Northwest Power and Conservation Council

Council Meeting
Boise, Idaho

November 5-6, 2013

Minutes

Council chair Bill Bradbury called the meeting to order at 1:33 p.m. He asked for committee reports.

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

Phil Rockefeller, chair, fish and wildlife committee; Jim Yost, chair, power committee; and Henry Lorenzen, chair, public affairs committee.

Phil Rockefeller, chair of the Fish and Wildlife Committee, said the group discussed the activities and timing for the Council to take action on the Fish Tagging Forum's 17 recommendations. Staff outlined a scenario for implementation and proposed a timeline, he said.

The committee also began work on the recommendations received for amending the Fish and Wildlife (F&W) Program, Rockefeller said. Staff has prepared summaries of "clusters of issues" and what stakeholders are focused on within them, he reported. Rockefeller described five clusters staff presented, including the framework of the program, biological objectives, and research, monitoring and evaluation. We also discussed habitat strategies such as preserving strongholds and engaging in water transactions.

Power Committee chair Jim Yost said two Idaho electric cooperatives made presentations about issues of concern and described what they are doing for energy efficiency, and said it is important for the Council to consider the problems faced by smaller public utilities. The presenters stressed that every utility is different, and the same approach doesn't work for all utilities, Yost added.

We also looked at the regional load forecast, he reported. There is room for another discussion about the forecast and the analytical methods for developing it; we need to look at the analysis again, Yost stated. The committee also received an update on the region's Smart Grid pilot project, he continued. It will be 18 months before there is data, Yost said, adding that the project was slow to get off the ground but is now picking up speed. He added there may be opportunities to apply the results to various utilities and control areas in the region.

Yost said staff also reported on the utilities' energy efficiency achievements for 2012, and it looks like we are on track to achieve the 2012 target, he said. The Power Committee will also recommend full support and adoption of both the Regional Technical Forum's proposed 2014 work plan and budget.

Henry Lorenzen said the Public Affairs Committee will meet at the end of the day. On the agenda are continued deliberations on a new Council logo and discussion of moving toward more digital publications and discontinuing the printed materials, he said.

1. Council decision on Geographic Review:

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

Staffer Lynn Palensky introduced a presentation on the geographic review of habitat projects that are part of the Council's F&W program. She said the decision document represents a year's worth of work on the 83 projects under review. We are bringing the projects forward with the committee's approval, Palensky said. The project budgets currently total $80 million for expense and $6 million for capital, and they represent a big chunk of the Council's F&W program, she said, adding that the recommendations cover the period 2014 to 2018.

Palensky noted the document has four parts: Part 1 is background on the review; Part 2 covers the programmatic issues raised; Part 3 is the specific project recommendations; and Part 4 satisfies a legal requirement to explain instances in which a final recommendation varies from the Independent Scientific Review Panel (ISRP) evaluation. She said the review effort involved many people, including Council central and state staffs, BPA, the ISRP, and the public.

Palensky described the geographic review, noting that it covers the anadromous fish areas of the basin and focuses on tributary and habitat-based projects. Most of the projects have gone through previous reviews and this is a review of their progress, she said. Palensky went on to describe the timeframe and process the review followed. She noted that the ISRP asked 33 sponsors for more information on their projects. Some of the projects are recommended with contingencies, including review of a follow-up report, Palensky explained. She also listed a number of considerations and expectations that will be conveyed to BPA in funding the projects. Palensky also noted the recommendation that a couple of projects not be funded in the future and a caveat that the Council is amending its F&W program and may revisit projects.

Jennifer Anders asked about the trigger and process for revisiting the recommendations. Palensky said something could come from the F&W program amendment process that would change priorities, and the Council is reserving the right to revisit a project. Staffer Tony Grover added that the Council might decide on a new direction in the program that could have ramifications for some projects. He said any review would be in an open public process and include consultation with the affected parties.

Bradbury asked for background on a statement related to redirecting funds to the O&M on fish screening facilities/structures. Palenksy said all of the program's fish screening projects were part of the geographic review. We were told that fish screens need maintenance and this statement puts a priority on directing a small pot of money into that effort, she said. There are O&M needs on screens in all of the states, Palensky added.

She continued with explaining programmatic issues that arose in the geographic review. Palensky reported that the ISRP included 17 issues with its review, which is more than we have ever had before. She said staff made a recommendation on which to deal with now, which to table until later, and which to defer to another venue for consideration. Palensky identified four overarching programmatic issues she said are timely and important to address, including: implement monitoring and evaluation at a regional scale; evaluate and improve umbrella projects; provide long-term maintenance of fish screens; and effectiveness monitoring in the Columbia River estuary. She proceeded to explain the staff recommendation on each issue.

With regard to the maintenance of fish screens, Bradbury asked where proposals would come from to fix, maintain, or improve screens. Staffer Mark Fritsch responded that many entities have screens and a lot of them are embedded in other projects. Due to flat budgets, sponsors have said they have not had the resources to maintain screens, he said, adding that some sponsors use the Budget Oversight Group process to get more funds for O&M on screens. Fritsch said the O&M issues also come up with wildlife projects in which funds are needed for that purpose.

Staffer Patty O'Toole provided a brief overview of the estuary projects. She said a primary issue is making sure we understand the strategic plan for the estuary and how to monitor the progress. O'Toole said BPA and the Corps of Engineers are continuing to refine the overall strategy and it should be again reviewed by the ISRP.

Palensky went on to explain the organization of the project list. She pointed out there is a notation to indicate where a programmatic issue applies to a project.

Staffer John Shurts explained Part 4 of the decision document. He said there are specific requirements in the Northwest Power Act about the Council's project review. One requirement is that the Council consider the recommendations of the ISRP and provide a written explanation if it doesn't accept an ISRP recommendation, he said. Shurts explained the instances in which the Council is departing from the ISRP recommendations. He also said there are explanations of how the Council took ocean conditions into consideration, as well as how the Council's recommendations are consistent with the Act's language on assuring projects take a cost-effective approach.

I didn't see anything about results and these are all projects that have been going on for years, Tom Karier said. He asked about data and reports on project results. Palensky said the ISRP review is focused on results and accomplishments. The ISRP looks at summary and annual project reports, as well as any other documents the sponsors provide, she said.

Karier pointed out the opportunity was missed to include project accomplishments in the Council's geographic review report. He also asked how much the projects spend on RME. Palensky said the projects were screened for RME in an initial sort. We are taking a regional approach to monitoring now, and at one point, there was a call for limiting RME spending to a certain percentage of the program budget, she said. Fritsch added that RME is "in transition" and BPA is defining the level of RME needed.

Karier clarified that the Council decision does not include recommendations for specific project budgets. Palensky confirmed it did not, but said what is currently being spent on the package of projects is about $80 million in expense and $6 million in capital.

Karier said he is concerned about making five-year recommendations on projects when the current F&W program will end next year. It is odd timing to have long-term recommendations based on an old program that will soon be ending, he said. Karier added that project accomplishments should be "front and center." The projects are in great shape given where they used to be, he said, adding that he strongly supports Part 3 of the report, the individual project recommendations. Karier said he does not support Part 4.

Anders made a motion that the Council approve and transmit to Bonneville the project and programmatic review recommendations out of the geographic review as presented by staff and recommended by the Fish and Wildlife Committee and acknowledges that there are not specific budget numbers in the recommendations. Rockefeller seconded the motion.

Rockefeller asked for confirmation that the motion means the transmittal to BPA will include the six funding expectations presented by staff, and Grover said those would be in the letter to BPA. Rockefeller noted that the sixth expectation statement concerning the funding period answers some of the concerns raised by Karier.

Karier questioned language on page 11 of the document that appears to be instruction for the Council. Booth said he looked at the language as signaling the need to address the maintenance of fish screens. The message is that throughout the region this is a major issue that needs to be addressed, he stated. Rockefeller suggested deleting the language. Bradbury asked if there were objections to doing so, and none were offered.

The motion was approved on a unanimous vote.

2. Briefing on renewable resource development in Idaho:

Shirley Lindstrom, Idaho Council staff, introduction; Mark Stokes, Manager of Power Supply Planning, Idaho Power, presenter.

Mark Stokes, director of water and resource planning at Idaho Power, briefed the Council on the company's resource picture and the development of renewable resources in its service territory.

Idaho Power serves customers in Idaho and a small portion of eastern Oregon, he said. The company has 1,709 megawatts (MW) of hydroelectric, 1,118.2 MW of coal, and 773.7 MW of natural gas generating capacity on its system; the latest addition to Idaho Power's resources is the 330-MW Langley Gulch combined cycle combustion turbine (CCCT), Stokes said.

Big changes with renewable resource development began to occur in 2009, he explained. The wind generation Idaho Power has under contract jumped from just over 200 MW in 2007 to nearly 800 MW in 2011, Stokes said. This rapid development is what prompted "the PURPA issue" in Idaho, he said. And while the company has the wind resources under contract, Idaho Power does not get the renewable certificates associated with the generation, Stokes added.

Idaho has seen more resources developed under the Public Utility Regulatory Policies Act (PURPA) than other western states, he pointed out. The company's average annual load is 1,858 MW, and it has 989 MW (nameplate) of PURPA projects under contract, Stokes said. That compares with PacifiCorp's' 6,342 MW of load in a six-state territory and 815 MW of PURPA projects, he noted. PURPA contracts add up to 53.2 percent of Idaho Power's load, Stokes said.

The main point is that in the absence of a state renewable portfolio standard (RPS), there have been lots of renewables developed in Idaho, he stated. In 2014, Idaho Power's renewable portfolio will exceed the 2015 requirements in Washington, Oregon, and Montana, and it will be just shy of Oregon's 2020 mandate, Stokes reported. He went on to say that in addition to the PURPA contracts, Idaho Power has three long-term agreements for other wind and geothermal generation.

Idaho Power set new peak records in 2013 on two consecutive days in July, Stokes said, adding that peak load in Idaho is driven by air conditioning and irrigation. The company ramped up 1,200 MW of generation to follow load through the heat wave, he said. Idaho Power uses hydro for a lot of its load following, predominantly from the Hells Canyon complex, Stokes noted. We were also operating Langley Gulch and our gas peakers to meet load, he said. On July 1, wind picked up late in the day, and we dropped hydro to integrate the wind, Stokes said. Purchases and a demand response program, which reduced load by 35 MW, were also called on to meet the 3,402-MW peak that day, he stated.

In our latest Integrated Resource Plan (IRP), our forecast is reduced and we are not showing the need for demand response, Stokes said. We have had public meetings to discuss how to deal with demand response, he said, adding that in previous years, Idaho Power has had 400 MW of participation, mostly in irrigation load.

Bill Booth asked how much more resource Idaho Power had available in July during the peak loads. "We were pretty stressed" and were tapping into reserves to serve load, Stokes responded. "Everything was fine," but it was stressing the limits of our capabilities, he added.

Stokes pointed out what the wind generation was doing during the peak episode. Out of a total of 678 MW on line, we were getting 48 MW of generation, he said, adding that is typical for the weather patterns at that time of year. "That is at the heart of the educational process" we are undertaking; we need people to understand why wind is not a good fit for our system, Stokes stated. Some is okay, but not the amount we have, he added.

With Langley Gulch, we have 300 MW of dispatchable capacity, Stokes explained. To get that much generation from wind, we'd need 6,000 MW of capability, he said. Idaho Power is not against renewables, but wind is not a good fit for our system and what our customers need, Stokes added.

Jim Yost asked how much energy efficiency Idaho Power expects annually. Stokes said efficiency is accounted for in the company's IRP. In 2013, we have 200 to 250 MW of load reduction, he said. Idaho Power hires a third-party consultant to do a study of the efficiency potential on its system, and that "is baked into our resources" before we look at the supply side,

Stokes stated. We are doing the achievable energy efficiency "from the get-go," and it shows up as a lower load in any given day, he added.

Tom Karier asked why Idaho is "the big winner" with PURPA contracts in the Northwest. The biggest factor was the way the rules were set up in Idaho, Stokes replied. In 1978 after PURPA passed, FERC put together basic ground rules and left it up to the states to come up with the details and specific rules, he explained. What we saw was that the pricing methodology on avoided costs resulted in rates that were too high, Stokes said. When coupled with federal incentives through the production and investment tax credits, the PURPA projects were that much more economic to develop, he continued. Developers also found loopholes in the rules; for example, they broke up a 150-MW wind farm into separate strings of turbines, Stokes said. The economic incentives were there to develop projects, he stated.

Even after the PURPA case with the Idaho Public Utilities Commission (IPUC), we see interest in these projects, Stokes went on. The changes made by the commission make it fairer for our customers, and we won't see the same boom of development, he said. The IPUC left the cap on wind and solar projects at 100 kilowatts, and projects that lend themselves to disaggregation are now subject to a different pricing methodology, Stokes explained. This tends to be a lower price, and the published rate is strictly based on the avoided cost of a CCCT, he said, adding that "it more appropriately sets the rates."

PacifiCorp has 1,800 MW of wind capability on its system, according to Paul Clements of Rocky Mountain Power. Of that, 1,000 MW are owned by PacifiCorp and 800 MW are under contract, he said. The PacifiCorp projects are clustered in the Columbia River Gorge and eastern Wyoming, Clements said. In Idaho, PacifiCorp owns the Wolverine project, which was acquired through a Request for Proposals, and has four others developed under PURPA, he explained. The company has a total of 229 MW of wind in Idaho, Clements added.

In addition, PacifiCorp has 100 MW of small hydro in Idaho, some of which are PURPA projects, and one biogas plant, he continued. Clements said the company has not seen much recent PURPA activity, and the changes made by the IPUC "have dampened interest."

Pat Smith said a Power Committee presentation indicated rooftop residential solar could have a big future in Idaho. What's your take on that? he asked.

We are starting to see a lot of interest in rooftop solar programs, Clements replied. In the Southwest and California, those programs have been heavily promoted and "that tidal wave is sweeping north," he added. We are funding some applications and providing credits for others, Clements said. The "big question" is how to pay the fixed costs of other resources to serve customers when their solar isn't producing, he stated. When the sun isn't shining, those customers need power, but how are the costs of those facilities going to be shared? Clements asked. This is the next big issue that utilities will have to tackle with solar, he added.

The cost of solar PV is on a downward trend, Stokes stated. A lot of applications are occurring in California and the Southwest, where rates are much higher and there is a shorter payback period, he elaborated. That will retard the growth of rooftop solar in Idaho, but we will see the same

issue with fixed costs, Stokes said. We have 3 MW of load in a net-metering program, and interest will continue as long as there is a downward trend in solar PV costs, he added.

Steve Silkworth of Avista said his company is quite a bit smaller than Idaho Power, with 360,000 electricity customers, 320,000 gas customers and 1,100 MW of electricity load. Avista has 1,022 MW of hydroelectric capability and 822 MW of thermal capacity, he reported. The company has contracts for power from a gas-fired plant in Idaho and wind projects in Washington, but does not have many PURPA projects, Silkworth said. We have a 5-MW wood-burning generator and four very small hydro projects, he added.

Avista is meeting the 2020 requirements of the Washington RPS, Silkworth stated. The company is also on track to meet the 2030 Washington standard, he wrapped up.

3. Northwest Power Pool update on energy imbalance market effects:

Ben Kujala, energy analyst, introduction; Rachel Dibble, Bonneville Power Administration Strategy Integration and Northwest Power Pool Market Assessment Committee Representative, presenter.

Staffer Ben Kujala introduced an update on the Northwest Power Pool's study of an Energy Imbalance Market (EIM) for the Northwest, calling the analysis done as part of the pool's Market Assessment and Coordination Committee (MC) Initiative "very robust." The EIM study is important since the next Council power plan will need to consider system flexibility in identifying resources, he said. Looking at the costs and benefits of an EIM is an important step, and the analysis is showing there is a wide range of possibilities, Kujala said, adding that hydro conditions make a big difference in estimating the benefits.

The basic idea with an EIM is "security constrained economic dispatch" of resources, according to Rachel Dibble of BPA. Utilities today may do economic dispatch manually, but an EIM would use a computerized algorithm to dispatch resources automatically, she explained. The way the system operates today, balancing authorities balance resources within "their own bubble," Dibble said. With an EIM, another entity would look at a wider footprint for balancing, she said. It gives you more options to balance the system without moving as many resources, Dibble stated.

Discussions in the power pool's MC Initiative are geared toward voluntary participation in an EIM, she continued. It would be voluntary to join and for participants to offer generation, but once you are in the EIM, it would be mandatory to settle imbalances under its rules, Dibble explained.

In the MC Initiative, 22 Northwest Power Pool members explored ways to deal with balancing issues on the system, she said. The effort, which has been going on since 2012, started with a first phase that analyzed the economic benefits of an EIM, Dibble noted. The aim was to answer the question of whether there were enough benefits to pursue an EIM, she said, adding that the Phase 1 report was recently posted on line.

The executives who participated in the initiative had a multi-faceted problem statement that started with the need for additional tools to manage ramps and the increasing demand for balancing capacity associated with variable energy resources, Dibble explained. The findings from Phase 1 of the analysis indicate there is no "silver bullet" to meet the challenges, she said.

In addition, the analysis found that the costs are very dependent on an EIM design, and the market participant costs outweigh the market operator costs, Dibble said.

The key concerns that came out of Phase 1 have to do with EIM governance, she went on. The public power contingent has concerns about FERC jurisdiction over an EIM, Dibble said. In addition, there are policy and technical issues to be addressed, she stated, adding "there is lots of groundwork to do."

As for the annual regional benefits, Dibble said the analysis used a production cost model to look at how to reduce generation costs with an EIM. We looked at today's case and determined the generation costs and then looked at the case with an EIM and determined the generation costs, she explained. The results showed there were $41 million to $71 million in savings in the base case, Dibble said. We then identified several sensitivity cases, she said, adding that the base case analysis incorporates a lot of assumptions and the sensitivity cases addressed some of those. In the sensitivity analysis, eight of 12 cases fell between $70 million and $90 million in annual EIM benefits, Dibble reported. "We felt confident that was a good range," she added.

Karier asked what generation resources are dispatching more frequently with an EIM. Dibble indicated that depends on the assumptions; for example, with high gas prices, gas-fired generation will be shut down more often.

The Northwest Power Pool's EIM effort has been under way for some time, and PacifiCorp has partnered with the California Independent System Operator (CAISO) to explore an EIM, staffer Charlie Black told the Council. The Council hasn't taken a position on an EIM to date, he said. The EIM momentum is building, and we wanted to flag these issues for you, Black added.

The MC Initiative's Executive Committee will meet November 19 and participating entities will decide whether to pursue a Phase 3 and indicate whether they are "in for the long haul," Dibble said. The opportunity to speak to the executives about their decision is available, she said. At that meeting, executives will indicate the likelihood their organization would be willing to move forward on an EIM, Dibble stated.

It strikes me that resource providers already have contracts to sell generation, and it seems complex to divvy up the costs and benefits in a different way, Booth pointed out. Are people thinking about this? he asked.

The deals that are set up to serve load do not change, Dibble stated. With an EIM, the market operator takes in a bid from an entity that wants to participate and the algorithm spits out the most economic supply, she said. This algorithm is already being used in many places, and the technology is well proven, Dibble added.

The discussion has been that each Balancing Authority in a Northwest EIM will come into the operating hour with adequate resources to meet its load, Black explained. Working at the Balancing Authority level, there are still opportunities to optimize within the hour, he said. This is about optimizing within the hour, which helps meet balancing and integration needs for renewables, Black added.

Resource sufficiency is a big part of the discussion, Dibble agreed. A participant has to show it has the resources on line and ready to go to meet its obligations, she stated. A participant has to be able to meet all its requirements so the EIM isn't used as a short-term energy market, Dibble added.

What about a utility that plans to meet load with market purchases? Karier asked. Dibble indicated market purchases would be subject to the EIM's resource sufficiency rules. As the operating hour nears, a utility must have all of its resources in order, she said.

At the close of Kujala's presentation, Anders made a motion that the Council meet in Executive Session to discuss matters related to participation in civil litigation. Karier seconded the motion. In a roll call vote, the Council unanimously approved the motion.

4. Presentation and Council Decision on Regional Technical Forum Work plan and Budget for 2014:

Nick O'Neil, RTF conservation analyst; Jim West, RTF PAC Co-chair.

Staffer Nick O'Neil described the proposed 2014 work plan for the Regional Technical Forum (RTF). Staff began developing the plan in August and after several iterations based on feedback and discussions with others, presented the draft plan to the RTF in October, he said. Staff subsequently reviewed the plan with the RTF's Policy Advisory Committee (PAC), O'Neil explained.

The "big theme" in the 2014 plan is "no major changes," with the allocation of time and budget among the work categories similar to 2013, he continued. In addition, the staffing model we now have, which utilizes full-time contract staff, is working well, O'Neil said. The plan also proposes to continue using a contribution from in-house Council staff, he explained.

The third-party quality assurance/quality control (QA/QC) reviews that have been implemented for the analyses of energy efficiency savings are lending credibility and transparency to the RTF work, and we plan to continue those, O'Neil stated. The RTF's current pace for reviewing measures and their savings has been adequate, he added.

In terms of the proposed budget allocations for 2014, O'Neil said the majority of the RTF's $1.5 million annual budget goes toward reviewing existing measures, developing new ones, and standardizing the technical analysis. Fifty percent of the proposed budget goes toward that category, he said. A second category, 22 percent of the budget, would go toward tool development, research and data development, and regional coordination, O'Neil reported. The last 28 percent of the budget is for website and database support, RTF member support and administration, and RTF management, he said.

O'Neil pointed out where there have been slight adjustments from the 2013 budget. The plan is to continue to contract for the third-party QA/QC reviews and while contract staff handles much of the analyses, there are several work plan items that are accomplished through contracting via a request for proposals (RFP), he said. We allocate some funding to those contracts rather than use in-house resources, O'Neil clarified.

The RTF is in the last year of a three-year funding agreement with its sponsors, he continued. A look-back at our budgets since 2012 shows that the allocation among the major work categories has been relatively stable, O'Neil said. He pointed out that in 2013, there was a shift in the business model and much of the work that was previously contracted out is now done using in-house contract staff. The "big picture allocation" hasn't changed much over the past three years, and all of this has been accomplished within the annual budget, O'Neil stated.

The continuing shift of technical and management work to RTF staff has taken more "off Tom and Charlie's plate," he said, referring to Council staffers Tom Eckman and Charlie Grist. There is still a lot of contribution from the Council staff that amounts to about two FTE a year, O'Neil explained. The Council contributes in-kind to the RTF in many areas, he said, including IT assistance, website development and hosting, contracting, accounting, and legal work.

The majority of the RTF budget is allocated to the in-house contract staff, O'Neil went on. This has increased efficiency and improved the analyses, he said. There are significant cost savings with this model compared to having the work conducted entirely through RFP contracts, O'Neil said. The work products are more consistent using the in-house staff, he added. The staff learns what the RTF wants in terms of information and the way it is presented, O'Neil elaborated. We are a cohesive team and we review each others work products, he added. The PAC recommended adding the third-party QA/QC review, and that has been an improvement, O'Neil said, adding that the reviews have not uncovered any major flaws in the staff work.

The staffing level is likely sufficient for now, but that depends on what the PAC wants, he said. There is more subcommittee work needed to tackle complex issues and measure analyses so they go to the RTF "more fully baked," and this suggests a need for more staff support, O'Neil explained.

RTF member feedback indicates the in-house staff approach is working well and members think the current staff is performing above average, he reported. The members feel the analyses are consistent and the processes have been streamlined, O'Neil said. "We had that sense internally" and that was confirmed in an anonymous survey we conducted with the RTF, he said.

O'Neil concluded by saying staff would like the Council to approve the RTF budget, work plan, and business plan for 2014.

Jim West, Snohomish PUD and co-chair of the RTF PAC, said the committee completed its review of the work and business plans, and the budget. We are pleased to recommend them to the Council for approval, he said. We have been pleased with the shift to the new staffing model, West said. He noted that Montana Council member Pat Smith was appointed in September to co-chair the PAC.

The PAC met in January, April and July, and has another meeting scheduled for November 22, West said. We had a webinar in 2013 in which we talked about non-energy benefits of energy efficiency measures, he reported. A primary example of this issue is the extent to which ductless heat pumps provide health benefits by reducing wood smoke, West stated. With the shift to contract staff for most of the savings analyses, the conflict of interest issue with members of the RTF "has not materialized," he added.

Anders made a motion that the Council approve the Regional Technical Forum 2014 work plan, budget, and business plan as recommended by the Power Committee. Smith seconded the motion, which passed unanimously.

The RTF provides a wonderful model of public/private cooperation, Bradbury commented. We get great work from the RTF, and I like the participation of so many players, he wrapped up.

Public Comment on Fish and Wildlife amendment recommendations.

The Council took public comment on the F&W program amendments.

Tom Stuart of the Save Our Wildlife Coalition said his organization submitted lengthy recommendations in September. He said the Northwest Power Act calls for the protection, enhancement, and mitigation of fish, including providing flows of sufficient value. Stuart said the Council has not yet directed flows of sufficient quantity and value for fish and the program amendments offer the reason and opportunity to do more.

It is time for the Council to delink its F&W program from the Biological Opinion for the Federal Columbia River Power System (FCRPS), he continued. Stuart said the region has never had a legal Biological Opinion and he presumed the Council would prefer a plan that could withstand legal scrutiny. It makes no sense for the Council to defer to BPA and the Council should do more for salmon recovery and take a stronger leadership role, he said.

Stuart said the Council's program needs to focus on the Snake, where salmon are vital to the economies in three states. He said there is much underutilized habitat in Idaho and eastern Oregon. Stuart said the spill test proposal should be in the Council's F&W program and he urged the Council to adopt it. He said it would not disturb the VAR Q operation in Montana.

Norm Semanko of the Idaho Water Users Association said his organization is concerned about calls for reintroduction of salmon into the blocked areas. He said there would be astronomical costs associated with reintroduction and it would be an invitation to lawsuits. A reintroduction of salmon into blocked areas would mean costs and complication, Semanko stated.

He said he wanted to correct Stuart's assertion about the Biological Opinion. He said the 1995 Biological Opinion was upheld, and the region will operate through 2014 under the current Biological Opinion. He said the next Biological Opinion may pass court review and noted a "troubling" trend by environmental groups to go to other venues, like the Council's F&W program, to try to go beyond what is in the Biological Opinion. Semanko asked the Council to be cautious about that.

Terry Flores of Northwest RiverPartners said actions to aid salmon were brought into focus with the Columbia Basin Fish Accords. The Accords were "an attempt to reach peace in our time," stop litigation, put measures on the ground, and bring about a new paradigm in cooperation, she said. Flores said the Biological Opinion represents the largest species recovery program in the United States, with the largest associated costs.

It was hard for RiverPartners members "to stand down" on the Accords, but in exchange, we were assured that the parties would support the Biological Opinion, not bring more lawsuits or

recommend dam breaching, nor would they request more F&W funding from BPA, she said. And the agreement was that the parties would submit comments to the Council that are consistent with the Accords, Flores said. In this way, she said, the Accords created more certainty for BPA customers. Now with these amendments, it is hard to know if the promise has been kept, Flores stated.

The Columbia River Inter-Tribal Fish Commission (CRITFC) said it would prefer to direct BPA to fund more F&W measures, but its members understand that the Accords are paramount and they are obliged to stay within the existing funding levels, she said. We agree with CRITFC, Flores stated. She pointed out that the Council will have to provide a legal rationale for rejecting copious recommendations, some of which are unrelated to the hydro system.

5. Update on the Redfish Lake Sockeye Hatchery in Springfield, ID:

Paul Kline, Idaho Department of Fish and Game Assistant Fisheries Chief.

Paul Kline of the Idaho Department of Fish and Game (IDFG) gave an update on the Snake River Sockeye Salmon Program and the transition from conservation to recovery. He provided an overview of the species, noting that it travels the farthest of any salmon to return to its spawning grounds in Idaho. The Redfish Lake sockeye, the run that is the farthest south, travels the greatest distance and to the highest elevation, Kline said. He described the lakes to which the sockeye return, Redfish, Alturas, and Pettit, as fairly undeveloped, pristine lakes in the Stanley Basin.

Kline said IDFG has many partners in the sockeye program, including the Shoshone-Bannock Tribes. He described the circumstances that led to the effort, showing the downward trajectory of returns after the first federal dam on the Snake River was built. In the late 1970s, the numbers dropped to fewer than 200; in 1989, four fish returned to Lower Granite Dam, and in 1990, there were none, Kline said. The tribe petitioned the National Marine Fisheries Service for a listing under the ESA and the sockeye were listed as endangered in November 1991, he said. The conservation program began that year, Kline added.

He went on to describe Phase 1 of the conservation program and hatchery protocols that were established to protect the remnant population of sockeye. Kline noted steps that were taken to protect the fish against the introduction of disease and listed locations of the hatcheries in the Northwest that nurtured the broodstock. The effort was geared “to rebuild” the population starting at the broodstock facilities, he explained. Kline described various strategies used to see what would work to bring the most fish back to their spawning grounds.

So far, the program has introduced 3.8 million sockeye at various stages of maturity, he said. Evaluations produced signs that the introduced sockeye spawn and reproduce naturally, Kline said. We’ve seen a 1.56 percent smolt-to-adult return with the natural smolts released at Redfish Lake, he said. “This is encouraging” and demonstrates that the lake has the productivity to support the population, Kline added.

From 1991 to 1998, 16 sockeye came back to the basin, but since 1998, 4,829 sockeye have returned, he reported, with 7,678 counted at Lower Granite Dam, a 400-mile distance away. The sockeye program developed aquaculture techniques to raise sockeye full-term to maturation in

the hatchery, which was no small feat, Kline continued. We effectively maintained and conserved the population's genetic diversity, he said.

The primary factor limiting further program expansion was the absence of rearing space, and that changed with the signing of Idaho's Columbia Basin Fish Accord in 2008, Kline continued. In 2010 with Accord funding, BPA purchased the Springfield hatchery site, he said. That same year, IDFG initiated the Council's three-step hatchery review process, and the Council approved hatchery construction in June 2012, Kline said. Construction began immediately and we expect to complete the hatchery in December 2013, he stated.

Recolonization and adaptation are the next steps for the sockeye program, and the objective is to produce large numbers of smolts to produce large numbers of adults, Kline said. He described the process for meeting the objective and the numbers of fish that are expected, as well as the anadromous fish returns that will trigger the transition to Phase 3 of the program. The earliest we could see the transition, which would occur with a five-year average return of 1,000 fish and 750 naturally spawned fish, is 2021, Kline said.

The Phase 3 goal is to develop an integrated program that follows scientific guidance, with smolt production reduced to between 400,000 and 600,000, he said. In Phase 3, we expect an average return of 1,122 naturally spawned adults and 5,384 hatchery-origin adults, Kline said, adding the minimum abundance threshold for Redfish Lake is 1,000.

He went on to describe the Springfield Hatchery, which is on the site of an old trout-production facility. The cost of building the hatchery was $13.58 million, Kline said. He noted there was not one change order during construction, and the facility came in on time and at cost.

Kline explained the operation and how fish will come and go from the hatchery. The first eggs will be delivered the first week of December and the first smolts will be released in 2015, he said. The first returns from this facility will be in 2017, Kline stated.

Rockefeller asked if there are other comparable efforts going on in the Columbia River Basin. Not an effort that started with this level of extinction risk, Kline responded. This is a comprehensive effort in terms of our ability to recover a species and have it repopulate its habitat, he said. Kline said the program took four adult returns and some outmigrating smolts from Redfish Lake to get the captive broodstock. We also took in 16 adults that returned in a trickle from 1991 to 1997, he explained. This program has retained more genetic variability than any other captive broodstock program, Kline said, adding that 95 percent of the genetic variability at the start has been retained.

Booth complemented IDFG and Kline for the program, adding that BPA support and funding was critical. He pointed out the effort was unique for its cross-collaboration among agencies, tribes, and states; the efficiency with which the hatchery was built and the good water supply it has; and the availability of local genetic stocks. These led to a great example of how a hatchery can be used to conserve and ultimately recover wild fish, Booth stated.

6. Discussion with Upper Snake River Tribes regarding Fish and Wildlife Program amendments:

Lee Juan Tyler, Chairman of the Upper Snake River Tribes Foundation; Fort McDermitt Indian Tribe Commissioner; Shoshone-Paiute Tribe Commissioner; Burns Paiute Tribe staff; and Heather Ray, Executive Director Upper Snake River Tribes Foundation.

Staffer Laura Robinson introduced members of the Upper Snake River Tribes (USRT), who were present to discuss the upcoming F&W program amendments.

Lee Juan Tyler, USRT chair. Our organization was formed to protect the tribes' life ways, and our charter is to restore the Snake River Basin to a natural condition, as well as protect and nurture the tribes' languages and culture. The tribes are major contributor to the basin's F&W projects and initiatives, and our main goal is to bring the natural conditions back. The tribes want to make people accountable to the laws, including the Clean Water Act.

Bob Austin, USRT staff. We want to speak to F&W program amendment ideas, focusing on five: increased and more active Council oversight of the program; defining the wildlife operational losses; a 70:15:15 allocation of the program funds; resident fish substitution; and crediting for FCRPS wildlife losses.

1) NPCC oversight. The current program has a more narrow focus on ESA-listed salmon and steelhead. There is minimal Council oversight currently on program level goals, objectives, and levels of expenditures. Let's regain the Council's voice in oversight and have more reporting on what is being achieved.

2) Mitigation of wildlife losses. There are ongoing impacts due to reservoir operations and the impacts to wildlife haven't been looked at a great deal. A Kootenai Tribe pilot project has come up with a methodology that could be used, but it needs more work. We encourage the Council to continue the Wildlife Advisory Committee to develop protocols and to work in concert with parties in the basin. BPA should fund wildlife assessments so we can get a regionally accepted framework in place for the mitigation and to conduct impact assessments.

3) 70:15:15 allocation. We want to see more funds put toward wildlife and resident fish. This allocation diversifies the program beyond being solely an ESA salmon program, and the Council should assess whether the 70:15:15 split is being accomplished.

4) Resident fish substitution. A major resource for the tribes in blocked area is substitution of resident fish for their anadromous fish losses. But there have not been clear goals, objectives, and methods for addressing the losses. We recommend resident fish substitution program objectives that include restoring native fish to near historic abundance; taking action to reintroduce anadromous fish into the blocked areas; and foster opportunities for consumptive and non-consumptive resident fisheries programs.

5) Wildlife crediting for FCRPS losses. The question remains whether the crediting is 1:1 or 2:1. A 2:1 crediting would more closely bring wildlife back to what was lost; the Council should take a hard look at this. All of the FCRPS projects should be mitigated at a 2:1 ratio.

We are grateful for the opportunity to discuss the program amendments with the Council and the F&W Committee. We haven't talked about dollars, but these ideas are based on what we think your program should incorporate to provide mitigation for the tribes.

Buster Gibson, USRT. Earlier this spring, we had a site visit with BPA staff. They feel their obligations to the tribes have been fulfilled, and that is of concern to us.

Edmund Murrell, USRT. I heard the same statement from BPA and it concerns the tribes quite a bit. This tribe picked its reservation site because of the plentiful steelhead and salmon. But there are now no salmon returns. The resident fish program does not provide an adequate protein source for tribal members; they have lost their traditional fishing methods and the culture surrounding anadromous fish. Now they typically fish along the banks using sport fishing methods, which is a different fishery. What we have is a reduced protein source and reduced cultural activity. There are a lot of things to do besides putting fish in a lake before you say you are finished with mitigating for what the tribe has lost.

Lee Juan Tyler. We should be able to re-establish the salmon runs, and we need to unite to figure out how to do this. Things can be turned around.

Smith asked about the resident fish compensation and the terms of engagement on the Columbia Basin Fish Accords.

Bob Austin. Only the Shoshone-Bannock Tribes are party to an Accord at this time. With the resident fish compensation, we'd look at it in terms of the original goal of substitution for the loss of anadromous fish. There should be feasibility studies conducted to determine if anadromous fish passage is feasible above Grand Coulee and other dams. There are new technologies available, and it's worth looking at to see if it is feasible; if not, then look at substitution programs.

Jason Kessling, USRT. Resident fish substitution is part of the Council program and there needs to be accountability to see that the program is carried out. There are things in the program for the tribes, and we want enforcement to see they are carried out. Enforce what is already in the program.

Bob Austin. We prepared over 50 program amendment ideas and have emphasized five today. If there are questions to clarify what was meant, let us know. The Council's program could work better, and we'd like to be part of the process to improve it.

Bradbury thanked the panelists for their comments.

7. Briefing on University of Idaho Integrated Design Lab:

Shirley Lindstrom, introduction; Director Kevin Van Den Wymelenberg.

Kevin Van Den Wymelenberg of the University of Idaho Integrated Design Lab and Sheree Willhite of Idaho Power briefed the Council on the energy efficiency research and development facility and the use to which its work is being put by Idaho Power. Van Den Wymelenberg said the lab connects research with practice in the design and construction industries. The lab's technical assistance outreach projects deliver kilowatt-hour savings less expensively than other

resources, he said, adding that the lab is expanding its partnerships within and outside the state and the region.

Van Den Wymelenberg described the lab's mission as applied research, which gives technologies "wheels in the marketplace." The lab personnel are a mix of architects and engineers, and the funding comes from various sources, with the Northwest Energy Efficiency Alliance (NEEA) providing foundational support, he continued. The lab carries out projects that provide education and training, and technical assistance with design and construction on new buildings and major renovations, Van Den Wymelenberg explained.

"I work with people to push on the edges" to get them to incorporate efficiency, he said, adding that the lab has been involved with 14 million to 15 million square feet of construction projects. We evaluate what is going on and work with developers to make efficiency happen, Van Den Wymelenberg said.

The lab has a "lending library" that puts tools in the hands of those who want to carry out efficiency projects, he said. The library is a free resource in the Idaho Power service territory, and we have about 1,000 pieces of equipment worth $150,000, Van Den Wymelenberg explained. This helps to leverage efficiency projects, he added. The lab also operates a website with a lot of information, including video presentations and research papers, Van Den Wymelenberg said.

The network of design labs in the region started in 2000 at the University of Washington, he continued. The initial work was with owners, designers, and engineers to incorporate daylighting into their buildings, he said. It starts the conversation about efficiency, Van Den Wymelenberg said. Today, there are labs at many universities, he said, adding that agreements have been worked out to get the national energy labs and universities working together.

Van Den Wymelenberg described projects done with NEEA, one of them "a near-zero energy" building that is 65 to 70 percent below code in its energy consumption. The builder has done the analytics, which showed that while the construction costs are greater, the value is also greater with a net-zero building, he stated. We are starting to get the consumption data to see how these buildings pan out, Van Den Wymelenberg added.

He also described the Bullitt building in Seattle. It's an interesting pilot project in which the building owner is entering an agreement to sell energy to Seattle City Light for 20 years, Van Den Wymelenberg explained. Establishing the baseline for savings is a challenge with a new building, he said. Our role is to try to find the baseline, and it isn't easy to find a "matched pair" of buildings to use to do that, Van Den Wymelenberg added.

The development community knows it can call the design lab for information on efficiency, and the lab's connection with that community is crucial, Willhite said. We get hybrid efficiency projects at Idaho Power that have several components, and the lab helps us figure out the baseline to determine how much efficiency is being gained, she said. Idaho Power conducts a random 10 percent verification for energy efficiency projects, and the design lab does the verification for us, Willhite said. Architects and engineers value the design lab, she told the Council.

Charlie Grist asked about the penetration and saturation of integrated design practices in the buildings marketplace. There has been a movement to make buildings green, but what fraction of the market is taking this up? he asked. Van Den Wymelenberg said the market has evolved.

Energy tracking is something the American Institute of Architects is trying to push, but the reporting rate is still low, he acknowledged, and more integration is needed. I can't give you a number, but the practice is changing and continuing to get better, Van Den Wymelenberg stated.

Willhite said Idaho Power has tracked about 75 projects for efficiency. The incentives are very important in this economy, she stated. Our challenge with new construction will be greater as the economy heats up, Willhite said.

Smith asked about what is going on in Montana. Van Den Wymelenberg there is a great resource at Montana State, and the university and the utility would like to do more. We are the only one of the university labs with an in-house mechanical engineer, and our collaboration with Idaho Power has helped, he added. Once you have a couple of key positions on board, a lot more can happen, Van Den Wymelenberg said. That is what needs to happen in Montana; they are on the cusp of taking a big step forward, he added.

Yost asked about the lab's involvement with public buildings and schools. NEEA had an initiative in 2000 to 2005 in which we made progress with developing prototype schools, Van Den Wymelenberg responded. Since NEEA pulled out there is not as much focus on schools, but some resources have been put toward upgrading energy efficiency at schools and "the upside is huge," he said.

Idaho Power has quite a bit of involvement with schools, Willhite said. We do walk-throughs to identify where they could find savings, and we have that involvement with public buildings, too, she added.

8. Briefing on Idaho Power and Integrated Design Lab projects:

Shirley Lindstrom, introduction; Sheree Willhite, Idaho Power Company

---------- Merged with Agenda Item #7----------

9. Council Business:

- **Approval of Minutes**

Anders made a motion that the Council approve for the signature of the Vice-Chair the minutes of the October 8-9, 2013 Council meeting held in Helena, Montana. Yost seconded the motion, which passed unanimously.

Comment on any issue before the Council

B.J. Kieffer of the Spokane Tribe offered comments on issues related to the Council's current F&W program.

After the Council released its review of the blocked areas in 2011, the Upper Columbia United Tribes and the Spokane Tribe asked that new projects be implemented. I have come to Council meetings before with this same message. We submitted a project through the Budget Oversight Group and were told there is no room for expansion within the program. I have issues with the

way things have shaken out for us. We are stuck for five years with no ability to expand projects or propose new projects. We did significant F&W planning in the subbasins, and the F&W program language says the Council will work with BPA and project sponsors on multiyear implementation budgets.

Kieffer presented slides of the annual drawdown at Lake Roosevelt. “We take the brunt of these impacts so Portland doesn’t flood.” We try to keep bringing projects forward to mitigate these problems, and “we keep getting the door slammed on us.”

Toxics are an issue people may not be aware of in the Upper Columbia. There have been PCB releases at the hydro projects, and the tribes encounter warnings about consuming resident fish. We are told to limit consumption of the fish. These resident fisheries are subsistence fisheries for the Spokanes, but now we are limited in consuming them.

We want to stress a point about climate change. With more impacts coming from climate change, you will need the waters in the Upper Columbia as habitat for fish. Where do we go to get funding for more projects?

The meeting adjourned at 11:20 a.m.

Approved December __, 2013

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Vice-Chair

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