W. Bill Booth Chair Idaho

James A. Yost Idaho

Tom Karier Washington

Dick Wallace Washington



Bruce A. Measure Vice-Chair Montana

Rhonda Whiting Montana

Melinda S. Eden Oregon

Joan M. Dukes Oregon

#### Council Meeting Astoria Oregon

September 16-17, 2008

#### **Minutes**

Bruce Measure made a motion that the Council meet in executive session at 10:45 a.m. on September 16, 2008, to discuss participation in civil litigation. Melinda Eden seconded the motion, which passed unanimously on a roll call vote.

#### 1. Welcome by Clatskanie PUD:

Greg Booth, General Manager.

General manager Greg Booth of Clatskanie PUD briefed the Council on his utility's resource acquisition. He noted the PUD, Oregon's oldest, serves significant and growing industrial load, including paper and ethanol producers. "Free, perfect, and now" is how Booth described what customers want in their electricity service.

We expect continued industrial growth, and the challenge is to meet load and remain the lowest cost electricity provider in the state, he said. Clatskanie is looking to develop renewables and take advantage of new technologies for conserving energy, Booth reported. Conservation is our first priority, and we are in the process of acquiring renewable resources, he added.

## 2. Panel of investor-owned utility representatives on the Western Climate Initiative:

Kyle Davis, PacifiCorp; Ken Johnson, Puget Sound Energy; and Sunny Radcliffe, Portland General Electric.

A panel of IOU representatives reported that their companies are working to meet the challenge of reducing carbon emissions. Kyle Davis of PacifiCorp described "the backdrop against which we must lower carbon," which encompasses dramatically increased costs of raw materials, transportation, and labor; a generation deficit; transmission capacity needs; and renewable portfolio standards (RPS). In addition, Northwest utilities are experiencing load growth, some of

503-222-5161 800-452-5161 Fax: 503-820-2370 which is "life-style driven" and includes consumer purchases such as high-definition television, he indicated.

Sunny Radcliffe of Portland General Electric (PGE) said that while generation in the Northwest is generally low in carbon, power imports also figure into the equation. Measured in terms of generation, CO<sub>2</sub> emissions in the region are relatively low; but measured by consumption, CO<sub>2</sub> emissions are much higher, and the carbon costs will follow consumption, she said.

Puget Sound Energy (PSE) is investing in energy efficiency, which PSE's Ken Johnson called the first-priority resource. PSE will invest \$140 million in energy efficiency over the next few years, he said. In addition, the company has two wind installations that bring about 400 MW of capacity into its system and is working on another 1,250 MW in four wind projects, which have the potential to fulfill PSE's RPS requirement, Johnson said. Solar is also on the PSE agenda, with an installation of solar panels at the Wild Horse project in central Washington, he continued. The solar project has a peak generating capacity of 500 kilowatts and cost \$4.5 million, according to Johnson.

The three utilities, along with six others, paid for an Electric Power Research Institute (EPRI) study of how a carbon price signal at various levels could affect the power market, Davis said. EPRI looked at what happens to generation dispatch when CO<sub>2</sub> has a price, he explained. The most expensive resources to operate "bring up the tail end" of the supply stack, and when the CO<sub>2</sub> price gets to \$40 per ton, more gas is dispatched in lieu of coal, Davis said. According to the EPRI analysis, the emissions cost has to get above \$50 per ton "to force coal out of the system," he noted.

The EPRI study concluded that higher electricity prices will be inescapable in order to cut CO<sub>2</sub> emissions; large reductions in emissions are possible if there is time to add significant amounts of nuclear, renewables, and carbon capture and sequestration; and the availability of natural gas is critical to achieving near-term emissions reductions, Davis summarized.

Johnson described the Western Climate Initiative (WCI), which is an effort by Western governors to set a regional emissions cap. WCI is set to release its final cap-and-trade program proposal next week, he said. Johnson listed several utility principles for designing a cap-and-trade program, including that it address emissions economy wide. In Washington, for example, electricity production accounts for 20 percent of CO<sub>2</sub> emissions, while transportation contributes 50 percent, he said. In addition, a program needs to be consistently applied, administratively simple, transparent, and include a safety valve for costs, Johnson stated.

We three IOUs think a federal program is preferable to the WCI, Johnson said. It would be easier to develop a program if all affected states and provinces were at the table, which they are not, he said. We all believe there are ways to develop a regional emissions reduction program, but cap-and-trade is not the best way, Johnson stated.

Radcliffe explained that the method for allocating emissions allowances makes a big difference for Northwest utilities, but the WCI leaves this decision to the states. Punting to the states is not workable – you need a consistent market that shares the problem equitably, she indicated.

Davis outlined several items for the Council to examine in its modeling for the Sixth Power Plan. He said the Council should include: sensitivity runs on natural gas prices being higher than

projected; a high load-growth case driven by plug-in electric vehicles; higher capital costs for new generation; no new nuclear generation; success with research on carbon capture and sequestration; energy-efficiency mandates; and a "wild-card" scenario with several simultaneous adverse outcomes. And he asked the Council to promote an accurate accounting of the region's carbon footprint. Your 2007 report was a realistic assessment, Davis added.

Yost asked whether the utilities are having problems delivering and integrating wind generation. Davis said Oregon's RPS targets pose integration problems. We can accommodate about 15 percent of the target, but beyond that, it's a real challenge, he said. We absolutely need new transmission and new technologies, Davis added. He also pointed out that the integration of small-scale projects like residential solar and distributed generation pose challenges for the distribution system.

It's very clear that new transmission will be needed, Radcliffe agreed. And we will need firming resources, like gas, she added.

#### 3. Review of Resource Adequacy Report:

John Fazio, senior power systems analyst.

Staffer John Fazio reported on the latest iteration of the resource adequacy assessment. The Council adopted an adequacy standard in 2007, and every year, the Council looks ahead three and five years to assess the adequacy of the power supply, he explained. According to Fazio, the assessment this year indicates the region has ample access to supplies over the next five years to avoid significant power curtailments. If you take planned resources into account, the situation looks even better, he said.

The gap between accessible generating capability and load has decreased since last year's assessment, primarily because of higher load forecasts, Fazio continued. The assessment shows that the region is more likely to face a summer peaking shortage than a winter peaking or annual energy problem, he said.

According to this year's assessment, the annual average energy surplus for 2011 and 2013 is well above the adequacy threshold, Fazio reported. There is a 2,600 average MW surplus in 2011 and 1,900 MWa in 2013, he said. For winter and summer capacity reserve margins, the assessment shows them to be above the threshold, with slightly more likelihood the region would experience a summer capacity shortage before it faces a winter shortage, Fazio pointed out.

Since last year, the gap between generation and load has decreased substantially, particularly with regard to the 2013 annual energy surplus, which has gone from 4,000 MWa to 1,900 MWa, he said. This was largely due to an adjustment in the Council's short-term load model with more recent information, Fazio explained.

The bottom line, we're still okay, but the Resource Adequacy Forum has laid out a work plan to look at the data and review the assumptions, he said. The Council's Sixth Power Plan will address the resource adequacy standard, looking at an economic standard, as well as other issues, according to Fazio.

## **4.** Update on Fish and Wildlife Program amendment process (if necessary) Tony Grover, director, fish and wildlife division.

Staffer Patty O'Toole presented an update on the schedule for comments on the draft fish and wildlife program. She said the draft has been released and the deadline for written comments is October 30. Staffer Lynn Palensky said the first public hearing is tonight, September 16. There are 11 hearings, with the final one October 21 in Portland.

O'Toole asked for clarification about when to release the subbasin plan summaries for review. My recommendation is to follow up the December decision on the program with them, she said. There is so much information out now, we don't want to confuse the public, O'Toole added. The Council agreed with the recommendation, with Wallace saying that while he earlier thought it might be possible to do the summaries simultaneously with the program amendments, he agreed with waiting.

#### **5.** Council business:

#### Approval of minutes

Measure made a motion that the Council approve for the signature of the Vice-Chair the minutes for the August 1, 2008 teleconference meeting, recorded in Portland, Oregon; for the August 8, 2008 teleconference meeting, recorded in Portland, Oregon; for the August 12-14, 2008 meeting, held in Spokane, Washington; and for the August 28, 2008 teleconference meeting, recorded in Portland, Oregon. Joan Dukes seconded the motion.

Karier offered an amendment to the August 8, 2008 teleconference minutes, adding "and needs to be evaluated as any other project" to language relating to the Fish Passage Center. Wallace seconded the motion to amend. The motion as amended passed unanimously.

#### Update on Columbia Basin Trust issues

Staffer John Harrison reported on progress with five work items related to the Columbia Basin Trust (CBT): an international center for information; merging climate change reports; an estuary-to-headwaters bus tour; co-funding of a fish and wildlife project; and a steering committee for a transboundary conference in 2010. The CBT is at work setting up the bus tour, he said. The co-funding idea doesn't look feasible because of differences in the way we fund projects, Harrison said. As for planning the 2010 conference, we will start that work in October or November, he said.

We've contacted university climate change researchers about merging the ISAB report on climate change with other work, Harrison said. We are first looking at what kind of product would be useful to the Council in developing a fish and wildlife program and a power plan, he explained. The researchers will get back to us with a scope of work that explains how the merged reports could be used, Harrison added.

He reported on a conference call to discuss the international center for information. It was a well attended call, he said, with representatives of a number of organizations and universities participating, Harrison said. Both Portland State University and the University of British Columbia saw great potential in such a center, he said. We need a scope of work for consultants

to respond to on the potential uses of the center, and I will coordinate development of the scope, Harrison said.

#### Reports from Fish and Wildlife, Power and Public Affairs committee chairs:

Rhonda Whiting chair, fish and wildlife committee; Melinda Eden, chair, power committee; and Dick Wallace, chair, public affairs committee.

Fish and Wildlife Committee chair Rhonda Whiting reported that Gary James went through the Walla Walla Master Plan the tribe recently submitted. She said the committee also discussed the Independent Scientific Review Panel (ISRP) reports on two fish and wildlife projects: Middle Fork John Day and Blue Mountain. The ISRP expressed concern with the John Day project, but the committee decided to move the project to the Council for a vote, with conditions, Whiting said. As for the Blue Mountain project, the ISRP gave it an excellent review and we determined that it should move forward since conditions have been met, she reported.

There was also a presentation on the Hood River production program, Whiting continued. The ISRP had concerns and the committee said sponsors should work with Council staff to address them, she said. We also had an update on the project review process, Whiting said. Staff has met with the ISRP, the Wildlife Advisory Committee, and BPA contracting officers about wildlife projects, and the next step is to work with sponsors to update information, she said.

Power Committee Chair Eden said the power committee had a presentation on energy efficiency and new technologies that are being considered for the Sixth Power Plan. Staff reported on Demand Response efforts, and we wrapped up our discussion of the portfolio model, specifically the economic metric in the model, she said. We had an update on wind issues and learned that an increasing amount of the wind being developed in the Northwest is being shipped to California, taking up transmission capacity to do so, Eden reported. She said staff will be looking into integration costs.

We also had a presentation on ancillary services that are used to balance generation and load, Eden continued. And we learned about the tactics that are used to keep the system in balance, she said.

Dick Wallace, chair of the Public Affairs Committee, said his committee did not meet. He reported that the Congressional staff visit was a success and recounted activities that went on during the visit, including a trip to Bonneville Dam and a tour through a cutting- edge energy efficient building at OHSU.

Staffer Mark Walker recapped Council members' recent visit to Washington, D.C. It turned out to be a good time for the visit as we were able to get to many offices and meet with many members of Congress and staff, he said. Walker described meetings that went on, including those with House Water and Power Subcommittee staff, Washington Congresswoman Cathy McMorris Rodgers, Oregon Congressman Greg Walden, Idaho Congressman Bill Sali, and Washington Congressman Norm Dicks' staff.

One of our goals is to increase our interaction with Congress, and we are doing that, Council chair Bill Booth said. I would urge continued involvement, he added.

Booth reported on a September 2 sockeye release and ribbon cutting at the Eagle Hatchery near Boise, which he said was a good event and exemplifies the partnership to aid salmon in the region. Eden reported on a recent dinner to celebrate the return of salmon to spawn in the South Fork Umatilla River.

# 6. Presentation on the Oregon Graduate Institute's Center for Coastal Margin Observation and Prediction's recent estuary, ocean plume and near shore research and monitoring activities:

Dr. Antonio Baptista, Director.

Director Antonio Baptista of the Oregon Graduate Institute's Center for Coastal Margin Observation and Predictions described research and monitoring activities on the estuary, ocean plume, and near shore environments. He began the presentation with an animated map showing the movement of tides and salinity levels in the estuary in real time. While there are new tools being developed to study the coastal margins, the systems are too complex for us make certain predictions or understand completely, Baptista said.

Baptista described the work of the Coastal Marine Observation Program and its relationship to other technical centers across the country funded by the National Science Foundation (NSF). We are the only center that is focused on coast observation, and our mission is to study coastal systems, he said.

A measure of our center's success is that we will never have another spotted owl or salmon crisis because we will see ahead, and integrate anticipatory understanding, Baptista explained.

# 7. Briefing on public comments to Bonneville on Fish and Wildlife Program budget:

Greg Delwiche, Bonneville Power Administration; Tony Grover, director, fish and wildlife division.

## 8. Review and discussion of Bonneville's analysis of Fish and Wildlife Program budget:

Greg Delwiche, Bonneville Power Administration; and Tony Grover.

#### [Agenda items #7 and #8 were combined]

Greg Delwiche of BPA updated the Council on the agency's 2009 and 2010-2011 fish and wildlife (F&W) budgets, which now incorporate costs associated with the Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) and the Columbia Basin Accords with states and tribes. During its Integrated Program Review (IPR), BPA held workshops that focused on costs to be included in 2009 and 2010-2011 power rates, he explained. The agency had workshops on the 2009 costs in May and announced its decisions in July, Delwiche said. For the 2010-2011 costs, workshops were held in June, and a final decision is expected this month, he said.

F&W program spending is set at \$200 million for 2009, \$230 million for 2010, and \$236 million for 2011, according to a BPA summary. Delwiche said the budgets reflect a 2.5 percent inflation factor.

He said a fundamental principle underlying the F&W budget is that it reflects what it will take to implement the new BiOp and Accords without reducing funding for other elements of the program. Delwiche acknowledged the increase in 2009, from \$143 million in 2008 to \$200 million, is the largest in the history of BPA's F&W program. But it is necessary to meet our commitments, he stated.

The 2009 and 2010-2011 F&W budgets include \$90 million for research, monitoring, and evaluation (RME), up from \$55 million in 2008, Delwiche pointed out. With the ramp-up in the program, there is a ramp-up in RME spending, he said. How much RME is sufficient is both a science and a policy question, and "we need to think hard about how much is enough," Delwiche said.

In the IPR, customers expressed concern about the budget levels, so we took a look at what would happen if we increased or decreased levels by 10 percent, he continued. For F&W, the Accords are firm commitments, so all the cuts would have to come from other areas of the program, Delwiche said. We found that result to be inconsistent with the building blocks of our proposed budget, he said. Half of the base program is the cost of keeping up past investments, Delwiche added.

As for increasing the budget, it would allow for funding previously proposed unfunded projects, he said. But many of these are RME, and BPA is reluctant to initiate any of them ahead of the Council's categorical review of RME and the application of high-level indicators, Delwiche explained.

While we haven't finalized our proposal, there's a strong inclination to stay the course of what we originally proposed, he stated. The final budgets will be brought into the rate case, Delwiche said.

He presented a summary of F&W spending for 2009-2011 sorted by several categories: geographic province; type of project, i.e., habitat, wildlife, hatchery; FCRPS BiOp; Columbia Basin Accords; and Non-BiOp and Non-Accord. There was an increase of \$82 million from the 2009 planning budget developed in July 2008 to the current 2009 start-of-year budget, which includes the Accords and the new FCRPS BiOp, Delwiche indicated. Of the \$82 million, \$5 million is general increases, and the remainder is for BiOp and Accord work, he explained.

The planned spending for the F&W program for 2009-2011 is "an unprecedented" 55 percent increase over the previous three fiscal-year planning budgets, Delwiche acknowledged. He said \$31 million is budgeted for new work in 2009 that is intended to implement elements of the BiOp outside the Accords. The project sponsors have already been identified for some of the work, but not for all, Delwiche said.

Delwiche asked the Council to play a role in recommending funding for mitigation actions that are scientifically sound and the most cost-effective means to meet program objectives, including new BiOp actions and we also need to get started on the RME review.

Delwiche went on to outline the geographic distribution of budget increases, as well as the distribution by category of project. RME, at \$90 million, is the largest single category within the budget, he said.

BPA is preparing a budget white paper to explain how it plans to manage the separate program categories, he said. We will release the paper and ask for feedback, Delwiche added.

We appreciate you getting this information for us, but there is more work to be done here, Booth said. He indicated that Council staff will need more data and the capital side of the budget to do a good analysis and inform the Council on provincial-level spending.

Karier said the region needs a long-term budget agreement for planning purposes. We have two years of budget here, but a long-term project cycle for recovery, he stated.

#### 9. Council decision on follow-up for Fiscal Year 2007-2009 projects:

Mark Fritsch, manager, project implementation.

#### Project 1984-021-00, Mainstem, Middle Fork, John Day River Fish Habitat Enhancement Project

Whiting said the Fish and Wildlife Committee considered two Oregon Department of Fish and Wildlife habitat projects, which have been part of the program since 1984. On the John Day project, the committee decided to move forward with caveats, including that the sponsors need to respond to the ISRP concerns and improve data gathering, she said.

Staffer Mark Fritsch provided background on the John Day project, including ISRP reviews that have taken place since it was given conditional funding in the 2007-2009 project selection process. The ISRP gave the project qualified approval, and staff determined based on the history of the project that it has met the ISRP qualifications identified in the ISRP review, he said.

Karier noted that the proposed budget for 2009 was \$474,000. Fritsch said the Council had recommended \$340,000.

Booth clarified that the motion that was prepared for the action addresses both the John Day and Blue Mountain projects. But we will take them separately, he said.

Wallace said he had three points he wanted to add to the motion for the project: that the sponsors must address the concerns and conditions noted by the ISRP; that the project needs to better coordinate and synthesize data for the John Day; an independent group needs to help with the synthesis of data and assessment of accomplishments; and this information will be utilized during the geographic review.

Dukes made a motion that the Council find that conditions placed on the John Day Fish Habitat Enhancement, Project 1984-021-00, have been met, with the additions offered by Wallace. Wallace seconded the motion.

Karier said that the information the sponsor presented wasn't compelling on results. The ISRP has said it can't establish the benefits of the project, which has going on for 24 years, he said.

I'd like to see the ISRP conditions met before we give more funding, Karier states. It seems to me we are voting on this without having the problem solved, he added.

Who will pay for the independent group? Eden asked. Fritsch said it could be dealt with through the existing budget. Bill Maslen of BPA agreed, saying it wouldn't add costs to the project.

There's great potential in the John Day, but this is an opportunity to step back, Karier responded. We can't justify this when the ISRP found no benefits in the last 24 years, he said. And waiting until November 2009, when it could be included in a geographic review, is not timely, Karier added.

Booth called for a roll call vote. Wallace, Eden, Dukes, and Booth voted aye; Yost, Measure, Whiting, and Karier voted no. Booth concluded the measure failed.

#### Project 1984-025-00, ODFW Blue Mountain Oregon Fish Habitat Improvement

Measure made a motion that the Council find that conditions have been met and confirm the budget recommendations for the Oregon Department of Fish and Wildlife Blue Mountain Fish Habitat Improvement, Project 1948-025-00. Dukes seconded the motion, which passed unanimously.

#### 10.Presentation on ISAB spill transportation report:

Rich Alldredge, member ISAB; and Erik Merrill, ISAB coordinator.

Dr. Richard Alldredge reported on the Independent Scientific Advisory Board's (ISAB) Spill-Transport Review, which he acknowledged as a team effort among several board members and agencies. In March 2008, NOAA Fisheries asked the ISAB to respond to questions about the seasonal variation in the transportation benefits for smolts from four Snake River salmon and sockeye species, he said. Other questions from the Columbia River Inter-Tribal Fish Commission and the Oregon Department of Fish and Wildlife (ODFW) were subsequently added to the study, Alldredge explained.

He outlined the topics the ISAB addressed as: the relative benefit of transportation versus inriver migration during April and May; no voluntary spill from May 7 to May 20 versus continuing spill; results from recent years; impacts on other native species; and ecological/evolutionary issues. Our responses were developed using existing data, Alldredge said.

The magnitude of benefits relative to transportation in late April through May varies substantially across species and between years, he reported. But overall, statistical results indicate transport is a benefit in 75 percent of years, Alldredge said. As to the question of whether to terminate voluntary spill from May 7 to May 20, he pointed out that transportation in that period benefits both hatchery and wild chinook and steelhead, but as spill increases, inriver survival increases, too, and the relative benefit of transportation decreases. Terminating spill would eliminate the possibility of learning about the effect of partial spill during this critical period of the year, Alldredge stated.

A third question relates to whether the results from 2006-2007 are different for spring chinook and steelhead in terms of travel time and downstream survival. Recent structural and operational changes have improved inriver survival, but we need more years of returns to see, he said. There are also the confounding effects of the ocean and a good flow year in 2006, Alldredge added.

A fourth question relates to the impacts of alternative spill-transport scenarios on other native species, in general, and Pacific lamprey and Snake River sockeye, in particular. He said data are very limited and impacts are expected to vary greatly. Juvenile lamprey impingement on screens and sockeye descaling in bypass systems present concerns, Alldredge said.

The fifth question addresses optimal spill and transport operations and the factors to consider. He described several factors in play, including predation, disease in barges, increased straying in barged fish, and the potential that a particular spill-transport regime year after year could influence the evolution of downstream migratory behavior.

The ISAB offered several recommendations, which Alldredge listed, including concurrent transportation and spill whenever river conditions allow during the late April and May migration season, compiling more years of data on various species and conditions, and evaluating juvenile passage alternatives against spill. "Although spill isn't natural, it's more natural than barging," he commented.

The meeting adjourned at 12:15 p.m.
Approved October 15, 2008.
/s/ Bruce Measure
Vice Chair

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