

## **Utility Sounding Board (USB) Meeting Summary February 14, 2007**

### **USB members in attendance via phone:**

- Van Ashton – Idaho Falls Power/IDEA
- Bruce Etzel – Benton REA
- Kevin Howerton – Grays Harbor PUD
- Kathy Moore – Umatilla Electric/PNGC (*for last part of meeting*)
- Joe Savage – Emerald PUD
- Tom Schumacher – Benton PUD
- Jim Wellcome – Cowlitz County PUD

*Not present: Brent Barclay – Columbia River PUD and Mary Smith – Puget Sound Energy*

### **BPA staff in attendance at various times:**

- Bruce Cody
- Jennifer Eskil
- Karen Meadows
- Lloyd Meyer
- Rosalie Nourse
- Jean Oates
- Tim Scanlon
- Mira Vowles

### **Enhancements to Measures in BPA "Salmon Book" and Other Discussion (Karen Meadows)**

Karen Meadows opened a discussion of enhancements to measures in the BPA Conservation Rate Credit and Conservation Acquisition Agreements Implementation Manual -- CRC & CAA (10/1/06) known as the "Salmon Book."

- Information was provided to the BPA Energy Efficiency Representatives (EERs) to share with their customer utilities regarding program enhancements.
- The Industrial and non-lighting commercial cost cap will increase to 70 percent.
- Utilities will have a one time opportunity to change funding sources once the Long-Term Regional Dialogue policy is released. BPA is still working on the policy, and then it has to go to the Department of Energy office in Washington, DC. It may not be released until June.
- BPA is still deciding on the percentage – 50 percent or 75 percent – of BPA funded energy efficiency will be allowed toward the High Water Mark (HWM).
- Trained utility staff may be allowed to certify duct sealing. [Some confusion surrounded this issue and Karen will talk to Adam Hadley about the specifics of this.]
- BPA may want to start with utilities that have strong heat pump (HP) programs. (Grays Harbor PUD does about 100 HP per year.)
- USB would like to know which utilities have HP programs.
- One USB member from an early-start utility reported that contractors were angry about the piecemeal roll out of HPs.
- BPA plans to hire contract engineers to supplement BPA Energy Efficiency engineers to help get projects going.
- Letters were sent to utility general managers about the HWM and submitting measurement and verification plans.
- What if a utility funds a program for 2010 and 2011 and counts it from 2007 as a five-year program? Would it be easier to carry over the rate period with a bi-lateral agreement (CAA)? [EE is seeking permission to provide funding beyond the current rate period. Carryover arrangements were made for ConAug. It can be done with bi-lateral contracts. It's easier because it's a capital, not expense budget item. It's more difficult with CRC, which is built into BPA's rates.]

### **Commercial & Industrial Lighting Utility Field Training (Tim Scanlon)**

Tim Scanlon, BPA's Energy Efficiency Commercial Sector Lead, updated the USB on the C&I Field Training.

- About 27 utilities have signed up. Others have indicated interest. EERs will make sure their customers are aware of sessions planned in their area.
- One USB member reported that the training was great; Craig Ciranny did a good job. There was a lot of interaction between utilities, which was a huge benefit, especially for utilities that have not done lighting before.
- BPA is looking at ways to supplement training with a contractor. This will be discussed further with the USB.
- March is the target for completion of field training. [A list of training completed or planned will be sent to the USB.]

### **Commercial & Industrial Lighting Trade Ally Network Concept (Tim Scanlon/Jennifer Eskil)**

Jennifer Eskil, BPA's Energy Efficiency Industrial Sector Lead, and Tim Scanlon presented the latest information on the Trade Ally Network (TAN) concept, which is a way to maximize C&I efforts and respond to needs expressed by utilities in a 2006 assessment. This is meant to complement, not replace, current efforts.

- IOUs use trade allies as a key component and delivery mechanism for commercial and industrial lighting programs.
- BPA wants to expand the TAN into areas where one currently doesn't exist and expand current efforts into new areas. USB feedback on this concept is requested, particularly whether something like this would work for their utility and for other utilities, and regarding page 2 of the TAN concept paper "Key Considerations" section.
- Cowlitz held vendor-customer training with some vendors that have participated in its programs and some who had not. There was a lot of interaction between vendors, which is surprising because of the competitive nature of vendors. Cowlitz has done more than 500 commercial buildings and is seeing a lot of customers wanting upgrades, as well as new customers. Some small businesses and school districts are participating (concerns about cracked metal halide lights are driving some of this).
- Trade allies need to understand BPA's Standard Offers. BPA is trying to make sure all vendors and installers have an opportunity to hear about new technology and offerings and to incentivize beyond current practice. BPA is considering where the best economies of scale are for this, so it can be implemented at a low cost. Lighting requires a 30 percent wattage reduction (30 percent reduction is only for lighting, not whole building energy savings). [This will be addressed in a future C&I L Roadmap Lunch & Learn session (see <http://www.bpa.gov/Energy/N/Utilities%5FSharing%5FEE/Utility%5FBrown%5FBag/> for more information).
- One USB member stated that he has asked for something like the TAN before, and finds it helpful. That utility is seeing quite a few more jobs as a result. Another member, who is working on an Integrated Resource Plan (IRP), stated that any assistance his utility can get is good, such as with the Grocery Store and TAN.
- Emerald PUD had a successful program, and they talk with Eugene Water and Electric Board and Springfield Utility Board to see what they're doing.
- BPA wants to get the word out to all utilities and educate vendors as to what's there. As long as utilities are aware of what's going on in their territory, it should be okay.
- The primary audience for this is trade allies – vendors and installers – although utilities are welcome. The training will be set up to leverage the geographic location of training to maximize utility/vendor participation. Training will last about 1 hour and 15 minutes; vendors don't want to sit in a room for hours. Also, vendors appreciate getting information in a simple way for various utility service territories.

- One hour, 15 minutes, is not enough time. Vendors will have a lot of questions. Other vendors help answer those questions. Have two hours in the morning for vendors and two hours in the afternoon for consumers.
- The utility's TAN administrator will work with utilities to facilitate vendor invitations.
- One utility did something similar to this training about a year ago. Only one contractor showed up – they're very busy. How can other vendors be enticed? [Outsourcing to a trade ally administrator would facilitate a good communication flow with utilities so they can include their vendors.
- One USB member said that this all assumes utilities will follow-up on opportunities. His utility can do several big potato sheds instead of hundreds of small project that can't be followed due to lack of staff resources. [Utilities make their own decisions about scale and how much they want to do. Utilities should let BPA know if they need help.]
- What aspects of how this is designed do utilities feel is absolutely essential for this to be successful? [BPA changed self-funded verification and the ESC based on USB feedback.]
- What can BPA provide/setup so utilities can do more; BPA depends on utility partners to get the megawatts (i.e., third party contractor, administrator, direct acquisition.).
- The USB said they would like the following:
  - Hire an administrator who has a broader role for some utilities.
  - Allow utilities to claim savings.
  - Allow utilities to use their CRC first.
- Utilities will spend their CRC and some CAA, but there is a cap on how much utilities will do because it reduces load. General Managers don't want to reduce load; they only want to do what's required. [Utilities make their own decisions; BPA respects that and will target trade ally activities only where utilities want them.]
- It's a good idea, but if utilities don't have the staff, it's setting up expectations. Who runs the program? Will BPA have someone to field calls?
- Heat pumps are an example – a lot of contractors were trained. If the utility doesn't have the staff/budget to follow through, then contractor expectations aren't met.
- [There has to be a balance. If BPA hires more third parties, etc., incentives may have to be lowered. That has to be a consideration.]
- What's going on with LED fixtures and foot-candle/dimmer switches? [This is a technical issue for a Brown Bag session, not the USB. Craig Ciranny participates in the [Consortium for Energy Efficiency](#) (CEE) and brings back information on ENERGY STAR® lighting and other changes in lighting.]

### **Expansion of the Technical Services Proposals (Mira Vowles)**

Mira asked for USB feedback on the expansion of [BPA's Technical Services Proposal](#) offering to include commercial measures and/or services. A prescriptive path will have measures beyond code and "stretch" measures.

### **Early Project Identification Rewards (Mira Vowles)**

Eugene Water & Electric Board and several IOU's said they are having problems identifying new commercial construction projects early on.

The F.W. Dodge database is a source for contact information. Utilities would have to check it out on their own. Outreach to architects/engineers, with a regional Web site to enter preliminary information, and they get a small reward for doing so. The serving utility would get the information. The owner would have to agree to seriously consider the project. No drawings/blueprints; would provide the sq. ft., and other information. It's more of an early warning to utilities to let them know something's coming.

- USB comments/suggestions:
  - Clone projects – make it more of a deemed measure process, i.e., if we insulate all of a school gym. Waiting for a deemed measure can delay it one year.

- It's generally too late by the time an architect/engineer is involved. [BOMA's Design to Build is a good source. This information could go into the TSP and the EER would notify the utility. Then the owner, architect or engineer would get their reward.]
- Would need to make it clear that it's proprietary information.
- Target marketing/PR staff of these owners.
- ETO has ENERGY STAR labeled buildings – a year after construction.

### **Commercial & Industrial Lighting Roadmap (Jennifer Eskil)**

Jennifer Eskil presented the latest on the Commercial & Industrial Lighting Roadmap.

- Tips for disposal of lights have been added at the suggestion of the USB.
- BPA is in the process of fine-tuning products. When that's complete the Roadmap will go to Public Affairs for polishing, and then will be posted on the external BPA Energy Efficiency Web site. The first of three Brown Bag sessions on the C&I Lighting Roadmap will be on February 20.
- Would utilities prefer binders rather than materials on the Web site?
  - Binders
  - When sheets are updated in the binder, how will we know what to take out and replace? [The number and date of each publication is on the bottom of the page.]

### **Compressed Air (Jennifer Eskil)**

BPA's target for Compressed Air (CA) is 2 aMW. The TSP process can assist utilities with compressed air scoping audits. Are there other things BPA can do to get CA going?

- One USB member reported that his utility is trying to figure out how to get projects; have to go to people at facilities that have a lot of CA, i.e., the sales person that meets with customers. We want to get the information without showing preference to any one vendor.
- There are just four or five compressed air suppliers on the I-5 corridor. The USB asked for the list. [Jennifer will send a list to the USB.]
- Maintenance in CA is atrocious; there's a lot of energy wasted.
- Is there a flyer utilities can give out? [Yes. BPA can tailor materials for utility needs.]
- Invite as many of your end-users that you can to a meeting to talk about opportunities. [If utilities do this, get a list of attendees at the sessions and do follow-up by the utility and/or CA consultant. Would utilities do this?] [Four USB members have done CA projects. We may discuss this at a later USB meeting, as BPA wants to support these projects.]
- One USB member said his utility would as long as it doesn't show a preference, i.e., bringing in one contractor when another already serves that customer.
- How do you know which vendors are in a utility service territory? *(Another USB member suggested contacting the end-users purchasing department to find out what vendors are in that area.)*
- Firms did an audit of end-users and sent it to the utility to see if it is interested.
- Let the people doing the audits know there are incentives. [The utility could let end-users know the vendors may call on them about good opportunities. Tacoma is doing projects through CRC. They have a major focus.]
- One USB members said his utility has done CA projects in the past. Managers are busy people and don't want to deal with changing out compressors until they break, and then they want a replacement immediately. Get something in place for those units that may be nearing failure. [The New York Energy Authority worked with vendors to do something similar (<http://www.nypa.gov/press/speeches/2006/61012b.htm>).]
- Provide end-users with information so it's on hand when the compressor breaks.

### **2007 Utility Workshop (Mira Vowles)**

Mira presented the most recent draft of the May 17-18 workshop agenda and provided updates. The Workshop is for utilities, although some speakers come in for specific sessions. Is it critical that the Workshop sessions are vendor-free? What about investor-owned utilities (IOU) or the Energy Trust of Oregon (ETO)?

- There's some value in letting vendors attend, as long as they understand that the Workshop is for utilities. [There will be a vendor BPA Program 101, parallel with utility sessions on the first day. Vendors will also be there in the evening on May 17.]
- Vendors will send their sales force, and that could change the dynamics. For the most part USB members do not to open the sessions to vendors.
- A useful discussion at the Workshop might be how to optimize limited staff.
- If utilities are going to allow IOUs to help them (spillover), maybe we don't want to keep them out. The USB doesn't see any problem with letting IOUs and the ETO attend.

### **Commercial Audit Training (Mira Vowles)**

Three years ago, the Northwest Public Power Association (NWPPA) offered Commercial Audit Training. There is utility interest in having this training repeated. If eight or ten people attend, the cost would be about \$300; the more people, the lower the cost (maybe \$200). Mid-April is a potential training date.

- There's not been enough training in the commercial sector. I heard about it after the fact last year – didn't know in time to participate.
- It would it be okay to allow non-utilities if there's room in order to subsidize the utility cost.
- This may be offered the afternoon before the Workshop.
- Are there other training utilities need? CA hasn't been promoted. We don't know how to identify potential customers or how to market to them. Who are the key players? Get everyone together.

### **Regional Technical Forum (Bruce Cody)**

Bruce Cody provided a recap of the January 23 RTF meeting.

#### Vending Machine Market Characterization Research:

Preliminary savings analysis found cost-effective savings for Tier 2 Energy Star machines; market assessment is needed to refine estimates of costs, savings, potential, and to design an effective program structure. The RTF approved funding in November 2006 and selected Quantec to conduct a literature search and interviews with key market actors.

#### Rooftop Packaged Systems:

5-7 ton rooftop air conditioners controls don't work very well. The New Buildings Institute is recruiting sites for field testing in Bend and Portland, and bench testing is now up and running.

#### Prescriptive Paths for New Small Commercial Buildings:

Goals: a prescriptive program for selected new small commercial construction: whole-building, integrated measure approach where possible and effective; deemed or deemed-calculated savings; commonality across the region; training for designers, builders and developers. The favored approach is to piggy-back with work being done by the New Buildings Institute for its Advanced Building Guidelines. The initial NBI analysis is underway. It's a complex analysis, to sort and optimize measures and sequence their application; BPA is proceeding with a separate NBI contract for the PNW-specific analysis and review.

#### Presentation, Discussion and Decision on Revised Energy Star Dishwasher Specifications:

Staff proposal: use DOE retail price assumptions, or alternative. Ultimately, it was agreed to table the decision on this agenda item until the next RTF meeting.

#### Presentation, Discussion and Decision on Savings Assumptions for ENERGY STAR Homes with Interior Duct Work and Heating Systems:

With respect to duct efficiency, there are two levels of savings in the ENERGY STAR program, currently – one for buildings with ducting that is completely inside the heated building envelope, and another where the unit is located outside, and the bulk of the ductwork is outside the heated/cooled envelope of the building. The RTF was asked to look at what it would mean to move an exterior HVAC system – air handling, ductwork etc. -- inside. Tom Eckman's estimate of the incremental cost was \$675 based on two houses only. The savings in Portland were about 1,300 kWh, which means you could afford to pay up to \$1,200 and still have this be a cost-effective measure. This topic will be revisited at the next RTF meeting.

#### Presentation and Discussion Energy and Economic Analysis of Potential Residential Energy Code Revisions.

Using the region's most stringent implemented energy code, Oregon's, as the base case, Eckman touched on major topics. He asked the RTF members if they had any specific suggestions for changes in the input assumptions he had used. Mark Jerome volunteered to provide estimates of gas furnace and heat pump costs based on his company's

experience. Brady Peeks also indicated that he would provide cost estimates from the Oregon Residential Tax credit data base. Jay Himlie distributed photos showing the complete absence of insulation in the attics of two new homes -- you can put all of the code out there you want to, but without code enforcement, you're not going to get very far. Eckman will update his analysis once the additional information discussed at today's meeting is received.

Presentation, Discussion and Potential Decision on Deemed Energy Savings and Cost Effectiveness of 80-Plus Power Supplies.

Power supplies for desktop computers are notoriously inefficient; they can be made more efficient by changing from a linear to a switching power supply. Published estimates put annual savings per unit at 74-90 kWh (Ecos and NEEA), with an incremental cost of \$5/unit and declining. The RTF recommended sticking with NEEA estimates for now, and that BPA adopt this as a deemed measure and work with NEEA to adopt a program for implementation. This motion was unanimously approved.

Presentation and Discussion on PNW Deemed Energy Savings Values for Commercial Pre-Rinse Spray Valves of Recent California Impact Evaluation.

A draft evaluation from a California program evaluation found much lower savings than expected; the EPAAct of 2005 set standards for spray heads: 1.6 gpm for new heads beginning January 2006. Preliminary thoughts: original savings estimates should be reviewed; AWWA report has much useful data that could be employed to re-estimate savings; may need PNW measured data on hours of use pre- and post-installation; get more PNW data on water temperatures. Draft recommendation: issue RFP. Review savings estimates in light of recent evaluation findings, identify and conduct research needed to revise estimates, develop program recommendations, savings protocols.

Lazar moved that the Council move to expand the ethnic and gender diversity of the RTF. This motion was seconded and unanimously approved.

The next meeting of the Regional Technical Forum was set for February 20, 2007.

**Implementation Manual (Salmon Book) Changes for April or October 2007 (Ken Keating)**

**New measures:**

- The cap for Industrial and Non-lighting Commercial moves up to 70 percent, effective February 1, 2007.
- Dry-type transformers will probably be 15 kva to 17 kva due to early and replacement and will be cost effective. Tom Eckman is looking at this measure.
- Vending machines (refurbished) – Research is underway, but it won't be addressed until October 1, 2007.
- Freeze resistant stock water tanks/fountains are in the Planning, Tracking, and Reporting (PTR) system, so utilities can go ahead and submit claims.
- Prescriptive new construction – not until October 1, 2007.

**Measures dropped:**

- These will be officially announced in April, but won't be effective until October 1, 2007.
- Heat pumps in climate zone 1 with basements will not be available.
- There will be ENERGY STAR Dishwashers for electrically-heated homes in October. Tom Eckman has found an incremental cost of \$14-\$20, and the BPA credit is \$25.
- Pre-rinse spray washers – current specifications protect us from problems (i.e., installations in grocery stores); we'll get at least 1,000 kWh.
- Geothermal heat pumps – no one has cost data. The Inspector General (IG) investigation said BPA was paying within \$10 of the incremental cost. BPA will probably leave it alone, rather than reduce the incentive.

**USB questions/comments:**

- What's the rationale for restrictions on claiming this? Are most closed loops? [About ½ and ½]
- Was there any cost data out of Spokane?

BPA needs cost data for these installations. 9.5 HSPF is hard to find. May have to drop in October and go with cold climate heat pumps. If they are dropped, notice will be given in April. There's no cost data in the PTR because, so it shows \$0.0 as the credit/reimbursement.

- One USB member said she had seen Trane 9.5s, but doesn't know the cost.
- They're expensive.

- What if someone commits to one before October 1, but doesn't install it until after that time? [BPA will pay, if documentation is provided]

More measure changes:

- The confusing, unnecessary language about windows will be removed.
- R-0 means something less than R11. BPA has a request to change it to "less than R-11 to R38."
- BPA wants Tom Eckman to have fewer categories for dishwashers and clothes washers, but only the Council can change the PTR; Tom owns the contract for the PTR. Utilities can use the default entry.
- RTF determines savings; BPA decides Willingness to Pay (WTP).
- It would be much easier to take a lot of unnecessary stuff out of the PTR.
- Different houses save different amounts.
- Ground source heat pump specifications will be updated in the PTR on April 1.
- Low-income windows with storms qualify as single pane based on starting U-value.
- Audit report: 3/31 or 4/30 – BPA doesn't care; just do once per year, for each of the three years.
- Corrected typos in PTR; refrigerators, not refrigerators/freezers; 40 horsepower Ag motors are 95,1 not 94.1
- Manufactured houses – left over from C&RD.
- BPA will post errata sheet to the EE Web site, and send the link to utilities. The manual won't be reprinted. [until 4/07]
- Next step, line up changes, run by Energy Efficiency Management Team. EERs will send letter.

USB member: Did the USB get an opportunity to provide input on these proposed changes and on the four enhancements? The changes announced April 1 won't be changed until October 1. It's different than what we've done in the recent past. [The enhancements were more of an agency push to try to make it easier to get more conservation. As far as the proposed changes, they are April changes.]

**Feedback on NWPPA Training (Mira Vowles)**

Mira requested feedback from the USB by March 1 on proposed Northwest Public Power Association training.

**Utility Tracking Tool Tied to Council Targets (Tom Schumacher)**

Tom Schumacher shared a utility tracking tool he developed with Charlie Grist.

- It took one year to figure out how we tied to the Council Plan regarding kWh savings for each customer class.
- It's broken out by sector for Council targets, and using Benton load (sales) Benton's share of the Council target is calculated.
- All the utility has to do is input load and the rest is calculated. It also shows levelized costs.
- It helps to figure out what mix of measures will achieve the targets.
- Cost is based on BPA incentives.

**Other Issues**

- The March 14 call will be the last for Tom Schumacher, Mary Smith, and Brent Barclay, who will rotate out of the USB at the end of the month.
- E-mail Brown Bag ideas to Mira.
- Have Roger Ebbage talk about the Lane Community College Intern Program.

**Next Meetings**

• March 14, 2007	Conference call, 8:30 a.m. to 10:30 a.m.
• April 11, 2007	Face-to-face meeting, 9:30 a.m. to 4:00 p.m.