Bruce A. Measure Chair Montana

Rhonda Whiting Montana

> W. Bill Booth Idaho

James A. Yost



Dick Wallace Vice-Chair Washington

Tom Karier Washington

Melinda S. Eden Oregon

Joan M. Dukes Oregon

## Council Meeting Boise Idaho

## April 13-14, 2010

#### **Minutes**

Council Chair Bruce Measure called the meeting to order, and Bill Booth welcomed the Council to Boise.

Measure announced a couple of changes to the agenda, including an 8 a.m. starting time on April 14 and moving Agenda Item 10 from the afternoon to the morning that day.

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

Bill Booth, chair, fish and wildlife committee; Melinda Eden, chair, power committee; and Rhonda Whiting, chair, public affairs committee.

Fish and Wildlife Committee chairman Booth reported that staff provided an update to the committee on the planned launch of the Research, Monitoring and Evaluation (RME) categorical review. The review will begin June 1. Mark Fritsch gave an overview of nine "fast track" F&W projects, and the committee approved them for Council passage, Booth said. We also had a report from Peter Paquet on the wildlife crediting process, and a presentation on the quarterly within-year project funding adjustments, which was an information-only item, he said.

Power Committee chair Melinda Eden reported that Ken Corum gave an update on the Northwest's demand response work, which is getting under way again after a hiatus. We had a briefing on the federal standards for energy efficiency – many appliances are up for review – and we had a presentation on the plan to do a mid-term review of conservation achievements, she said. The Conservation Advisory Board will assist with this review. The committee also discussed the outstanding appendices to the Sixth Power Plan and made "very minor" changes to Appendix J. Both appendices I and J and the statement of Basis and Purpose for the plan are up for approval, Eden said, adding that the committee recommends the Council approve all of these items.

The Public Affairs Committee will meet today, chair Rhonda Whiting reported. We will talk about the upcoming Congressional staff trip, she said.

503-222-5161 800-452-5161 Fax: 503-820-2370 Member Dick Wallace reported on a meeting he and Measure had with the Columbia Basin Trust. Several topics were discussed, including collaboration on a science and policy forum, with possible topics of climate change and international water management, he said. We are hoping to have a joint cross-boundary project, and there will be an annual meeting between the Council and Trust in September, Wallace said.

## 1. Overview of efficiency implementation participants:

Tom Eckman, conservation resources manager.

Staffer Tom Eckman briefed the Council on "the huge web of organizations that get energy efficiency done" in the region. Based on the conservation target in the Sixth Power Plan, we have 1,200 megawatts (MWa) to build, he said. Eckman provided a schematic of the "Northwest Energy Efficiency Implementation Web," explaining the roles and interrelationships of various organizations and entities.

The schematic includes information on who does what, including where rates and revenues come from; who makes policy recommendations and who sets policy; where program funding decisions are made; who makes technical recommendations; who carries out conservation and market transformation projects and programs; and where taxes and tax credits come into play. In the end, Eckman said, "the dollar value comes back to end-use customers."

## 2. Briefing on Bonneville's post-2011 conservation program:

Josh Warner, Bonneville Power Administration.

Josh Warner of the Bonneville Power Administration rolled out the agency's proposal for a post-2011 conservation program. Chief among the program's principles is to give BPA the ability to achieve public power's share of all cost-effective conservation, as spelled out in the Northwest Power Act, he said. BPA has been working with the region for the last year to develop the program, according to Warner.

BPA aims, with the proposal, to meet the diverse needs of its customers around the region, he went on. Customers told us "loud and clear" that the bulk of conservation is best managed at the local level, and they have several other key concerns, including local control, equity, and avoiding cross-subsidies, as well as having choices in implementation.

In developing the proposal, BPA focused on ways to work with utilities as partners and acquire energy efficiency at the lowest possible cost, Warner said. We also thought about opportunities to achieve economies of scale and ways to serve customers' needs so they are encouraged to participate, he explained.

Energy efficiency costs will be allocated to Tier 1 rates for BPA's preference customers, Warner said. In addition, the proposal retains a single energy efficiency target for public power, rather than establishing individual utility targets, he noted. And utilities will be able to "self-fund" some of their own energy efficiency efforts, Warner stated.

BPA's proposal outlines a "regional infrastructure" for energy efficiency, including funding for acquisition support through such entities as the Regional Technical Forum and Northwest Energy Efficiency Alliance, he continued. The infrastructure also includes support for new measure

development and technology, as well as low-income weatherization and conducting conservation potential assessments (CPAs), Warner explained.

He outlined the Energy Efficiency Initiative (EEI) funding mechanism, adding that it provides transparency about how much revenue is collected in rates and made available to each customer. This is an important piece in looking at the equity issue and addressing cross-subsidies, Warner said. The EEI budget will be set in the rate case and take into account what has been achieved at the time toward meeting the regional target, he stated.

Eden asked Warner to explain the cross-subsidy issue. The issue comes up with the bilateral conservation contracts BPA has entered in the past with utilities, he responded. There is "a bucket of money" available to all takers, and for various reasons, some customers have more opportunity than others to use the money; that raises an equity issue, Warner said. He indicated that while there are a number of details to work out, EEI addresses the problem.

Warner described the "implementation mechanism" in the proposal, which includes "standard agreement" or "pay for performance" options. Other elements of the proposal include a review by 2014 to ensure it is meeting customer needs, as well as support for CPAs or other means to assess conservation potential, he said. Utilities are interested in knowing the potential in their service territories – "we heard that loud and clear," Warner added.

BPA is taking public comment on the proposal through May 26 and will have four public meetings – Spokane, Portland, Pasco, and Idaho Falls – to discuss it, he reported.

3. Council decision on the adoption of the remaining Sixth Power Plan items, including Appendices I and J, and the Statement of Basis and Purpose for the Sixth Power Plan and Response to Comments on the Draft Sixth Power Plan:

Terry Morlan, director, power division; and John Shurts, legal counsel.

The Council took up consideration of Appendices I and J of the Sixth Power Plan and the Statement of Basis and Purpose, with Melinda Eden complimenting staff on its work. She said Appendix I is "a scholarly work" on generating resources, and J is a description of the portfolio model. The Power Committee recommends passage of all three items, Eden stated.

Wallace made a motion that the Council approve the additional technical appendices supporting the Sixth Northwest Power Plan (Appendices I and J) as presented by staff and recommended by the Power Committee; and the Statement of Basis and Purpose and Response to Comments as presented by the staff and recommended by the Power Committee; and direct the staff to give appropriate notice of its action. Eden seconded the motion, which passed unanimously.

4. Report and Council guidance to the Wildlife Crediting Forum:

Peter Paquet, manager, wildlife and resident fish.

Staffer Peter Paquet provided an update on the Wildlife Crediting Forum. At its third and most recent meeting in March, the participants agreed on the following, he said: the 2009 F&W program is the controlling program; BPA's Pisces system will be used for the wildlife crediting ledger; the Habitat Evaluation Procedure (HEP) is the primary model and accounting tool for crediting; and the effort is confined to crediting for "construction and inundation" losses.

Paquet said a fifth principle addresses "annualization" versus "a 2:1 ratio" for crediting the losses. He pointed out the 2009 F&W program states the Council chose 2:1 crediting "to address the inability to precisely determine the habitat units resulting from acquiring an interest in property that already has wildlife value or the additional losses represented by annualization of the losses." We thought that took the annualization issue off the table, and we want to be sure we are on the right path moving forward, Paquet said.

## 5. Progress report on the Independent Economic Analysis Board quagga mussel task and Council decision on the charter of IEAB:

Roger Mann, chair, IEAB; Terry Morlan; and Tony Grover, director, fish and wildlife division.

The economic risk associated with zebra and quagga mussels is considerable, according to a report from Independent Economic Advisory Board (IEAB) chair Roger Mann. The IEAB looked at the potential types and costs of damage should the invasive mussels establish themselves in the Northwest and addressed the question of how much should be spent on planning and prevention, he said.

Mann divided the IEAB's key findings into uncertainties, vulnerabilities, and implications. With regard to uncertainties, scientists believe calcium concentrations in the water are key to mussel viability, and those figures are "all over the map" in the Northwest, he said. There are also questions about the effectiveness of prevention measures, such as intercepting and inspecting boats, Mann stated.

The IEAB identified bypass screens and ecosystem effects as vulnerabilities in the region should the mussels show up, along with hydropower and water supply facilities, he continued. The findings have research implications, such as for water-quality characteristics in the basin, and the cost-effectiveness of prevention, according to Mann.

With regard to the economics of an infestation, the IEAB worked with scientists to consider "how bad could it get" and the chances for mussel colonization and reproduction, he said. With calcium as a key factor, there are very favorable conditions for mussels in the Snake, where warmer temperatures are also more conducive to them, Mann commented. Calcium concentrations are cyclical, and researchers are still studying what this means for mussel survival, he added.

The IEAB estimated potential costs of invasive mussels in the Columbia River Basin for various types of facilities, including hydropower, water supply, fish passage, and the ecosystem, Mann explained. While there are fairly specific figures for some facilities – \$3 million to \$10 million for hydropower spillway gates, piers, aprons, and still basins in the Federal Columbia River Power System – estimates are more general at "tens to hundreds of millions annually" for facilities and property in the Snake, according to the IEAB.

The Pacific Northwest states are currently spending about \$7 million annually on quagga/zebra prevention, Mann went on. The recently developed action plan calls for spending about \$30 million, he said.

The direct costs of an infestation in hydro system and passage facilities could be in the tens of millions of dollars annually, while the total costs to the ecosystem could be in the hundreds of millions, Mann reported. In all, the prevention investments are justifiable, he indicated.

Mann said the action plan proposal for 3,000 inspection sites may be excessive. I'm not sure if there is a need for that, and it may be that inspections at a point of entry into the Northwest would be most effective, he added.

Staffer Terry Morlan said the new charter proposed for the IEAB would give the board a wider purview for its activities. Eden said she would vote against a new charter. My issues with the board "are well documented," and I don't support expanding its function to include power issues, she stated.

The original idea for the IEAB was to have an economic analysis if there were competing project proposals to do the same fish and wildlife (F&W) work, Eden said. I don't understand the expansion, she stated.

Morlan said the changes to the charter are not major. The Council still has a say over projects the IEAB does; they are all done on a task-order basis, he said. The language just opens up the opportunity, Morlan explained.

Wallace made a motion, seconded by Karier, that the Council approve a new charter for the IEAB, and the Council approved it on a seven to one vote. Eden voted against the motion.

## 6. Council decision on Fast Track Proposals:

Mark Fritsch, manager, project implementation; and Lynn Palensky, project development.

The Council has received 19 proposals for "fast track" F&W projects, staffer Lynn Palensky reported. Of those, nine met scientific criteria and are the highest priority to fill gaps in the Biological Opinion work, she explained. The recommended not-to-exceed budgets are for 2010-2013, and some of the projects have issues that will be addressed during BPA contracting, Palensky said.

The nine projects are "a small subset" of the RME projects to be addressed during the categorical review that begins later this year, she noted. If they need to be modified based on that review, "we can do that," Palensky stated.

Staffer Mark Fritsch described the projects, which are located throughout the Columbia River Basin. Three of the projects have been ongoing, he said, some for as long as two decades.

Booth pointed out that the F&W committee recommended approving all nine. There was some concern about the coordination related to genetic work, and the Independent Scientific Review Panel (ISRP) put conditions on some, he reported.

Measure noted that one project, sponsored by ODFW to monitor in the John Day subbasin, has been going on for 13 years. For \$1.5 million a year, "are they ever going to figure out what's going on"? he asked.

Fritsch responded that the project will produce a trend analysis and that the focus of the project has shifted from spring chinook to steelhead. He also said the project sponsors stepped up to assist with another project that did not have an adequate monitoring plan. Some of these questions will be addressed in the RME categorical review, Fritsch said.

Measure asked that the Council's motion on funding the nine projects segregate the John Day project for separate consideration. The sponsors haven't selected the monitoring sites, he noted.

Wallace made a motion that the Council recommend that Bonneville fund the eight fast-track projects to implement the FCRPS Biological Opinion presented by the staff and recommended by the Fish and Wildlife Committee with the expectations that: these projects will be subject to revised recommendations as necessary after the projects are reviewed in context as part of the RM&E/Artificial Production Categorical Review; the sponsor and Bonneville will integrate ISRP suggestions and staff recommendations into the contracting and reporting requirements; and Bonneville will inform the Council of its final contract decisions.

Booth seconded the motion, which passed unanimously.

Wallace then made a second motion that the Council recommend that Bonneville fund project 1998-016-00 to implement the FCRPS Biological Opinion presented by the staff and recommended by the Fish and Wildlife Committee with the expectations that: the project will be subject to revised recommendations as necessary after the project is reviewed in context as part of the RM&E/Artificial Production Categorical Review; the sponsor and Bonneville will integrate ISRP suggestions and staff recommendations into the contracting and reporting requirements; and Bonneville will inform the Council of its final contract decisions.

Duke seconded the motion, which was followed by Council discussion.

The John Day project meets scientific criteria, and the ISRP was clear on its performance and usefulness, Fritsch said. The project adds rigor and confidence to the monitoring for steelhead, he added.

We have had this project for 12 to 13 years, Karier said. The ISRP does not have confidence in the monitoring sites, and there are questions about the quality of the data, he added. The problems could be fixed, but "I am reluctant to cast this off to BPA," Karier said, adding that the Council does not see much response when issues are dealt with through the contracting process. This is a \$4.5 million project, and it should be set up right, he stated.

Bill Maslen of BPA explained that the project is part of a group of John Day projects. It has been ongoing, and the focus was changed at a meeting earlier this year, he said. We intend to insure that the information is good and the project is well integrated with others, Maslen stated. He said the project is on track to find out about the impacts of habitat work in the John Day subbasin. Maslen called it "a sound project" and said BPA can address the issues raised in the ISRP review.

Measure said he's concerned that the underlying project was expensive and that there is continued expense. He said he would support the project if there is an assurance that the

information the ISRP wanted will come back to the Council. Maslen said he would work with the sponsor on site selection for monitoring and notify the Council of the outcome.

The Council voted unanimously to recommend funding for the John Day project.

# **7. Presentation on April runoff forecasts and power supply implications:** Jim Ruff, manager, mainstem passage and river operations; and John Fazio, senior power systems analyst.

Staffer Jim Ruff reported that the Northwest had a moderate-to-high El Niño situation going on this winter, with a split jet stream delivering storms to the north and south.

The Columbia River Basin snowpack above The Dalles is on average 73 percent of normal, Ruff continued. While there were some gains in parts of the basin in March, they were offset by losses, and the overall situation remained the same, he said. The snowfall in March was "too little, too late," Ruff added.

He described snowpack conditions in various parts of the basin, noting that the highest percentage, 81 percent, is above Castlegar, B.C., in the upper Columbia basin, and the lowest is in the Idaho panhandle. The upper Snake is at 62 to 64 percent of normal, Ruff said. Overall, snowpack in the Columbia River Basin has declined 12 percent since January, he added, and climate predictions are mixed for the remainder of the spring.

Runoff forecasts reflect the low snowpack, with the April 2010 final at The Dalles at 69.7 million acre-feet (Maf) or 65 percent of normal, Ruff continued. The lowest forecasts are in the Snake, with only 41 percent of normal runoff expected at the Hells Canyon dams, he said.

The low runoff at The Dalles compares to the long-term (30-year) average of 107 Maf, Ruff said. Conditions won't get as bad as they were in 2001, when runoff was below 60 Maf, he added. Ruff noted that 11 of the past 12 years have been below average.

Staffer John Fazio pointed out that while the Council normally deals with long-term planning and a three-to-five year adequacy standard, the computer models can be configured to generate information about current conditions. The "most-likely" runoff forecast at Lower Granite shows that flows are off substantially from average through the spring and early summer, but are not that different in August, he said. "Summer is low anyway," Fazio added. At McNary, "the pattern is exactly the same," he said.

While the decreases in hydro system generation follow the runoff pattern, that won't affect adequacy, according to Fazio. The low runoff at 65 percent of normal "translates almost exactly to a decrease in generation," he explained. Adequate supply is not an issue, but revenue is, Fazio said. There will be foregone sales and increased purchases from the market, he pointed out.

A table of the 2010 power supply outlook shows adequacy in annual load/resource balance and the summer sustained-peak reserve. We are in "no danger" of having an energy problem this summer, Fazio stated. "It's a question of money, not power adequacy," he added.

There is a very low chance of a power outage, but revenues will be lower than average, and BPA is using some of its financial reserves to get through the year, Fazio said. The Northwest Power Pool's (NWPP) March assessment indicates the region has adequate generation, although low

flows will decrease the flexibility in the hydro system and make it harder to integrate wind, he noted.

According to NWPP, emergency measures may be needed if there is a significant resource loss or an extreme temperature event, Fazio said. That doesn't mean curtailments, but "measures we don't like," such as running diesel generators, he wrapped up.

# 8. Presentation by Independent Scientific Advisory Board on review of fish transport operations:

Dr. Richard Alldredge, ISAB member.

Independent Scientific Advisory Board (ISAB) member Dr. Richard Alldredge led off a presentation on the review of NOAA's proposed 2010 operations that would defer spill at three Lower Snake collector dams and move to a maximum transportation operation in May. This is "a very difficult issue" with considerable tension involved, he said.

The ISAB received the review assignment in February, and in March, the Oregon Department of Fish and Wildlife (ODFW) raised questions and brought new information to the review, Alldredge explained. There was a lot of material for the reviewers to cover, and we worked with staff and scientists from the various agencies, he added.

Alldredge said the ISAB focused on the new data, analyses, and conclusions within the context of its previous spill/transport report. He emphasized that the ISAB does not make policy recommendations and presents science in a form that is useful to policymakers.

According to the NOAA data, transporting smolts results in higher smolt-to-adult returns (SARs) for spring and summer chinook and steelhead, Alldredge said. But there was additional data from the following sources, he said: ODFW brought data that associates increased spill with increased in-river survival between Lower Granite and McNary; the Fish Passage Center brought information about effects on other species and straying with transported fish; and the U.S. Fish and Wildlife Service said additional years of spill would improve the understanding of its contribution to survival in low-flow years.

In light of the data, the ISAB came to six conclusions, Alldredge said:

- Combinations of spill and transport spread the risk across species, stocks, and the ecosystem; it offers an approach that can shed light on uncertainties in the longer term.
- A combination of spill and transport provides opportunities to learn from strategies in recent years.
- A gap in knowledge exists on the effects of spill and transport on juvenile lamprey migration.
- New studies to examine the effects of spill and transport on sockeye would reduce uncertainties.
- Out-of-basin straying is a concern, with reports that transported steelhead have higher straying rates and lower homing rates than fish that migrate in-river.

• Spill more closely mimics natural evolutionary and ecological processes than maximum transportation, which argues for a mixed strategy.

The ISAB concluded that a mixed spill/transport strategy is supported by the best available science, he stated.

You recommend a mixed transportation and spill strategy, but make no recommendation on a specific regime? Tom Karier asked. Yes, only policymakers can make those decisions, Alldredge replied. Karier asked about the type of mix that would provide enough data to measure performance. There is no transport and maximum transport, and lots of places in between, Alldredge said.

So that policymakers "will know where your recommendation starts and ends," Karier asked about tables that provide more detailed information about wild chinook SARs. He said it looked like in 2007, the SARs for wild chinook were 20 percent better with transportation. ISAB member Dr. Jim Congleton confirmed the figure.

Wallace pointed out that the Council takes a broader, multi-species view of operations. The Biological Opinion is a subset of our program, he said. Wallace asked for thoughts on the definition of "spread the risk" given that consideration. Alldredge said the ISAB did not assign weights to how the strategy might affect different species.

You took into account the low water year for both steelhead and chinook, Booth commented. Would more fish survive with transportation than being left in-river? Booth asked.

The data indicate that survival from Lower Granite to Bonneville is a higher percentage with transport than with in-river, Alldredge responded. He indicated that effects on other species were also part of the consideration, but "the short answer, is yes," he said.

Clearly, in low-flow years, "transportation provides a large advantage," Congleton replied. But we don't have a lot of information on spill, he said. There is an apparent trend with the spill data, but it is a small data set, Congleton explained.

Dr. Dennis Scarnecchia, an ISAB member, said the ISAB heard different presentations on the issue, and NOAA focused on SARs. In low-flow conditions, transported fish survive better than those left in-river, he said. But information from ODFW showed survival rates related to spill between Lower Granite and McNary, and that data indicates with spill, survival is better, Scarnecchia said. The benefits were offset because fish went through more projects downriver, so overall, survival with spill was lower, he explained.

This is a big issue due to the Biological Opinion and water conditions, Jim Yost stated. At Lower Granite, we will be faced with operations questions because of the low water in Dworshak, he said. When you have low flows, less than 65,000 cubic-feet per second at Lower Granite, and deteriorating conditions with temperatures increasing, it seems like "a prudent conclusion" to transport more fish, Yost stated. Maybe not all, he added. I was surprised that your report didn't say as temperatures increase and flows decrease, more transport is best, Yost said.

Our work did not address temperature, Alldredge responded. It is not as big an issue in spring as in the summer, he said. We were presented data for a comparison of the differences with

numbers of fish transported, but we don't have data on how that bears on straying and other species, such as lamprey, Alldredge said. We are still in a situation of uncertainty, he concluded.

# 9. Presentation by Upper Snake River Tribes – Shoshone-Paiute Tribes, Burns Paiute Tribe, Shoshone Bannock Tribes:

Buster Gibson, habitat enhancement project manager, Shoshone-Paiute Tribes; Jason Kesling, natural resources director, Burns Paiute Tribe; and a representative from the Shoshone Bannock Tribes.

Chad Colter of the Shoshone-Bannock Tribes kicked off an Upper Snake River Tribes' (USRT) presentation on F&W projects. USRT was formed in 2007 as a cooperative organization of the Shoshone-Paiute Tribes, Burns-Paiute Tribe, and the Shoshone-Bannock Tribes, he explained. "We are all one people," Colter said of the tribes that reside in the upper Snake, where salmon have been blocked out by dams. The Snake River and its tributaries "are the lifeblood" of the tribes, and they have undertaken mitigation projects in the basin, he said. The salmon we once utilized are no longer present, Colter said, but the tribes are looking for ways to reintroduce them in the upper basin, he said.

Daniel Stone of the Shoshone-Bannock Tribes described F&W projects that are being carried out under the tribes' \$61 million Columbia Basin Accord with BPA. He described nine projects: supplementation; Salmon River Habitat Enhancement; Yankee Fork; ESA Habitat; Nutrient Enhancement; Southern Idaho Wildlife Mitigation; Snake River Sockeye Salmon Research; Crystal Springs Hatchery; and Fort Hall Habitat Improvement.

Jason Kesling of the Burns-Paiute Tribe described F&W work that is aimed at protecting 13 focus species and the tribe's cultural resources. He detailed efforts to improve riparian conditions in Logan Valley and to manage wildlife and restore native species and habitats in Malheur Valley.

Buster Gibson of the Shoshone-Paiute Tribes described three programs: Duck Valley Fisheries; Duck Valley Habitat Enhancement; and Southern Idaho Wildlife Mitigation. He noted that the tribe is working on Quagga/Zebra mussel prevention.

"We are very concerned about the mussels," Gibson said, adding that Lake Meade, which is infested with the invasive species, is a day's drive from the Owyhee headwaters. We have trained all of our staff for watercraft inspections, he said.

Eden asked Colter about reintroducing salmon in the upper Snake. The tribes are still interested in anadromous fish, he replied. We want to sit down with Oregon and Idaho and talk about what we could do, Colter said. The tribes will continue to push; we are not giving up on anadromous fish in the upper Snake River, he stated.

## 10.Presentation on new genetic tools and the management of Columbia River salmon and steelhead:

Matthew Campbell, Idaho Department of Fish and Game.

Matthew Campbell of the Idaho Department of Fish and Game briefed the Council on a new technology that is logistically less difficult, intrusive, and stressful than coated-wire tags (CWT) to mark fish. The parentage-based tagging (PBT) could replace CWTs, and the department is conducting a "proof of concept" project to prove PBTs work, he said.

CWTs are currently used in the Snake River Basin to establish how many hatchery fish are contributing to harvest and estimate run-timing and harvest levels of particular stocks, Campbell explained. There are limitations, however, that PBT could solve, he indicated.

Wallace asked how long researchers would need to test CWT and PBT side by side to have results. We hope in five years to have demonstrated the power and accuracy of PBT, Campbell responded.

### 11. Presentation on Smart Grid demonstration project:

Lee Hal, BPA Smart Grid Program Manager; Carl Imhof, Battelle/PNNL Electricity Infrastructure Sector Manager; and Tracy Yount, Battelle/PNNL Smart Grid Deputy Project Director.

Lee Hall of BPA began a briefing on the Pacific Northwest Smart Grid Demonstration Project by outlining what is meant by "smart grid." It's a system that uses various technologies to enhance power delivery and use through intelligent two-way communication, he stated. Hall said generators, suppliers, and end-users are all part of the equation. The smart grid empowers customers to choose to control their energy use – the end-user is the centerpiece of the smart grid, he stated.

A recent smart grid demonstration project on the Olympic Peninsula offered important lessons, Hall said. Customers *will* sign up for real-time pricing; peak load was shaved by 16 percent; and excursions from normal set points on appliances caused minimal if any discomfort, he reported.

Hall described the upcoming \$178 million demonstration project to be led by Battelle/PNNL. It will demonstrate coordination of smart grid assets locally and across the region using innovative communication and control systems, he said.

The project will involve a number of entities in the region, including public and private utilities, vendors, and technology partners, Hall continued. The entities, located throughout the region, are contributing financially to the project, with a match from DOE, he said. The project will extend from 2010 to 2014.

Tracy Yount of Battelle described the role his organization will play, which includes overall technical leadership and project management. Battelle will operate the Electricity Infrastructure Operations Center at PNNL, which will host the participants' computing hardware and software throughout the project, he said.

The demonstration project relates well to actions in the Council's Sixth Power Plan, Yount noted. When we looked through the plan, we found a lot of intersections with what we are doing, and "these intersection points create opportunities," he added.

The smart grid project provides a direct economic stimulus of \$178 million over five years and will provide 1,500 jobs at its peak, he said. It will provide a cost-benefit analysis to guide

utilities in making future technology investments, and it has the potential to reduce greenhouse gases and carbon footprints through better integration of renewables, Yount concluded.

### 12. Council Business:

### Approval of minutes

Wallace made a motion that the Council approve for the signature of the Vice-Chair the minutes of the March 9, 2010, Council meeting held in Portland, Oregon. Eden seconded the motion, which passed unanimously.

### Public comment on any Council agenda item.

Measure noted there were people in attendance who wished to make public comment.

- 1) Mr. Siegal: The Council should be aware of a "hidden cost" with regard to demand response. Demand-side management can lead to grid and voltage instability. No one is looking at the costs related to this problem, and they could be considerable.
- 2) Mr. Krause: With regard to an inspection program for quagga and zebra mussels and the need to have so many inspectors at so many sites, universities could be encouraged to train students to carry out the inspections as part of their course work. Students would be happy to gain credit for the undertaking. You should also look at other geographic areas where there have been infestations of the mussels to learn from their experiences.
- 3) Ed Chaney: I was involved in the conception of the Northwest Power Act and I am here "to bear witness to the death of salmon restoration" on the 30<sup>th</sup> anniversary of the Act. The Act directed the Council to restore salmon devastated by the dams. In February 2009, the F&W program adopted by the Council "turned the fate of the fish over to the federal agencies responsible for driving them to the brink of extinction." By adopting the Sixth Power Plan, the Council "ratified the theft of the economies" that depend on the fish. Conservation was part of the Act to ameliorate the effects of electricity use on salmon. The Act was to accomplish fish and wildlife restoration while keeping the power supply economical and affordable. Conservation was the way to do that the mandate was eloquent.

People knew for a long time that the four Lower Snake River dams were a problem. The Corps did not design them with a provision to move juvenile salmon down the river. And people knew the region was awash in inefficient use of energy.

Thirty years after the passage of the Northwest Power Act, the region doesn't have a plan for how to restore salmon to productive levels or alleviate the impact of the dams. The Sixth Power Plan was creative, but it ratifies giving economic benefits to the Columbia River Pork Alliance that is responsible for destroying, not saving the salmon.

There have been economic consequences to the Council's failure to act for a thousand miles inland and up and down the West Coast. Thirty years ago I couldn't imagine I wouldn't live to see the salmon restored; now, I am not sure. The Council's failure to Act has enabled the destruction of the salmon.

The bright spot is that there are more gray beards coming into the fray. They'll keep coming at you and won't stop until the Columbia River Pork Alliance is brought to heel and bent to the will of the people.

4) Terry Flores of Northwest RiverPartners told the Council her organization disagrees with the ISAB's advice on spill and transport. RiverPartners is focused on policies based on sound science, she said. In a low-flow year, barged fish will survive at higher rates than fish left in the river, and "SARs will be maximized," Flores said. The data shows there would be significantly higher steelhead returns – "there is no uncertainty about that," she added.

I understand the ISAB's desire to want another data point for the longer term, Flores said. But we need to get the fish through this short-term situation, she indicated. We are making a huge investment, and we want to maximize the results, Flores stated. It is NOAA's decision, and "we will encourage NOAA to do maximum transport," she said.

This is a huge debate over one month of operations, Flores said. This is not about more power or revenue – "it truly is about the fish," she said. This is not a good year "for a grand experiment with listed fish," Flores stated, adding that RiverPartners would encourage others "to respectfully disagree" with the ISAB.

Approved May 11, 2010.
/s/ Dick Wallace
Vice-Chair
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