Northwest Power and Conservation Council

Council Meeting
Bend Oregon

September 21-22, 2010

Minutes

Council chair Bruce Measure called the meeting to order at 1:20 p.m.

1. Presentation of ACEEE "2010 Champion of Energy Efficiency in Buildings" Award:

Ralph Cavanagh, Natural Resources Defense Council.

Bruce Measure introduced Ralph Cavanagh of the Natural Resources Defense Council, who was in attendance to present the Council with an award for energy efficiency.

Cavanagh said the Council had been selected for the "2010 Champion of Energy Efficiency in Buildings" award from the American Council on an Energy-Efficient Economy (ACEEE). It is the highest award in the nation for energy efficiency achievement, he said.

Cavanagh described the ACEEE as "the repository of best practices on energy efficiency," and "everyone knows it is a demanding group of jurors." The award is given every two years, and since this was the 30th anniversary of the award and there were a lot of contestants, it was the toughest year to win, he told the Council. The Council is the first public agency to receive the award, and Cavanagh said the response of the jurors to the nomination was, "what took you so long."

The savings achieved in the Northwest "is arguably the best energy efficiency story in the world," he continued. It was clear in the jury's mind, the award was for all of the innovation over the years about how to think about energy efficiency and for the re-envisioning and recapturing of ideas the Council has done with efficiency, Cavanagh added. You have pushed a ways beyond the bounds, he said.

The energy efficiency targets in the Sixth Power Plan will require new business models for utilities, since it will limit the growth in their service, Cavanagh said. I would encourage the Council to think hard about what that new model should be; it will take an intense conversation in the region, he added.

Cavanagh said the Council should also be applauded for expanding the region's energy infrastructure and for its work on measuring conservation achievements. He pointed out that California has been spending $80 million – now reduced to $40 million – to accomplish the work being done by the Regional Technical Forum for far less. You may have the most respected "bureau of standards" in the world, Cavanagh said. This is one of the really important things you have achieved, he added.

Cavanagh said energy efficiency standards are another area where the Council should continue to work. We're moving into "an era of contention" with standards, he said. Because of your efforts, we were able to get Congress to act in 2007 on lighting standards, Cavanagh said. But we need to encourage higher standards, and there is now some pushback in Congress, he added. Cavanagh noted there is an effort to repeal standards that phase out conventional light bulbs. "We can win this argument," but we need you to help, he said. We need to get the public to understand the importance of energy efficiency, Cavanagh stated.

He presented the award to Measure. You have my heartfelt congratulations – "you deserve this," Cavanagh stated.

2. Regional Conservation Progress report for 2009:

Tom Eckman, conservation resources manager.

The region "far exceeded" the 2009 conservation target set in the Fifth Power Plan, staffer Tom Eckman reported to the Council. The region achieved 219 average megawatts, against a target of 150 aMW, he said. "We underestimated the ability of the region to deliver energy efficiency," Eckman stated.

To aggregate the savings, staff collected data from utilities, Bonneville Power Administration (BPA), Northwest Energy Efficiency Alliance (NEEA), and the Energy Trust of Oregon (ETO), he explained. Eckman listed adjustments made to the data, including line losses, duplication, and accounting for non-reporting utilities. He pointed out the total regional savings are actually larger than indicated since the report does not cover savings from building codes and federal standards enacted after the Fifth Power Plan was adopted. Also, we don't have savings for measures individual consumers undertook without participating in a utility, BPA, or ETO program, Eckman said.

The region exceeded the targets in the Fifth Power Plan in every year from 2005 to 2009, he continued. "We vanquished the Fifth Plan's five-year target," Eckman said, racking up 942 aMW of savings overall, compared with the 700 aMW set in the plan. We had reached 738 aMW by 2008, he added.

In all sectors except agriculture, the region met or exceeded its targets, Eckman said. We had a "good distribution of achievement" across the sectors, but we fell 25 aMW short in the agriculture/irrigation area, he acknowledged.

The residential sector far exceeded its goal of 250 aMW, posting a total of 491 aMW, Eckman said. That success is largely attributed to compact fluorescent lights (CFLs), he noted. We had "stellar performance on this measure," Eckman stated. Even without CFLs, the residential sector

met its target, with 286 aMW of non-CFL savings, he pointed out. "We built a lot of capability beyond light bulbs," Eckman said.

Both investor-owned and publicly owned utilities exceeded their targets, he continued. The IOUs had a target of 382 aMW and achieved 561 aMW; the publics had a 319-aMW target and achieved 379 aMW, according to Eckman.

Residential sector savings were high for both types of utilities, and both were below targets in the agriculture sector, he reported. The publics also were below the target in the industrial sector, Eckman said. We'll see less emphasis on the residential sector going forward and more on industrial, he noted, adding that the publics expanded their industrial sector programs in 2010.

Staffer Charlie Grist reported the average cost of all of the efficiency acquired was $13 per megawatt-hour (MWh). "This is really, really low cost," he stated. During this period, 2005 to 2009, market prices at the Mid-Columbia hub were $30 to $60 per MWh, Grist said. "We capture this difference in cost as value to our system," he added.

The efficiency savings over this period are equivalent to the annual output of a large nuclear power plant, like the Columbia Generating Station, Grist continued. The $1 billion spent on efficiency over the period is similar to the cost of a large wind farm, but efficiency produces five times the annual output, he said.

The projected lifecycle savings from conservation achieved in 2005 to 2009 are $2.9 billion, Grist said. He detailed the basis for the estimate, which assumes a measure life of 13 years. We expect lifecycle savings will reach $5 billion by 2021, Grist added.

He pointed out that savings in 2009 were lower than 2008 because of a drop in the residential sector. NEEA stopped its market push for CFLs in 2008, the primary reason the savings are down, Grist explained. He added that utility expenditures to achieve conservation are increasing. CFLs kept the first-year cost low in 2007-2008, but as we go forward with other technologies, we can expect costs will go up, Grist said.

Tom Karier commented that just as impressive as the actual achievements is the region's ability to monitor and account for them.

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

Bill Booth, chair, Fish and Wildlife Committee; Tom Karier, chair, Power Committee; and Rhonda Whiting, chair, Public Affairs Committee.

Bill Booth, Fish and Wildlife Committee chair, reported that the Confederated Tribes of the Warm Springs Reservation made a presentation on their fisheries and habitat restoration program. In addition, the committee is looking ahead to the next fish and wildlife (F&W) program amendment process, he said, and staff talked to us about how that is shaping up with so many activities – MERR, NOAA recovery plans, BiOp – going on. Staff will make a presentation on the process to the full Council in the next couple of months, Booth added.

We had a representative from the Environmental Protection Agency present to talk about the Dworshak Nutrient Enhancement Project and the EPA's issue with the project, he continued.

Paul Kline and NOAA Fisheries made a presentation on the 2010 sockeye return and work going on to expand production, Booth said. It raises questions about whether conditions at Redfish Lake are adequate to handle the returning adults, he said.

Power Committee chair Tom Karier said the committee had a presentation on transmission adequacy. It is clear there are areas in the Northwest that are constrained and need additional transmission, he said. Staff reported on the issue of negative pricing, which can occur when there is over-generation on the system, Karier said. It's a situation in which generating utilities pay others to take the power, and this could become a bigger problem in the future as more renewable generation is developed, he reported.

We discussed the System Analysis Advisory Committee charter, and staff briefed us on the renewable portfolio standards situation in California and on the developments with small hydro, Karier wrapped up.

Mark Walker reported that 14 congressional staffers participated in the Council's annual tour in the Northwest. He listed the activities, which included a trip to Ft. Stevens and a tour of the Columbia River estuary. A number of people from federal, state, and local agencies and organizations made presentations and assisted with various events, Walker said. The trip also included a tour of BPA's Dittmer control center, he concluded. Walker noted that five Council members participated in some part of the trip.

3. Council decision on project reviews:

Mark Fritsch, manager, project implementation.

– Project #2009-004-00, Monitoring Recovery Trends in Key Spring Chinook Habitat Variables and Validation of Population Viability Indicators

Staffer Mark Fritsch described a Columbia River Inter-Tribal Fish Commission-sponsored project entitled "Monitoring Recovery Trends in Key Spring Chinook Habitat Variables and Validation of Population Viability Indicators." He said the project is part of the Columbia Basin Accords and was originally submitted June 25, 2009. The goal is to determine if there is a feasible way to construct a habitat database using fewer variables than typically used in analyses to estimate the effect of current and future habitat conditions on salmon productivity.

The Independent Scientific Review Panel (ISRP) requested additional information from the sponsor, and after a year of revisions, CRITFC submitted a response in May 2010, Fritsch said. After a second review, the ISRP found the proposal meets scientific review criteria "in part," he said. In response, CRITFC said it would submit its model for review prior to the second phase of the project in 2014, Fritsch said.

Dick Wallace made a motion that the Council recommend that Bonneville continue funding Project 2009-004-00, Monitoring Recovery Trends in Key Spring Chinook Habitat Variables and Validation of Population Viability Indicators, and call on the Independent Scientific Review Panel to review the second phase of the project before the 2014 field season, as presented by the staff and recommended by the Fish and Wildlife Committee. Melinda Eden seconded the motion, which passed unanimously.

- **Project #2010-088-00, Upper and Lower Lemhi Acquisition/Easements**

Fritsch presented a second project proposal, sponsored by the Idaho Office of Species Conservation, to acquire conservation easements on the Upper and Lower Lemhi River. This is also a Columbia Basin Accord project and was proposed in December 2009, he said. The ISRP requested additional information, and the sponsors submitted a new proposal in July 2010, Fritsch explained.

The goal of the new proposal is to protect aquatic and riparian habitat permanently, improve flow in the Lemhi River, and assist in reconnecting tributary streams to the river, he said. It involves acquiring easements on several parcels, and one acquisition is time-sensitive Fritsch said. The ISRP found the proposal met scientific review criteria, he added.

Booth noted that this is an important project for Idaho. The Idaho Office of Species Conservation did a good job of responding to ISRP questions, he said. The project involves about 12,000 acres of land and protects 45 miles of streamside habitat, Booth stated.

Eden said she would support the project but hoped there would be additional monitoring on the Lemhi to ensure that fencing occurs to keep cattle out of the river.

Wallace moved that the Council recommend that Bonneville fund Project 2010-088-00, Upper and Lower Lemhi Acquisition/Easements, as presented by the staff and recommended by the Fish and Wildlife Committee. Dukes seconded the motion, which passed unanimously.

4. Council decision on recommendations to amend the Fish and Wildlife Program to adopt the proposed Bitterroot River Subbasin plan:

Lynn Palensky, program development; John Shurts, general counsel; and Kerry Berg, Montana staff member.

General Counsel John Shurts said the agenda item asks the Council to amend its F&W program to add the Bitterroot Subbasin Plan. In 2004-2005, the Council amended its program and added 50-plus subbasin plans, he explained. A few subbasins in the region did not have a plan completed at that time, Shurts said, adding that the Council expected those plans would come forward. He noted that some funding was available to the subbasin planners to complete their efforts.

In 2009, planners for the Bitterroot and Blackfoot subbasins submitted plans. The Blackfoot plan needs additional work, but the Bitterroot is ready for adoption, Shurts said. He noted that while these plans came in later in the process, they received the same treatment as those submitted in the past, including the opportunity for public comment and the same level of review by the ISRP. The ISRP report on the Bitterroot plan was positive, he said. The U.S. Fish and Wildlife Service submitted comments, which were addressed by the planners, Shurts said.

This process also provided an opportunity to clarify the meaning of adopting subbasin plans into the F&W program and whether "BPA is on the hook" for funding everything in the plan, he stated. We clarified that adoption is not the same as saying that all of the measures in the subbasin plan are hydro system responsibilities, Shurts said.

Wallace made a motion that the Council amend the Columbia River Basin Fish and Wildlife Program by adopting the management plan portion of the Bitterroot River Subbasin Plan; approve the "Findings and Responses to Comments relating to the Council's decision to amend the Fish and Wildlife Program to add the Bitterroot River Subbasin Plan"; and direct the staff to give appropriate notice of its actions. On a roll call vote, the Council voted unanimously to pass the motion.

5. Presentation on low-impact technologies for hydroelectric production:

Patti Kroen, president of the Northwest Hydroelectric Association; and Jan Lee, executive director of the Northwest Hydroelectric Association.

Patti Kroen, president of the Northwest Hydroelectric Association (NWHA), told the Council that America's largest renewable resource, hydroelectricity, is poised for a comeback. Hydro once made up 33 percent of the nation's generation, but is now down to 10 percent, she said. But advances in technology have opened new opportunities, Kroen stated. New hydro facilities will not be on the scale of large dams built in the 1950s, she said, adding that research is opening up the possibilities for small-scale, low-head projects, as well as pumped storage. Applications for up to 65 gigawatts of new hydro generation are before the Federal Energy Regulatory Commission (FERC), she said.

The new hydro would come from efficiency gains at existing facilities and installations at non-hydro dams that are already in place, she continued, adding that there is a lot of potential for new hydro in the Pacific Northwest.

Jan Lee of NWHA said 2,500 MW of generation could be added to existing dams in the region and 100 MW are available from other types of hydro. She reported that ETO had funded a study of the hydropower potential in the region and found there are 40 MW that would be "immediately available" from projects in 14 irrigation districts.

6. Presentation by the Warm Springs Tribe:

Bobby Brunoe, General Manager for Natural Resources and Brad Houslet, Fisheries Program Manager, will brief the Council on recent activities of the CTWSRO in implementing the Fish and Wildlife Program and the Federal Columbia River Power System Biological Opinion

Bobby Brunoe and Brad Houslet of the Confederated Tribes of the Warm Springs Reservation presented information about the tribe and its F&W program. Brunoe explained that the confederation includes the Warm Springs, Wasco, and Paiute tribes. He described the tribes' culture, the 1855 treaty which established the boundaries of the reservation and ceded lands, and the philosophy under which lands and resources are managed.

Houslet described the tribes' F&W activities, noting that much of the work going on now relates to the selective water withdrawal facility constructed on the Deschutes River adjacent to Round Butte Dam at Lake Billy Chinook. He said the tribes are trying to reconnect habitats in the lower and upper river for the benefit of salmon. The work is guided by the Upper Deschutes Habitat

Conservation Plan, Houslet said. And there are multiple efforts going on to achieve "connectivity" in the river, he added

7. Presentation by NOAA Fisheries on hatcheries

John Ferguson of NOAA Fisheries said the presentation on emerging hatchery science was being made at the request of the Council chair, who is interested in having more frequent updates from the agency. We plan to give four to six talks over the next several months, he said. Ferguson noted a "good sign" in NOAA's September cruise to monitor ocean conditions. The first net brought up more young salmon than were counted in all of the monitoring cruises in September 2009, he said.

– Emerging science on hatcheries: Mike Ford

NOAA staffer Mike Ford reported on trends emerging from research into the effects of hatchery fish on wild salmon. Hatcheries have operated in the Columbia River Basin for over 100 years, and production peaked in the 1980s at about half a billion fish, he stated.

Recent scientific papers reveal "two emerging trends," Ford said: poor reproductive success with hatchery fish versus wild fish, and large-scale negative correlations between the presence of hatchery fish and the performance of wild populations. There are also "two nagging questions," he noted: What causes these trends? And, are there large-scale cumulative effects of the hatchery system?

He presented data that supports the emerging trends, noting that hatchery fish produce about half the number of offspring as wild fish. Researchers have been studying the phenomenon, and a 2007 study at Oregon State University showed a potential genetic reason, he said. Research is also being conducted to test whether spawning location is affecting the success, and it seems fish spawning further upstream are more successful than others, Ford reported. There are both environmental and "heritable" (genetic) effects, but no general trend in terms of one versus the other, he summed up.

A review of studies on the effects of hatchery fish on wild salmon productivity indicates there is a decline in wild productivity as the number of hatchery releases increases, Ford continued. Researchers, he said, had a chance to study Oregon coast coho in a "natural experiment," as hatchery production went from high to low. "There was a big uptick" in wild productivity as hatchery releases decreased, Ford reported.

With regard to the cumulative effects on the mainstem, estuary, and ocean of 70 million hatchery releases annually, there is an argument to be made that salmon are a very small part of the biomass in the ocean, he said, so it shouldn't make any difference. But a study in Puget Sound suggests otherwise, according to Ford. There are indications that reducing hatchery production leads to an increase in wild salmon productivity, he stated.

– Draft EIS on Mitchell Act hatcheries: Rob Jones

Rob Jones and Allyson Purcell of NOAA Fisheries briefed the Council on the "Draft Environmental Impact Statement to Inform Columbia River Basin Hatchery Operations and the Funding of Mitchell Act Hatchery Programs" informally known as the Mitchell Act EIS. Jones provided background, noting that every year NOAA receives between $11 million and $16

million under the Mitchell Act to mitigate for fish losses due to development of federal dams. Allocating those dollars triggers a National Environmental Policy Act (NEPA) requirement, he explained.

In addition, under the Biological Opinion for the Federal Columbia River Power System, NOAA Fisheries will be making decisions on "take" permits, Jones said. We hope this EIS will provide NEPA coverage for both of those actions, he stated.

Purcell said the EIS is to provide "a comprehensive foundation" for future decisions. The EIS does not determine the future for any particularly hatchery program, she emphasized.

Purcell continued to explain the process through which the EIS was developed, noting that the Mitchell Act hatcheries are responsible for 49 percent of the total hatchery production in the Columbia River Basin. There are 62 programs funded under the Act, she added.

There were five alternatives considered in the EIS, and they are very general, Purcell acknowledged. NOAA will identify a preferred alternative in the Final EIS, Purcell stated.

The EIS has been released for public comment, which ends in December 2010, Purcell said. A final EIS is scheduled to be released next spring, she stated.

Karier asked about the relationship between the Mitchell Act and operating hatcheries in a way that is consistent with the Endangered Species Act. Jones said the EIS will not designate hatchery purpose or operations. Wallace asked about studies of cumulative effects, and Purcell said there is a cumulative effects assessment as part of the Hatchery Genetic Management Plans used in hatchery operations.

8. Council business:

- **Approval of minutes**

Wallace made a motion that the Council approve for the signature of the Vice-Chair the minutes of the August 18-20, 2010, Council meeting held in Spokane, Washington. Eden seconded the motion, which passed unanimously.

- **IEAB member appointment recommendations**

Staffer Terry Morlan reported that the Independent Economic Advisory Board had issued a letter to solicit applications from persons interested in serving on the board. We received 14 applications, he said. The board evaluated the applications and recommended the addition of four new members, including two who are currently on the board, Morlan said. Two others would be new to the board and would bring new areas of expertise, he said.

The Council usually posts the nominees and asks for public comment, particularly whether there are any conflicts of interest, Morlan said. We are recommending these nominees for appointment and want to post this information on the website for comments, he explained. The Council had no objections.

- **Council decision to release Draft Annual Report to Congress for public comment (Council document 2010-12)**

Staffer John Harrison said the draft 2010 report to Congress is ready to be released for public comment. He described ways in which the draft differs from reports in the past, including the insertion of a link to the Council bylaws and selected news articles about Council activities. There were no other changes suggested by the Council members.

Wallace made a motion that the Council release for a 90-day public comment period, beginning September 27 and ending January 7, the Draft Annual Report to Congress for Fiscal Year 2010. Dukes seconded the motion, which passed unanimously.

- **Council decision on approval of Systems Analysis Advisory Committee charter**

Morlan explained a proposal to charter a Systems Analysis Advisory Committee for the Council. He said a list of potential members was submitted to the Power Committee, but participation at advisory committee meetings is not limited to members. Morlan said he would send out a final list of committee members.

Wallace made a motion that the Council approve the charter for a Systems Analysis Advisory Committee as presented by staff. Dukes seconded the motion, which passed unanimously.

The Council meeting adjourned at 11:40 a.m.

Approved October 14, 2010

/s/ Dick Wallace

Vice-Chair