

Approved Board Meeting Minutes – 78th Meeting

November 14, 2007

Board members present: Rick Applegate, Jason Eisdorfer, Tom Foley, Julie Hammond, Al Jubitz, Debbie Kitchin, Vickie Liskey, Alan Meyer and John Reynolds

Board members absent: John Klosterman, Caddy McKeown, Preston Michie, Bill Nesmith, John Savage

Staff attending: Pete Catching, Phil Degens, Fred Gordon, Margie Harris, Nancy Klass, Steve Lacey, Spencer Moersfelder, Brooke Nelson, Elaine Prause, Linda Rudawitz, Sue Meyer Sample, Jan Schaeffer, Adam Serchuk, Greg Stiles, John Volkman, Peter West

Others attending: Jeremy Anderson, WISE; Alecia Dodd, CSG; Joe Esmonde, IBEW #48; Donald Hammerstrom, Pacific Northwest National Laboratory; Don Jones Jr., Pacific Power; Aaron Wines, Lockheed Martin

Business Meeting

President Tom Foley called the meeting to order at 12:10 pm.

October 3, 2007, meeting minutes.

MOTION: Approve minutes from the August 8, 2007, meeting. Tom Foley expressed concern that item #6 in the Contract Execution and Oversight policy resolution adopted by the board during this October 2007 meeting is unclear as to the executive director's authority to sign personnel contracts and agreements over \$500,000 in value. He asked John Volkman to review this language and, if necessary, propose rewording to the policy committee. In addition, Tom offered a correction to the last sentence on page 4 to state that, in the Portland area, 1 watt of solar produces 1,000 watt-hours. On page 14, first sentence, he noted that "business" should be changed to "building." On page 15, third sentence under Public Comments, Tom suggested removing "either." Alan Meyer noted his last name had an unnecessary "s" at the end in the record of board minutes approval. Lori Koho asked to amend her comments on page 9 about slow spending of gas carryover; Jan proposed removing the third sentence on that page and adding "quickly enough" to the end of the second sentence.

Moved by: Alan Meyer Seconded by: John Reynolds

Vote: In favor: 8 Abstained: 0

Opposed: 0

Adopted on November 14, 2007, by Energy Trust Board of Directors.

Don Hammerstrom, Pacific Northwest National Laboratory, USDOE

Grid Wise Program presentation. Don Hammerstrom explained that "Grid Wise" refers to applying intelligence from the late 20th century to the power grid. The technology at substations is from midcentury or earlier. Using "bits" (computer intelligence) could take account of diurnal variability and thereby reduce load losses up to 30%. He described a year-long demonstration project in the Olympic Peninsula. From this experience he believes people would pay for home energy monitors that tie into power management systems. A separate aspect of the experiment had to do with a grid-friendly appliance controller that can turn off appliance load (dryer and water heater heating elements, for instance) during a peak use period. He contends that this technology can manage loads without resulting in discomfort to users.

Board members asked several questions. Vickie Liskey asked when Don expects this technology to hit the marketplace; he responded that, realistically, it could take seven years. He noted Energy Trust could influence this. Tom Foley noted if new appliance standards were required to include chips, their appearance in the marketplace would correlate with turnover of appliances. John Reynolds noted the opportunity to turn down heating elements, rather than turning them off. Don said the industry is responsive to designing appliances to turn down just enough to meet the demand.

Margie noted she hadn't previously heard about retrofitting appliances with demand-response mechanisms. Don said this is costly, especially compared to installing the chip during manufacturing.

Margie noted Don was recommended to us by Preston Michie.

Al Jubitz asked whether Energy Trust has a role in demand response. Tom said we do if the measure saves energy, but not as a grid improvement.

Debbie Kitchin arrived at 12:25 pm during Don Hammerstrom's presentation. Rick Applegate left the meeting at 12:50 pm

General Public Comments

Joe Esmonde from IBEW noted he just returned from the Chicago GreenBuild conference, where he was a guest of the City of Portland during the time they unveiled their new proposal for new and retrofit building standards above code. He thought he was the only union person out of the 22,000 in attendance. He re-iterated his pledge to assemble groups of contractors to meet with Energy Trust to share information and assist in making introductions to building owners and others.

President's Report

Tom Foley noted he joined Margie and staff in presenting the 2008 draft budget to the PGE officers. He urged them to work with Energy Trust on the demand side.

Committee Reports

Finance Committee

Debbie Kitchin introduced Sue Meyer Sample, CFO, to give the finance report. Sue referred to financial documents in the packet. She said there isn't anything unusual to report. We are still a little bit underspent but are coming close on the electric side, and lower on the gas side due to the downturn in the housing market. Renewables will be underspent from an accounting perspective, with project commitments to be paid out in 2008. She noted we expect to hit best case electric efficiency goals for the year and to come in between conservative and best case gas goals. We will fall short on renewable goals primarily because of the withdrawal of a utility scale project by PacifiCorp.

John Reynolds asked if there is anything we can do to influence more projects to finish earlier in the year. Steve Lacey said the issues driving the "hockey stick effect" are weather and desire to spend budgets before year end.

Audit Committee

Julie Hammond noted she just completed an informal audit of certificates of insurance provided to Energy Trust by contractors. Although there were some anomalies, she thought most files were in order. She noted that generally, contractors tend to be more interested in working in the field than in paperwork. Sue said we have looked at the potential for outsourcing insurance-related paperwork. As Energy Trust brings trade ally and ATAC contractors in-house, she thought it was a good time to considering outsourcing.

She noted Perkins & Co. is starting its field work for their annual financial audit. New regulations require more effort on the front-end. She thinks their presence will be a little more intense at this time of year and less intense in March.

Margie noted we have hired a trade ally coordinator, Leana Mathews, our current receptionist. Her job will include assuring contractors files are in order.

Policy Committee

Jason Eisdorfer reported the committee met yesterday and also several weeks ago. Yesterday the committee started thinking about how Energy Trust would function in a carbon-constrained world. The committee considered whether there would be an economic benefit due to carbon reduction from energy efficiency, and how that benefit might flow; the discussion will continue. The other issue discussed yesterday and during the October meeting was the discount rate, and whether Energy Trust should use a discount rate that is more consistent with the rate utilities use. One of the aspects of this is the connection between discount rate, the levelized cost of a measure and Energy Trust's ability to meet OPUC benchmarks. Board members were concerned about changing one without changing the others.

Tom said that, for the budget, staff developed levelized costs using the 3% discount rate and compared them to the current OPUC performance measure of \$.02 per kilowatt hour levelized. Fred Gordon said staff continues to work with the OPUC staff to show effects of different discount rate assumptions. There is a meeting with the OPUC on performance measures and discount rates Friday noon. Julie asked what is the driver? Tom said the driver is OPUC staff and Commissioners, who feel strongly about moving toward a discount rate that is consistent with what utilities use in their Integrated Resource Plans (IRPs).

John Reynolds noted a lot of the board prefers a lower discount rate because it gives more value to those efficiency measures with longer lives. We are willing to go with a higher discount rate so long as

the OPUC also raises the levelized cost performance measure. Debbie Kitchin said utilities use a rate that's based on their cost of capital and other costs that Energy Trust does not have. Board members continued a discussion on the merits of changing the discount rate.

Lori Koho thinks changing the discount rate offers Energy Trust more credibility when our resources are put on an equal footing with the utilities. Al Jubitz sees merit in harmonizing language with the utilities. Don Jones said consistency is good, in terms of buying resources and paying for them in the same way. Debbie noted a document in the packet that seems to have a text reference to the incorrect discount rate. The discussion turned to green tags and white tags.

Lori offered clarification about the extension of the grant agreement. She realizes that the process for soliciting comments on the automatic grant extension needed to be initiated prior to a possible grant agreement amendment related to the Renewable Energy Act terms "constructing and operating." Any amendment(s) will be discussed once the current administrative rulemaking on this language is completed.

Program Evaluation Committee

Debbie said the committee had a meeting covering many topics, none of which were controversial. John Reynolds asked for clarification of a sentence in the meeting report about economic impact of Energy Trust spending versus other consumer expenditures, stating the Energy Trust money is more likely to circulate in the local economy. Debbie explained Energy Trust services are provided locally, while many consumer purchases procure out-of-state products.

Staff Report

Margie Harris presented the staff report. She noted potential collaboration among several Northwest organizations and California's Public Utility Commission on several initiatives. These include consideration of zero net energy homes and businesses, LEDs and appliance standards. She thanked Vickie Liskey for her hospitality during a recent trip to Klamath Falls made by Margie and Elaine Prause, Energy Trust's Senior Industrial Sector Manager. She listed some highlights from the report.

Margie also reviewed the third quarter report to the OPUC. She noted we are 55% of the way toward the 2012 300 aMW efficiency goal and 50% of the way toward our direct renewable generation goal of 150 aMW by 2012, both major milestones. She noted there were few variances to report, and of these mostly were for gas spending over budget, for which ample funds are in reserve.

Draft 2008-2009 Action Plan and Draft 2008 Budget

Margie Harris presented the draft action plan and budget. She commended staff, particularly Pati Presnail, controller, and Sue Meyer Sample, for their work putting the budget together. She noted the budget does not reflect incremental efficiency funds stemming from utility plans submitted to the OPUC under the Renewable Energy Act (SB 838).

Margie observed that more people now think that climate change is real, carbon regulation is coming, and energy efficiency and renewable energy are regarded as solutions. Clean energy venture capital investment and worldwide output of wind turbines and solar panels are growing exponentially. She noted a Forbes magazine article which named Vermont and Oregon as America's greenest states. She

added that future savings and generation are expected to be harder to acquire and potentially more expensive than what we have achieved to date.

Al Jubitz asked if we are pursuing "one stop shopping" for participants to tap Energy Trust and ODOE funds. Margie said we have included funds for forms integration and simplification in the budget.

Margie stated that by year-end 2007, we expect to exceed the best case electric efficiency goal, to acquire between the conservative and best case gas goals, and to dramatically increase renewable results, although still falling short of the renewable goal because of Pacific Power discontinuing a large wind project late in the year.

Several themes were identified for the 2008 renewable energy budget:

- Transition to projects 20 MW or less
- Fulfill 2007 project commitments
- Meet residential and commercial solar demand
- Pursue several community wind projects
- Focus biopower on dairies and wastewater treatment
- Expand the open solicitation program to include more hydro and potentially geothermal
- Partner with utilities on Integrated Resource Plans
- Promote nonprofit/public sector opportunities using the "flip" model
- Meet customer expectations for credible, unbiased third-party information

Alan Meyer asked how many dollars we collected before the 20 aMVV constraint was adopted that could still be used for utility-scale projects. Margie said the only utility scale projects we will support in 2008 will be those already identified for which funds have been committed. Jason asked if there will be money left over from the Pacific Power master agreement. Peter said he spread remaining utility scale dollars across other programs based on board direction when Pacific Power abandoned its large wind project. Jason noted SB 1149 did not restrict the size of renewable projects eligible for Energy Trust funding. Peter noted the procedural aspects of the Pacific Power master agreement continue but the deadline for holding project funds expired in June.

Jason asked how the budget for the open solicitation program was determined. Peter responded the budget considered market opportunity, projects in the pipeline, demonstrating success and the need to build long-term markets. The relatively larger budget in 2008 reflects several near-term opportunities with irrigation districts that are not repeatable later.

Jason also asked where we are in integrating energy efficiency and renewables. Margie noted we are doing a solar assessment as part of home energy reviews. She said the proposed customer centric marketing approach will promote energy opportunities holistically, helping customers to navigate and choose the best options for them. Jason wants us to make it very easy to help the customer link efficiency and renewables. Julie said her business anticipates customers may not know what they want. Peter noted another integration example where the dairy initiative involves both the biopower program and the production efficiency program. Steve noted we are also looking to use efficiency program management contractors to do commercial solar assessments in 2008.

Al said he thinks Energy Trust is appropriate to be a "pathfinder" to help customers participate with us, an approach that would help us attract more participants and get more results. He thinks the model of "navigator," "community coordinator," or "caseworker" is appropriate – assigning someone to help a would-be participant connect with the services and products they need.

Margie recited themes for efficiency "base dollars:"

- Penetrating new submarkets in the commercial sector
- Enhance service to industrial customers by scaling up the small industrial initiative
- Go deeper into residential markets, capturing more savings
- Introduce more new efficiency measures
- Further integrate renewable opportunities
- Initiate a 1- to 2-year capacity-building period in anticipation of expanded opportunities stemming from incremental utility funding prospects

John Reynolds asked why the levelized cost in 2008 will go down for existing buildings. Steve thought one reason is that we spent money in 2007 to build the infrastructure that will pay off in 2008. Greg Stiles, Energy Trust's Senior Business Sector Manager, confirmed this explanation and added that a number of higher cost projects such as HVAC have been funded this year, further driving up the levelized cost.

Jason asked why the incentives portion of the New Homes program is relatively low. Steve said outreach to builders is more successful at attracting participation than incentives alone. Steve also noted the downturn in the new construction market provides an opportunity to educate and train builders in new efficient construction techniques that can be applied when the market picks up.

Margie reviewed proposed efficiency spending by sector. She noted the close-to-equal distribution of spending across the three sectors (37% residential, 32% commercial, 31% industrial in 2008). Alan Meyer asked if one sector were to underspend, will we look at reallocating midyear? Margie said staff has authority to move funds within programs but must seek board support when proposing to shift funds among programs.

Assuming incremental electric efficiency funding materializes, Margie previewed plans for how such funds would be invested. This includes:

- Diving deeper into existing markets to glean more savings
- A greater emphasis on existing small businesses and new commercial construction
- Adding near low-income residential customers and introducing new residential technologies
- More savings from small industrial customers
- Pursuit of zero net energy residential and commercial building design
- Exploring time of sale upgrades and corresponding financing options for improvements

Debbie and Margie discussed the City of Portland's proposal to charge a carbon fee for new homes and businesses that just meet current efficiency standards, and to reward those that significantly exceed standards.

Noting that oil may soon reach \$100/barrel, John Reynolds asked if we are preparing for a rush on our programs? Margie thinks any increase in demand will be slow enough for us to accommodate new customers. Debbie encouraged staff to conduct more trade ally trainings and roundtables to elicit information they gather in the field.

Margie reviewed communications and outreach themes, including:

- A new customer-driven marketing strategy
- New market research
- Integrated marketing across efficiency and renewable programs
- Website upgrades to be more interactive, have videos
- Simplified participation, including automating on-line forms
- Centralized trade ally administration and support
- Community energy project launch with Corvallis

She also reviewed management and general themes and, finally, staffing. She noted the proposal to convert three current contractors to FTE, one new help desk coordinator, and 4 new position requests driven by increased volume and/or the Renewable Energy Act (OSP/biopower coordinator for renewable energy, residential outreach manager in marketing, a planning engineer and an evaluation and market research positions, both of which are tied to incremental funding). Julie asked if we have sufficient office space for the positions; Margie said yes.

Margie reviewed budget performance against the OPUC program support performance measure, showing us coming in below the 11% performance measure cap and the 9% stretch goal. Alan Meyer asked if we should apply a new term to the "best case" goal – as we have exceeded "best case," then by definition it isn't really "best case." He suggests considering the term "stretch goal."

Lastly, Margie highlighted projected 2009 Energy Trust activities and discussed next steps in the budget process. Outreach presentations will continue on the budget through November, work will continue with staff on the remaining OPUC performance measures, the proposed final budget will be presented for board action at the December 12 board meeting, and coordination with PGE and Pacific Power will continue on their supplemental energy efficiency plans. In 2008, the strategic plan will be updated to reflect changes in goals, primarily stemming from the Renewable Energy Act.

Julie asked about Energy Trust's goal number two. She thought it had been further modified to explain that Energy Trust will not achieve a 10% share of renewable energy on its own but will help the state achieve this. Margie thought old language inadvertently was included here; she will research and remedy this in time for the final draft action plan.

Julie also suggested adding references to meeting our goals in the action plan introductory material.

Adjourn

The meeting adjourned at 4:10 pm

Next meeting. The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, December 12, 2007, 12:00 noon at Energy Trust of Oregon, Inc., 851 SW Sixth Avenue, 12th Floor, Portland, Oregon. The meeting is open to the public.

s/ Debbie Kitchin, Secretary