

Bruce A. Measure
Chair
Montana

Rhonda Whiting
Montana

W. Bill Booth
Idaho

James A. Yost
Idaho



Dick Wallace
Vice-Chair
Washington

Tom Karier
Washington

Bill Bradbury
Oregon

Joan M. Dukes
Oregon

Council Meeting Portland, Oregon

February 9, 2011

Minutes

Reports from committee chairs:

Bill Booth, chair, fish and wildlife committee; Tom Karier, chair, power committee; and Rhonda Whiting, chair, public affairs committee

Fish and Wildlife Committee chairman Bill Booth reported on a “productive” January 19 work session on research, monitoring, and evaluation (RM&E) and the categorical review. He described the process for the categorical review and said an initial 60 projects were selected for three-year funding decisions in April. Booth said the committee would hold another work session before the April meeting to finalize the project recommendations. Another group of 100 projects will be receiving further review by the committee, he continued. Booth said the committee is also working on a strategic plan for the next fish and wildlife (F&W) program amendment process.

At the February 8 committee meeting, we had a group of guests who came to express concerns about a Council draft issue paper on white sturgeon, he reported. The issue paper is not complete, but a draft has been circulating, and much of our meeting was spent in discussions with a panel from the Oregon and Washington F&W agencies and representatives from the Columbia River Inter-Tribal Fish Commission (CRITFC), Booth said. Before any decisions are made on the issue paper, everyone will have their say, he stated.

The committee had a presentation on the Budget Oversight Group projects, which will be up for consideration later in the Council meeting, Booth concluded.

Power Committee chair Tom Karier reported that the committee had a preview of a 20-page white paper – Power Planning 101 – that describes the Council’s planning methods. The document will be reviewed again before it is posted on the Council’s website, he said.

The committee had two wind-related items, one having to do with pulling back the issue paper on oversupply, Karier said. Critics of the paper were concerned about its purpose, and there were anti-trust issues raised, he said. A revised paper could be out as early as this week, according to Karier. There was also discussion of a collaborative study being carried out with PNUCC on the capacity value of wind, he said. An important question is whether wind in

combination with the rest of the system can meet load and capacity requirements, Karier said. The effort is leading to lots of good work, and we will soon see the results, he stated.

Karier said the committee also discussed the data on the employment effects of energy efficiency and how the 47,000 jobs figure used in the Power Plan was calculated. The committee also had an update on California's latest policy on renewable energy credits (RECs) relative to that state's renewable portfolio standards. The latest number is a result of action by the California PUC, which set a 25 percent cap on RECs, with rules about what does and does not count, he said.

A Council letter to BPA on that agency's energy efficiency program was the last topic of discussion, Karier said. The committee unanimously supported the letter, he added. The committee will meet on March 5 via Go To Meeting, Karier concluded.

Public Affairs Committee chair Rhonda Whiting said that committee did not meet.

1. Council decision on project reviews: Quarterly Review of Within-year Project Funding Adjustments for Implementation,

Mark Fritsch

Staffer Mark Fritsch told the Council the Budget Oversight Group considered two requests for adjustments to within-year project funding. The first, related to the Southern Idaho Wildlife Mitigation project, is being addressed in the wildlife categorical review and does not need Council attention at this time, he said.

The second item pertains to the removal of sea lions at Bonneville Dam, Fritsch continued. The \$75,857 request came from the Idaho Department of Fish and Game, Pacific States Marine Fisheries Commission, Washington Department of Fish and Wildlife, and the Oregon Department of Fish and Wildlife to build three additional floating traps to capture sea lions at Bonneville Dam. So far, about 40 sea lions have been removed using the traps, he said.

In November 2010, , Fritsch said. Based on the Ninth Circuit Court ruling that NOAA Fisheries had not provided an adequate rationale for the lethal removal of sea lions and the lack of science review for the project, staff does not recommend the Council support the request.

Karier asked why there had not been a science review. Fritsch responded that the request came in on an emergency basis as part of a request for funds to carry out hazing of sea lions. Hazing is now part of the tribal Accords, he added. The Council recommended the emergency request for funding, so the trapping of sea lions never went through a science review, Fritsch explained.

I support the expenditure and it has potential for major benefits to salmon, Karier said. I would like it to go through science review, he said. The legal issues will be sorted out soon, and NOAA is remedying its sea lion program, Karier said.

Booth said the F&W Committee reluctantly agreed to act not to fund the request. The sea lion capture program is suspended and there is also an issue around the funding, with BPA saying the Corps should provide it, he said. It is a small amount of money, Booth said. Hazing continues to be funded even though we are told it is ineffective, he commented. The Council should be prepared once NOAA decides how it will proceed, and BPA and the Corps need to sort out the funding, Booth continued. We may send a letter asking them to sort this out, he added.

Dick Wallace said he would echo Booth's sentiment calling it a "reluctant decision." He noted that NOAA needs the Council's decision to build the traps and it may get too late for this season.

Bill Maslen of BPA explained that the issue revolves around "lethal take" and the authority was given to the states. It is not our within our authority to get involved, he said. The Corps and BPA are complying with a measure in the Biological Opinion that includes hazing the sea lions and keeping them out of the fish ladders, Maslen said. Until NOAA changes that BiOp requirement, we are carrying it out – it isn't our decision, he stated. We are not responsible for the lethal take – it isn't part of our program, Maslen stated.

Wallace made a motion that the Council recommend that Bonneville NOT implement Project 2008-003-00, Removal of Sea Lions at Bonneville Dam, for the reasons presented by staff and recommended by the Fish and Wildlife Committee. Booth seconded the motion, which passed with two votes opposed.

Council chair Bruce Measure gave a statement in memory of Jay Minthorne, a member of the Confederated Tribes of the Umatilla Indian Reservation who was a regular participant in the Council's fish and wildlife process. "Jay was a statesman," and he never waived from his focus on fish and wildlife, Measure said. The Council presented a plaque honoring Minthorne to representatives of the Columbia River Inter-Tribal Fish Commission and the Umatilla Tribes, which was hung in the Council's main meeting room. John Platt of CRITFC thanked the Council for honoring the tribal leader and mentor. He said Minthorne believed in consensus and was always cordial and collaborative.

2. Update on RM&E/AP category recommendation development:

Tony Grover, director, fish and wildlife division; and Lynn Palensky, program development.

Staffer Tony Grover explained how staff and the F&W Committee are coming up with recommendations about which RM&E projects the Council should support for funding. The committee held a work session in January to start the "triage" with the projects and should have a recommendation for the full Council in April.

The projects have been separated into a number of programmatic-issue sets, including habitat effectiveness, sturgeon, ocean, estuary, lamprey, artificial production, food web implications, and tagging, according to staffer Lynn Palensky. The staff is preparing topic papers for each, and we're looking at like-projects together to see how they fit into the basin as a whole, she said, Grover said any staff topic papers will be labeled pre-decisional.

Staffer John Shurts said that ultimately, there will be a decision document to send to BPA with the recommendations. "Habitat is a key piece we have to wrestle with," he said. We have a habitat-based program, Shurts explained. The region is funding hundreds of millions of dollars in habitat projects, and we expect to get improvement and survival gains, he said.

We have a group of projects to monitor, but we don't have the evaluation piece well developed yet, Shurts said. We have scheduled a workshop with the Independent Scientific Review Panel (ISRP) that will focus on evaluation, he reported. The habitat projects and RM&E touch on lots of other things, Shurts said.

I agree that habitat monitoring is critical; if we solve that, it's huge, Karier stated. It is important for staff to look back at the track record – there's a long history of failed projects that give way

to a new process, he said. For example, the Integrated Status and Effectiveness Monitoring Program (ISEMP) sponsors need to show us what they've accomplished in seven years, Karier said. We expect to see biological results – they need to show us that it works and that they are “measuring what needs to be measured,” he stated.

There is no synthesis going on and there should be, Karier continued. Another example is the Columbia Habitat Monitoring Program (CHaMP), which is a multimillion dollar project, he said. Karier said a monitoring system developed by Tetra Tech is in use and working in Washington.

Mitch Pond of the Confederated Tribes of the Umatilla Reservation stressed the importance of the food web issue and urged the Council to support a clean water initiative in Oregon that would set a standard based on tribal consumption of salmon.

3. Council decision on recommendations to amend the Fish and Wildlife Program to include the proposed Blackfoot River Subbasin plan:

John Shurts, general counsel; Kerry Berg, Montana staff; and Lynn Palensky

Shurts introduced consideration of the Blackfoot Subbasin Plan by saying that most of the region's subbasin plans were adopted into the F&W program in 2005. In 2009, the Council received plans for the Bitterroot and Blackfoot subbasins, which kicked off a comment process and ISRP review, he said. The Bitterroot got a favorable review and was subsequently adopted into the program, but the ISRP had concerns with the Blackfoot plan, so the planners asked to revise it and address those concerns, Shurts explained.

The ISRP's key issue was the lack of specificity on the assessment and the management plan, he continued. The planners revised the plan substantially, and resubmitted it in January 2011, Shurts said. Staff reviewed the plan, found that the issues have been addressed, and recommend its adoption, he said.

Staffer Kerry Berg noted that the ISRP always said the plan was consistent with the F&W program, despite concerns about the specificity. He thanked those who worked on the plan and Shurts for helping it along.

Shurts said the planners linked the plan with effects of the hydro system. They recognize you cannot mitigate for F&W losses at the dams and they focus on bull trout and west slope cutthroat as offsite mitigation, he indicated.

Wallace made a motion that the Council adopt the Blackfoot River Subbasin Plan into the Council's Columbia River Fish and Wildlife Program; approve the findings and response to comments as presented by staff; and direct the staff to provide appropriate public notice of the Council's decision. Whiting seconded the motion, which passed unanimously.

4. Overview of the Corps of Engineers' Turbine Survival Program:

George Medina, TSP manager; Martin Ahmann, TSP Technical Lead; and Shawn Nelson, Project Manager of the Ice Harbor Turbine Design and Installation project

The Corps of Engineers briefed the Council on its Turbine Survival Program (TSP), an interagency effort that aims to improve salmon survival through hydroelectric plants. Martin Ahmann of the Corps said the effort, which is funded through the Columbia River Fish

Mitigation program and the Department of Energy, is investigating the turbine environment and how it affects smolt survival.

The TSP was started in response to the 1995 Biological Opinion for the Federal Columbia River Power System (FCRPS) and has continued in support of the 2000 BiOp, he said. We have a better understanding of the turbine environment than we did 15 years ago, Ahmann stated, adding that it can be “a viable passage route” for salmon and lamprey.

He explained the complexity of getting good estimates of survival. While *turbine* survival is estimated at between 85 and 95 percent for salmon smolts, *total* project survival on the FCRPS ranges from 70 to 100 percent, Ahmann said. Total survival takes into account all forms of mortality, including direct turbine strike, as well as predation and conditions downstream from the dam, he explained. Every project is different – John Day is at the low end and Lower Monumental is at the high end, according to Corps data.

Total project survival is measured using surgically implanted acoustic tags in a small number of fish. Ahmann described physical hydraulic models that are used in the TSP to replicate water passage through turbines and to explore the effects. Using weighted beads to study the likelihood of direct mechanical injuries, researchers found that 95 percent have no contact with blades and pass without incident. In addition, the hydraulic models have shown that the best survival occurs when turbines are operating outside of 1 percent of peak efficiency, he said.

The Corps is also conducting a risk assessment for the fish with tags to determine the bias of tags in the study, he said. We’ve determined that the bias from tags is 3 to 8 percent, and there is a lot of indication that the older survival estimates could be negatively biased by the tags themselves, Ahmann stated. We are not applying a correction factor yet, but we are recognizing the influence, he added.

Ahmann listed several TSP findings, including that direct mortality from turbines is low, 2 to 4 percent. We can improve the quality of the water flow by turbine operations, and we can reduce strike and shear from turbine blades, he stated. Downstream predation likely has the greatest impact on survival, Ahmann said. To fully realize the benefits of turbine improvements, tailrace predation must be addressed, he added.

Ahmann went on to describe how TSP fits into decisions on rehabilitating dams. Priorities for turbine replacement are set unit by unit, he said. TSP works with the turbine industry on new designs, and we provide design guidance when turbines are due to be replaced, according to Ahmann. Replacement projects have taken place at Bonneville Dam, and one is under way at Ice Harbor, where the sole purpose is to design a turbine blade based on fish passage criteria, he said.

Bill Bradbury asked why tagged fish appear to have the worst time in a turbine. Ahmann said the tag is placed close to the swim bladder in a fish, and when the fish is exposed to pressure, the sutures can blow out or the tag can cause internal damage. The smaller the tag, the lower the risk, he said.

5. Council decision on comments to BPA on post-2011 energy efficiency implementation proposal:

Terry Morlan, director, power division

Staffer Terry Morlan explained that the Council proposes to send a letter to Mike Weedall at BPA supporting the agency's recently released draft post-2011 energy efficiency program. There has been one addition to the letter, a sentence in the second paragraph regarding funding for projects that extend beyond one rate period, he pointed out. Karier said the Power Committee unanimously supported the letter.

Wallace made a motion that the Council approve the letter to the Bonneville Power Administration commenting on its proposed post-2011 energy efficiency implementation program, as presented by the staff and recommended by the Power Committee. Karier seconded the motion, which passed unanimously.

6. Presentation on PGE IRP and Boardman Plans:

Brett Sims and Stefan Brown, Portland General Electric

Morlan introduced staff from Portland General Electric (PGE), noting that a key issue in the company's current Integrated Resource Plan (IRP) is the future of the Boardman coal plant. PGE prepares an IRP every two years, which assesses energy and capacity needs for the next 20 years and analyzes the costs and risks of long-term procurement strategies, according to Brian Kuehne, PGE's manager of Integrated Resource Planning.

The IRP involves balancing multiple objectives and interests, and the company's most recent plan took over two years to prepare and "was a delicate dance" between the Oregon Public Utility Commission (OPUC) and the Department of Environmental Quality (DEQ), he said. DEQ was involved because of Boardman, and the two agencies didn't agree on all of the complex issues, Kuehne explained. The process to come up with the IRP was collaborative, he said, but it was unprecedented for PGE to have so much attention focused on an IRP.

Kuehne went over the steps for developing the IRP, starting with planning resources to meet load. PGE's retail load is growing by about 1.9 percent annually, and there is currently a gap between load and firm resources, which is expected to grow to 873 average megawatts (MWA) by 2015, he said.

Kuehne pointed out that PGE, like other utilities in the Northwest, is increasingly focused on capacity to meet peak loads. We used to be "capacity rich," but we are losing our legacy hydro from the mid-Columbia dams, he said. Now, "capacity matters a whole lot," for PGE, Kuehne stated. He pointed out that winter capacity used to be the main concern, but the growth of the company's air-conditioning load means an increasing concern about summer capacity.

PGE is subject to Oregon's renewable portfolio standard (RPS), and with the completion of the Bigelow Canyon wind farm, "we are way ahead of the game" in meeting our 2015 RPS requirement, Kuehne said. But, he added, if we continue to meet the RPS with variable resources, it becomes challenging to integrate enough of them.

Company analysts modeled 18 alternate strategies to come up with the IRP's resource portfolio, Kuehne continued. The analysis looks at the cost to customers, cost uncertainty, and reliability to figure out a balanced resource mix, he said.

According to Stefan Brown of PGE, for the first time, the IRP analysis considered the potential for legislation that will impose a carbon cost. The analysis assumed a start year of 2013 for a carbon cost, with “a reference case” of \$30 per ton of CO₂, he said.

For the IRP, PGE compared the tradeoffs between cost and risk of the resource strategies and ranked the results, Brown said. He laid out key elements of the five-year action plan, including the need to acquire 122 MWa of renewables, 214 MWa of energy efficiency, 300 to 500 MW of gas-fired generation, and up to 200 MW of flexible gas capacity resources. PGE also plans to build the Cascade Crossing transmission line between Boardman and Salem, Brown said.

As for Boardman, PGE will install upgrades to meet a 2010 state air quality rule and close the plant by the end of 2020, he continued. The comparison of the resource mix before and after the IRP action plan shows less coal and hydro and more renewables and natural gas, Brown pointed out.

He went over the company’s decision on Boardman, which he said is one of the most efficient and youngest coal plants in the country. But the plant came into conflict with federal and state regulations for haze, Brown said. He outlined the emissions from Boardman that produce haze – ammonium sulfate, ammonium nitrate, and particulate matter, and the “glide path” PGE is on to get to “natural conditions” for the view by 2021.

PGE undertook significant analysis to consider the options for Boardman in terms of the cost of various closure dates, and to come up with a balanced decision, Kuehne explained. What got us to closure in 2020 was the combination of costs related to controlling emissions and the prospects of a carbon tax, he said. There were a lot of risks with continued long-term operation, and we came up with a good balance of cost and risks with closure in 2020, Kuehne stated.

He outlined the steps in the Boardman plan approved by the OPUC and the Oregon Environmental Quality Commission (EQC) and what they will achieve. Under a separate agreement, PGE will reduce mercury emissions substantially between now and closing the plant, Kuehne said.

He wrapped up with a description of why the IRP is a good plan for the company and its customers. Kuehne also pointed out that its emphasis on energy efficiency and wind and natural gas resources is in line with the Council’s Sixth Power Plan.

Measure thanked PGE for its presentation and said it helps the Council to see how consistent its Power Plan is with other entities in the region. Bradbury asked about PGE’s plans for a biomass resource at Boardman. Brown said the company is seriously considering a generating plant that would use giant cane as a fuel source. But the cane requires a lot of irrigation, and “it is not inconsequential” to grow enough fuel for a plant the size of Boardman, he stated.

7. Presentation on Food and Drug Administration’s review of genetically engineered salmon:

Alan Bennett, Food and Drug Administration

The Food and Drug Administration (FDA) is considering a request to allow genetically engineered salmon into the U.S. market for human consumption. Alan Bennett of the FDA spelled out the process FDA goes through to answer questions about whether the salmon are safe for humans to eat and whether there would be an effect on the environment.

Containment of the genetically engineered fish is a major issue, he acknowledged. The eggs, which will be modified to deliver only female fish, 98 percent of which are sterile, will be produced on Canada's Prince Edward Island, Bennett said. The fish will be transported to the highlands of Panama to be reared in conditions designed to keep them from getting away, he added. Bennett said the FDA has not determined whether it would need to act if the producers decide to move their operations or expand to a site within the United States.

Karier said the Council's concerns would involve whether the salmon is approved for consumption and if there is the potential for adding operations that could bring the fish to the Northwest. Bennett said the FDA does not speculate publicly about when it will make decisions.

Bradbury said there have been years of controversy in Oregon about spawning between natural and hatchery fish. Do we know anything about spawning between natural and genetically engineered fish? he asked. Bennett said the genetically modified fish will be larger than natural fish, which could affect spawning, but it isn't known. Fitness is a big issue in the FDA considerations, he said.

8. Council business:

– Council decision on approval of IEAB Task on Irrigation Efficiency and Water Acquisition

Morlan said the Independent Economic Advisory Board (IEAB) is proposing to do an analysis of irrigation efficiency improvements, both in terms of the application of water and its conveyance. The purpose is to review how efficiency improvements might affect in-stream flows and general cost-effectiveness of measures, he said. Morlan outlined the IEAB approach, noting the analysis will involve BPA and will include a review of case studies. The proposed budget is \$25,000 and the funds are available in the IEAB budget, he stated.

Wallace said he is encouraged by the opportunity to look at both efficiency and the potential for acquiring water to augment instream flows. He made a motion that the Council approve IEAB Task 176 requesting the IEAB to examine the effects of irrigation efficiency improvements as presented by staff at an estimated cost of \$25,000. Bradbury seconded the motion, which passed unanimously.

– Council decision to approve Annual Report to Congress

Staffer John Harrison reported that the comment period for the Council's 2010 Annual Report to Congress has closed. The Council received two comments, which were reviewed and addressed by the Public Affairs Committee, he said. Harrison noted that the Oregon Council members asked for a disclaimer that the financial information was provided by BPA, and we included that.

Wallace made a motion that the Council approve the Fiscal Year 2010 Annual Report to Congress as recommended by the staff. Karier seconded the motion, which passed unanimously.

– Approval of Minutes

Wallace made a motion that the Council approve for the signature of the Vice-Chair the minutes of the January 11-12, 2011, Council meeting held in Missoula, Montana. Karier seconded the motion, which passed unanimously.

Statement from Melinda Eden

Measure read a thank you and farewell statement from outgoing Council member Melinda Eden. She thanked the Council for the farewell party on Tuesday and acknowledged all of the staff and others who helped make her tenure at the Council a “great ride.”

The meeting adjourned at 2:45 p.m.

Approved March 9, 2011

/s/ Dick Wallace

Vice-Chair

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