Draft Board Meeting Minutes – 92nd Meeting

September 2, 2009

Board members present: Rick Applegate (joining via teleconference), Jason Eisdorfer, Dan Enloe, Roger Hamilton, Julie Hammond, Al Jubitz, John Klosterman, Caddy McKeown and John Reynolds

Board members absent: Debbie Kitchin, Alan Meyer. Preston Michie and John Savage (ex officio), Betty Merrill *is no longer working for ODOE - awaiting confirmation of new representative.*

Staff attending: Matt Braman, Pete Catching, Amber Cole, Kim Crossman, Diane Ferington, Lakin Garth, Fred Gordon, Margie Harris, Nancy Klass, Jed Jorgensen, Steve Lacey, Kathleen Ortbal, Sue Meyer Sample, Greg Stiles, John Volkman, Peter West

Others attending: Jim Abrahamson, Cascade Natural Gas; Stephanie and Justyn Baker, Portland Home Energy Makeover winners; Bob Boryska, Rick Lock and Dave Oswalt, JB Insulation; Paul Case, Home Visions West; Michael Early, ICNU; Bill Edmonds, NW Natural; Joe Esmonde, IBEW; Charlie Grist, NW Power and Conservation Council; Jack Hansen and Bruce Hansen from Bull Mountain Heating, AC and Insulation; Dave Hutchins, CSG; Jerry Page, Total Comfort Weatherization; Jan Schaeffer; Lauren Shapton, PGE; Les Stephens, JELD-WEN Windows and Doors; Chris Waehrer, Empire Pacific Windows

Business Meeting

President John Reynolds called the business meeting to order at 12:10 pm.

July 29, 2009, meeting minutes

MOTION: Approve minutes from July 29, 2009, meeting.

Moved by: Dan Enloe Seconded by: Caddy McKeown

Vote: In favor: 9 Abstained: 0

Opposed: 0

Adopted on September 2, 2009, by Energy Trust Board of Directors.

General Public Comments

There were none.

President's Report

John Reynolds presented information about shading to save energy. Windows are often the greatest source of heat gain in summer. Venetian blinds are the most typical form of shading; they are good at deflecting light but not reducing heat. Orientation of the window is significant, and outside shading is effective. Exterior shading is often the most visible sign of sustainable design. John's personal favorite: pole beans are edible shading for one summer at a time. Shade cloth, commonly used in greenhouses, preserve views while stopping nearly all direct sun. John noted OHSU's windows use shade coverings that also generate electricity using PV.

John asked Al Jubitz to report on his 83 kw solar system installation on his barn. It produced 90 kw the first year. The cost before incentives was $550,000 (384 solar panels). He said that's about $6.11 installed per kW. His use was 120,000 kWh prior to upgrading his lighting through re-lamping. Al spent $350,000 to re-lamp. Now he has sensors that turn the lights off when no one is inside. Just by re-lamping, he saved 50,000 kWh. The cost of that was $1.44 per kWh, resulting in the building becoming a net energy producer. Al noted the payback for the lighting improvement was higher than on his solar system. Al advocates linking incentives for solar to efficiency upgrades.

Dan Enloe asked if Al will have the option to use a feed-in tariff. Theresa Gibney responded there are restrictions on eligibility for the feed-in tariff until after completion of the pilot, in April 2010. Also, rules have not been established on the size system that will be eligible. Al noted the complexity of the rate schedule and built-in disincentives for adding solar.

Committee Reports

Audit Committee. Julie noted the committee has selected TKW (Talbot, Korvola, & Warwick) to conduct the management review. The report is scheduled to be finished in November.

Board Nominating Committee. Rick Applegate is hopeful the committee will have a nominee to bring forward by the next board meeting. John Reynolds noted he hopes this will happen, as the position has been open almost a year.

Finance Committee. John Klosterman said the committee met August 17. He noted the committee met with representatives of the Bank of the Cascades. The June financial statements do not show any new variances. The committee is gearing up for review of the 2010 budget.

Policy Committee. Jason Eisdorfer referred to policy committee notes in the packet. The committee discussed interest by utilities in having representation on Energy Trust's board. He hopes to have a recommendation to the board at the next meeting. A range of options are being discussed, from voting seat and non-voting seat(s). Stakeholder response has been strongly opposed to either. The policy committee is considering creating a strategic utility roundtable with periodic strategic discussions between Energy Trust and utilities, with others invited to observe and participate. Dan Enloe suggested approaching this as a negotiation, and seek a win-win outcome. Jason said stakeholders do not view this as a bilateral negotiation. Julie asked which stakeholders were interviewed. Jason identified Michael Early, ICNU; CUB and Renewables NW Project. and said they are the groups who typically track utility issues brought to the OPUC.

Jason continued to review the policy committee agenda. The topic of “risk assessment” was discussed, referring to possible new legislation, changes in markets, changes in avoided cost assumptions and other topics. The committee discussed options for reporting on NW Natural activities in Washington, concluding the information should be ample and segregated from Oregon information. The committee re-examined the self-direct policy and concluded it does not need changing at this time. At Roger’s request, Peter West explained challenges in identifying self-direct sites and determining when large users are actually using self-direct credits.

Margie said NW Natural is filing a tariff designed to aggressively meet IRP goals. By raising the public purpose charge from 1.5 percent to 2.5 percent, the increase is higher than the company first proposed, following comments from stakeholders. She said we will manage our internal costs and focus on lower income populations to help address NW Natural priorities.

Strategic Planning Committee. Rick said the strategic plan document is out for comment. He anticipates bringing it to the board, changed as necessary to reflect comments, in November. Margie said individual meetings are being scheduled with each utility and an information workshop was held with OPUC. The final plan will reflect a better articulated renewables strategy and will also include references to the organizational redesign effort.

Northwest Power and Conservation Council Draft 6th Power Plan

Margie introduced Charlie Grist. She noted she saw the Northwest Power and Conservation Council Draft 6th Power Plan presentation at a NW Energy Efficiency Alliance (NEEA) meeting in July. She noted a portion of the plan is to be derived from Energy Trust support of NEEA activities. Charlie said this is a preview, because the draft plan has not yet been approved for release by the council.

Charlie noted the plan addresses the watershed of the Columbia and Snake rivers, incorporating the four states of Idaho, Montana, Oregon and Washington. The council was created by Congress in 1980 to create a regional electric energy development plan with the overall goal of producing lowest cost electricity. The act gave efficiency a 10 percent advantage over fossil fuels. The council also was charged with planning to preserve fish runs.

The Council hopes to adopt a final plan by the end of the year. Hearings around the region will be conducted in September and October. The plan covers 2010-2030 with a focus on the next 5 years. The plan calls for a doubling or tripling of spending on efficiency to achieve 80 percent of load growth from efficiency. Renewable generation in the plan mostly is driven by renewable portfolio standards in place in the region. The plan contemplates meeting or exceeding carbon dioxide reduction goals, explores renewable integration strategies, explores new generating technologies, and reduces reliance on coal while testing integrated gasification combined cycle technology (IGCC). The plan concludes efficiency still is the cheapest option. It reflects significant transmission investments.

Roger noted the plan includes wind from Alberta and asked about boundaries for resource supply. Charlie said Alberta is pushing to export electricity from co-generation, oil shale and wind. He noted uncertainties and risk factors, including volatile gas prices, unpredictable human behavior, and unknown costs of future CO_2 penalties. Efficiency and renewables avoid the uncertainties of price and CO_2.

The efficiency wedge in the 6th power plan represents 60% of new resource requirements. Most of the rest is made up of new wind, with a little bit of combined cycle and single cycle gas plant generation. He noted the level of efficiency in the plan doesn't change much under different carbon scenarios.

We are spending $11 billion/year on electricity in the region. Charlie noted that since 2005 the region's acquisition of efficiency has increased from 160 to 240 aMW. The new plan projects acquiring 200-350 aMW from 2010 to 2020. He described this as daunting, expensive, available and doable. Today we are spending ~$300M on energy efficiency. The plan envisions adding another $200M to this to acquire more savings. Costs assume consumers pick up 1/3 of efficiency costs, while utilities cover two thirds. Efficiency is expensed, not financed – requiring payment up front for savings delivered over the life of the installed measures. From 2010-2012, efficiency costs more than buying power, while by 2013 and 2014 efficiency costs less. Hence, revenue requirements are estimated to increase by 1% in the first year and after five years as the benefits are realized, revenue requirements will be down by 1%.

There are 1,400 efficiency measures in the region's portfolio. The council identified more conservation available in the sixth plan than the fifth plan, even though we are eliminating standard sources such as CFLs. Big gains are projected for consumer electronics, industrial measures, distribution efficiency (voltage optimization between substation and house). Overall we have identified 6,000 aMW of resource, double that in the 2005 plan. New measures also include residential heat pump water heaters, TVs and set-top boxes, computers and monitors, residential ductless heat pumps, LED street lighting, façade and exterior parking lot lighting, computer server rooms, and dairies.

Charlie compared Energy Trust targets to the 6th draft plan of 1200 aMW. He noted Energy Trust's draft strategic plan includes approximately 40 aMW acquisition with current funding, and increases to 60 aMW with more funding. Energy Trust "stretch" goals exceed goals in the 6th plan. PGE and Pacific Power Oregon customers represent ~20% of the region. Al Jubitz and Charlie discussed progress toward small PUD participation in efficiency acquisition. Dan and Charlie discussed the effect of peak in increasing the value of efficiency. Margie, Jason and Charlie discussed the annual load growth, and whether growth can be turned back.

Charlie reviewed other items from the draft action plan. One is to create a conservation strategy with help of utilities, Energy Trust and NEEA. Another is a high level forum for ongoing policy-level guidance, along the lines of NEET. Another is to have a two-year check-in on progress toward securing 1,200 aMW of efficiency. Another is to assure adequate funding for market transformation efforts. And more.

In conclusion, Charlie noted avoided costs for energy efficiency are up, with cost of new resources and the volatile market price of power. Their new analysis shows a market-price adder for lost opportunity efficiency is $50 and $10 for retrofit – significantly higher than in past.

In his final observations, Charlie noted "the human factor" is increasingly prevalent. Addressing this is done at higher cost and is less predictable than widgets. Codes and standards can capture a lot of prescriptive measures, which are cheap, and this makes the remainder higher cost and harder to get. The new administration is gung ho on standards and codes for efficiency. We need to focus on supply chain development for new efficiency by getting new products developed, manufactured, marketed and delivered. Because not everything works as expected, evaluation and research are really critical.

Charlie stated that he looks forward to working together, including continued iterations on conservation potential, and participation on Regional Technical Forum (RTF) "truth in savings". He complimented Energy Trust for its leadership in evaluation, innovation and providing a diverse portfolio. He appreciates Energy Trust's participation on the power council's Conservation Resource Advisory Committee and is pleased Energy Trust is here to offer a different model for getting energy efficiency.

Break

The board took a 10 minute break at 1:50.

Energy Efficiency Program

Jason introduced a resolution amending Energy Trust's articles of incorporation to allow Energy Trust to do business in Washington state. John Volkman said we cannot register to do business in Washington with the words "in Oregon" as they currently appear in Article III of the bylaws. John Klosterman asked if OPUC had weighed in on the proposed change; John V. said OPUC has voiced support for Energy Trust involvement in southern Washington and is not opposed to this. Theresa said the OPUC's interest is in not having Energy Trust's work outside Oregon impinge on its efforts within Oregon.

Resolution 525, Amending Articles of Incorporation

RESOLUTION 525
AMENDING ARTICLES OF INCORPORATION

WHEREAS:

1. **Energy Trust's articles of incorporation provide that Energy Trust is organized and operated "to support the development of cost-effective local energy conservation, market transformation energy conservation, and renewable energy resources for utility customers in Oregon."**
2. **Based on prior board authorization, Energy Trust plans to begin doing business in Washington to provide services to NW Natural residential and commercial customers.**
3. **Legal counsel in Washington State advises that amending the articles of incorporation to remove the words "in Oregon" would allow Energy Trust to register to do business in Washington.**

It is therefore RESOLVED:

The board of directors of Energy Trust of Oregon, Inc. amends the corporation's articles of incorporation to remove the words "in Oregon" from Article III, Purpose and Powers, as follows:

> **The Corporation is organized and shall be operated exclusively for charitable, scientific, literary, and educational purposes within the meaning of section 501(c)(3) of the United States Internal Revenue Code of 1986, as amended ("Code"), including, without limitation, but only to the extent consistent with such purposes, to support the development of cost-effective local energy conservation, market transformation energy conservation, and renewable energy resources for utility customers. Subject to the**

foregoing purposes and the restrictions set forth in these articles of incorporation, the Corporation shall have and may exercise all the rights and powers of a nonprofit corporation under the Oregon Nonprofit Corporation Act.

Moved by: Jason Eisdorfer Seconded by: Roger Hamilton

John Reynolds asked for a roll call vote. Voting aye: Rick Applegate, Jason Eisdorfer, Dan Enloe, Julie Hammond, Roger Hamilton, Al Jubitz, John Klosterman, Caddy McKeown, John Reynolds.

Voting nay: none.

Adopted on September 2, 2009, by Energy Trust Board of Directors.

Renewable Energy Program

Peter West introduced Jed Jorgensen, renewable energy project manager, to present a proposal to add Energy Trust's Wind programs to the "mature technologies" track within the Open Solicitation program. Jed said this would create flexibility for staff to manage the program and projects. He noted there are two wind programs, one is "community" wind and the other is "small" wind. The latter operates with a standard offer like the solar program. Community wind operates similar to the Open Solicitation program now – projects are large and subject to change, therefore are difficult to predict. The unpredictable nature of the projects has led staff to seek board approval of budget changes midyear. The proposal would allow staff to shift funds within a program depending on the opportunity presented.

John K. asked what projects are coming up in Open Solicitation that are not in the "mature technologies" track. Jed mentioned geothermal projects, which tend to be large and therefore come to the board for approval. A few demonstration technologies have come in, for example the OSU elliptical trainer project and the Bugni small hydro project. These demonstration projects tend to be very small. John K. questioned the need for the Open Solicitation program if there are not new technologies and small projects to incubate. Peter said our niche has not been reaching into brand new technologies, but rather to go upstream in markets to find the right partners to bring projects using known technologies to market. One example is the push to bring forward irrigation district hydro projects. Jason expressed a concern that funding for the "non-mature" technologies could be used up by the "mature" technologies and asked staff to report on how monies were allocated in this regard next year. John R. appreciates the Open Solicitation program because it is available to unknown or emerging technologies.

Resolution 524, Adding wind to the "mature technologies" track of the Open Solicitation program.

RESOLUTION 524
ADDING WIND TO THE "MATURE TECHNOLOGIES" TRACK OF THE OPEN SOLICITATION PROGRAM

WHEREAS:

1. **In May, the Board added a "mature technologies" track to the Open Solicitation Program to allow a lower level of scrutiny for projects with established**

technologies. The mature technologies track requires board approval only for projects involving more than $500,000 in incentives.

2. **Wind technologies for projects of 20-megawatts and less are well established, as are the Energy Trust program requirements, standards, and trade ally structure for project development.**
3. **Energy Trust support for such projects includes:**
   Cash and support for on-site use;
   Funding for local projects that deliver power to the grid;
   Resource assessment through anemometer loans to help landowners determine sites' wind generation potential;
   Co-funding for feasibility studies and technical analyses; and
   Outreach and education to promote the use of wind technology.

It is therefore RESOLVED that the board of directors of Energy Trust of Oregon, Inc. adds wind projects of 20 megawatts and less to the "mature technologies" track of the Open Solicitation program.

Moved by: Roger Hamilton Seconded by: Julie Hammond

Vote: In favor: 9 Abstained: 0

Opposed: 0

Adopted on September 2, 2009, by Energy Trust Board of Directors.

Staff Report

Feature presentation: Home Energy Makeover Contest. Diane Ferington summarized how this contest worked. She credited the four participating utilities and sponsors for donating $140,000 in materials and services for making this possible. Four winners were selected, one from each of our service territories, in Portland, Salem, Medford and Bend. She acknowledged Dave Hutchins of CSG, who discussed each home and introduced homeowners Stephanie and Justyn Baker, Portland Home Energy Makeover winners.

Dave noted a home performance account manager was assigned to each home to act as project managers.

The Bend house, 1,700 square feet, had an old gas furnace, an old unsafe water heater, many air leaks, little insulation and original single-pane windows. He reviewed the improvements made and their donors/providers/installers, as he did for each of the remaining three homes.

The Medford home, also 1,700 square feet, had an inefficient old heat pump and electric furnace, inefficient electric water heater, many air leaks, original single pane windows. He said the family, which included a grandmother, had expanded into the garage. Improvements included converting the garage to living space and many efficiency measures.

In Portland, Stephanie & Justyn Baker, had a 1,330 square foot house built in 1925, with an inefficient old gas furnace, inefficient gas water heater, very little insulation and air/duct leaks. All were improved.

The Salem house is a 1,440 square foot ranch-style house built without insulation in 1960. He reviewed improvements and new equipment.

The website includes videos of the start up, progress and completion of each project. The video makeovers bring efficiency opportunities to life. Media events are planned in each city.

Diane introduced participating trade allies and sponsors and then brought Stephanie and Justyn forward to speak. Board members thanked them and the trade allies for collaborating on the improvements and sharing information about it to neighbors and more broadly. A discussion of home performance contracting ensued. The trade allies passed around the microphone and contributed to the discussion. Some of it focused on homeowners' need for more funding.

Organization redesign update. Margie reminded the board of the staff design team formed in February to undertake a strategic organization redesign and prepare us to meet ever-growing expectations and interest in the work we do. She reviewed examples of growth indicators, including contacts with Energy Trust and increased program activity. The challenge for the redesign was how to dramatically increase results by securing more savings and generation from existing customers, attracting new and different customers, and becoming more flexible, nimble and scalable. She reviewed the schedule and then summarized outcomes:

- Draft design team report covered much ground, probed deeply
- Identified many changes and many are already in the works
- Suggested improvements will be ongoing and incremental
- We're shifting away from individual programs and creating a structure focused on customers, what they have in common and how they make decisions; we want to be able to speak holistically to that customer base
- We want to maximize the effectiveness of the trade ally as a sales force, the first line of contact for many of our participants
- Many recommendations involve internal changes through contracts, position descriptions, work plans and training
- Some new positions will be needed to fully realize the benefits of the redesign

Margie named four areas to be addressed in implementing the redesign:

- Work process, productivity improvements to achieve efficiency gains and cost savings
- Customer focus improvements, including how programs are designed and delivered to address the customer's experience and "go deeper"
- Cultural changes including project management methodology and protocols; continuous improvement, clarified roles, responsibilities, authority and accountability; training and cross training
- Structural changes in how we are organized to serve homes, businesses, industry/agriculture; involves transferring existing solar and marketing functions and expertise into both the homes and business teams The renewable energy group would remain focused on markets outside solar and be led by someone promoted from within, with no new positions required.

Margie asked the board to support her moving forward to begin the hiring process for four new positions now rather than waiting for the budget to be approved in December. The positions include a sector lead for homes and for businesses, an industrial/agriculture sector project manager/operations analyst, and a new development engineer for the planning team to address the back-log of measures to be screened. The sector leads would take a longer range view for the sector as a whole, working with groups like NEEA and NEET to strategically plan and develop our program offerings, address research needs and secure results. The industrial position addresses significant growth in activity and project volume stemming from demand for smaller industrial projects and the inclusion of NW Natural industrial customers.
With Steve Lacey in his operations role and Peter West in his energy programs role since February, Margie reiterated her plans to transition to more to external relationship building, strategic planning and risk management.

A list of potential redesign evaluation metrics was developed by Fred and Phil. Though not yet finalized, ideas include creating a framework to track overall success compare savings/generation and cost/unit of savings acquired; use existing staff, customer and trade ally surveys to track satisfaction rates, analyze close rates by program, and complete a one-year check in to review key topics.

Board members discussed Margie's request for four new positions. John R. noted the number of new positions is small compared to total staff (65) and he thinks they are justified. Dan Enloe asked if the development engineer position is needed to deal with backlog or ongoing needs. Fred Gordon said he doesn't see the needs slacking, given the pressure to continue to analyze new technologies and measures.

Jason said he had mixed feelings about the redesign, noting that we are addressing a lot of what we wanted to address. However, he cannot tell whether the reorganization is major that should have included board participation, or whether the changes are instead incremental and operational and therefore outside the board's scope. He knows adding four FTE is a big deal, from an external perspective. Margie said she feels the focus of the reorganization was almost exclusively operational, seeking improvements in operational efficiency and effectiveness and organizing ourselves to better serve a broader customer base and secure greater results. She noted that Energy Trust is being expected to accomplish more than ever before, and the board is involved in guiding what we take on. The improvements are intended to create capacity for achieving the expected increased results. Jason said he frustrated because the material provided in the packet did not inform him well enough to decide about the redesign. He said that Margie's presentation was good and helped. Though he was not centered just on staffing, it is not a small issue.

Dan said he would be more comfortable if the board set metrics before the organization gears up to achieve them. Al said he was in awe of being able to pull off a massive internal reorganization without skipping a beat. It can be done but takes great focus and discipline. He would like to know the budgetary impacts of the new positions. Sue clarified that the impact is approximately $112k this year, depending upon hire dates. Dan suggested different ways of hiring people, including probationary periods and temporary positions. Margie noted that in many cases, the changes we plan on making formalize the direction we have already been moving. Julie thinks the new positions respond more to natural, accelerated growth in activity, funding and expectations and are exactly what we need and make sense. She acknowledged that she kept hearing these changes were coming and now sees them as operational, not necessarily coming to the board. John K. would like to see demonstrated how the positions support doubling or tripling of results. If that work is done, approving the positions would be a

slam dunk, he said. Julie supports tying the new positions to the specific growth in business activity.

Theresa asked about timing. She, and John Savage, thought the timing of requests like this would come at the end of the strategic planning process and review of utility rate cases discussing additional efficiency funds. The arguments supporting the request for the new positions would come out of comments by stakeholders on the requested rate increases and strategic plan changes. Theresa suggested the possibility of initiating recruitment without finalizing new hires until the utility negotiation and strategic plan processes have been completed. Margie said the earlier timing allows us the momentum of the redesign effort to go forward and be ready to secure significantly greater results starting in January. Julie commented that with 8% of funds for administrative costs, we have a low margin even when we are in a growth mode.

Joe Esmonde with IBEW came forward. He thinks a wave of energy efficiency money is going to hit hard. There are going to be a lot of expectations on Energy Trust, fair or unfair, to deliver the goods.

Discussion continued, with a range of opinions expressed as to when to bring on new staff in light of the unfolding public process around the strategic plan and utility rate case filings, on the one hand, and the coming wave of energy funding nationally, on the other. Jason said he heard the board and agreed with much of the discussion. He would have preferred more sufficient communication on this process. He added that there is no board role in operational decisions and wanted more engagement on the external consequences of internal changes.

Caddy asked Jason what would satisfy him? Jason answered a better sense of measurement and a better check in with the board.

Al said we are planting different crops to do business differently. He encouraged going forth aggressively and offered full support.

In conclusion, the board verbally supported Margie in going forward to begin the hiring process for the 4 new proposed positions. Margie said she would also provide additional position justification and metrics at the November board meeting as part of the budget presentation. Other highlights from the staff report will be sent via email to the board.

Adjourn

The meeting adjourned at 4:40 pm.

***Next meeting*.** The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, November 4, 2009, 12:00 noon at the Energy Trust of Oregon, Inc., 851 SW Sixth Avenue, Suite 1200, Portland, Oregon.