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July 2, 2008

MEMORANDUM

TO: Power Committee

FROM: Terry Morlan

SUBJECT: Report on Northwest Energy Efficiency Task Force

The Executive Committee of the Northwest Energy Efficiency Task Force (NEET) had its first meeting on June 18th. The Executive Committee is co-chaired by Tom Karier, Steve Wright of Bonneville, and Pat Reiten of Pacific Power, and facilitated by Ken Canon. Most of the members were able to attend and there was a lot of enthusiasm about a regional effort to accelerate the achievement of improved efficiency. Minutes from the meeting are attached for your information.

The Council was briefed on the NEET process at its Walla Walla meeting in May. The NEET effort brings together not only the region's utilities, but also businesses, energy service companies, NEEA, the Oregon Energy Trust, public interest groups, and representatives of state governments and regulators. In addition, there is participation from people and firms that specialize in creating public messages and branding.

It was clear that the participants in the Executive Committee expect tangible results from the NEET process in the form of implementable actions with assigned responsibilities and funding strategies.

Discussion focused the assignments for the various work groups, and volunteers for co-chairing of these working groups were solicited. The working groups will be responsible for doing the real work and bringing recommendations to the facilitator and Executive Committee.

At the Power Committee meeting we will have a brief discussion of the NEET progress. Tom Karier and Melinda Eden both attended the Executive Committee meeting and can share their impressions with the rest of the Power Committee.

Attachment

**Northwest Energy Efficiency Taskforce
Executive Committee Meeting
June 18, 2008**

Minutes

All meeting handouts and reports are posted at:
<http://www.nwcouncil.org/energy/neet/Default.asp>

Members present:

Tom Karier, *Northwest Power and Conservation Council*
Pat Reiten, *Pacific Power*
Steve Wright, *Bonneville Power Administration*
Jim Abrahamson, *Community Action Partnership of Oregon*
Richard Beam, *Providence Health and Services*
Ralph Cavanagh, *Natural Resources Defense Council*
Lisa Coltart, *Power Smart, BC Hydro*
Randal Douthit, *Fred Meyer*
Bill Drummond, *Western Montana Generation and Transmission Cooperative*
Melinda Eden, *Northwest Power and Conservation Council*
Paul Elias, *McMinnville Power and Light*
Claire Fulenwider, *Northwest Energy Efficiency Alliance*
Bill Gaines, *Tacoma Public Utilities*
Margie Harris, *Energy Trust of Oregon*
Erin Holland, *Edelman Public Relations*
Fred Kiga, *Boeing*
Bill Nicholson, *Portland General Electric*
Sara Patton, *NW Energy Coalition*
Brian Skeahan, *Cowlitz County Public Utility District*
Cal Shirley, *Puget Sound Energy*
Phil Welker, *Portland Energy Conservation, Inc.*
Brady Wiseman, *Montana House of Representatives, District 65*
Roger Woodworth, *Avista Utilities*

Members absent:

Steve Eldrige, *Umatilla Electric*
Michael Hanson, *Northwestern Energy*
Paul Kjellander, *Idaho Energy Office*
John Savage, *Oregon Public Utility Commission*
George Smith, *NORPAC*
Matt Steuerwalt, *Energy Policy Advisor to Washington Governor Christine Gregoire*

Project Staff

Ken Canon, *Facilitator*
Darby Collins, *Bonneville Power Administration*
Josh Warner, *Bonneville Power Administration*

Co-Chair Opening Statements

Tom Karier – Conservation is the priority resource in the Northwest Power Act. The models used by the Council want energy efficiency faster than we can get it. The constraints the region faces are more institutional than economic. While we have made some progress over time, there are still more constraints to overcome. In addition, one third of the 200 aMW in 2007 was gained through CFLs. We must do a better job coordinating investments and also research promising new technologies that can pay long-term benefits to the region.

Steve Wright – There is a tremendous opportunity for energy efficiency and the time is right for this effort. We face a rapidly changing energy landscape. The cost of alternative generating resources, like wind power, is rising. We need to take advantage of the growing public interest in energy efficiency. However, NEET is not and should not just be a utility effort. This taskforce is based on the wind integration model. When the wind integration process started, we knew big challenges were coming. That taskforce concluded with 16 concrete actions that were unanimously endorsed. Do not underestimate what can be accomplished when we bring smart people together to seek collective action.

Pat Reiten – We are collectively at a fork in the road. When asked about the largest challenge in power business -- the answer is our growing load resource gap. PacifiCorp anticipates a 2,400 aMW gap by 2012. Carbon constrains will make filling the gap more difficult. The price of steel and other construction materials is going up dramatically. Labor availability is also a challenge. We need more than new generation. Our integrated resource plan calls for 272 aMW of dispatchable load control and a significant amount of energy efficiency.

Executive Committee Perspectives

Bill Nicholson – We all are facing resource gaps and the price of power on the market is expensive. We need energy efficiency to help mitigate price increases. We expect 20% of our installed capacity to be wind. We can do better than 50% of load growth with energy efficiency. Customers are hungry for energy efficiency and have already proved willing to pay more for renewables. However, they have not yet made the leap to energy efficiency and how that relates to climate change. We need better communication with end users. PGE is dependant on what we as a region can do together.

Cal Shirley – Puget Sound Energy also has a load resource gap. Building new wind plants and gas powered resources every other year for 10 years would be a \$5 to \$7 billion investment. Energy efficiency should move from 20% to 33% of load growth. Today we are facing several game changers: 1) we must get clear on the number of masters that energy efficiency serves as our customers demand energy efficiency as well as utilities use it to start counting carbon. 2) How do we count kWh savings - will the savings really show up when we need them? Not all savings are the same from a resource perspective. 3) Do we have the infrastructure in place? We are also facing continuing staffing restraints – we had 30% of our staff change out last year. We need to have people in place to make it all happen.

Phil Welker – PECE is growing dramatically. Funding for energy efficiency on the West Coast has tripled. Relationships have changed. Customer perspectives are changing. They want to

leverage what we offer. We need to build relationships over time. Three years (length of most contracts) is too short to build the relationship need to get to deeper savings and create trust. The green movement adds weight. What is after energy efficiency? How do we interact with the new economy and the decision-making process? Energy efficiency offers many companies a competitive advantage. Today we should try to not have the “stop-and-start” rollercoaster with customers as we have in the past. Energy efficiency must be an ongoing process.

Paul Elias – From a public power perspective, cheap rates have made energy efficiency difficult in the past. This has led to, among other things, a lack of conservation staff. However, that paradigm is changing with tiered rates. The load growth is small over time, but small increments add up and the advantage of doing energy efficiency can add up. We need a bridge to engaging the new paradigm. My board just approved \$5 million for energy efficiency and we expect to capture 4 aMW in savings.

Fred Kiga – Boeing is very interested in energy efficiency. The historical advantage of the Northwest has been reliable and cheap power. Boeing is in a fight to reduce costs of production and energy efficiency and low cost power are a part of that process.

Erin Holland – The world is changing. The way people get information and who they trust is changing. How do we reach out to customers and get them to drive the agenda is key. In three to five years, it will be unacceptable for any CEO to not know her/his own companies carbon footprint. People want to be part of the change but are skeptical. How can we engage them?

Lisa Colton – BC Hydro has very aggressive targets. 50% of load growth is legislated to be met with energy efficiency. We recently filed a long-term acquisition plan that has a roadmap for accomplishing that mandate. Three keys to that are 1) demand side management 2) codes and standards, and 3) rate structures that promote conservation. The low hanging fruit is all gone. We want to figure out how to work more closely with customers? We are working with energy management processes such as Inventa. Areas of focus for us include engaging communities, smart metering and distributed generation. We’ve got to figure out how to measure success.

Bill Gaines – Tacoma slowed energy efficiency activities in the 1990s... In retrospect that may not have been a good idea. Today, energy efficiency is a compelling proposition because of the underlying economics. Annual rate of acquisition needs to increase by 400 - 500% in next few years according to Tacoma’s Potential Assessment. There is a paradigm shift -- hydrocarbon prices and tiering of BPA rates expose utilities to marginal cost. We need to look forward and not backwards. Energy efficiency is compelling on its own merits.

Jim Abrahamson – There is tremendous opportunity to capture energy efficiency in the low income market. However, there are challenges: initial disrepair of property and need to look at home holistically. Funding is tough to find because it is not necessarily paid for by utility funds.

Roger Woodworth – We have seen a change from low cost readily available energy to it becoming a more precious commodity. Just look at the number of electrical appliances in an average hotel room. Not a good example of energy efficiency. Are the end users really ready to change? New policies are good, but does regulation follow quickly enough to support the new

policy. At an EEI meeting, reps said that people already are struggling to afford energy. With rising costs – energy efficiency can be a buffer to help minimize the increases.

Brady Wiseman – I'm concerned with power markets in Montana. We don't have a substantive energy policy. On-third of the power is from the merchant power market. We must get info to customers so they can make informed decisions. For example, how much does it cost to dry a load of laundry? People need to be empowered to make decisions for themselves. Montana has a mostly residential load. People need to know how to lower their electricity bills. People want to make the right decisions. I would also like to see 50,000 photovoltaic roofs to help internalize the productive of power to Montana.

Richard Beam – Energy is not a casual affair at Providence Hospitals. We were honored by an Energy Star award in 2008. Hospitals are very intense users of energy. Providence partners with utilities and they need incentives because it helps move projects forward and get priority. The savings may be worth more to Puget Sound Energy than to Providence. Incentives should be available to make it happen. PSE is willing to pay up to 100% of incremental cost for some measures. Limited capital dollars for energy efficiency is only one of a long list of capital needs. Incentives and tax credits help to increase the return on investment. Energy is only 1% to 2% of total operating cost. Better Bricks and High Performance Hospitals programs show how energy efficiency can pay back to bottom line 50 to 1.

Margie Harris – We need to continue what we have been doing, but differently and do more. Green Wave research by Linda Dethman was just completed. Link messages with global warming with energy efficiency actions. Consumers don't always make the connection. There is a need to make the linking intentional. Cost effectiveness is a driver, but we need to get more to the emotional drivers in marketing energy efficiency and be more sophisticated. In program design and delivery – make investments in how people get info and make it easier to do the right thing. Reduce barriers in program design, policy and regulation. Work on both sides of the meter – opportunity in grid to reduce transmission losses. Urgency is needed.

Bill Drummond – The ground is shifting under many utilities' feet. Tiered rates will be a big change as melded rates go away. There will be a clear and direct incentive to acquire energy efficiency – market rates are 4 -5 times what they pay now. Small rural utilities are challenged to do energy efficiency and cost effectiveness goes out the window because of the low density of customers. It is better to get energy efficiency at the new construction phase, but only 40% of homes are inspected for compliance with the energy code in Montana. Montana has few energy efficiency opportunities in commercial and industrial. Key issues: 1) need data issue resolution – not counting everything that we are getting and we are counting things we are not getting; 2) a discussion on institutional relationships and structures that need to change – how BPA, states, customers and utilities interact. Rate structures should be reviewed.

Ralph Cavanagh – A regional approach is useful – codes and standards have shown savings. Focus on Northwest Energy Efficiency Alliance to coordinate the region. NEEA needs to grow from what it has been. The Regional Technical Forum needs to be utilized – better measurement and evaluation will be a benefit. We need a new institution – energy centers at the higher education level. Utilities are a critical partners and financial health is still tied to selling more

kWh. Conservation-oriented rates would be one option to drive energy efficiency but it needs to be tied to an earnings opportunity. We need to align financial incentives with energy efficiency goals.

Brian Skeahan – In German hotels, we see few appliances and those that are there are efficient. This is a very different model than we have in America. Cowlitz PUD is probably the most industrialized utility territory in the region. Companies are facing challenging times, and energy efficiency presents an opportunity to keep them competitive.

Sara Patton – With the diversity of utilities and geography, the region has needed a good coordinating organization. We need to get off the roller coaster that energy efficiency has experienced. We have achieved a lot, but we could have done better. Use creativity – Snohomish is planning on setting its Energy Efficiency Potential Assessment based on the Council's methodology, but will look at the cost effectiveness of a package of measures as opposed to the individual-measure level.

Randal Douthit – Fred Meyer has 19 million square feet of retail space in 129 stores. We doggedly pursue energy efficiency. Fred Meyer is owned by Kroger, which is in Cincinnati. Kroger is very committed to energy efficiency. 25% of earning on stock was from EE (11 of 44 cents) in 2007. Kroger is creating a new high efficiency store prototype. Fred Meyer has been working on EE since 2001. With an increased level of customer savvy, shopping trends are changing. Also, rising energy prices will change behavior. Execs have a vested interest in the outcome of the NEET initiative.

Claire Fulenwider – The Northwest Energy Efficiency Alliance partners with many of the organizations at the table – directly serving the organizations and also leading with new technologies. NEEA works up front on upstream costs so there are downstream savings. We do research with customers and retailers to understand processes and decision making. More work is needed with training programs and with the deliverers of energy services. Partnerships need to be built to make programs more effective. We need to work with universities to create a more effective workforce. We must stay on the cutting edge.

Melinda Eden – The Council is embarking on its 6th Power Plan. Things are changing dramatically. There are advances in technologies. There is also a need for education – working with business as well as labor to get the work done. We must deliver the message to retailers and end users and get information out there. Smart meters can be an answer to help tell people what they will save.

Ken Canon – From the utility perspective, energy efficiency is changing fundamentally. We have a two to four-year window to meet customers' needs or they will go to other places to get the services they want. It is a challenge to utilities.

Presentation: “Efficiency by Design: The Customer Perspective” by Craig Boice

Posted on web at:

<http://www.nwcouncil.org/energy/neet/meetings/2008/06/CustomerTalkSpring2008Northwest.pdf>

Highlights from the presentation include:

- Energy efficiency can allow utilities to connect with customers as they never have before.
- Need to see customers as a part of the infrastructure.
- Utilities need to understand what customers will use and find reliable. Customers don't like variable and volatile rates. Some of our best ideas are not bridging the gap to connect with customers.
- Customers want to be green. Utilities need to be a good source of information and services to customers.
- Green is hard to figure out -- customers don't know what it means or how to get there. This is an extraordinary marketing opportunity.
- Energy isn't a product, it is an experience. Need to be investing effort and money in understanding customers. Customers want better experiences, not more demanding experiences.
- Today we make programs too complicated. The design work needs to go to the customer experience. Efficiency needs to be enjoyable, easy to use and reliable.
- Customers want help being green; we need to design enjoyable energy experiences and help customers be greener.
- Equated future of utility industry to airline industry where price increases are proving unacceptable to customers.
- Helping customers be green allows utilities to offer value beyond being just a commodity.

Questions and Answers

Q: Cavanagh – NW utilities are already well respected. Standards can help to make customers feel safe in not making a bad choice.

A: Boice – High customer satisfaction numbers can be misleading. Expectation vs. what utilities can do. Architecture is totally in our control. Look outside of the regulatory mechanism.

Q: Harris – Being green is more than energy. How do we serve customers more comprehensively?

A: Boice – Reach beyond just energy-related mechanisms. A load management example where a successful program was successful because the installers wore uniforms and this had a positive influence on the performance evaluation of the program. This gave the appearance of respect to the customer.

Holland – Customers just want to know what the impact of their contribution is for doing something. They want to make a measurable contribution and get feedback and recognition.

Luncheon Presentation -- “Customer Priorities: CO₂, kWh and Lattes” by Bill LeBlanc

Posted on web at:

www.nwcouncil.org/energy/neet/meetings/2008/06/NEETPresentationLeBlanc.ppt

Work Plan and Work Group Discussions

Three top issues:

1. Data needs
2. Utility EE initiatives
3. Marketing

Other important topics

4. R&D
5. Workforce recruitment
6. Policy Options

Work Plan Review Discussion

The executive committee supported working on all six topics. Additional areas of focus for consideration include:

- Customer behavior and the decision-making process
- Types of hardware being used and how it is relevant to the customer
- How to get greater input from end users, especially in areas like load management
- Finding ways to help the customer “do the right thing”
- Greater clarity on what is regional and what is local
- How to make energy efficiency offerings less complex – simpler and fewer programs
- How to address new construction
- How to capture savings beyond the short term
- Measurement and verification and who’s given credit for the savings
- How energy efficiency costs are recovered
- Reliability of energy efficiency savings in relation to resource acquisition
- Values of the next generation of energy efficiency workers – especially social causes
- Ability to do more upstream work and address longer-term issues
- Ability to measure beyond “savings”
- Figuring out how to measure what really matters
- Looking at a future business model for energy efficiency beyond kWh and carbon trading
- Most effective ways of reaching customers
- Addressing energy efficiency delivery across multiple fuels and how they connect (electricity and natural gas)
- How to address low-income needs
- The need for more research and development
- Eliminating duplication in the region especially relation to education and training
- Reducing silos and finding ways to work together

Discussion around Work Group Co-Chairs and Members

Recommendations:

#1 Data – Massoud Jourabchi, Northwest Power and Conservation Council

#2 EE RD&D – ETO and NEEA checking for staff participation

#3 Utility Funded EE Initiatives – John Savage, OPUC, and Stan Price, Northwest Energy Efficiency Council

#4 Marketing – Erin Holland, Edelman, and Teri Duncan, Bonneville Power Administration
#5 Workforce – Cal Shirley, Puget Sound Energy, and Pacific Power checking with staff
#6 Policy – Michael Early, Industrial Customers of Northwest Utilities, and Sara Patton, NW Energy Efficiency Coalition

Pam Barrow -- Northwest Food Processors Association Overview

80 members, 180 facilities. Program funded by Department of Energy to look at needs and opportunities in the food processing industry. Currently working with NEEA on a program to bring continuous energy improvement into plants (currently 27 participants.) There is work underway to establish an innovation productivity center with energy as one component. Energy is just one input. They are working on new technologies and demonstration projects in collaboration with national labs, DOE and universities. Want to move toward incorporating energy efficiency into business-decision making.

Closing

- Executive committee agreed to a mid-point face-to-face meeting (with a call-in line) for October.
- Ultimate endgame from the work plan – actionable outcomes.
- Strong staff participation from the executive committee is critical and expected.
- Final meeting will be held at the end of the year with a possible symposium to showcase best practices. Possible two-day meeting. Dates to be determined.