted the plans reflect analysis of six topics: what is working/not working within the current program; who are target customers and markets for each area of focus; key opportunities for savings by customer segment, and how to motivate customers to take action; other cross-program/cross-selling opportunities; primary risks and sign posts to monitor; how each focus area supports enterprise-wide goals. He noted the challenging economy factors in each of the plans.

Business Sector plan. Oliver Kesting presented the Business Sector strategic plan. He noted the 2010 Existing Buildings budget is \$26.2 million, 60 percent slated for incentives. New

Buildings budget is \$13.3 million, with about 45 percent for incentives. The multifamily budget, embedded in each program, is \$3 million.

He said historically about 50 percent of Existing Building savings come from lighting. Heating equipment accounts for 66 percent of gas savings. New Buildings has achieved 60 percent market penetration of floor space. Seventy percent of savings comes from buildings over 70,000 square feet. Fifty percent of multifamily savings come from common area lighting and windows.

He reviewed two tables showing savings over time.

He noted high level results of a SWOT analysis:

Strengths: strong PMC, PDC, utility relationships; ability to change quickly in a quickly changing marketplace; strong trade ally network.

Weaknesses: current delivery model (one-year goals) can lead to shorter term thinking as opposed to long-term planning. There is not much time for PMCs to think 3-4 years out. Processes could be streamlined and simplified. Data management systems don't support optimal customer service, for instance systems could be improved to tell us that a measure's life expectancy is ending so the customer can be contacted for the next project

Opportunities: code upgrades leading to market transformation saving; develop longer-term, deeper customer relations.

Threats: lack of capital in current economy; high vacancy rates dissuade investment in new buildings; lack of compliance with new codes and standards will create a missed opportunity.

He reviewed eight Energy Trust organizational activities from the 2009 strategic plan. The Business Sector plan supports them all. Comparing these with the SWOT analysis led to three areas of focus: ensure code-based market transformation savings are realized in new construction; work with large customers to develop long term portfolio plans that enable deeper savings; provide measures and services that allow smaller customers to invest in energy efficiency and renewable projects that meet their cost constraints.

He reviewed measure opportunities, including commercial rooftop retrofit; demand control ventilation, LED outdoor lighting, lighting design layouts, operational changes; refrigeration heat recovery for water and space heating, ozone-treated laundry, desktop computer management.

He noted 65 percent of existing building electric potential is in office space and retail, while over 50 percent of gas potential is in restaurants, retail and small office. New buildings opportunities are in schools, government, low margin retail chains, groceries and foods. Seventy five percent of multifamily properties were built before 1977. Only 16 percent have participated in Energy Trust programs.

He reviewed key challenges, including the state of the economy, new codes and standards, and customers' sometimes limited understanding of the value of energy efficiency. He listed key strategies, including providing measures and services with low or no capital costs, coordinating with NEEA to ensure compliance with new codes, and developing long-term customer relations and communication with customers in ways that meet their needs—not limited to Energy Trust offerings, but focused on how our offerings support their plans.

Debbie asked what kinds of financing options we are looking at. Oliver said ideas about financing are in discussion, including EEAST, ESCOs, other. Debbie asked if Energy Trust will be providing financing or pointing customers to other sources. Peter said the question is how far you can take Clean Energy Works—including on-bill and energy service charge options. To get projects to move, you've got to include financing.

Alan asked how proactive we are. Do we review building permits pulled? Oliver said we work with NEEA on code training. We help contractors learn how to meet new requirements. We are considering how to better integrate with building departments to identify new projects and opportunities. We are considering incentives for building departments to bring us projects.

John Reynolds asked what is meant by the reference to "Kaizen" event. Oliver said this is a Japanese term dealing with deep energy retrofits. Kim Crossman said these events are for new manufacturing. They develop cross-functional teams that go around a plant looking for efficiency opportunities.

Debbie asked about approaches to lighting design layout. She noted that as a building's use changes, often lighting upgrades are not considered—for example, when a large space is cut up into cubicles. Oliver said that's what the lighting design layouts are intended to do—to help contractors serve small project needs without hiring an architect.

Julie asked the utility representatives whether the presentation was useful. Margie noted the references throughout the plans to utility roles, such as long-term customer relationships. Jim said it would be helpful to have a copy of the presentation; Margie said this will be provided. Jim likes the direction of involving the utilities earlier. He will need time to go through the document. Carol said it would be helpful to back up the involvement to an even earlier point, before you develop the activities—discuss the challenges and opportunities before reaching for solutions. This would put us in an interactive mode, staff to staff. Peter said these are drafts; there is time for collaboration now. Bill seconded the idea. He appreciates seeing the process.

John Klosterman left at 1:30 pm during Oliver's presentation

Residential Sector plan. Diane Ferington presented the Residential Sector strategic plan. She noted the need for different strategies for new, existing and products for each of the many entities with which these programs interact, including manufacturers, distributors, retailers, trade allies, homeowners, home buyers, market transformation, communities and solar.

She reviewed areas of focus: achieve savings targets cost effectively, gain deep understanding of customers, grow the effective delivery network, educate customers to drive behavior change (such as Opower), work effectively with key constituents (including communities), streamline processes.

She showed savings historically and forward over time for the residential sector. The majority of electric savings come from NEEA market transformation efforts with the products program dominating the proportion of electric acquisition. Historic gas savings are dominated by the existing home program with the Trade Ally network being largely responsible. Forward gas savings will reflect new construction codes based on gas market transformation savings with furnace transformation savings contributing in 2013 and 2014 after the 2012 furnace code change. After discussion, Diane agreed to update the slide in the hard copy of the strategic plan with the one in her presentation that was not in the board packet copy. She reviewed market potential savings noting the existence of 78 aMW of potential future savings over 20 years from

emerging technologies, on top of 53 aMW of known resource potential, much of which is likely to fall under the services of NEEA. Fred Gordon explained the 78 aMW of emerging technologies are not included in the current IRP plans, although we are quite sure that some of it will prove out, such as heat pump water heaters, which is in NEEA's strategic plan to work with manufacturers to bring a NW applicable model to our market.

Al Jubitz asked about the potential for solar water heating in Oregon. Peter said climate is an issue—they are more effective the warmer the climate. Here we continue to struggle against the massive ramp up in the eighties of systems that were not well designed and have failed, leading the industry to collapse. Installation costs have risen. Only eight or so installers remain. This is a national market that is stuck. California is about to infuse a lot of funds into solar thermal. New Jersey has done this. He noted that Energy Trust support for solar thermal is constrained by the PUC interpretation of the technology being subject to energy efficiency cost effectiveness standards, which are not above market cost oriented but rather utility system and societal cost based.

Bill Edmonds noted NW Natural is asking the same questions: if solar thermal is cheaper and more cost effective than solar electric, should it receive more support. They are considering whether incentives should be increased or even whether NW Natural should own the systems. Bill said in this climate we can get about 60 percent of our hot water needs from solar thermal. He noted we should have integrated systems, thermal and electric.

Diane noted the plan aims to increase the market share for efficient new manufactured homes that are Eco-rated, Earth Advantage or ENERGY STAR models, noting that Oregon is the leading state in the nation for efficient manufactured homes. With respect to products, the plan aims to increase adoption of refrigerator recycling from 1.3 percent to 3 percent. They expect to evolve efficiency tiers on incented products. They want to simplify and strengthen retailer relationships, adopt new products such as cold-water laundry detergent as an efficiency measure, and improve ease of applying for incentives. For the new homes program, the intent is to increase market share through the next five years leading to code changes and target program efforts to address barriers to building efficient new homes with lower EPS scores. We want to increase awareness of the energy performance score (and roll it out for existing homes). We will continue to work with mortgage brokers, insurance organizations, appraisers and realtors to educate them on the EPS and leverage these market actors to expand EPS awareness and understanding of the value than an EPS can play in home transactions. For existing homes, we want to diversify program offerings to meet customer needs, shorten the time between assessment and action, better understand barriers to adoption, refine program offering for each customer segment, provide geographically diverse service, maximize and support regional community efforts, and foster collaborative stakeholder relationships to increase market penetration of energy efficiency and renewable technologies.

John Reynolds asked for reactions from the utility representatives. Bill Edmonds would like to see more on gas: for instance, emerging technologies are shown for electric but not for gas. He thinks the challenges are well outlined. The behavioral piece is getting attention at NW Natural as well. We're interested to know how customers react to the Opower letter, and whether it leads to durable savings. Carol Dillin is interested in solar integration, the feed in tariff and changes to RETC. Peter said we think the feed in tariff will lead to more residential customers in the longer term. He doesn't know how much of a drop off will result from changes to RETC. Carol wondered if Diane considered behavior-focused technologies. Diane said we are investing in Opower currently as the behaviroal approach to test and we are also looking at Energy Savvy and other on-line systems to assist a customer is deciding what actions to take and aid in better

triaging a customer's needs when they come to the program. Jim Abrahamson echoed Bill's comments on Opower. Cascade is concerned about how Opower will work in a rural setting. He noted on page 2, the table for gas does not break out new, existing homes and NEEA. Diane said there are no therm market transformation savings until 2009 then when those occur there is a strong ramping of gas savings which is dominated by gas transformation savings much like the electric transformation savings associated with CFLs. Jim noted the issue of lead abatement requirements from EPA, which add costs and affect cost effectiveness. Diane said that the program is aware of this issue that the new lead standards may have on window cost effectiveness screening, adding that some contractors have reported the increased cost to be as much as \$3/sq. ft installed for homes that need to comply with EPA's lead abatement requirements.

Renewable Energy strategic plan. Elaine Prause presented. She noted our four technologies: biopower produces more generation but there are more solar projects. Other technologies include hydro, wind and geothermal. We face challenges finding viable projects and champions for them. The five-year estimate for biopower is 7.5-10 aMW, 5-10 aMW from hydro and 2-8 aMW from geothermal. Biopower comes from wastewater treatment, dairies, municipal solid waste, food processing, forest products. Hydro opportunities are from irrigation districts, municipalities, residential/ranch. Geothermal opportunities are in south, central and eastern Oregon communities and landowners; key is to identify viable existing wells. Over five years the solar opportunity is 2-4 aMW; challenge is growing demand, ensuring quality, promoting with energy efficiency. Wind opportunity is 4.7-7.5 aMW, targeting agriculture. Across all the technologies, we intend to expand support for grant writing, site assessments, technical assistance.

Dan asked about collaboration with forest products organizations. Peter said thinning is going on. Roger noted the impact of transportation on net carbon reduction from these projects.

Julie asked if we have a method for tracking grants that don't come through Energy Trust assistance, such as several she has forwarded recently. Peter said we track those. He noted Energy Trust helped engineer 41 applications to USDA for small scale renewables and got 39 of these.

Elaine reviewed forecast generation through 2016. Recent changes to BETC are expected to bring 28 aMW potential down to 18 aMW.

She reviewed sectorwide challenges. Long term, the Energy Trust budget cannot sustainably cover large increases to above market costs. She plans to present two budgets this fall showing different ways to address this. Another challenge: more demand in rural areas, leading to imbalance in spending Pacific Power to PGE. Current policy limits investment in one technology to 50 percent of overall renewables budget; this may need to be revisited.

She listed new policies affecting renewables. Renewable energy certificates did not exist when we started. The solar production-based incentive is new. We need to stay engaged in understanding customer and ratepayer perspectives.

She reviewed focus areas. One is to support a range of resources, continuing with the current portfolio of programs, while shifting resources to meet opportunities. Another focus is to go further upstream, developing early stage markets and expanding development services. We'd like to track these by adding "soft" goals such as leveraging other funds, assisting with regulatory barriers and the like. The third focus area is to expand market opportunities, finding

new opportunities within existing technologies and markets—such as irrigation districts, existing geothermal wells. The last area is optimizing limited funds. The budget is \$14 million per year and is expected to be steady going forward. We will leverage other resources where possible, teaming with other organizations, looking for new ways to disburse our funds where most effective.

Bill reminded us that renewables still are defined by 1149 as electrons. But within five years he believes NW Natural will be cleaning up biogas and putting it into pipes. This raises questions about how Energy Trust will engage with this renewable fuel. We need to alter our way of thinking about what is a renewable: renewable "energy" not "power." He thinks this future belongs in the strategic plan, albeit without specifics.

Preston noted the cost efficiency of oversizing substations now to allow cheaper accommodation of additional wind later. Alan thinks we need to be creative and use our funds to leverage other funds. Debbie supports the idea of measuring soft goals. She wonders if there is a way to decrease above market costs to the point a technology becomes cost effective. Peter noted a community wind project we had worked with used our promise of \$1 million to line up their financing and then decided to sell RECs rather than accept our incentives. Debbie thinks we should include such leverage among our soft goals. Peter said another example is Bigelow Canyon first phase, when the transmission line was overbuilt and allowed PGE to expand the project later without Energy Trust funds.

Bob Repine commented on the issue of the biopower supply chain, and the impact of limiting supply to five years while loans are requested for 15 years. He said the legislature gave ODOE the biopower credit program. They have redesigned the program to provide credits at only one point in the chain, rather than multiple points. He noted there have been 33 applicants for renewable "tier two" credits; ODOE has capacity to serve 11 of these. He will seek comment from Energy Trust on the requests so he can understand which have received a technical support from Energy Trust.

Break

The board took a 10 minute break at 3:05.

Bob Repine left.

NEEA Annual Update

Claire Fulenwider, Ph.D., Executive Director, NEEA, presented. She started with a cartoon on high-definition TVs. She noted 13 contracts have been signed, and one is pending, providing \$192-196 million commitment over five years.

NEEA strategic plan goals are to increase market adoption, help NW utilities and other energy efficiency organizations achieve their goals, building regional market capability, facilitate emerging technologies and solutions, support the region's efforts to promote energy efficiency, facilitate regional energy efficiency planning and implementation.

She reviewed 2005-2009 savings, focusing on the decline in CFL sales from \$25 million in 2008 to \$16 million in 2009. Factors involved include promotions and sales offered in 2008, which may have resulted in consumers stocking the product, and RTF reducing the CFL measure life to 5 years. The savings over this period exceeded the business plan goal of 75 aMW by 6 percent, even after true up and accounting for the CFL changes.

She showed the budget allocation for 2010-2014. Residential and commercial work each take 22 percent of the budget, followed by 17 percent for industrial, 13 percent for planning and operations, 10 percent for emerging technologies, 7 percent for partner services and community, 5 percent for evaluation and market research, and 4 percent for codes and standards. She noted Energy Trust is NEEA's second largest funder, providing \$39.4 million over 2010-2014.

She noted market transformation values delivered to Oregon. The regional market share of NW ENERGY STAR Homes grew to 12 percent in 2009 despite the economy. Legacy Health realized a savings of 1.6 aMW and \$1.3 million annually. Four food processors and one paper mill saved 1.4 aMW in 2009. Energy Trust, NEEA and others are planning a fall workshop and 2011 Industrial Energy Efficiency Summit. NEEA programs have trained 1,800 design and construction professionals over the past 12 months.

She reflected on the new commercial code effective this month. NEEA was instrumental in developing and presenting the commercial curriculum with Oregon Building Codes Division. They participated in public processes for a more stringent residential code. NEEA's role in federal standards is increasing, as USDOE is under court order to implement over 80 federal standards (appliances and equipment) within the next 18 months.

She reviewed NEEA's major initiatives, including residential ductless heat pumps, NW ENERGY STAR Homes, consumer electronics, heat pump water heaters, "Top Ten" most efficient products in a set of categories (a concept borrowed from Europe and showing remarkable results in China), commercial redesign with business electronics, industrial initiatives. She noted none of these will be as strong as CFLs.

She reviewed emerging technologies, noting the Regional Emerging Technologies Group has formed to find, develop and commercialize opportunities. Research or pilots planned in 2010 include green pumps. These are rewinds of existing pumps of high horsepower to improve efficiency, saving consumers tens of thousands of dollars over purchase of new pumps. The rewinds are sophisticated to do; NEEA is involved in training. Other emerging technologies include agriculture sector opportunities, high performance windows, cold climate ductless heat pumps, heat pump water heater Northern Climate spec and network outdoor lighting controls.

John Reynolds asked about LED lighting. Claire said that technology is further along in development so is not listed under emerging technologies.

Claire said four funders, including Energy Trust, Avista, Puget Sound and Northwestern, have provided funds supporting a prospectus and pilots to test market transformation in dual-fuel markets (electric and gas). She noted NEEA received a small ARRA grant to provide technical support to Energy Efficiency Community Block Grants and State Energy Program grantees. She reviewed regional collaboration efforts, including developing a regional coordination plan for high-impact initiatives (such as LED lighting). NEEA also is doing secondary research on behavior change initiatives.

NEEA has a goal of achieving 100 aMW through net market effects, and 200 aMW in total regional savings over five years. Of this, Energy Trust's share is 20 and 40 aMW, respectively.

She showed a diagram of incremental savings from prior investments, with 112 aMW from these investments in 2009 alone.

She explained challenges, including the higher cost of savings, closing the CFL gap, electronics that elude standards, and increased regulatory focus on near-term savings. Jason asked which regulatory agencies do this; Claire said Montana and Idaho utility commissions do this.

Al asked about Energy Trust's share of the NEEA budget. Margie explained her role on the NEEA board and the consideration of NEEA funding in the annual budget. Al asked if savings from NEEA are shrinking. Margie said this remains to be seen, in the post CFL world. CFLs accounted for a third of NEEA's savings and were cheap savings, 1 cent per kwh. Debbie said she believes we are much more effective in market transformation by banding together. In the long term this is one of our most successful strategies.

Operations

Resolution 558, Authorize a contract with Epicor. Margie introduced this topic. She noted the steering committee yesterday received a great deal of new information that caused concern. Since it arrived the day before the board meeting, she proposes to move forward with the presentation and after discussion the board can decide whether to act on the resolution today or carry it over to September.

She said she has full confidence in the process that led to the recommended decision. There is a steering committee, which included outside experts along with Dan Enloe and Al Jubitz. She listed staff members of the selection committee and introduced Robin Denney, the contract project manager. She said she has confidence in the Epicor solution. It integrates well with our existing IT platform and boasts a lot of flexibility for us. They were one of the lowest cost solutions.

Margie noted the two-year cost for the project is \$3.7 million, of which \$1.57 is for Epicor.

Debbie Blanchard presented. She described the process of review. Four solutions teams each presented on given scenarios for two days, total eight days. Subsequently, two teams were selected as finalists. She reviewed the merits of Epicor/MIS solution, which was the top choice. Epicor spent a week in a "deep dive" session working with Energy Trust staff on specific assignments. This exercise resulted in their teams and ours gaining experience working together. All concluded Epicor/MIS is a very good fit for Energy Trust.

Epicor will replace all three major Energy Trust IT systems: FastTrack, Goldmine and Great Plains. They project a 12-month implementation timeline.

She reviewed how we will ensure success over the course of the project. We will have rigorous project management, issue management and change management. We have a framework in place to help manage the project, having identified and prioritized our needs. We plan to do rigorous real-world testing. We will do a monthly status report with a red/yellow/green indicator,

to be reviewed by the steering committee and Energy Trust management team. We will provide updates quarterly.

She reviewed project costs. Budgeted costs, developed before the scope was known, was \$1.6 million for software costs. We are projecting \$1.565 million contract cap with Eipcor. For associated costs and services components, we budgeted \$2.8 million but now estimate \$3.8 million. The 10-year life cycle costs, which include additional costs for software license, infrastructure upgrades every 3 years and 2 software upgrades, total \$5.7 million.

Preston asked what the cost is of not doing this. Steve answered that the cost of upgrading our current systems is estimated at \$1.9 million. Alan asked if we anticipate OPUC concern. Margie said she has heard nothing from them indicating concern, and brought this up most recently at the presentation on first quarter 2010 results. Dan asked if there are lost opportunity costs of not taking this step. Steve said we would lose the capacity to achieve results of the sector strategic plans, unless we add staff.

Julie asked what things we would not get with this solution. Debbie said the vendor's project manager must be an Epicor project manager to ensure that any issues that may occur get escalated appropriately. She noted that during day 2 of its two-day presentation, Epicor demonstrated it could quickly turn around changes in its solution to meet Energy Trust needs. Debbie noted another concern had been that MIS, the implementation contractor, specializes in Epicor's financial product. We will contract with Epicor for implementation of the other products and use MIS for the financial product.

Sue Meyer Sample said she initiated a call with the implementation contractor for the SAP solution after learning they had contacted several board members, with "concerns about the RFP process". They were convinced we were selecting the wrong product, and that SAP was the superior product because they had a solution that could be used "out of the box" and did not require development, like the other solutions did. Sue said she took their concerns to the steering committee, which did not change its decision. In its presentation, SAP did not demonstrate how its products would meet Energy Trust's requirements and received the lowest ranking of the four vendors considered.

Preston asked if the contract should have performance requirements that provide for payment upon delivery of products, not during development.

Jason asked if price were no object, who would have been selected? Steve said consensus was Epicor on all counts, regardless of cost.

Sue said SAP represented that their utility references were favorable. In checking utility references, several described significant challenges with their SAP implementations. Debbie said we have contacted 5 of Epicor's 6 references. They were positive. We really want to talk with the sixth reference, who has implemented Epicor 9. Another reference implemented Epicor 9 in 4 weeks!

Margie addressed timing. The sooner we get started, the better off we are. We would like to move forward into the negotiation stage, working with a cap authorized by the board. If we wait until September 1, we will lose 3-4 weeks. She would find it worthwhile to wait if the board has questions.

Julie is concerned about the OPUC and the sixth reference check. She'd suggest going forward but if something comes up bring it back. Alan would want the OPUC to be aware of the notoriety of the process. Roger and Preston support going forward conditionally in this manner.

Dan suggested offering a resolution to proceed with negotiations without naming Epicor. He would like competition between integrators and suggests a "deep dive" with the implementers from the other finalist team. Preston supports this approach generally.

Al is concerned. Yesterday at the steering committee meeting both he and Dan decided they want a little more time. Al wants to talk to Gartner about how to hold Epicor accountable. He doesn't think we should put a price on the resolution until we know more. He suggests a special board meeting for the board to hear from the committee.

Steve said we expect to have Gartner provide consultation services as part of the negotiation process.

Alan Meyer left at 5:15

Jason is not sure he's in agreement with taking the specifics out of the resolution. The cat's out of the bag; this is a public meeting and we've said whom we want. It's Margie's responsibility to come back to us if she can't negotiate a contract with favorable terms. We ought to include in the resolution language about the expected payback.

The board discussed having Margie address the OPUC's sentiments, calling to their attention the SAP the letter. A question was asked regarding the staff backfill assumptions; are these roles permanent additions? The staff backfill roles would be filled by temporary contractors for the duration of the implementation. She should address the return on investment/payback calculation. She should engage Gartner, check additional references (more if we can get them on Epicor 9). Dan wants Epicor to offer other, lower cost implementation providers that they have used.

Dan would like the board to adopt a resolution that states Margie will negotiate a contract and address the additional concerns noted by the board today.

Dan Davis moved and Preston seconded a motion to allow Margie to negotiate a contract for acquisition of software. Steve provided language for the motion:

RESOLUTION #558

AUTHORIZE NEGOTIATING CONTRACT FOR EPICOR SOFTWARE SOLUTION

It is resolved that the board of directors of Energy Trust of Oregon authorize the executive director to negotiate and sign a contract to pay up to \$1.57 million to purchase and implement the Epicor 9 software solution.

Vote: In favor: 7 Abstained: 0

Opposed: 3

Debbie Kitchin opposed the action because she thinks the abbreviated version without Whereas clauses is inadequate to reflect concerns outlined by AI. Jason concurs with Debbie. Al Jubitz opposed the action because he does not think the motion is necessary for further due diligence to be carried out and that going straight to contract is getting the cart before the horse.

Adopted on July 28, 2010, by Energy Trust Board of Directors.

Committee Reports

Committee reports were deferred to the September meeting.

Staff Report

Website overview presentation was deferred to the September meeting.

Highlights. Margie Harris will email these to the board.

Adjourn

The meeting adjourned at 5:30 pm.

Next meeting. The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, September 1, 2010, 12:00 noon at the Energy Trust of Oregon, Inc., 851 SW Sixth Avenue, 12th Floor, Portland, Oregon

Debbie Kitchin, Secretary