Northwest Power and Conservation Council

Council Meeting
Portland Oregon

December 14-15, 2010

Minutes

Council Chair Bruce Measure called the meeting to order at 1:47 pm on December 14 and adjourned it at 2:08 pm on December 15. All members were present.

Council Vice-chair Dick Wallace noted it was Melinda Eden's last meeting and saluted her contributions during her tenure. Eden said serving on the Council was "the peak of her professional career and the most fun." She cited as her accomplishments the subbasin plans and two power plans, especially the last one with its strong energy conservation targets.

Reports from committee chairs:

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

Bill Booth reported that the Fish and Wildlife (F&W) Committee received a staff update on the categorical review and the Independent Scientific Advisory Board's (ISAB) review of the draft High-Level Indicators report. We had a presentation from a panel about predation, including from cormorants and sea lions, he said. The committee also reviewed some F&W projects, which will come before the Council next month, Booth added.

Tom Karier reported that the Power Committee met December 9 and talked about BPA's energy conservation program. We also heard the latest on California Assembly Bill 32, including the message that the uncertainty in California over renewable energy credit policies is likely to continue, he said. The committee reviewed the staff's overgeneration and negative electricity prices white paper and supported a transition contract for staffer Jeff King for next year, Karier added.

Rhonda Whiting reported that the Public Affairs Committee will meet in January to discuss the trip to Washington, D.C. and the Congressional staff visit to the Northwest. She also said the committee is working on a variety of publications.

Measure reported that the Fish Passage Center (FPC) Oversight Board met December 13 and received a report from FPC manager Michele DeHart. The report was "very encouraging" and shows the FPC has interacted well with the ISAB, he said. The board also unanimously approved a set of review guidelines for FPC products, Measure noted. Next year's meetings of the board will be held in March, July, and November, he added.

1. Overview of Columbia River Basin Fish and Wildlife Program implementation planning:

Patty O'Toole, program implementation manager, Peter Paquet, manager, wildlife and resident fish; Nancy Leonard, fish, wildlife and ecosystem monitoring and evaluation manager; and Laura Robinson, intern; Tony Grover, director, fish and wildlife division; John Shurts, general counsel.

Staffer Tony Grover led a discussion on implementation of the 2009 F&W program and preliminary thoughts about preparations for the next program amendment process. He listed tasks to be done from the 2009 program and their current status. Some of them are done, some are in progress, and some are no longer needed, Grover noted. Melinda Eden questioned his statement that implementation of the land acquisition program may no longer be needed in light of the Willamette wildlife agreement. She asked about other mitigation credits. Staffer Peter Paquet said there are some areas where mitigation is not done, such as southern Idaho and the upper Columbia.

Karier said "the paradigms have shifted" and many things have changed in the region, such as the signing of the Accord agreements. We should "join the paradigm shift" and evaluate everything the Council does with respect to F&W and consider what we contribute to the region, Karier added.

Two tasks the Council may want to think about are subbasin plan updates and the development of biological objectives, Grover said. We may want to consider updating the plans for those subbasins where significant changes have occurred, Grover suggested.

The subbasin plans are now six years old, and they are supposed to be the foundation for the Council's F&W funding decisions, Eden stated.

As for the biological objectives, we discussed having provincial-level objectives in the last process, Dick Wallace noted. We've been looking at different approaches for the biological objectives and considering the various types of objectives, said staffer Nancy Leonard. The Council has tried to come up with objectives many times, Karier noted. It's not clear what "value added" would come from this, and we would need to decide whether or not we are going to set escapement goals or targets, he stated.

We'll gather all the existing information, identify where the gaps are, and take the information to the F&W Committee, said Grover.

2. Presentation on Energy Smart Industrial Program design and achievements:

Jennifer Eskil, Bonneville Power Administration.

Jennifer Eskil of BPA described the Energy Smart Industrial (ESI) program, launched in 2009, to assist utility customers and their industrial customers to increase energy efficiency. The ESI program is a response to the Sixth Power Plan, which has aggressive industrial conservation targets, she noted. Our program is very flexible and allows utilities to pick and choose components, Eskil said. We formed a utility focus group two years ago to get opinions on how the ESI program is working, and that group continues today, she added.

Energy project managers are the ESI component that has had "the most uptake in the region," according to Eskil. These are co-funded staff positions at industrial facilities who manage efficiency efforts, she explained. There are 15 such managers working in industries such as food processing, wood products, and high-tech manufacturing, Eskil said. Other popular parts of the ESI program are "track and tune," which focuses on operations and maintenance savings, and high-performance energy management, which trains end users to embed energy management into core business practices, she stated.

Eskil described the energy-smart industrial partner (ESIP) effort that assigns efficiency experts to work with utility staff on industrial conservation programs. Currently, there are 12 ESIPs serving 100 utilities, she said. The ESI program has saved 14 MW in 2010, and we are on track to save 17 to 18 MW next year, according to Eskil. ESI is helping our region's industries to be economically viable and globally competitive, she stated. Our goal is to build relationships and trust and exceed the energy-savings goals set by the region cost-effectively, Eskil summed up.

It's great to hear about these success stories, said Karier. Do you anticipate having adequate funding to continue this good work? he asked. We are trying to sort that out, replied Mike Weedall of BPA. We hope utilities will make the funds available for these types of projects, Weedall added.

3. Presentation on wind development and integration:

Elliott Mainzer, Executive Vice President of Corporate Strategy, Bonneville Power

BPA's Eliot Mainzer updated the Council on progress made under the Northwest Wind Integration Action Plan, published in March 2007, and the wind-related challenges ahead. There are now 6,186 MW of wind installed in the Northwest, of which BPA owns about 3,200 MW, he said.

Mainzer described work that has been done to understand the characteristics of wind generation, including determining wind's value for adequacy and estimating integration costs. BPA is on its third wind integration analysis for rates, and quantifying costs has been "a big dialogue topic" across the region, he noted.

Wind forecasting is one of the biggest factors in cost calculation, according to Mainzer. BPA has installed 14 new wind measurement stations, and utilities have developed better estimates of the benefits of improved forecasting, he said. We are looking at the best way to incentivize good forecasting in rates, Mainzer added.

Another issue is broadening the sources of balancing services, he stated. BPA is participating in the Reliability-based Control Protocol (RBC), a pilot effort under the auspices of the Western Electricity Coordinating Council (WECC).

Council Chair Bruce Measure asked whether the utilities participating in the ADI project can use BPA's system. They can't now, but once they comply with reporting requirements from the North American Electric Reliability Corporation (NERC) and WECC, the issue will be cleared up, Mainzer replied. "To be honest," since BPA is now participating in the RBC pilot, we are concerned the ADI benefits may be overtaken by the RBC, so we aren't that keen to jump back into the ADI pilot, he said. But we don't want to prevent the ADI project from going back into effect when it can, Mainzer stated. We think the RBC "may be a bigger bang for your buck," he added.

Mainzer described BPA initiatives to broaden balancing services, including a pilot project in which customers self-supply generation imbalance services. Iberdrola is doing that, it's going quite well, and we hope to expand this effort in the next rate period, he said. BPA has a pilot in which it can purchase 75 MW of reserves from Calpine Corp., Mainzer noted, adding that the project is proving to be cost-effective and that BPA hopes to do similar projects. BPA has teamed up with a number of utilities on demand-response pilot projects, including the use of hot water heaters, and these have a great deal of potential, he said.

Mainzer reported on efforts to reduce the demand for balancing reserves, including the work of the Joint Initiative on intra-hour transmission scheduling. He said the Joint Initiative, which involves

ColumbiaGrid, NTTG, and West Connect, is an effective model of cooperation and has been cited by the Federal Energy Regulatory Commission (FERC) for its regional coordination efforts. It is "becoming the poster child for driving change on these issues," Mainzer stated.

We need to do more evaluation of FERC's new requirement for 15-minute intra-hour scheduling, he continued. We also need to look at opportunities to use wind generation diversity to lower demand for reserves by delivering wind energy from isolated areas, Mainzer said. This question of geographic diversity for wind is one that's hard to make progress on, he acknowledged.

BPA has taken some big shots at market design reform for transmission, and "we are 3 and 0", Mainzer said. I don't know how many RTO coffee mugs you have, he told the Council.

With regard to transmission for wind generation, BPA has had some successes, but "there's a lifetime of work to be done," according to Mainzer. There's been a good focus on trying to use the existing transmission infrastructure as fully as possible, and we've been selling over 900 MW of conditional firm transmission service, he noted. A lot has been done, but at the end of the day, we'll need to expand transmission, Mainzer stated. We've been able to get the most traction for transmission projects that serve native loads, but the big interregional projects are struggling, he added.

The region has made significant progress on wind energy data and analytics and the development of alternatives to federal hydro for system flexibility, Mainzer said. But there is more work to do to ensure the intra-hour market functions effectively, expand access to non-federal balancing capability, push the envelope of forecasting, and keep an eye on longer-term market design alternatives with respect to transmission issues, he stated.

Other challenges include geographic diversity, dynamic transfer, renewable energy credits (RECs), and the question of what California resource development is doing to our Northwest energy markets, Mainzer said. How would you solve the California issue? Measure asked.

"I've burned a lot of personal capital" meeting with Pacific Gas & Electric, the Sacramento Municipal Utility District, and the Transmission Authority of Northern California, replied Mainzer. They want to build transmission from the Northwest to California, and in the future, I don't see how you get around building more transmission to maximize our renewable energy potential, he said. The question is how to do things like cost allocation and siting, Mainzer added.

There is also "a ton of flexibility" in Canada, he told the Council. It's essential we keep the dialogue going with folks to the north and the south, Mainzer said. But "I'm not crazy about this unbundled REC situation," he added. California has a new governor and that may change some of the messages coming out of that state, Mainzer said.

Jim Yost asked to whom BPA sells its wind power. Major utilities here and in California, replied Mainzer. A continuing question we face is: because so much wind isn't serving BPA's native load, who should pay the costs of integration and balancing services, he said.

I continue to be concerned about the unbridled development of wind, particularly in the Columbia Gorge, said Bill Booth. It's being driven by government subsidies and politics in California, and BPA and Northwest ratepayers are bearing the brunt of the cost of paying for that wind, he stated.

Booth posed several questions. Has BPA thought about the question of how much wind the region can develop and still protect Northwest ratepayers? Has BPA considered what level of wind we can handle and "do you plan to slow it down?" Is anyone looking at the ultimate mix of resources that makes sense for this region?

Mainzer said regional portfolio standards are state and national policy and that BPA is attempting to operate as an open-access transmission provider. We have tried to take on these cost-allocation issues, and we've "taken heat" for trying to quantify and allocate the costs for reserves, he stated.

It's fair to ask, how much is too much wind and what's the limit, Mainzer told the Council. BPA hasn't done anything to put on the brakes, he said. And there are the broader questions of geographic diversity, transmission planning, and how to get the Northwest and California to work more constructively together, Mainzer added. We need to do that and the Council has a role in asking these kinds of questions, he said.

There are areas of agreement, noted Tom Karier. One is that California should pay for its share of wind integration costs, and another is that it's up to the Northwest to figure out what those are, he said. The same thing applies to transmission, Karier stated. California should pay its fair share of transmission costs, he said. And why don't we ask them to pay some of the costs of fish recovery? Measure suggested.

Measure said that the comments of Idaho resident Charles Pace about this issue would be entered into the record.

4. Presentation from the Oregon Wave Energy Trust:

Justin Klure, Pacific Energy Ventures; and Therese Hampton, Pacific Energy Ventures.

Justin Klure and Therese Hampton of Pacific Energy Ventures reported on the "utility market initiative," a project sponsored by the Oregon Wave Energy Trust (OWET) to acquaint utilities with the resource potential of wave energy. Klure described his company's work since 2009 to engage utilities and examine different wave energy technologies. In the next couple of years, we'll see some of the best technologies move forward, he said.

One of the advantages of ocean energy, according to Klure, is that it is predictable. Being able to schedule it is one of its key attributes," he said. We delivered a final report to OWET on the utility market initiative in January, and now we are trying to disseminate the results of what we've learned.

We found there is 18,000 MW of rated capacity and 6,000 average MW of ocean energy potential along the West Coast, primarily off Oregon and California, he said. We've been talking about a 30 to 35 percent capacity factor, but at this point, we are still "throwing darts against the wall," Klure stated.

There are 22 active wave energy technology developers, and four are pursuing projects of some kind in Oregon, he reported. Oregon has created itself as the place to do wave projects in the United States, according to Klure. Our study showed that between 50 and 500 MW of wave energy capacity is likely to be sited off the coast of Oregon by the end of 2025, he noted.

NOAA has collected a lot of data about wave energy, Hampton said. The ocean is a winter-peaking resource, and there's a wide variability in November, December, and January, depending on what kind of winter we are having, she explained. In summer, waves are constant with a lower resource potential, and in winter, there's a lot of potential, but it's going to be variable, Hampton said. Utilities told us it's okay if the resource is variable as long as we can predict what it will do, she noted.

Eden asked if a utility would be interested in using the resource if there are constant waves at a low level in the summer. The assumption is that utilities would want to tap it in the winter, but the question of using it as a base resource is a good one, replied Klure. It's too early to say what's going to be cost-effective and what is not, he added. Relative to wind, is wave energy more or less predictable? Karier asked. It's more predictable because you can see storms coming, replied Hampton.

Costs for the resource depend on the level of federal incentives, capital costs, and available capital structure, Klure said. Estimated costs for wave energy range from $220 per MWh to $475 per MWh, he noted. These numbers represent early-stage demonstration projects, and it's worth noting "wind was once in that ballpark," Klure stated.

The value range of wave energy depends on market alternatives, REC value, and integration costs, he continued. The value is estimated to be from $114 per MWh to $124 per MWh, Klure said. Price supports are necessary to get early-stage projects off the ground, he added.

Hampton reported on a study by Powertech Labs that found the current electrical system on the Oregon coast can integrate 430 MW of ocean energy without significant infrastructure investment, she said. That assumes wave power generation from 12 interconnection points under a set of contingencies, Hampton noted. Without contingencies, the total estimated capacity is up to 630 MW, she said.

Two areas that need more work, according to Klure, are better resource characterization to provide a "utility-style" analysis of monthly, daily, and hourly variability, and better forecasting. That's what we'll work on in the next two years, he said.

5. Presentation on Smart-Grid grant:

Kevin Watkins, PNGC; and Dave D'Avanzo, Lane Electric Cooperative.; and Roman Gillen, Consumers Power, Inc.

Kevin Watkins of PNGC Power kicked off a presentation on recent Smart Grid activities by telling the Council PNGC Power is made up of 16 regional cooperatives and is BPA's fourth largest customer. The U.S. Dept. of Energy recently awarded us a grant for an advanced metering infrastructure (AMI) project, he noted.

Smart Grid, according to Watkins, is about bringing intelligence and a higher level of automation to the whole system. It involves the entire electrical power system from generation to end use -- you can think of it as "from generator to refrigerator," he said. Smart Grid features include sensors, two-way communications, information management, and intelligence -- the reason it is referred to as "smart," Watkins stated.

Ten of PNGC Power's members are participating in the AMI project, which will involve installing 97,600 smart meters and integration with 120 substations, he said. The project cost will be about $39.2 million, and the grant will cover half of that, Watkins noted.

The project will use power-line carrier technology, which sends a signal over a power line to a customer's house, he pointed out. Benefits we expect to see are better customer information, a streamlined billing process, improved reliability, and more efficient operations, Watkins said. Among the challenges are customer acceptance, moving data in two-way communications, interoperability, and cyber security, he noted. As for future applications of advanced metering technologies like the one PNGC Power will use, "the sky's the limit," Watkins said.

Roman Gillen of Consumers Power, Inc. in Philomath told the Council CPI has 17,500 members and is Oregon's fourth largest cooperative. We were one of the first utilities in the state to install an automated meter system, and 100 percent of our customers are read through that system, he said. The meters send a one-way signal to us, but by participating in the PNGC Power grant project, our meters will be upgraded to send information as well as receive it, Gillen pointed out. Our biggest reason for participating is that we think smart meters are a tool to give our customers some control over rising energy prices, he stated.

In 2009, we did a successful pilot project with advanced metering, Gillen said. All of our 22 substations are upgraded and ready to communicate with the new meters, and we expect installation to be done by May 2012, he added. Among the challenges we face, Gillen noted, are educating our members to understand the benefits of the new technology and making sure we address their technological, security, and privacy concerns. Also, we are doing this amidst emerging standards for this type of technology, and we have to squeeze the costs into our budget and amortize the investment for the meters over a shorter life period to meet the grant standards, he said.

Two benefits from this effort would be lower costs to ratepayers and energy conservation, said Booth. How do you plan to measure performance on those criteria? he asked. We expect to gain a number of operating efficiencies, such as the ability to locate sources of line loss faster, Gillen said. With respect to energy efficiency, as we start to use more higher-cost Tier 2 power from BPA, we think this new two-way communications system will help our members decide to make changes in the way they use electricity, he stated. We'll be able to offer pricing plans such as time-of-use or demand-shifting rates, Gillen added.

Dave D'Avanzo of Lane Electric in Eugene said his utility serves 10,500 members and has about 12,800 meters and 1,473 miles of transmission lines. Lane started deploying smart meters in 2006, and today, we have a meter-read rate of 99 percent, he noted. By the end of 2007, we were fluent in the uses of these meters and the information we could get from them, D'Avanzo stated. Today, we can read our meters in six to seven seconds, he pointed out. They provide load profile and voltage information, as well as helping us detect meter tampering, D'Avanzo said.

Our meters store 600 days of hourly data, and our energy services staff can give customers data about their energy use in five-minute segments, he reported. It lets them understand what's going on in their homes and what actions they can take to save energy, D'Avanzo stated. We've found that by providing our members this information, we have gotten a reduction of seven to 12 percent in energy use, he said. We have recently offered a "my usage" program, which allows you to monitor your energy use on your smart phone on a daily basis, according to D'Avanzo.

Using our smart meters, we have been able to reduce outage times, improve preventive maintenance, and do better voltage monitoring, among other things, he told the Council. When you do these projects, you need to have people who are willing to wring out the total benefits that come from these systems, D'Avanzo noted.

6. Update by NOAA Fisheries on ocean conditions in 2010:

John Ferguson, Director, Fish Ecology Division, NOAA; and Bill Peterson, NOAA Science Center, Newport, OR.

John Ferguson and Bill Peterson from NOAA's Fisheries Science Center made a presentation on the latest information on conditions in the Pacific ocean affecting salmon survival. They explained how various meteorological and oceanographic indicators interact to account for either "good" or "bad" salmon returns and showed the Council a "stoplight" diagram which summarizes current ocean conditions using 16 different indicators. Taken as a whole, the indicators represent an "ecosystem approach" to providing management advice, according to staffer Jim Ruff.

Peterson explained the sampling that is done and the factors researchers look at, including the state of the Pacific Decadal Oscillation (PDO), sea surface temperatures, currents, the timing of upwelling, as well as biological indicators that index the quality of food in the food chain for salmon. This year, the PDO is very negative, which is good for salmon, he said.

The PDO is now occurring in four or five-year phases, whereas PDO phases used to last 20 or 30 years, Peterson noted, adding "we don't know why it has changed."

This year has been a "mixed bag," he said. Conditions were poor early in the year, and great later in the year, according to Peterson. In July, the ocean went cold, and that should give us a lot of good data to study, he added.

Booth said the installation of the lower Snake dams coincided with a period when the PDO switched, and as a result, it is hard to separate the causes of the poor salmon returns that occurred around that time. You have to look at the ocean to put all fish restoration work in context, said Peterson, and restoration work may have to accelerate if ocean conditions are bad, he stated.

Ferguson outlined what's next for NOAA's research program. We will continue to improve these environmental indicators to be more predictive for salmon, he noted. Variability is increasing, and we need to keep our eye on ecosystem changes, Ferguson stated.

He said NOAA has two new state-of-the-art fishery research ships in Newport, Oregon, and that the agency is going to propose a coast-wide survey of juvenile salmon that would start in FY 2013 and extend from Monterey, California to La Push, Washington. The cost would be about $3 million per year, and we will seek funding for this new study, Ferguson noted. He said he hoped the Council, with its influence on federal and state policymakers, would be supportive of their funding request.

7. Update on NOAA's Pinniped-Fishery Task Force Recommendations:

Garth Griffin, NOAA Fisheries Biologist.

Garth Griffin of NOAA Fisheries briefed the Council on the pinniped-fishery interaction task force, which advises the agency on interactions between California sea lions and salmon at Bonneville Dam. He recounted the history of the task force's work and its recommendations for reducing sea lion predation on salmon, including capturing and killing specific animals below the dam. In early 2008, NOAA authorized lethal removal of up to 85 sea lions a year for five years, Griffin noted.

He reported on all the actions, lethal and non-lethal, such as relocation, that have been taken in the last three years to reduce sea lion predation. We reconvened the task force in October and November to evaluate all the removal measures used thus far and to consider making changes to the program, Griffin said.

The task force findings, in a report coming out soon, are that the removal program hasn't succeeded in reducing the salmonid predation problem below Bonneville Dam and that more action is needed, he stated. The task force recommends more traps be built and deployed, Griffin said.

NOAA was sued in 2008 over the lethal removal program, but we prevailed in district court, he stated. Then this November, the Ninth Circuit ruled against us saying we failed to explain adequately how the lethal removal of sea lions is consistent with the Marine Mammal Protection Act, Griffin reported. But the good news is that the Ninth Circuit generally validated the approach we used and we have another chance to make our case by providing a new explanation, he said.

I'm impressed by your optimism after finding the program didn't work and that it was illegal, said Karier. He asked about the trapping recommendations. The states think increasing the number of traps from four to seven will help, Griffin said. There are better ways to deal with trapping, and this problem isn't going to go away, he added.

Steller sea lions are becoming more of a problem than California sea lions, noted Booth. Is there any opportunity to pursue a removal program with them? he asked. They are classified differently, replied Griffin. There are two stocks and recently they have rebounded, and states have petitioned for new status reviews of them, but status reviews take time, he said.

8. Briefing by EPA Region 10 Administrator

Dennis McLerran

EPA Region l0 Administrator Dennis McLerran gave a presentation on some of his agency's activities. Three issues we have in common, he told the Council, are climate change, toxics reduction, and work to strengthen state and tribal partnerships.

McLerran provided an update on EPA's efforts to regulate greenhouse gas emissions from large sources, such as coal plants. We are framing a common-sense approach to this and getting states ready to administer the greenhouse gas reporting programs, he said.

McLerran said the Council's Sixth Power Plan is "very encouraging," particularly its approach to energy conservation. He described the efforts of the West Coast Collaborative to reduce diesel emissions and exhaust by electrifying port facilities up and down the West Coast. With respect to vehicles and electrification, there's a lot of public interest, and the biggest limit I see is the amount of vehicles that can be produced, McLerran said.

He noted that Council staff has been involved with EPA's efforts to reduce toxins in the Columbia River Basin for many years. EPA now has a toxics reduction action plan and strategy, McLerran reported. Studies have shown problems with fish contamination and possible dangers from too much fish consumption from bodies of water with toxins present, he said. McLerran asked for the Council's cooperation on some of the projects laid out in the action plan and suggested working together on data management and monitoring.

We really value the work the Council does, and we want to become a bigger player with respect to energy issues, especially climate issues, he said. And we'd like to hear from you what we can do, McLerran told the Council.

Yost asked him for help in expediting a permit to introduce nutrients for fish into the Dworshak River, and McLerran said he would look into it. Karier said the Council doesn't have the authority to mitigate for toxics, but the issue of toxics and the effect on fish are of interest to the Council. Things seem to be moving awfully slowly -- can you accelerate that? he asked. McLerran noted the complexity of the issues and said it would require EPA to work with many partners to reduce the toxic loads being put in the rivers.

The fishery is very important to us, and I'm concerned we could be sending signals to the public that fish aren't safe to eat, said Booth. Are the fish safe to eat? he asked. It depends on the consumption rate, McLerran replied. We are concerned about sending that signal too -- it's a tough piece of line-drawing, he added.

Booth asked if he would commit to implement an emergency treatment protocol in the event of a zebra or quagga mussel detection in the Northwest as part of an effort to act quickly to protect the Columbia River. A lot of agencies need to work together on this, and I'll talk to my staff, said McLerran.

Eden suggested he visit often with the Council. At her request, McLerran provided an update on EPA's work on a cleanup plan for the Teck Cominco smelter. McLerran promised to return for another visit in the future.

9. Briefing on forecast of surplus energy events and possible mitigating actions:

Jeff King, senior resource analyst.

Staffer Jeff King recommended releasing a white paper on "surplus energy events and possible remedies" for public comment. The Power Committee discussed the paper and is comfortable with it, Karier noted. He suggested Eden and Yost serve as a review team to sign off on the latest draft of the paper before it is sent out. The Council agreed to that.

King summarized some of the paper's conclusions. Current wind development has led to more frequent surplus energy events and RPS resource development is likely to increase such events through the 2020s, he said. Resource development to provide unbundled RECs to meet California's RPS will likely further increase the frequency, King added.

Meeting the RPS will drive down the value of non-RPS electricity until the RPS targets are achieved, he stated. Across the Northwest, the effect of lower market prices on all generating capacity will be moderate, but the energy value of hydropower will be disproportionally reduced, King added.

10. Council Business

- **Approval of minutes**

Wallace moved that the Council approve the minutes of the November 9-10, 2010 Council meeting held in Portland, Oregon. Eden seconded, and the motion passed.

- **Extension of Wildlife Crediting Forum Charter**

Staffer Peter Paquet asked the Council to approve an extension of the Wildlife Crediting Forum charter. He said the Forum had hoped to complete its process by the end of the year, but that proved to be too ambitious. We've made considerable progress on the ledger of habitat units and where we are with credits associated with individual hydro projects, Paquet noted. We are getting to the point where it would be difficult to make the ledger much more accurate, although there are still some areas where we have concerns, he said.

The remaining issues are specific to certain geographic areas, according to Paquet. The group has agreed it would be fruitful to focus on issues specific to those areas, and this extension would allow them to do that, he said.

Will all the tasks be done in 90 days? Wallace asked. We'll have the ledger as good as we are going to be able to get it, and there will be recommendations as to how we'll proceed, replied Paquet.

It would be edifying to see the magnitude of the remaining unmitigated credits and to have the ledger show the range of disagreement about habitat units and the areas where agreement hasn't been reached, Eden said. The more numbers and information there is, the better, and I request that, she added.

Wallace moved that the Council approve the extension of the charter of the Wildlife Crediting Forum for 90 days. Eden seconded, and the motion passed.

- **Approval of contract with Jeff King**

Staffer Terry Morlan said staffer Jeff King is retiring at the end of December, but that the Council's Power Committee had approved a request for a "transition contract" with King for part of the coming year. Wallace moved that the Council approve a contract with Jeff King for transition support for the Power Planning Division's Senior Resource Analyst position and for additional research and analytical services as needed, for the period January 17, 2011 through September 30, 2011, in an amount not to exceed $45,000. Dukes seconded, and the motion passed.

Approved January 11, 2011.

_/s/ Dick Wallace

Vice-Chair

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