

Bill Bradbury
Chair
Oregon

Henry Lorenzen
Oregon

W. Bill Booth
Idaho

James A. Yost
Idaho



Jennifer Anders
Vice Chair
Montana

Pat Smith
Montana

Tom Karier
Washington

Phil Rockefeller
Washington

Council Meeting Bend, Oregon

**August 6-7, 2013
Minutes**

Council chair Bill Bradbury called the meeting to order at 1:34 p.m. He began by thanking Facebook and its public relations firm for Monday's Council tour of a Facebook facility.

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, public affairs committee.

Phil Rockefeller, chair of the Fish and Wildlife Committee, reported on NOAA's presentation to the committee on an Environmental Impact Statement for hatcheries. The draft EIS generated 1,100 comments, and NOAA has a lot of feedback to go through and integrate into the document, he said. Rockefeller also noted that NOAA has enlarged the scope of the EIS beyond Mitchell Act hatcheries to all hatcheries in the Columbia River Basin. NOAA is working on a final alternative and the EIS document should be available in November, he said.

Rockefeller went on to cover a briefing by staff on the geographic review of wildlife projects and the programmatic issues encountered. The Independent Scientific Review Panel (ISRP) will release its review next Thursday after which staff will work on recommendations for the Council to consider, he said. In addition, staff went over the fish and wildlife committee budget reviews for two projects that will come before the Council for approval; both projects are supported by the committee, Rockefeller said. The committee also had a briefing on the Yakama's effort to develop a coho master plan, he said.

Peter Paquet has been nominated to become chair of the Wildlife Advisory Committee, Rockefeller continued. The committee discussed the types of reviews needed for wildlife projects, including the usefulness of a periodic forum for wildlife managers, he said.

Power Committee chair Jim Yost said the committee began with a primer on solar energy and the work staff will do to determine the cost of the resource. We had an update on the Generating Resource Advisory Committee, which will identify resources that are available and meet again in September or October, Yost said. We also were updated on the Resource Adequacy and Resource Strategies Advisory committees, he said. The plan is for the Council to vote on members for those committees in September, Yost said, adding that the names of nominees would be circulated ahead of time.

Staff presented an overview on the historical context for the power plan, he reported. The committee also discussed the loads and energy efficiency and distributed generation opportunities presented by data centers, Yost said. We heard about a study of that will be conducted of the non-energy health benefits of energy efficiency that displaces wood burning, he said, adding that this is the first opportunity for the Council to look at issues related to the health benefits of energy efficiency.

The committee discussed emerging trends in energy efficiency markets and technologies, and strategies for the future of NEEA, Yost said. NEEA is attempting to come up with more “low-hanging fruit” for the energy efficiency harvest, he added.

Public Affairs Committee chair Henry Lorenzen reported on plans for the congressional staff tour, which will take place in Montana. Jennifer Anders summarized the agenda and activities that are planned for the tour, which includes trips to Hungry Horse Dam and the Flathead River, and visits with the Flathead Electric Cooperative and the Salish-Kootenai Tribe. Lorenzen said the Public Affairs Committee will meet this week to review a draft of a new Council logo and to finalize details for the tour.

Report on the visit of Council Members to the Commission Meeting of the Columbia River Inter-Tribal Fish Commission:

Bill Bradbury, Chair.

Bradbury reported on a meeting with the Columbia River Inter-Tribal Fish Commission on July 25, which seven Council members attended. The purpose of the meeting was to strengthen the relationship and partnership between the Council and CRITFC, he said. Bradbury said there was an “excellent conversation” on a number of topics. The Council bylaws allow for this type of meeting, but the Council failed to give public notice of the members’ intent to attend the meeting, he acknowledged. The Council will provide information about the meeting and a summary, which will be posted on the Council’s website.

Tom Karier said the meeting was productive and helpful. I am concerned about the lack of notice, and I would like to see an accounting of how we failed to make the notice, he said. Bradbury said he shared that concern and would ask for a full report to the members.

1. Briefing on Bonneville Energy Efficiency Business Case:

Charlie Grist, senior analyst; Richard Génécé, vice president of energy efficiency and Josh Warner, manager, planning and evaluation, energy efficiency, Bonneville Power Administration.

BPA has completed an evaluation of financial savings accruing from energy efficiency in the region and developed a tool for utilities to use in evaluating their own efficiency investments, staffer Charlie Black told the Council. Richard Génécé and Josh Warner of BPA made a presentation to PNUCC last week, and received a lot of kudos for the work, he said. One issue the Council heard about during the mid-term assessment of the Sixth Power Plan is the need for more information on the impacts of energy efficiency on specific utilities, which this work addresses, Black added.

The “case for conservation” was a collaborative effort within BPA, as well as with entities outside the agency, including PNUCC, PNGC Power, and the Northwest Requirements Utilities

(NRU), G nec  told the Council. There has been a need for a rational and objective economic analysis of the case for doing energy efficiency, he said.

G nec  listed several reasons for the study, including the economic downturn that led to low or no load growth for many utilities, and the amount of self-funding utilities are undertaking for energy efficiency. Our objective was “to assist BPA’s customers with making a case for conservation,” particularly Tier 1 customers who are facing Tier 2 purchases, he said.

We wanted to create a tool for utilities to use to show the impacts of energy efficiency on their own systems, G nec  continued. He said the tool is applicable to load-following customers, but not to those who purchase the Slice product. At every turn, we made conservative assumptions in the analysis, G nec  said, adding that our objective was to be “deliberately conservative.”

The first part of the analysis compared energy efficiency to Mid-C market prices, he explained. We compared the value of our 2001 to 2011 energy efficiency investments to the cost of purchasing the equivalent amount of energy from the market, G nec  said. The headline is that in the absence of the 2001 to 2011 investments, BPA’s estimated power costs would have been approximately \$750 million to \$1.75 billion higher from 2001 to 2022, he reported.

G nec  reiterated that the assumptions on prices, savings, and persistence of energy efficiency measure savings were deliberately conservative. The regional benefit perspective is in retrospect only, and the analysis only considers costs through 2011, he clarified.

G nec  described “A Utility Business Case for Conservation.” This takes the analysis from a regional to a utility-specific view to answer the question of whether the investment in energy efficiency pays off, he stated. The objective was to demonstrate that it makes sense from a retail perspective for a utility to invest in energy efficiency whether its entire net requirement is served at Tier 1 rates, it purchases Tier 2 power from BPA, or it purchases additional nonfederal resources, G nec  explained.

The business case shows that even for a utility with “headroom” in its Tier 1 allocation, there is a benefit from energy efficiency, he reported. The benefit is \$8.90 per megawatt-hour for a utility that has its entire net requirement served at the Tier 1 rate, and the benefit is larger, \$17.33 per MWh, for a utility with Tier 2 exposure, G nec  said.

Henry Lorenzen pointed out that retail utilities face rate pressure as a result of energy efficiency savings that diminish the contribution to fixed costs. Utility boards have to explain why rates are going up when revenue needs go down, he indicated.

At its core, energy efficiency is a hedge against the uncertainty of future energy prices, G nec  replied. If utilities are capturing those savings, that is what needs to be communicated, he said, acknowledging that it is a difficult idea to convey to customers.

G nec  listed a number of supporting points for the energy efficiency case not captured in the analysis, including customer satisfaction, which he called “a huge benefit.” Other pluses are securing lost opportunities and the cumulative benefit of conservation to defer other power purchases, he said. People know these benefits, but the economic piece has been missing,

Génece stated. This analysis gives us a common economic base to support energy efficiency, he added.

Warner explained the “Utility Service Area Conservation Financial Impact Model.” This is an Excel model based on comparing the cost of energy savings against power purchases, he said. It is a tool that gives utilities the opportunity to input their own variables for an analysis of end-user benefits, Warner noted. The tool is not applicable to all customers, but is primarily for smaller, non-Slice customers, he added.

BPA conducted a data-test of the model, using input from five utilities, Warner said. We want this tool to be used appropriately and effectively, and we wanted to enable utility general managers and boards to look at energy efficiency investments objectively, he stated. This is a tool to help with the question of how much is being saved in a specific utility service territory, Warner said.

Lorenzen asked if the model provides BPA “cover” for reducing its budget for energy efficiency and asking utilities to spend more. Génece said the model was not intended that way. BPA doesn’t intend to decrease its commitment to energy efficiency, he said, adding that the model’s output could help in coming to agreement about how much utilities invest.

What incentive is there for a utility that hasn’t reached its Tier 1 cap to invest additional money in energy efficiency? Jim Yost asked. The benefit would be a hedge against the uncertainty of future power prices, Génece responded. There is a benefit of about \$9 per MWh for a utility when its entire requirement is met at Tier 1 rates, Warner added. Even with the dollars paid to BPA for energy efficiency, energy efficiency is not a net drain on the utility, he said. Whether a utility decides to invest above that is up to them; with the model, they can set parameters to look at the outcomes for their utility, Warner added.

This is a tool to aid and inform decision-making, not to drive to a particular decision, Génece pointed out. It is to decrease the debate about what is the economic basis for energy efficiency investments by a utility, he said.

Tom Karier said with the BPA analysis, the region has answered the question about the value of energy efficiency when load growth and energy prices are low. The analysis covered a period of major recession with a major reduction in load growth and still there was economic benefit, he stated.

2. Presentation on Northwest Energy Efficiency Alliance Business Plan:

Charlie Grist, Susan Stratton, Executive Director, NEEA.

Susan Stratton, director of the Northwest Energy Efficiency Alliance (NEEA), described the strategic planning and budgeting process NEEA has undertaken as it nears the end of its 2010-2014 funding cycle. NEEA’s funding is on a five-year basis, and we are currently working on a high-level strategic plan for 2015-2019, she said. As we complete a plan from “the 50,000-foot view,” we will begin work on a more specific business plan, Stratton explained. NEEA also prepares an annual operating plan, she added.

NEEA started its strategic planning last year with “a scan of the energy efficiency environment,” which we distilled into trends, Stratton said. We will have the first draft of a strategic plan August 26 to present to our board, she reported. By September 23, we hope to have draft strategic and business plans that the board has approved for discussion purposes, Stratton said. With regard to funding, staff is not thinking about changes to the current funding formula, but we are thinking about “options” for utilities, she added.

The list of issues for NEEA to consider in its strategic plan is long, Stratton continued. The most important is defining NEEA’s unique value and role in the region’s energy efficiency efforts, she stated. There is no assumption that NEEA’s role in market transformation should be what it always has been, and we are asking, “what is the best value we can bring,” Stratton said. We’ve found that as utility capability has grown, it is important that we not overlap, and we need to work together on that, she added.

In the last regional plan, we took on the regional coordination role, “and there are mixed views of our role there,” Stratton acknowledged. We are looking for “the sweet spot” in regional coordination, she said.

Another issue is reconciling short-term investment decisions with NEEA’s long-term value delivery, Stratton pointed out. Some of our initiatives span many years and that doesn’t always work with ratemaking for regulated utilities, she explained. For example, the value of research and development investments is difficult for regulators because of the “used and useful” provisions that govern what can be included in utility rates, Stratton said. We need to help regulators understand the value of R&D, and we are working internally on comparing these investments with the savings that are achieved, she stated.

NEEA is also considering how to balance the needs of small and rural utilities versus large urban utilities, Stratton said. We can’t be all things to all utilities, but we need to be sure there is value in our portfolio for all utilities so they continue to fund our work, she added.

We value the Council’s input, Stratton said. We want your comments and questions about how NEEA should evolve and adapt in the next five years, she stated.

You touched on a lot of issues that affect Idaho, Yost said. There is a delicate balance between utilities and regulators on energy efficiency issues, he added. Thus far utilities have achieved cost recovery for their investments in NEEA, but if NEEA expands its role and jeopardizes that recovery, “you will have defeated your purpose,” Yost pointed out. You may want to consider the “a la carte” approach, he said.

Your base program has been shown to have value, but your long-term efforts raise issues for utilities and the PUCs, Yost stated. You need to meet with the PUCs and justify the costs to them, he said. That’s a challenge you face, and it should be in your business plan, Yost advised. To keep your members, you need to supply them with services they need, he added.

We aren’t contemplating increasing our services, Stratton responded. Our board said NEEA should be smaller than it is today, she added. We are looking at the concept of optional services and other ways to fund them, Stratton said.

We have a chronic issue with the low level of applied research, Karier stated. The R&D expenditures in our industry are lower than elsewhere, he added. With a small investment, NEEA has accomplished a lot, Karier said, adding that applied research helped create new compact fluorescent light bulbs that were accepted in the marketplace.

3. Briefing on financial and other challenges facing Northwest Requirements Utilities member utilities:

John Saven, Executive Director, NRU.

John Saven, CEO of the Northwest Requirements Utilities (NRU), described his 50 members as nonprofit locally governed utilities that collectively represent 1,900 average megawatts of BPA's Tier 1 load. All of NRU's members have long-term load-following power contracts with load shaping and network transmission service, he noted. Saven said the long-term BPA contracts have been successful in distributing the benefits of the federal power system. This a good model for sharing benefits, he added.

NRU members differ from larger utilities in many ways, including the number of customers and employees, MWh sales, and customers per mile of distribution line, Saven continued. For example, in 2011, Seattle City Light had annual sales of over 9 million MWh, while Harney Electric sold less than 160,000 MWh. EWEB had 582 employees and Columbia Power employed 15.

The difference in size means a difference in orientation for the utilities, he stated. Saven offered a comparison of customer revenues between the large and small utilities and pointed out the difference in customer base. The larger regional publics derive significant revenue from their large industrial and commercial loads, while some smaller Oregon cooperatives have little industrial and commercial load, and some have no large loads, he said.

We are looking at a residential customer base with the smaller utilities, and some rely on a large irrigation load, which is weather dependent and can vary, Saven explained. For example, 70 percent of the load for Harney Electric is irrigation, and there can be big swings in revenue patterns because of that load, he said.

Using Oregon Trail Electric Cooperative as an example, Saven pointed out that power purchases account for 44 percent of the utility's total costs. Power is less than half of the total budget for these distribution utilities, he stated. Other costs, like transmission and distribution, administration, depreciation and amortization, and customer service are large pieces in the cost picture, Saven said.

At Oregon Trail, if power sales decline, each kilowatt-hour loss creates a budget gap that is 1.27 times the price of power, he noted. In other words, a small percentage drop in sales can quickly create a budget gap of several hundred thousand dollars, and the options to replace the revenue are limited, Saven explained. A utility can hope for an increase in sales in the near future, make service cuts if feasible, live with the reductions in its margins and capital fund, or increase rates, he said.

NRU members have weathered a number of competitive challenges in the last decade, Saven told the Council. They have lost significant commercial and industrial load, much of it related to the

decline in the wood products industry, and this loss has also cut into residential loads, he added. Increasing regulatory requirements, such as those imposed by the Western Electricity Coordinating Council, and additional complexity in setting rates have also taken a toll, Saven stated.

For these utilities, conservation savings may erode or eliminate load growth, which has an impact on financial margins, he explained. This has always been an issue, Saven added. Conservation can eliminate load growth for utilities that don't have much to begin with, he pointed out.

Moving forward, I see other challenges, Saven continued. Walmart and IKEA plan to sell "house fuel cells" by 2020, which could diminish load, as do distributed generation and net metering for solar, he said. There could also be issues with long unamortized distribution lines if customers decide to disconnect from the grid, as well as negative impacts on lower-income customers if utilities have to raise the base customer charge to cover losses in energy sales, Saven explained.

Utilities need to determine their role in facilitating or resisting change brought about by these newly emerging products and services, he said. Do we put a wall up or embrace them? Saven asked.

Historically, the Council's power plans have not had much relevance for mid to small-size utilities, other than the BPA conservation targets, he stated. They focus on the big picture issues but don't address the challenges facing members of NRU, Saven said. "One size fits all solutions may not be the best approach," and conservation opportunities that work in Seattle won't necessarily work in rural areas, he added.

In addition, there's the question of whether we want a reliable and dependable distribution service where everyone pays an equitable share, or the "wild west," where everyone is on their own for power supply, Saven said. I would assert the latter is "a recipe for chaos, economic inefficiencies, and possibly for the use of resources that may have a detrimental long-term impact on the environment," he stated.

Saven advised the Council not to assume that cost-shift problems can be readily absorbed, particularly when a utility's customer base is relatively small. It's easy to say we need this or that program, and "people can suck it up" when it comes to the costs, but that isn't always possible, he added.

Karier said BPA's tiered rate structure puts utilities on their own for new resources. "Is that the wild west?" he asked. No, but there are underlying issues with the need to maintain the transmission and distribution system, as opposed to the flexibility a utility can allow its individual customers, Saven responded.

Utilities in the future may have to rethink their business, Lorenzen commented. In the future, they may be supplying transmission and distribution, with electricity as a sideline, he said. That could mean a radically different rate structure, Lorenzen added.

Under the Northwest Power Act, the Council does not have much authority to regulate these issues for you, Council chair Bill Bradbury said. I don't see us regulating price or conservation issues, he said. I agree, but you are an influential body that can have an impact, Saven responded.

The Council can influence BPA on energy efficiency, Yost stated. Every one of these utilities will be on the hook for energy efficiency "whether they need it or not," and there are lots of issues in the power plan that have an impact on these publics, he said. Do we ask BPA "to dig deeper into its wallet for more conservation?" Yost asked. Small utilities lose in two ways in that case, he said. We may need to provide more specific guidance to BPA about how to assign conservation among the publics, Yost added.

How does BPA do that? What is a better strategy? Karier asked. We need ideas about how to address that, he said.

What about smaller utilities pooling their conservation, Saven suggested. There are things that could be done, he added. We aren't anti-conservation, but there is not a lot these utilities can do, Saven stated. We need an agenda item for the Power Committee to work on solutions, Yost concluded.

4. Briefing on Bonneville Power Administration Transmission Rate Case:

Ben Kujala, Energy Analyst; and Rebecca Fredrickson, Bonneville.

Postponed.

5. Overview of data centers:

Massoud Jourabchi, manager, economic analysis; and Tom Eckman, conservation resources manager.

Data centers are an element of load that is growing in the region, according to staffer Massoud Jourabchi. The centers, which are blooming "where beans once grew" in central Washington, could be a load-growth opportunity for smaller rural utilities, he said.

While names like Microsoft and Facebook are familiar to most people, ViaWest, Rackspace, Intuit, Vantage, and VmWare are other names in the data center industry that people will be hearing, Jourabchi said. Just as the names of wood products firms were once commonplace, these are new names that represent the changing face of loads in the Northwest, he added.

Data centers are essentially large warehouses that house IT hardware, such as servers, data storage devices, and routers, Jourabchi explained. The centers also have HVAC equipment that serves the hardware, as well as lighting that serves the staff, he said. The hardware creates heat and needs to be cooled down, Jourabchi said. The HVAC systems remove the heat, he added.

There are a variety of data center sizes, from server closets and rooms in small offices and businesses up to the "enterprise class" of data centers like Google and Facebook operate, Jourabchi continued. The areas of most interest for load forecasting are the mid-tier data centers

and co-locators, which provide “real estate with a communications backbone,” and the enterprise class of centers, he said.

The enterprise centers are “the backbone of the Internet” that drive efficiencies elsewhere in the economy, Jourabchi explained. Facebook has over a million square feet of data storage with hundreds of thousands of servers, and Microsoft has over a million servers, he said.

We are seeing an exponential growth in data centers, but also a reduction in their individual need for power, Jourabchi said. He offered a rough ratio of IT hardware to HVAC load, which is about 52 percent for the IT equipment and 48 percent for facility cooling. In other words, it takes about as much energy to cool the servers as to drive them, Jourabchi said.

The Northwest is a desirable spot for data centers for several reasons, including access to cheaper land, economic incentives in rural areas, cheap available power, trunk lines for communications, and climate, he continued. Total load for the region’s large data centers represents about five to 10 percent of the non-DSI industrial sales or about 350 to 500 MWa, Jourabchi said. The load is about as large as the lumber and wood products industry, and half of Oregon’s pulp and paper sector, he said. Smaller data centers represent roughly five to six percent of commercial sector sales or about 300 to 400 MWa, according to Jourabchi.

The total data center load is an estimate since many of the companies are secretive about their operations, and many centers are installed in phases, he reported. But the estimate shows a transition from a resource to a technology-based economy in the region, Jourabchi said. The future of the load depends on the drivers, such as how much social networking and on-demand video is ahead, he explained. With more “cloud” computing, we will see a shift to the large data centers, Jourabchi added. The potential growth in Internet traffic could be 30 to 40 percent annually, he said, noting that many individuals now have two or three devices that use the Internet.

To give a sense of the demand for storage, Jourabchi pointed out that Facebook currently stores 240 billion pictures, and 350 million pictures are added daily, a figure that triples on New Year’s or Christmas. The industry has to respond to the need for storage, he added.

Processing efficiency is on the rise, and the computations per kWh have doubled about every year and a half since the 1940s, Jourabchi said. There is a 100-fold improvement every decade, he said, adding that without this efficiency, companies could not meet the demand. The information industry has been responding to the demand, and “you could say, they create it,” Jourabchi stated.

In terms of a forecast for enterprise and mid-tier data centers, we now think there are about 500 MW, although we don’t get good numbers for the load, he reiterated. In the Sixth Power Plan, the forecast was for between 350 and 700 MWa of growth for large data centers, Jourabchi said. If efficiency is not incorporated into the data centers, loads could grow significantly and perhaps become as large as the aluminum industry of the past with loads that exceed 2,500 MWa, he said.

The data centers are powered by conventional resources from the grid, but some are trying to install renewables, Jourabchi noted. Facebook has a small solar installation at its new data center in Prineville, Oregon, but it doesn’t provide much of the power, he said.

Jourabchi said there are opportunities to increase system efficiency in every part of the data center load. The Sixth Power Plan included no potential for large data centers since they have built-in energy efficiency incentives, he noted. We will likely change that assumption in the Seventh Power Plan, Jourabchi added. In the Sixth plan, we included significant potential for small facilities and will likely expand the measures list for that area in the Seventh Power Plan, he said.

The sector offers opportunities for large and small projects, and there can be savings throughout the range of data center facilities, he continued. According to Energy Trust of Oregon estimates, an annual load reduction of 30 million kWh was achieved with five data center projects, Jourabchi reported. There is a lot that can be done for existing data centers, and the centers are enabling tools for efficiency in other parts of the economy, he explained. Data center efficiency is becoming a top concern for IT and facility managers, Jourabchi said.

Staffer Ben Kujala described initial work to identify ways data centers can provide grid support services. Data centers have backup generators and they can ramp up or drop load quickly, he said. People think they could have a role in grid support, Kujala reported.

How much can they reduce consumption and still provide their service? Bradbury asked. Jourabchi said there are redundancies in the storage systems that replicate data in many locations. The redundancy gives them flexibility to move load from one location to another, he said. But there are not currently incentives to encourage this type of operation, Kujala added.

Jourabchi said partnerships among data center operators, designers, trade associations, and utilities could provide valuable synergies. Three or four years ago, these companies would not have been talking to utilities, but now there is a lot of dialogue, he noted. Jourabchi also said the Council needs help from utilities and the IT industry to keep up on this fast-growing sector. We need to know more about this load and how it interacts with other loads, he added.

6. Fish and Wildlife Program amendment process:

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

- **General approach and draft schedule**
- **Columbia Basin Fish and Wildlife Program: Role of ESA, Biological Opinions, Recovery Plan and Columbia Fish Accords**

Staffer Patty O'Toole outlined the general approach to amending the Council's Fish and Wildlife Program. The recommendations for amendments are due September 17, 2013, and once they are received, we will post them on the website for 60 days of comment, she said. The Council and staff then look at the recommendations and the comments, O'Toole explained. In the past, we have had work sessions to systematically work through them, but this time, the Fish and Wildlife Committee offered to do that step and come up with an initial draft program, she said. We are considering going that route, O'Toole said, adding that it is important for all Council members to become familiar with all of the recommendations.

She listed the basic steps involved in amending the program. Staff will try to synthesize the recommendations to help everyone digest them and will likely prepare an issue paper on any

conflicting recommendations or other issues that come up, O'Toole explained. Work sessions on the recommendations will start out as half day but may grow longer if needed, she said, noting that a portion of each committee meeting will be reserved for public comment. The sessions will end early enough that Council members can meet with public interest groups afterwards if they wish, O'Toole added. She went on to explain that once the recommendation deadline passes, staff begins building a record for the program amendment process.

Staffer John Shurts said when the proposed recommendations are finalized, staff will send out a memo and that is the point at which it starts tracking communications and contacts for the administrative record. We need to document all of the comments received and build a record, he said, adding that staff will keep members informed about what going into the record.

The Fish and Wildlife Program is one of most important things we do, Karier stated. There's always a set of issues that are controversial and need more regional discussion, he said. As a member of the Power Committee, I want to be involved in those discussions, Karier said. All of us need to hear from the principals who are advocating amendments, and we need to have a careful balance between what goes into the committee process and what comes before the full council, he said. We don't want surprises, Karier added. Some issues always stand out, he said, including spill and flow operations; research, monitoring, and evaluation; and Biological Opinion performance standards and evaluations.

Staffer Tony Grover invited Power Committee members to let staff know if a topic arises they want to be involved in during the process.

O'Toole pointed out the draft work plan she prepared with a potential schedule for the amendment process. At the next Council meeting, the period will still be open for recommendations, and we can continue to talk about issues of importance, she said. In September, we are thinking about addressing artificial production, O'Toole added. In October, our work begins in earnest and we will know more about that once we get the recommendations in hand, she said. The draft program release is scheduled for February, O'Toole said. She asked Council members to look at the proposed schedule and give staff feedback.

There were a couple of questions about the process for forwarding recommendations to Council members; Yost requested the recommendations be forwarded as they are received. Grover noted that the Council is obligated to turn the recommendations around immediately for public comment so they will all be accessible on the website database.

O'Toole explained that staff will summarize the recommendations according to topic areas and prepare a synthesis of the issues. Grover said there are 37 general topic areas staff will use to summarize the recommendations. Shurts reminded the Council that while staff will summarize the recommendations, the summary is not the recommendation itself.

He went on to provide the Council a briefing on the Council's fish and wildlife mission in the context of the Northwest Power Act and how it relates to the Endangered Species Act, Biological Opinions, Recovery Plans, and the Columbia Basin Fish Accords. The briefing was organized into six topics, and Shurts provided a detailed explanation of each.

The topics included the Council's mission under the Northwest Power Act; Federal agencies' authority and relationship to the Council's Fish and Wildlife Program under the Northwest Power Act; Role of the ESA and relationship to the federal agencies' basic authorities and the federal agencies' responsibilities to the Council's Fish and Wildlife Program under the Northwest Power Act; meaning of Federal Columbia River Power System Biological Opinions in this context, and how the Council has understood and addressed Biological Opinions in the Fish and Wildlife Program; meaning of recovery plans in this context, and how the Council has understood and addressed recovery plans in the Fish and Wildlife Program; and what are the Columbia Basin Fish Accords in this context, and how the Council has understood and addressed the accords in the Fish and Wildlife Program.

Council members asked questions and Shurts clarified the Council's role, the authorities of the federal agencies, and the relationship of the Biological Opinions to the Council's Fish and Wildlife Program.

It seems like Congress envisioned the Council's program as primarily on-the-ground work, but it has evolved as a research program, Karier said. One-third to one-half of our program is monitoring and research, and I encourage us to think about that, he stated. The Act also says the recommendations for amendments will be supported by data, but we haven't seen that, Karier said. Shurts responded that while the Act contemplates coordination and research, it is fair to ask how much of that should be incorporated into the program.

7. Council decision on:

– BiOp Project #2012-013-00, Snake River Fall Chinook Monitoring and Evaluation

Staffer Mark Fritsch said the Snake River Fall Chinook monitoring and evaluation project sponsored by the Washington Department of Fish and Wildlife and the Nez Perce Tribe is a Biological Opinion project related to Reasonable and Prudent Alternative Actions 64 and 65. On July 10, the Council received the ISRP review of the project, which found that it met scientific criteria qualified, he said. The Fish and Wildlife Committee gave the project a positive recommendation, Fritsch said.

Jennifer Anders made a motion that the Council support the implementation of the Snake River Fall Chinook Monitoring and Evaluation project, 2012-013-00, with the condition that the Nez Perce Tribe and the Washington Department of Fish and Wildlife address the ISRP comments in their final project report in 2017, and in addition, Bonneville assist the Nez Perce Tribe and the Washington Department of Fish and Wildlife to secure coded wire tags at a lower cost, as presented by staff and recommended by the Fish and Wildlife Committee. Karier seconded the motion, which passed unanimously.

– Accord (follow-up) Project #2002-059-00, Yankee Fork Salmon River Restoration

Fritsch explained that the ISRP expedited its review of the Yankee Fork Salmon River Restoration project sponsored by the Shoshone Bannock Tribes. After the sponsors responded to the qualifications the ISRP offered in its previous reviews, the project received a favorable review July 25 without qualifications, he said.

Evelyn Galloway of the Shoshone Bannock Tribes thanked the Council for fast tracking the project. It has been a long haul and we wanted to keep up the project momentum, she said.

Jim Gregory of Trout Unlimited made a presentation about the Yankee Fork project. The purpose is to provide habitat for juvenile salmonids, he said, describing the history of the project and the work that has been done. Gregory showed a video that documented the effort and he described work that will take place in 2014 through 2016. He said the future work will create the habitat complexity for fish that is missing at this point. As a result of the ongoing efforts, steelhead are returning to the Yankee Fork along with Chinook salmon, Gregory said.

Lorenzen asked whether there were toxics and heavy metals in the watershed as a result of mining in the area. Gregory said there was much concern about that and the Bureau of Reclamation had done testing that found levels consistent with or below DEQ standards. It was a concern and we will keep an eye on it, he added.

Anders made a motion that the Council support the implementation of project 2002-059-00, the Yankee Fork Salmon River Restoration project, as presented by staff and recommended by the Fish and Wildlife Committee. Karier seconded the motion, which passed unanimously.

8. Council decision on Fish Tagging Forum (FTF) recommendations:

Tony Grover, director, fish and wildlife division.

Grover told the Council the Fish Tagging Forum produced 17 consensus recommendations. The recommendations cover the near, mid, and long-term on a range of issues related to PIT-tags, coded wire tags, acoustic tags, and radio tags, he said. The recommendation that was not consensus related to coded wire tags, Grover explained.

He laid out the proposed options for the non-consensus recommendations as follows: Alternative 1: Maintain status quo funding of \$7.5 million; Alternative 2: Over a 3-year transition period, reduce BPA funding of \$1.9 million for fishery catch sampling and associated analysis; Alternative 3: Reduce the funding for Mitchell Act Hatcheries (\$600,000) in addition to the reductions in Alternative 2 for a total of \$2.5 million; Alternative 4: Fully fund the coded wire tag program to achieve all program objectives. Several committee members, who support Alternative 1, came up with nine conditions they would like to impose on the non-consensus recommendation, Grover added.

Bradbury asked if Council members wanted the conditions read, and they said no. He also asked if there were members of the public who wanted to comment on the issue.

Terry Flores of Northwest RiverPartners thanked the Council for sponsoring the Fish Tagging Forum and expressed support for Alternatives 2 and 3. She also said the forum was a great 18-month process that shed light on the extent of fish tagging efforts in the basin along with their cost. There are some pieces in the tagging efforts, specifically coded wire tags, that don't have a clear nexus to the hydro system and should not be funded by BPA ratepayers, Flores said. I recommend you support Alternatives 2 and 3 and reduce the program by \$2.5 million, she said. These alternatives recognize our view of the requirements in the Northwest Power Act and what we see as BPA obligations under it, Flores stated. We support the transition period in the recommendations to reduce the impacts on states and tribes, she said. We think the forum

uncovered things the region wasn't aware of and the Council has the opportunity to rectify them, Flores concluded.

Therese Hampton, Fish Tagging Forum Chair, said the forum's work was very technical and she offered to clarify any of the findings and answer questions.

Bo Downen of the Public Power Council expressed support for Alternatives 2 and 3. This is a small piece of your Fish and Wildlife Program, with alternatives that add up to \$2.5 million developed over 18 months, he said. The Council is facing a rewrite of the full Fish and Wildlife Program on a much shorter timeframe; the tagging process took a year and a-half and participants didn't come to full consensus on the recommendations, Downen said. Over the next few months when you consider the full Fish and Wildlife Program, you may not come to consensus on any cuts, he said. Will the Council be up for making tough decisions about cuts where there is no nexus between a measure and the hydro system or because a measure is not effective? Downen asked. Whatever decision you make now, remember you have a large challenge ahead and a shorter timeframe, he said. We hope you are up to making tough decisions and recognizing the potential for program savings, Downen concluded.

Dan Rawling of the Washington Department of Fish and Wildlife called the tagging forum a great process with a lot of consensus. We have a difference of opinion on coded wire tagging; our preference is Alternative 1, status quo, he said. The rationale for supporting that alternative is based on three things, Rawling said: coded wire tagging is required for activities under the Biological Opinion; the Council program uses the tag information for its biological indicators; and harvest monitoring is needed to determine hatchery effectiveness. Without the tagging and monitoring, there is no way to get at those numbers, he said, adding that the ISRP said monitoring adult returns is an appropriate way to determine hatchery effectiveness.

BPA has funded the coded wire tagging since 1982, contributing a 32 percent share, Rawling said. Coded wire tagging answers many high-interest management questions, he said. There is a nexus between the tag funding, species recovery, and the Council's Fish and Wildlife Program and that is the basis for the status quo funding alternative, Rawling wrapped up.

Anders made a motion that the Council recommend that Bonneville and others implement the 17 consensus recommendations from the Fish Tagging Forum, and that Bonneville continue to provide funding for the coded wire tagging activities (that is, Alternative 1 from the Forum), conditioned by and consistent with the nine principles stated in the July 30, 2013, decision memorandum presented by staff. Lorenzen seconded the motion.

Rockefeller spoke in support of the motion, pointing out that the work of the forum yielded 17 consensus recommendations that touch on several areas. In the aggregate, they will require significant follow-up work, he said. One of the recommendations addresses coded wire tagging, Rockefeller said. After 18 months of effort, the forum could not come to consensus on the coded wire tagging recommendations, which it deliberated for a long time, he said.

Rockefeller recounted the history and viewpoints on the coded wire tagging alternatives. He said the deliberations "left the Council with a hot potato" about which it must make a decision. Rockefeller went on to note that the Council and its Fish and Wildlife Program partners rely

heavily on data, and he said the program calls for hatchery evaluation, which requires information from coded wire tags. He also said hatcheries provide fish for harvest and harvest is carried out in a particular way to protect naturally producing populations. There is an argument to be made that there is a nexus with the hydro system, Rockefeller stated. The coded wire tag funding also provides boots on the ground that carry out activities under the Biological Opinion, and the Council's high-level indicators depend on information from tagging, he said.

Rockefeller went on to explain the outcome of Fish and Wildlife Committee consultations with legal counsel on the questions of the nexus of coded wire tagging with the hydro system and in lieu funding. He said the committee wants to maintain the coded wire tagging program, but it is not necessarily the ultimate answer if there is eventually a better way to come up with the information.

Karier said hatcheries are one of the largest BPA fish and wildlife expenditures. One of the purposes of the hatcheries is to provide harvest opportunities that were lost due to the hydro system, he said, and we have to have a way to evaluate the major mitigation effort provided by hatcheries. I don't see how this tagging is *not* related to the hydro system, Karier stated. There are lots of reasons we want to know what happens to fish once they are released from a hatchery; it is a basic evaluation of a major investment, he added.

Karier said he has been asking for years to get information on the harvest of hatchery fish. Principle 8 asks BPA and fish managers to report on the number of fish caught every year, he said. We are paying millions of dollars for this information and we are not getting it, Karier said.

Anders commented about the process, saying there was a lack of scientific information provided on the coded wire tagging recommendations. She said under the circumstances, she does not feel she has a choice other than to vote in favor of maintaining the funding. We need to have information about that is needed for managers to determine what measures are working and what are not, Anders said.

Bradbury asked for a roll call vote. Rockefeller, Pat Smith, Karier, Anders, Lorenzen, and Bradbury voted in favor of the motion. Bill Booth and Yost voted no.

Booth said he and Yost could not support the motion due to its retaining the status quo funding on coded wire tagging. The Council bylaws provide dissenting members an opportunity to file a statement to accompany their decision, he said, adding that he was offering a statement on behalf of himself and Yost.

Booth said they appreciated the forum members' efforts, which gave the region a clearer picture of diverse functions of coded wire tags and the costs. He said the Northwest Power Act mandates that the Council's program consist of measures to protect, mitigate, and enhance fish affected by the development and operation of the power system. This provides a clear directive on BPA funding decisions, Booth said.

He said the forum findings highlighted commitments and costs that were not previously well understood. BPA is now in a position to review new information developed by the forum and the nexus between the Northwest Power Act and the tagging process, Booth said, adding that BPA should follow the directives of the Act. The BPA Administrator is further directed to

ensure that its expenditures are not made in lieu of expenditures that are supposed to be made by others, he said. Because of this mandate, our opinion is that BPA should carefully review the forum findings, review where its efforts are consistent with the Act, and phase out projects that have no nexus with the FCRPS and are being made in lieu, such as expenditures for the Mitchell Act hatcheries, Booth concluded.

9. Briefing on Bonneville Power Administration's Start-of-Year Fish and Wildlife Budget:

Bill Maslen, Bonneville Power Administration

Bill Maslen of BPA presented the agency's FY 2014 start-of-year fish and wildlife expense budget. He began with a slide of the fish and wildlife budgets from 2009 to 2013 and noted that BPA generally under spends them. Maslen reported that efforts to put downward pressure on the FY 2012 and 2013 spending have been effective, and BPA is on a trajectory to come in within budget. Things are going as we had hoped, he said. For 2012 and 2013, we are within the authorized budget of \$492 million, Maslen stated.

Lorenzen asked if BPA is getting a handle on issues related to tracking Corps of Engineers projects. Maslen said yes. The concern is "the bow-wave of expenses" if the Corps doesn't spend its allocated budget within the year, he said.

For the upcoming fiscal years, 2014 and 2015, BPA's budget will be \$20 million above what it was in 2012 and 2013, Maslen said. The budget covers BPA's general fish and wildlife program, Biological Opinions, and the Columbia Basin Fish Accord commitments, he said. BPA's fish and wildlife program is fully ramped up, but we have fluctuations in costs for things like land acquisitions, Maslen pointed out.

We continue to be challenged by "the moving parts," including inflation, large land acquisitions, the shape and pace of spending that is influenced by factors outside of our control, and unexpected costs, he said. BPA is working with others to improve its business practices with regard to billing, including the issue of carrying forward budget, Maslen said.

He went over BPA's start-of-year fish and wildlife budget for FY 2014. We establish project budgets ahead of the fiscal year to guide us in contract development and serve as a baseline for spending, Maslen stated. He described the process BPA goes through to develop these budgets and said the agency works with project sponsors so there are no surprises. We are getting at the backlog of reports that sponsors have not provided and have let it be known that lack of reporting could lead to no further funding for projects, Maslen stated. If we don't get the reports, we don't know if things are working, he said.

Maslen provided a historical perspective on the fish and wildlife budget compared to actual spending. In 2012, we overspent the budget, but we are on track for 2013, he stated. We know contractors historically spend less than their budget, but the flexibility for that is decreasing now that the program is more mature, Maslen said.

Bradbury asked about BPA's working budget for fish and wildlife, and Maslen described the process for developing it. In 2013, our planned expense is \$270 million but our expected

spending is \$243 million, he said. Maslen said the authorized budget for 2014 is \$254 million, but BPA is comfortable with planning for expenditures of \$285 million.

He described the long-term management tools BPA uses to oversee the budget, including limits on contract extensions, spending plans for multiyear contracts, and quarterly budget-to-actual reviews. We need to manage our spending over a fiscal year, and we are scrutinizing multiyear programs, Maslen added.

In summary, this is a fully mature program and the budget is fully allocated, he stated. Our management tools include the Taurus and Pisces programs, and we also have experienced people managing the budget, Maslen said. The more rigorous management is a change from the past and there is need for a transition strategy, he said. We had a challenging year in 2012 and we got through it with regional cooperation and collaboration, Maslen stated.

You have come a long ways in correcting deficiencies in your budgeting, Lorenzen stated. He suggested BPA refer to the figure it calls “expected” expenditures as the authorized level.

You went through difficult budget adjustments, Bradbury said. My hat is off to you for getting a better handle on this; it will serve all of us well to have better controls, he said.

10. Presentation on reintroduction efforts of anadromous fish in Whychus Creek:

Zack Tillman, Deschutes River Conservancy.

Zach Tillman of the Deschutes Resources Conservancy made a presentation on the reintroduction of anadromous fish to Whychus Creek and flow restoration to aid anadromous fish runs above PGE’s Pelton-Round Butte hydro project. The Deschutes Resources Conservancy is an environmental organization and we focus on streamflows, he said. What we really want to see are fish, Tillman added. He described the organization, its partnerships, mission, and focus on outcomes.

Tillman went on to describe the reintroduction of salmon above Round Butte Dam, which was built in the 1960s. He said Whychus Creek became a high priority for reintroduction of anadromous fish since its runs were at high risk of extinction. Tillman explained how the convergence of the Deschutes, Crooked, and Metolius rivers near Round Butte Dam created difficult hydraulic conditions for fish that required a special passage solution, which has since been implemented.

In Whychus Creek, the focus has been on reintroducing steelhead, he said, explaining efforts to improve the streamflow through conservation, and water right transfers and leasing. While there is a long ways to go, 51 steelhead passed upstream to spawn in 2012, Tillman reported.

He pointed out the importance of funding from several sources and the opportunity this provides for leveraging the investment. The results are due to the partnerships we’ve established, Tillman wrapped up.

11. Council Business:

– Approval of minutes

Anders made a motion that the Council approve for the signature of the Vice-Chair the minutes of the July 9-10, 2013, Council meeting held in Seattle, Washington. Booth seconded the motion, which passed unanimously.

– Council decision on Ocean Forum Charter

Anders made a motion that the Council authorize the creation of, and approve the charter for, the Ocean Plume Science and Management Forum for a period of two years as presented by staff and recommended by the Fish and Wildlife Committee. Rockefeller seconded the motion, which passed unanimously.

– Council decision on appointment of chair of Wildlife Forum

Anders made a motion that the Council approve the Council Chair's appointment of Peter Paquet as chair for the Wildlife Advisory Committee. Rockefeller seconded the motion, which passed unanimously.

– Financial Disclosure statements

Bradbury announced that the agenda item on financial disclosure statements would be postponed to the September Council meeting.

The meeting adjourned at 11:43 a.m.

Approved September ____, 2013

Vice-Chair

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