Northwest Power and Conservation Council

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Council Meeting
Portland Oregon

December 9-10, 2008

Minutes

Reports from Fish and Wildlife, Power and Public Affairs committee chair:

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

Rhonda Whiting, Fish and Wildlife Committee Chair, reported that the committee received an update on the Hatchery Scientific Review Group, noting that the group has draft recommendations available for review. The recommendations will be final in January, but there is discussion about keeping the group together for further work, she said.

Chris Jordan of NOAA Fisheries and Michael Newsom of the Bureau of Reclamation gave an overview of the Integrated Status and Effectiveness Monitoring Project, with Jordan giving a general overview and Newsom providing detail on a project in the Methow, Whiting said. Joe Whitworth of Oregon Trout also made a presentation on habitat restoration, she said, and the committee discussed a $125,000 request for a monitoring and evaluation (M&E) project.

Power Committee chair Melinda Eden said staff provided the committee with an update on a draft demand forecast and discussed a newly identified segment of the residential power load referred to as information, communication, and entertainment or ICE. Jeff King updated the committee on resource technologies, including solar and coal, she said, noting that the greatest opportunity for solar is in the Southwest. It would be 2015 before we could see solar power delivered into the Northwest because new transmission would be needed, Eden added. Coal poses the greatest problem for climate change, she said.

Staff made a presentation on industrial conservation potential, informing us that the largest industrial load in the region is pulp and paper, Eden continued. A preliminary supply curve shows 425 MW of conservation potential in that sector, she said. Staff will also continue to update the committee on the price forecast for electricity on the spot market, Eden wrapped up.

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Dick Wallace, chair of the Public Affairs Committee, said he is working on organizing a trip to Washington, D.C. in March or April, and he reported that staff is working on a publication relating to power. It will be the "flipside" to the recent fish and wildlife publication and present a history of conservation in the region, Wallace said. He also previewed a cover for the fish and wildlife program that is under development by the Council's graphic designer.

1. Discussion of Fish and Wildlife Program Amendments:

Patty O'Toole, program implementation manager; Sandra Hirotsu, senior counsel; Tony Grover, director, fish and wildlife division; and John Shurts, general counsel.

The staff has done a lot of work since the last meeting to consolidate public comments on the fish and wildlife program, Booth reported. There was good attendance at the hearings the Council held, and people had lots of questions, he said. "People are paying attention," and that will make for a better product, Booth added.

The comment period on the draft program closed December 1, staffer Patty O'Toole reported. We are now in the process of having final consultations, she said. The Council held 11 public hearings and has had six consultations, with three more scheduled, O'Toole said. We've received 53 comments.

Are the consultations only to clarify the comments and not to add new material? Rhonda Whiting asked. Yes, they are consultations on things that are already in the administrative record, O'Toole responded.

Staff will take the information from our discussion today and consultations through December 19 and prepare a new draft of the program, O'Toole continued. In January, we'll work through the program section by section and focus on trying to get to a Council decision in February, O'Toole said.

She went on to explain staff's suggestions for how to treat hundreds of measures that were offered as program amendments. We are considering how to organize them – perhaps by subbasin – and how to shorten the material to keep it from being too unwieldy, O'Toole explained.

I'm confused about whether this is a publishing issue or a policy issue, Eden stated. Why would it be so difficult to make a list of the measures? she asked.

The question led to a lengthy and wide-ranging discussion around several issues, including: whether the decision about the measures is a matter of organizing them for publication or a policy decision about how the measures are to be treated as part of the program; what was meant by the reference in the draft fish and wildlife program to "multi-year implementation plans"; how the Federal Columbia River Power System (FCRPS) BiOp and Accords with tribes are being treated and whether the same should pertain to other proposed measures; and whether the existing process for project review is adequate for the amended program.

Booth summarized the discussion and decision as follows: everything we received as recommendations will be accepted into the program. There is a majority opinion that to do that

is okay as long as we aren't committing to funding the list in its entirety. We want our regular process to apply to making project selections. We've already expedited the first 11 projects for independent science review, and the word is that the projects need work.

As for the new measures, he continued, there may not be much that is actually "new" – much is ongoing work, such as RM&E. We have subbasin plans, and we may be able to mesh some of the new material with those plans, Booth summarized.

Dukes pointed out that subbasin groups don't exist anymore. Wallace suggested staff give some thought to the process. It may not fit in all states, but you could include generic language that where local groups exist, we will use them, he suggested. O'Toole said the draft program addresses voluntary updating of subbasin plans to begin in 2009.

2. Overview of the Willamette Basin Biological Opinions:

Dorie Welch, Bonneville Power Administration; Mindy Simmons, U.S. Army Corps of Engineers; Stephanie Burchfield, NOAA Fisheries; and Chris Allen, USFWS.

Mindy Simmons of the Corps of Engineers presented an overview of the Willamette Project Biological Opinion (BiOp) released in July 2008. The BiOp covers 13 multipurpose dams and reservoirs, downstream habitat, 42 miles of bank revetments, and a hatchery mitigation program, she explained.

The Willamette BiOp was completed after eight years of consultation, and it proposes continued operation of the 13-dam complex, continued maintenance of the revetments, and operation of a hatchery program, she went on. The federal agencies' (Corps, BPA, and Bureau of Reclamation) proposed action resulted in a jeopardy opinion for the fish in the Upper Willamette Basin listed under the ESA, and the agencies, in consultation with the National Marine Fisheries Service, developed a reasonable and prudent alternative (RPA), Simmons said.

The BiOp addresses the downstream effects of the reservoirs, including alterations in the seasonal flow pattern, she said. There is a problem with providing adequate water downstream of dams for all salmon life stages, and one of the RPAs is to identify the appropriate flows downstream of dams to protect spawning habitat, Simmons stated.

In addition, the BiOp addresses the loss of floodplain connectivity in the Willamette and spells out a habitat restoration program, she explained. The BiOp requires completion of two habitat projects per year starting in 2010, Simmons pointed out. And the BiOp addresses the Willamette hatchery program, which has numerous facilities and takes various approaches to mitigation, she indicated.

An additional problem in the Willamette is the temperature effects of the dams, Simmons said: the water is too cold during the summer, which keeps migrating adults from coming back to spawn, and it is too warm during the fall and winter. Water temperature has been identified as a major limiting factor for spring chinook populations, she said. The Corps' solution has been a temperature-control operation, and installation of temperature-control structures at the dams, which allow for water release at different elevations in the reservoirs, Simmons explained.

Upstream passage is a major issue in the Willamette, with upstream passage currently provided at only two dams through a "trap and haul" effort, she said. Fish ladders are likely infeasible at the high-head dams in the Willamette and due to variable forebay fluctuations, Simmons added.

The BiOp calls for continuing the adult "outplanting" program, but downstream passage is a challenge for several reasons, including deep intakes to the passage routes, she explained. The BiOp takes a "step-wise" approach to downstream passage, which includes continued evaluation at eight Willamette dams and reservoirs, Simmons said. Longer term, there is a requirement for downstream passage construction, beginning in 2014, she stated.

Simmons wrapped up by describing the process for evaluating further actions, conducting research, monitoring, and evaluation (RM&E), coordinating with agencies and tribes, and funding the work. The Columbia River Fish Mitigation Fund will be tapped for large structural modifications at the dams, she reported.

3. Presentation by Renewable Northwest Project on wind integration:

Rachel Shimshak; and Ken Dragoon, Renewable Northwest Project.

Rachel Shimshak of the Renewable Northwest Project pointed out that the Northwest Wind Integration Action Plan answered the question of whether the region could integrate 6,000 MW of wind. "The answer was yes," and the plan provided 16 action items to make it happen, she said.

Wind is an economic source of clean energy, and the Department of Energy recently said the United States could meet 20 percent of its electricity needs from wind, Shimshak said. The biggest impediment is transmission, she added. To integrate wind, we have to do things differently than we have been doing them, Shimshak indicated. She noted that in 1998, there were two wind projects in the Northwest, but now the map is filled with projects and proposed installations.

The amount of wind generation in the region is projected to increase 45 percent in 2008, according to Ken Dragoon of the Renewable Northwest Project. The biggest issue with integrating wind is proving to be instances when the wind comes up rapidly, creating a surplus of energy that a utility has to find a home for, he explained. There are ways to address this, Dragoon said, suggesting it is a great opportunity for demand response and SmartGrid measures, and pointing out that the island of Hawaii deals with the ramp-up by "feathering" turbine blades and "spilling" wind.

Dragoon explained what system operations would look like with 20 percent of load being met by wind. There isn't a need for new generation to back up wind; you need it to back up load, he stated. There are applications for SmartGrid in integrating wind, including energizing hot water heating when the wind comes up, Dragoon said.

Shimshak pointed out that the easiest way to integrate wind is to have "a bigger system" in which to balance it. We have 16 balancing authorities in the region, and we need to move quickly to solve the institutional issues, she said. "We'd like you to take the leadership,"

Shimshak stated. We have a system that was built to use the resources of today, and we need to find a way to accommodate new resources, she said.

tax credits, he said. We don't want more wind developed than will be useful, Booth indicated.

4. Update on preparations for Columbia River Treaty planning:

Rick Pendergrass and Steve Oliver, Bonneville Power Administration.

The Columbia River Treaty with Canada is "evergreen," and the earliest it could be terminated by either the United States or Canada is 2024, BPA's Steve Oliver explained to the Council. Termination requires 10 years' written notice, and "coordinators" for the treaty in the United States – Oliver for BPA and Witt Anderson for the Corps of Engineers – are starting the first phase of a process to consider 2014 issues, he said.

The treaty, which was signed and ratified between 1961-1964, provided for significant development of projects in the Columbia River Basin and motivated major additions to the system, including the Pacific Intertie, and operating agreements, such as the Pacific Northwest Coordination Agreement, Oliver said. The treaty required Canada to construct three large dams with 15.5 million acre-feet (MAF) of storage in the upper Columbia River Basin, he noted.

While the projects doubled the storage and expanded the ability to manage and control the river, this is still a "run-of-river system," according to Oliver. Projects in the Columbia store about one-third of the runoff, less than other major river systems, he said.

The treaty also allowed the United States to construct and operate Libby Dam on the Kootenai River in Montana, Oliver explained. While Libby creates power and flood control benefits downstream in the United States, no payment is required, he indicated.

Oliver outlined the power provisions in the treaty, explaining that the United States must now deliver to Canada one-half of the downstream power benefits (Canadian Entitlement), which is currently worth about $250 million to $350 million annually. One of the issues for 2014 is the cost of providing that return, which is about equal to the output of the Columbia Generating Station, he said.

Owners of the five mid-Columbia hydro projects deliver 27.5 percent of the power BPA returns to British Columbia, Oliver explained. The treaty dams in Canada enhanced the ability of the mid-Columbia projects to generate power, and those public utility districts were very involved, he added.

Anderson outlined the flood-control provisions of the treaty, which include 8.95 MAF of flood-control storage in Canadian reservoirs. We can make "on-call" requests for additional storage if we need to, but we have never done so, he said. As the dams were completed, the United States paid Canada $64.4 million for one-half of the present worth of the expected future flood damage that was prevented from 1968 through 2024, Anderson continued.

Canada's unconditional guarantee of 8.95 MAF of flood control was purchased only until 2024, when it changes, independent of treaty termination, he explained. We can continue to have the

storage, but we will pay for it, Anderson stated. That is one of the reasons for the 2014 review of flood-control provisions, he said.

In 2024, the flood control provided by the Canadian projects transitions to a "called-upon" operation, Anderson said. The operation is limited to potential floods that could not be controlled by storage in the United States, and the United States must pay for operating costs and any economic losses in Canada that result, he explained. The Corps is studying details of such an operation and how it would be paid for, Anderson said.

We are working on Phase I of the review now, and we are starting six years in advance because there is so much to consider, Oliver picked up. He listed the future alternatives as: treaty remains in place; treaty remains in place with minor adjustments done through implementation agreements; substantive modification/amendment to the treaty, which would require Presidential approval and Congressional ratification; and treaty termination by either or both parties.

If the treaty were terminated, British Columbia would continue to operate its projects, except for called-upon flood-control operations, Oliver said. And the United States would continue to coordinate with Canada on the operation of Libby, he went on. The Canadian Entitlement would cease to exist, and the United States would retain the downstream power, Oliver said. There is significant flow in the system, especially with flood events, and without the treaty, we wouldn't have the coordination, and things would be more uncertain, he added.

Oliver laid out the studies that will be conducted in Phase 1, including flood control, power operations, and the Canadian Entitlement under scenarios with and without the treaty. He noted that entities in both countries are participating in the studies, which are expected to be released in late summer 2009.

Beyond Phase 1, the Corps will undertake a flood-risk management review, and there could be additional studies, Oliver said. We haven't yet designed a process for involvement by others, but the agencies plan to keep interested parties apprised, he said. It's early in the process, Oliver wrapped up.

5. Presentation on National Oceanic Atmospheric Administration's upcoming hatchery consultation:

Rob Walton, assistant director, NOAA Fisheries.

Rob Walton and Rob Jones of NOAA Fisheries Service briefed the Council on the upcoming consultations on hatcheries. The stage for the consultations was set by several Biological Opinions (BiOps), including the 2008 FCRPS BiOp; 2008 *US v Oregon* harvest BiOp; management agreement BiOp; and 2008 FCRPS Supplemental Comprehensive Analysis, Walton said. He pointed out that NOAA Fisheries must balance the sustainable use and protection of the oceans and coasts. If we were simply implementing the ESA, it would be simpler, Walton commented.

The federal Action Agencies fund approximately 100 hatchery programs, and RPAs 39-42 in the FCRPS BiOp address hatcheries, he continued. There is potential for overlap between the RPAs and the Council fish and wildlife program, Walton added.

The hatchery objective in the FCRPS BiOp is stated as "to fund FCRPS mitigation hatchery programs in a way that contributes to reversing the decline of downward-trending ESUs." There are hatchery strategies in the BiOp, he said, that include ensuring hatchery programs funded by the action agencies are not impeding recovery of listed salmon or steelhead. Hatcheries are making the transition from providing fish for harvest to conservation, and both are acceptable under the BiOp, Walton said. A second hatchery strategy that Walton referred to, calls for preserving and rebuilding the genetic resources through safety-net and conservation actions to reduce short-term extinction risk and promote recovery.

RPA 39 calls for site-specific consultations, he continued. We will start the consultations in the Upper Columbia, working to the mid-Columbia, and then to the Snake, Walton said. We will ask the hatchery operators and funding agencies to get Hatchery Genetic Management Plans (HGMPs) to us to start the evaluations, he explained. At the end of our process, we will deliver the appropriate federal permits, Walton indicated.

The first step in the consultation schedule is to update and complete the HGMPs, Walton said. Who pays for updating them? Dukes asked. In the Upper Columbia, we have a mix of federal, state, and PUD funding, Walton said. There are a number of ways to approach it, but we don't have new money for it, so the resources might be limited, he acknowledged.

After the updates, consultation on specific programs will begin, Walton said. There are many programs that need ESA consultation, he added. From January to July 2009, the schedule calls for Upper Columbia consultation; from July 2009 to January 2010, Middle Columbia; and from February to August 2010, the Snake.

Walton went on to explain the process for the *US v Oregon* agreement, and he addressed the potential for overlap and opportunities to coordinate with the Councils fish and wildlife program and with others. Next month the Hatchery Science Review Group will have its final report out, he stated.

6. Panel on regional conservation policy:

Scott Corwin; executive director, Public Power Council; Bill Drummond, manager, Western Montana G&T; Rick Crinklaw, general manager, Lane Electric Cooperative; Steve Klein, general manager, Snohomish County PUD; and Bob Pierce**,** manager of member services and key accounts, Clearwater Power Company.

Scott Corwin of the Public Power Council led off a panel of utility reps, telling the Council that BPA will start a process in January to explore its future role in conservation, and "we have been anxious to get into this topic." He noted that PPC has released a discussion paper based on results of a survey conducted among its members.

Bob Pierce of Clearwater Power in Lewiston, Idaho told the Council that local utilities know what works for their members and what does not. Clearwater is a small, rural utility with a primarily residential load, and we have an average of three customers per mile of line, he said.

The culture in northcentral Idaho and perceptions about energy efficiency are drastically different from an urban area like Portland, Pierce said. "So one size does not fit all" when it

comes to a conservation program, he stated. Pierce explained why the financial incentive in BPA's program is not great enough to induce customers in Clearwater's service territory to buy a high-efficiency heat pump.

Manager Steve Klein said the strategy at Snohomish PUD is to pursue renewables, including wind, geothermal, and tidal, as well as conservation. We exceed our share of the region's conservation target, "and energy efficiency is a fundamental part of our resource portfolio," he stated.

BPA's conservation program should be focused as "a backstop," not on meeting conservation goals, he stated. Those who are meeting the goals should not pay for or be required to use BPA programs, Klein said. The rate credit made sense years ago "in a melded rates world," but circumstances have changed, he said. For many utilities, BPA's program "does not help, it limits," Klein indicated.

There are things BPA can do, he continued. Market transformation, research and development (R&D), and a strong role for the Northwest Energy Efficiency Alliance (NEEA) are possibilities, Klein suggested. In these areas, it makes sense to leverage resources and partner to get economies of scale, he said.

We need to look at this strategically, Klein stated. "Remove the hurdles, don't create them," he said. We are enjoying the advantage of conservation and renewables efforts that were undertaken in the past – "let's go forward from there," Klein urged. "Let's innovate" and leave the previous structure behind, he concluded.

Bill Drummond, manager of the Western Montana Generation and Transmission Cooperative, said most of his members are full requirements customers of BPA. After 2011, when new contracts and tiered rates begin, utilities will have an incentive to pursue "all the energy efficiency they can find," he stated.

Utilities that do not face renewable portfolio standards (RPS) in 2011 will have tremendous motivation to pursue energy efficiency considering that long-term power prices could be one to four times greater than BPA's Tier 1 rate, Drummond pointed out. "Avoiding Tier 2 at all costs is going to be important," he stated. In addition, the new BPA contracts require utilities to acquire energy efficiency as defined by the Council, Drummond reported. If they don't, they could risk losing access to Tier 1 power, he said.

The structure for the BPA conservation program needs to change, Drummond said. Under the new contracts, utilities will obtain their own resources and have their own avoided costs, Drummond said. With its own avoided costs, a utility can make its own choices about what will work, he indicated.

BPA is starting a process next month about its role in conservation, and "I look forward to a lively discussion," Drummond said. Redistributing the dollars customers pay for conservation no longer makes sense, he stated.

We'd like incentives in our state to get homes built to energy codes, Drummond continued. Sixty percent of new homes in Montana are not inspected for energy codes, he said. One

solution would be to give homeowners an incentive to build an Energy Star home, but that alternative doesn't work under the current BPA program, according to Drummond.

Rick Crinklaw, manager of Lane Electric Cooperative, summarized the panel's messages. There is an "overwhelming public power view" that we are out to get all cost-effective conservation – "it's unwavering," he said. But we need greater local control over the design of funding for energy efficiency, Crinklaw said. We understand our communities and know what works, he stated, adding that the current BPA program can lead to missed opportunities.

You've delivered a clear and consistent message, Council chair Bill Booth told the panel.

You've highlighted key issues, and we're looking at an evolution in the program, Tom Karier said. BPA's conservation and renewables discount was revolutionary for its time, but now it's time for the next step, he said. I think there is a regional role for BPA, and the upcoming process gives us an opportunity to solve these problems, Karier stated.

7. Update on Adequate, Efficient, Economic, Reliable Power Supply (AEERPS) analysis:

John Fazio, senior power systems analyst; and Jim Ruff, manager, mainstem passage and river operations.

Staffer John Shurts explained that the Council must make a determination about whether its fish and wildlife program will affect the adequacy, efficiency, economy, or reliability of the power system (AEERPS). Staff presented a preliminary AEERPS analysis, indicating the Council would have a chance to react before the program is completed in February.

The AEERPS determination involves making a comparison between a regional power operation that implements the fish and wildlife program's measures and one that does not, staffer John Fazio said. Our analysis indicates that implementation of the program will reduce hydro generation by about 1,170 average megawatts (aMW) or about 10 percent of the system's firm generating capability, he said.

The energy loss is about $434 million per year, but it could go as high as $1 billion, Fazio reported. There are other costs associated with the program, he continued, including capital costs and other program expenditures that are expected to average $56 million and $231 million, respectively, over the next five years.

The total annual cost to the region is about $720 million, which represents 20 percent of BPA's annual net revenue requirement, Fazio said. While this is a substantial impact and would affect AEERPS "if it were implemented overnight," it has been carried out since 1980, and the region has been able to adapt to the changes in the hydro system, he stated.

We concluded that the fish and wildlife program will not affect the AEERPS in a way that cannot be accommodated, but we will look more closely at this issue in the Sixth Power Plan, Fazio said. BPA reviewed the numbers and concurs with our analysis, he added.

Not everyone agrees that foregone revenues are an expense of the fish and wildlife program, Eden stated. Of the $434 million, about half is lost revenue, and half is power purchases made to replace lost generation, Fazio responded.

8. Council Business:

- **Approval of minutes**

Dukes made a motion that the Council approve for the signature of the Vice-Chair the minutes of the November Council meeting, held in Coeur d'Alene, Idaho. Eden seconded the motion, which passed six to zero. Whiting and Measure were absent for the vote.

The meeting adjourned at 1:55 p.m.

Approved January 14, 2009.

/s/ Bruce Measure

Vice-Chair

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