

Phil Rockefeller
Chair
Washington

Tom Karier
Washington

Henry Lorenzen
Oregon

Bill Bradbury
Oregon



Northwest Power and Conservation Council

W. Bill Booth
Vice Chair
Idaho

James Yost
Idaho

Pat Smith
Montana

Jennifer Anders
Montana

Council Meeting **September 15, 2015** **Eagle, Idaho**

Council Chair Phil Rockefeller brought the meeting to order at 12:33 p.m. All members were in attendance.

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

Power Committee

Council Member Pat Smith, Chair of the Power Committee, said that the group met Monday afternoon and reviewed four draft chapters of the Seventh Northwest Power Plan (Seventh Plan). Comments were made and they're trying to get all comments in by Sept. 24. Council Staff is pretty close to a final draft. During this morning's session, they focused on resource strategies and the action plan, which is the heart of the document.

Next they got an update on Scenario 3B, which is seeks to achieve maximum carbon reductions with new, emerging technologies. The scenario was requested by Washington Governor Inslee. It is similar to Scenario 3A, but no new gas is built, and the region only relies upon renewable and conservation to meet new loads out to 2050. It was run through the RPM and it resulted in huge amounts of utility-scale solar, utility-scale wind and rooftop solar. The staff looked deep to see what could be used as far as new technologies. However, the scenario didn't consider cost.

The committee then examined the last chapter of the draft – the action plan, which has 25 pages of recommendations. There was a significant add-on item. Member Henry Lorenzen is focused on a Council/BPA effort to remove high-level barriers for Bonneville customers to secure energy efficiency. The consensus is that it's a good, additional action item. There will be a new, revised edit of the action plan by the 24th.

Member Smith encouraged non-Power Committee Council members to look over those two chapters carefully and talk to staff about any questions they have. At a webinar on October

1, they plan to examine the Resource Strategies and Action Plan. The remaining unseen chapters are on transmission and on balancing and flexibility.

Fish and Wildlife Committee

Council Member Bill Bradbury, Chair of the Fish and Wildlife Committee, said that they met in special session on Aug 27. We recommend to the full Council that an email be sent to toxic reduction work group to develop a scope of work to map toxic hot spots in the Basin area. We recommend that the Council send a letter to the heads of federal action agencies to increase funding for state-led efforts to prevent zebra and quagga mussel infestation. The committee also discussed a solicitation for hatchery assessment work and recommend that it go forward as soon as possible. There is a very good video by the Shoshone Bannock tribe about Yankee Fort, and a blog on that will be posted on an upcoming Council website.

The committee discussed a solicitation for habitat assessment in the areas of the Upper Columbia. Committee had some edits that staff will incorporate. Then staff will work with Bonneville on the joint solicitation. The Committee approved a motion to move the RFP to full Council assuming the refinements are made.

The committee continued to review options for program priorities beyond 2016. Staff will pull together scoping document on the various near-term tasks and bring it before the Council in October.

Lynn Palensky, staff program development manager, provided a summary of the Eulachon workshop held in Portland. There were 60 attendees. A briefing on that will be provided to the full Council in Vancouver in October.

Public Affairs

Council Member Jennifer Anders, Chair of the Public Affairs Committee, met last month in Missoula. They discussed the Congressional Staff tour to Idaho and reviewed the Council's website pages on reintroduction of salmon steelhead to blocked areas.

The Congressional Staff tour had 23 participants — the largest group ever. For more than half of them, it was their first Council tour. Attendees toured Dworshak Dam, the dry Potlatch River, the Nez Perce Hatchery and took a trip up Hell's Canyon. Member Bill Booth praised the tour, calling it "a great turnout, with an engaged group of young people. It was a very successful tour."

In reviewing Web pages, the committee identified areas of concern. They will be reviewing the contract for the new website.

1. Presentation on the historic Ceremonial Chinook Fishery held by the Shoshone-Paiute Tribe this summer on the Duck Valley Reservation

Jeff Allen, Idaho Council office staff, introduced Buster Gibson, vice chairman of the Duck

Valley Shoshone-Paiute Tribe; Jinwon Seo, fish and wildlife director, Shoshone-Paiute Tribe; and Sam Sharr, anadromous fish coordinator, Idaho Department of Fish and Game (IDFG).

The panel shared information about the adult spring Chinook ceremonial fishery that was held on the East Fork Owyhee River, Nevada, beginning May 28, 2015, and extending into July 2015. Gibson said that it was an unprecedented historic event that offered an opportunity for tribal members and their families to participate in an adult Chinook salmon fishery in waters on their reservation lands for the first time in 87 years. Many tribal members and their families, including tribal youth, participated in this event. It is hoped that this type of tribal ceremonial fishery, in collaboration with IDFG and others, can continue on a yearly basis into the future.

“It was a life-changing event for my family and tribal members,” Gibson said. “A lot of members didn’t believe it would happen. We got close a lot of times. We thought it would last two weeks, but it lasted three months.”

He added that it was a delicate balance for tribal members in that they didn’t want to harvest every fish in order to leave some in to spawn.

“We had a clear understanding of what it meant for our tribal members,” he said. “Some people never ate salmon in our home, turning to groundhog, deer and elk. Now people are hunting fish traditionally. When people speared their own salmon, and cooked them there, it was huge.”

He said Council Members Yost and Booth, could feel what it was about. Their Arbor Day celebration came on the day of their salmon release. It was a big event, and it took a lot of work by their staff to make this happen. “It’s something our kids would never forget,” Gibson said.

Member Rockefeller asked how many years have passed since salmon were in that part of the river, and Gibson replied that it has been 87 years.

“We have clean water up there,” he said. “It’s the reservoirs where it’s not as much. We knew we had the habitat and we worked with Mr. Yost to get a clear understanding of what was expected.”

Gibson said he had a lot of convincing to do, they held a lot of forums.

On the eventful day, the fish were on Indian Time, he said. People were camping night and day waiting for them. They had to relay the message that it was tribal only. They would like to open it up at some point, but they’re trying to get a cultural event going first. Don’t want to spread it out too early.

Jinwon Seo described the project’s location in Duck Valley, which is located between Idaho and Nevada, in the southernmost portion of the Columbia River Basin. There are major dams in the basins: the Owyhee, Brownlee, Oxbow and Hells Canyon, which is how they lost the salmon over the years.

In 2011 initial discussions were held. In 2013, there was a feasibility study. In 2014, there was an initial proposal with negotiations with Idaho Power's FERC relicensing for Hells Canyon Complex. IDFG expressed tentative support for reintroduction.

A feasibility study by the Pacific Coastal Salmon Recovery Fund project confirmed the existence of carrying capacity in the Owyhee River.

A 6.8-mile site was selected based on habitat parameters, water quality, habitat types, diversity, cover and access that can safely accommodate dual axle fish transport truck. There was a discussion about picket weir design and location.

The event was supposed to finish at the end of June, but it was extended to the beginning of August. They taught traditional fishing methods. Fishing speakers, gill nets, fish weirs and they held a spear-making workshop.

The Chinook salmon release was May 28, 2015, and the group presented a video.

"We want to continue having this great moment every year, no matter how many fish we get," Gibson concluded

Member Rockefeller said, "Buster, your joy has spilled over into this room. Please convey that we're privileged to share this opportunity with you."

Member Bradbury said it was a wonderful cooperative effort with Idaho Fish & Game, and asked if it will be ongoing. Gibson replied that from his side it will be. He will start knocking on doors shortly to see if we can get it going for next year, but without assurances from certain agencies, it won't happen.

Member Yost said that it requires a lot of work on the ground, and depends a lot upon the returns that are coming back. They have to coordinate with Idaho Power, Fish and Game, and the tribes. The tribes need a start in recapturing their cultural traditions. "Maybe we'll have a couple hundred fish a year," he said. "It's just taking it a step at a time and we've talked about reintroduction forever. It's a collective effort."

2. Council decision on recommendations for implementing Fish and Wildlife Program emerging priorities for 2016 and 2017.

Tony Grover, Council staff fish and wildlife division director, presented three decision items:

1. *A request for proposals* for commencing immediate (FY 2016) implementation of a hatchery assessment,
2. Language for an email to be sent to EPA's regional Toxics Reduction Work Group to seek their assistance in characterizing and mapping toxic contaminant "hot spots" in the Columbia River Basin, and

3. Draft letters requesting federal funding to assist the states in the protection of Columbia River waters and infrastructure from the introduction of dreissenid mussels.

He said that the motions would be tinkered with to ensure that they reflect what was stated in the meeting.

Hatchery Assessment

The only budget impact is the proposal to use \$250,000 of the \$1 million set aside to implement an assessment of hatcheries so we're not surprised by major breakdowns.

Member Booth said that the O&M Subcommittee is prioritizing work on different projects. This includes looking at hatcher and ancillary structures, and taking a look at fish screens. Come up with long-term plan for O&M of these facilities.

Both phases of the hatchery assessment are underway. Under the inventory phase, there are a massive amount of screens. It's a nice online tool to locate where the inventory is. The subcommittee is looking at that to make sure we're identifying and prioritizing them.

On the hatchery side, they have completed the inventory and they are performing condition assessments on them. They are working with the Independent Economic Analysis Board (IEAB) to incorporate their suggestions as we move along.

Next, they will develop an information system to incorporate life-cycle costs.

Jeff Allen explained the proposal. They took a look at what they needed to know to look at intakes, pumps, etc. This is a bare-bones look at assets to assess conditions.

They want to get the RFP out quickly. This work would fund 14 site visits, assessments, staff time and consultants.

Northwest Power and Conservation Council Motion to implement Fish and Wildlife Program emerging priorities for 2016 and 2017 – Hatchery Assessment

Member Booth moved that the Council recommend that Bonneville solicit for proposals to conduct an assessment of hatchery assets as part of the O&M strategic plan, to be funded at up to \$250,000 from the Fiscal Year 2016 Budget Oversight Group placeholder, as presented by staff and recommended by the Fish and Wildlife Committee [and with the changes made by the Members at today's meeting].

Member Bradbury second.

Discussion:

Member Tom Karier praised the proposal and said that it's good to see priorities moving through like this. The funding of this isn't new money. It's savings from another programs. Grover added that it is money from the Budget Oversight Group that has \$1 million set aside for unanticipated things.

Member Karier said that there's no net impact on BPA rates, and we should make that clear. We're also planning to fund other things, such as habitat study on reintroduction. Is that budgeted as well? I get asked if we'll run out of money and is it bad to be at the end of the queue. I assume we have budget for each of these priorities.

Grover said that some of the budget to fund other work is dependent upon on a Council decision in November. The HEP program is one they think is coming to the end of its life cycle. Combining the savings from that and another project, they should have enough funding for another project, which is Habitat Assessment.

Member Karier said that if the Fish Committee is comfortable, then he is too.

Motion passed unanimously.

Toxics letter

Jim Ruff, of the fish and wildlife division staff, briefed the Council on a proposed email to EPA's Regional Toxics Reduction Working Group regarding toxics mapping. There's been a growing concern about the impact of toxics on the ecosystem, impacting our fish and wildlife mitigation efforts.

A related program priority on page 116 calls for mapping and determining hot spots for toxic contaminants. However, some information does exist and could be compiled. The Lower Columbia River Estuary Partnership Ecosystem Monitoring Program has collected data about toxics in the Columbia River below Bonneville Dam. Also various states have issued shellfish advisories because of contaminants. More recently, the U.S. Geological Survey has found mercury and contaminants in Pacific lamprey. All could assist in mapping effort.

Ruff said, accordingly, the Council requests EPA's Columbia River Toxics Reduction Working Group to address this issue at its next meeting in October 2015 and help develop a scope of work to characterize and map toxic contaminant "hot spots" in the Columbia River Basin. In the Water Quality sub-strategy on page 56 of the Council's program, a measure calls for the federal action agencies to "partner with and support ongoing federal, state, tribal and regional agencies' efforts to ... assess and map high priority toxic contaminant hot spots in the Columbia River Basin and evaluate their relationship, if any, to the development and operation of the hydrosystem."

The scope of work for assessing and mapping high priority toxic contaminant hot spots in the Columbia Basin should include, but not be limited to:

- a) the various sources of existing contaminant and fish health data that could be used to help identify toxic hot spots in the basin;
- b) identification of any suspected high priority toxic hot spots where there may be key gaps in, or limited, toxics monitoring data;
- c) a proposed schedule for how long it may take to identify and map such hot spots in the basin; and
- d) provide an assessment of how the working group proposes to move this process forward.

Northwest Power and Conservation Council Motion to implement Fish and Wildlife Program Emerging Priorities for 2016 and 2017 – Toxics Letter

Member Booth moved that the Council approve the sending of a message to the regional Toxics Reduction Workgroup, urging the workgroup to characterize and map toxic contaminant hot spots in the Columbia River Basin, by providing an assessment of how the working group proposes to move this process forward, as presented by staff and recommended by the Fish and Wildlife Committee and staff [and with the changes made by the Members at today's meeting].

Member Bradbury seconded.

Discussion:

Member Booth had a slight change from the original draft of the motion, which did not include the provision that we include in our email that urges the toxics workgroup to provide an assessment of how the working group proposes to move this process forward. We think it should be up to them to provide that proposal on how to move it forward.

Member Bradbury said he supports the motion change. There are impacts on fish and people who eat these fish. "We're not the EPA, but we really want to let people know there's a concern about this and that they can do more about it."

Member Rockefeller said, "We all felt in the committee that it was time to prod that group. We're concerned about it because of the ability for fish to survive and our ability to have consumable fish. I'm not sure they appreciate the importance of addressing those issues in terms of what happens to the salmon. We urge them to do what they're capable of doing. If they're wanting, we have a different decision to make."

Motion carries unanimously.

Mussels Letter

Tony Grover said that there are concerns over the appropriations process. The Corp of Engineers appropriations included \$4 million to help prevent zebra and quagga mussel infestation.

Mark Walker, staff public affairs division director, said nobody knows at this point where the funding stands. Both the U.S. House and Senate energy bills have a provision to provide funding for the U.S. Army Corps of Engineers to engage with states on inspection stations. On a normal situation, it would be enough.

The problem is that there's no guarantee that there will be funding for the Corps. At this point, we don't know if there will be a continuing resolution for the entire year. The issue is whether they will throw up their hands and do continuing resolution for 2016. If that happens, it's unlikely this will end up in the funding bill. In an omnibus bill, it probably will be there.

Senator Mike Simpson has this in his bill, so if things pan out, we're probably guaranteed. Otherwise, perhaps not.

Ruff said that with budget uncertainties for 2016 and 2107, we thought it appropriate to author letters on mussels. The four states are spending \$3.4 million of their own funds to prevent the spread of these mussels in their waters. About \$4 million is needed immediately for inspection and decontamination stations. This would include outreach materials, signage, drainage, etc.

It has been estimated that if we're unable to prevent their spread, the cost could exceed half a billion dollars. Recently we saw a report that the power producers in the Great Lakes have spent over \$3 billion between 1993 and 1999 on mussel eradication efforts.

We drafted letters to the Corps, the Bureau of Reclamation and BPA to get funding support to help eradicate mussels. We shared the letters with action agencies and found that the Corp and Bureau have different funding policies than BPA. Their budgets for 2017 are already in Washington. That's why there are two letters.

Grover said that these funds increase the hours of the existing inspection stations in place. They don't operate seven days a week and are underfunded.

Member Karier remarked that he likes the letter and asked where the numbers came from. Ruff replied they are from a table listing funding needs for watercraft inspection stations. Each state put in their "asks" for a prevention program.

Member Karier asked why we give a range instead of a set number that would achieve the inspection objective.

Walker said Member Karier raises an important point. It seems reasonable to ask for the \$4 million, he said.

Ruff said that the \$1.6 million figure cited is just for the watercraft inspection. The \$4 million builds institutional capacity, materials, signage, training and staff. It provides monitoring, research and containment at the source.

Member Booth said that in the meeting with Senator Simpson, the draft proposal split it so \$2 million went directly to the states. "We want to make darn sure we support that going to the states so it doesn't all go to the Corps."

Walker said that the house report has \$4 million and directs the Corps to implement it in accordance with inspection stations.

Members Rockefeller and Booth commented that we'd better settle on the language before anything goes out. Member Karier wanted to approve the email today, but wanted Mark Walker get back to the Council about the number specifics. "Why don't we ask for what's in the legislation and specify how much for the inspection stations?" he asked.

Grove said there's no reason not to mention the \$4 million in the letter and the \$1.6 and \$2 million needed immediately for inspection stations.

Rockefeller said that the Council could have two letters. When we get to the ask paragraph, we change that language so that the Council recommends the allocation of \$2 million for a cost share. That relates to boosting the inspection efforts of the states. That's the first letter. The second letter to OMB would be the one using the \$4 million.

Grover said the Council could approve it now on the condition that staff comes up with acceptable language by Friday.

Northwest Power and Conservation Council Motion to implement Fish and Wildlife Program Emerging Priorities for 2016 and 2017 – Mussels Letter

Member Booth moved that the Council approve the sending of letters to several federal agencies requesting federal funding to assist the states in the protection of Columbia River waters and infrastructure from the introduction of dreissenid mussels, as directed by the Council and revised by staff for email approval with the changes made by the Members at today's meeting.

Discussion:

Member Bill Bradbury said he wanted to add his support. "In the federal budgeting process, if we wait a month, we've blown it," he said.

Motion carried unanimously.

Council Meeting September 16, 2015

Council Chair Phil Rockefeller brought the meeting to order at 9:00 a.m. All members were in attendance.

3. Presentation on pumped storage.

Elizabeth Osborne introduced Tim Culbertson, manager, Columbia Basin Hydropower; Larry Thomas, assistant manager; and Boyd Reed.

Columbia Basin Hydropower (CBHP) managers briefed Council members on a prefeasibility study conducted earlier this year of the Banks Lake Pumped Storage Project. CBHP provides the administration, operations and maintenance for 150 MW of hydro facilities owned by the irrigation districts that make up the Columbia Basin Irrigation Project.

The Banks Lake Pumped Storage Project would be located at the North Dam of Banks Lake in central Washington, near Grand Coulee Dam. Originally, CBHP considered building a project capable of generating 1,000 MW, but after meeting with PNUCC, it amended its focus to a 500 MW project. Banks Lake Pumped Storage could be used in coordination with the Keys Pumped Storage Plant and Grand Coulee Dam operations, and could integrate into the Mid-Columbia hourly coordination.

“The region is looking for resources that will meet our capacity needs,” said Tim Culbertson, CBHP manager. “What will the capacity requirements be in 2020-2025? As utilities, we tend to put our eggs in one basket; first it was combustion turbines, then wind, and now solar’s price is coming down. They’re all great, but we need capacity resources. We have the ability to serve a lot of our needs with a pump storage project.”

Larry Thomas, CBHP’s assistant manager, pointed out that Washington State has the Keys Pump Storage Plant, which was built to pump water from Grand Coulee to Banks Lake. Turbines were added later in the early 1980s. Today, Keys is old, often out of service and requires a substantial amount of capital investment. CBHP is talking with the Bureau of Reclamation on whether some of the Keys budget should be shifted toward a new facility. With the prefeasibility study completed, they will continue refining its plans and cost estimates, and will submit the necessary filings to FERC.

Culbertson said that the project doesn’t have a carbon footprint and it will be located in a region that knows hydro projects. The project is needed due to:

- A slowdown in the construction of base-load power plants.
- An increase in nondispatchable, intermittent generation resources (wind and solar) that are stressing the grid.
- The utilities’ need to meet state-imposed renewable portfolio standards.
- The early retirement of two, large, coal-fired power plants in the region.
- Greenhouse gas restrictions that may limit the installation and operation of gas-fired combustion turbines.

- The need for additional electrical capacity in 2019 -2021.

“Construction of this type of project takes about 7-10 years, so we think the time is right,” Culbertson said.

The cost of the project would be between \$1.5 and \$2 billion.

The potential purchasers of the power include IOUs, public power entities, power marketers, independent power producers, and it could have benefit for CAISO. The next steps include entering into contracts. They are continuing their talks with the Bureau of Reclamation, and are having monthly check-in meetings with BPA.

Member Smith said he heard their presentation at PNUCC and also heard about the Gordon Beak project, located near the Colstrip transmission lines. They thought they could regulate 2,000 MW of wind. “What’s your range?” he asked. Lloyd replied that the key is special diversity whether it’s wind or solar. Through diversity, it’s able to regulate greater-than-nameplate. They don’t have an exact number. Some you can apply on top of each other, some you can’t.

Member Karier said that in less than a week, their cost efficiency figures improved dramatically and noted their finding that the U.S. Department of Energy could provide potential loans. Council’s plan is showing that new wind and solar needs will depend on what states require, but we will need winter capacity.

Lloyd said they assumed if we had a 500 MW plant, it could provide 500 MW of firm capacity for peak loads.

4. Presentation on Idaho Power Demand Response

Shirley Lindstrom, Idaho staff member, introduced Quentin Nesbitt, energy efficiency program leader, Idaho Power Company.

Nesbitt oversees the company’s demand response program.

Nesbitt said Idaho Power has three demand response programs:

1. Irrigation Peak Rewards – 2,258 sites representing 320 MW of expected potential reduction. It’s not used all summer long, just during the peak of the irrigation season. There are 400 MW of nameplate enrolled, but only 320 MW are expected.
2. Flex Peak – 71 sites representing 25 MW.
3. A/C Cool Credit – 29,017 sites representing 35 MW.

The rules limit the programs to summer. This past summer, Nesbitt said, Idaho Power would have hit a system peak of 3,407 MW if not for demand response.

Idaho Power began demand response in 2003 with an A/C pilot program and then continued in 2004 with an irrigation timer program. They signed up customers for one or two days a week of interruption, so they could have the same amount of load reduction during 4 and 8 p.m. In 2009, they started their irrigation program where they installed

devices that could control the load. The company was able to increase incentives and participation.

In 2013, the company suspended the irrigation and A/C programs because of a lack of need. They were spending more than \$20 million in 2012 on demand response, and were able to modify the programs working with the commission. Idaho Power is running all three programs for under \$10 million today.

Member Henry Lorenzen asked what activated the devices on the 29,000 air conditioners. It's a contactor on the air conditioner, Nesbitt replied. The company hires a third party, an HVAC person, to install them. It's a tariff, but the customer signs up for it.

Idaho Power pays a fixed incentive for irrigation and flex peak based on demand, and a variable incentive if it has more than three events in the summer. For A/C, there's a flat, \$15 per-season incentive.

Idaho Power uses demand response because of its integrated resource plan. "In 2004, we showed significant deficits in our planning criteria," Nesbitt said. "That capacity need drove us to look at demand response." This deficit was due to its large irrigation load and growing air conditioning load. The energy growth has been at a slower pace. The area's wind power has brought a lot of energy, but not much capacity for a summer peak.

"When it comes to building natural gas peakers or demand response, you're building something that won't need to run — just during extreme scenarios," he said.

Nesbitt discussed some of the myths surrounding demand response:

It saves energy: Our demand response does not save energy, he said. It shifts it. There's a percentage of the irrigation energy that's never made up.

It's the cheapest: "Not true for us," he said. "It's the most expensive thing we have in our IRP, because it's available for so few hours. We pay customers to not use energy they would otherwise use. Paying \$15 per customer for an air conditioner may not seem much, but it is for a few hours. It's the cheapest resource from a per-kW point of view, but from a kWh point of view, it's the most expensive. Customers just can't handle you using it all the time. We're doing it cheaper than most other utilities I've looked at, but it's still not cheap."

We need it all the time. "We only need it in a 1-in-20 load year or a 1-in-10 water year," he said.

It is used to avoid buying from the market. — "That's not true — it's about capacity potential," he said. "We wouldn't have the ability to get the energy in on the transmission we have at any price."

Nesbitt says that Idaho Power is into the year 2020 before there is any additional need for capacity resources.

Member Yost asked if there is a way to run a demand response program and sell it or trade to another utility. Nesbitt said they thought about the question, but didn't explore it. He said that irrigators are doing it.

Member Karier asked if Idaho Power would have a demand response program, aggregate it, and sell it to a utility. Nesbitt said it's possible, but without minimum events, you wouldn't need it. "We used to have these programs without a variable payment," he said. "Customers wouldn't react to that. Many of our customers are doing it for dual reasons."

Member Smith remarked, "I feel like we're hearing from a true demand response pioneer in the region. If you could do it over, would it be done differently?"

Nesbitt replied that they probably would not do a timer program. But at the time, they thought they needed it. They started the A/C cycling with a paging switch. But paging went away, so they couldn't have foreseen that.

When asked how long it would take to build a demand response program from scratch, he said he could start an irrigation program in November and have it up by spring. However, with A/C cycling, that isn't possible. It took Idaho Power a few years to build that up.

He said that the biggest issue is the actual installation of devices. Idaho Power used contract electricians.

Member Karier remarked that it looks like Idaho Power reduced the cost per MW in the last couple of years. Nesbitt said it is \$4 per kW per month. In all three programs, they are at the \$30 per kW per year and could go up to \$40 per kW per year. When they started, they were looking at an avoided cost of a combined cycle peaker of \$65. A/C cycling was looked at over a 10-year period, but irrigation was always designed so it would pay off w/in a year.

Award for Tom Eckman

Pete Van Gilley, research and analysis leader with Idaho Power, came up and presented an award for Tom Eckman, director of the power division, for adding a technical and regional perspective to Idaho Power's energy efficiency and technology programs. During Tom's tenure on the utility's energy efficiency advisory group, Idaho Power went from a handful of energy efficiency programs to 22 and three demand response programs.

5. Panel of Idaho Cooperative Utilities

Representatives from United Electric Cooperative, Lower Valley Energy, and Fall River Rural Electric Cooperative discussed issues that the Council should consider as it goes forth drafting and implementing its Seventh Northwest Power Plan.

Jo Elg, United Electric Cooperative general manager; Rick Knori, Lower Valley Energy director of engineering; and Bryan Case, Fall River Rural Electric Cooperative general manager, each shared how their utilities operate and the issues they deal with in their respective service areas.

Elg outlined her concerns about transmission and resource adequacy. United Electric, which is served under a BPA transfer service agreement, gets its power transferred over Idaho Power's transmission system. There is 700 MW of BPA native load that puts demand on transmission and reliability in the region. The entire Magic Valley region has experienced industrial and commercial growth, much of it in the last couple of years. Short-term market prices are attractive, but could create potential risks, such as ones that were experienced in the 2000-2001 energy crisis. She is concerned that the region is going to rely on conservation, renewables and low-market prices in place of a long-term vision. Can conservation and intermittent resources sustain the growth we're seeing in Southern Idaho?

Regarding conservation, United Electric is a member of the Idaho Energy Authority, a joint action agency. Thirteen utilities have partnered under it to gain efficiencies to administer and implement conservation programs. This is the first year it contracted with a number of Community Action Programs. "One was successful and others have not been as progressive, using only a quarter of the funds allocated to low-income conservation," Elg said. "We're in the business and recognize that reaching low-income customers is a win/win. So before CAPs look to the Council for more mandates, they need to work with their local utilities."

She said that utilities and BPA are looking to evaluate conservation holistically. There are different customer profiles, geographic differences and between different utilities. One size does not fit all.

In addition, the Fish and Wildlife Program is the largest of its kind and it should be finite, Elg said. She asked the Council to find redundancies and seek efficiencies instead of assuming that new dollars will be available. She asked for the Council to seek federal assistance to pay for mussel mitigation. In addition, she said that her organization's greatest concern is the request to fund studies to introduce fish passage above the dams. Any proposal that would jeopardize the efficient operation of the dams should be scrutinized.

Bryan Case said Fall River is a progressive utility that serves 15,000 in Idaho and small portions of Montana and Wyoming. They belong to the PNGC Power Pool. He sees that conservation is primarily for the financially affluent, so they've focused on low-income customers. It also started an energy efficiency program with its irrigators, with some help from neighboring utilities. It expects to hit its conservation targets in the next rate period. He's unsure how much conservation potential is out there since load growth is fairly flat.

He also shares Elg's concerns about fish reintroduction above the dams. "We don't mind paying our fair share, but those aren't costs we should incur since 30 percent of our power costs already are devoted to fish and wildlife," Case said. "Our ratepayers will be talking about it, and I always cringe at that. But even those little adjustments impact fixed-income and poverty-level customers. If Bonneville's rates were less than market, it might be different, but you can get rates lower than its tier-one rates."

Case also mentioned Fall River's use of demand response this past year when a feeder went out. They called some of their major irrigators to reduce their load, and it was successful. They will look to implement a demand response program with irrigators. It will

be voluntary with no equipment installed. The goal is to try and save some transmission costs through PacifiCorp during peak times.

Rick Knori said that Lower Valley's serves a diverse area in eastern Idaho. He described their programs to reduce demand, including placing load controls on water heaters. The pilot program has been successful and a lot more customers wanted to participate. However, they are delaying expansion because smart devices are now being built into water heaters.

Member Karier replied to Elg's concern about mussel mitigation expenses, explaining that the inspection stations are state expenditures. Still, the Council is seeking \$4 million from the federal government to address the issue. "If the mussels come in, they'll cost BPA tens of millions of dollars to clean them out," he said. "So sometimes, not spending money can cost more than spending it."

On the issue on energy efficiency, Member Karier said the Council looks at it from a regional view, trying to figure out how to serve everyone's interests. He defended the Fish and Wildlife Program as extremely successful in bringing back sockeye in Idaho and fall Chinook throughout the region. However, he agreed that there's been wasted money as well.

"Ask your associations that represent you to identify those (wasteful) projects and bring that information to us," Member Karier said. He also explained that when it comes to the reintroduction expenditure, it is a \$200,000 habitat survey lying entirely within the savings identified in the Fish and Wildlife Program. "It's a test of feasibility and we plan to do that very carefully," he said.

Case said what they see is that fish and wildlife has increased 30 percent over the past six years. Overall there's still work to be done, but some programs should no longer exist. This Council drives a lot of that, he said. The program is a mature program. Fish passage is in the high 90s and returns are good.

"When it comes to energy efficiency, if the market were higher, I'd agree with you," Case said. "We're in a period of time where energy efficiency is harder to justify from a financial standpoint." He added that he presented BPA Administrator Elliott Mainzer with a three-page list of recommendations.

Member Karier said that on energy efficiency, we have to explain why just using the market rate isn't enough. "We don't know what the gas price will be in the next 5-10 years. It's the uncertainty that we're willing to go above the market price." He asked Case to send his three pages of recommendations to the Council.

Council Members' questions and comments on Resource Strategy and Action Plan: Tom Eckman, director, power division; and power division staff.

Tom Eckman, staff's power division director, briefed the Council on the finishing touches to its draft of the Seventh Plan. Some of the changes made were on the action plan on the Model Conservation Standards category at the request of Member Smith to focus on hard-

to-reach customers who may not be participating in cost-effective opportunities. These include small rural, low-income, manufactured housing and middle-income customers. Member Lorenzen also asked for ways to remove high-level barriers for Bonneville customers to secure energy efficiency.

Eckman also reported that staff ran a scenario at the request of Washington Governor Jay Inslee, which evaluates maximum carbon reductions coupled with new emerging technologies. Under Scenario 3B, no new gas generation is built and the region relies only upon renewables and conservation to meet new loads out to 2050. After running it through the model, the scenario called for “huge amounts of utility-scale solar and wind, as well as rooftop solar panels.” The staff looked deep into the possible impact of new technologies, but they didn’t discuss the price tag. “We do know that it would cost a lot more,” Tom said. There will be a detailed discussion of this scenario in the Seventh Plan’s resource strategy section.

Four more chapters are coming for review. They are fairly short and include the executive summary, transmission, flexibility and balancing, and the status of the system.

Council Chair Phil Rockefeller echoed many of the Council Members’ comments about the staff’s work on the draft, saying, “The Power Committee has done a remarkable job. It’s been a smooth process to date and I see no controversies or issues at this late hour.”

The Council members had a robust discussion before the meeting close after Council Member Bill Booth asked if the Seventh Plan addressed concerns that BPA’s rates aren’t competitive with the market. He said there is the issue of contracts expiring in 2028, which falls within the scope of this plan. It seems like this might be a major hurdle, if things continue as they are.

Council Member Henry Lorenzen replied that nobody’s been able to respond to the question, “how deep is the market?” “How many megawatts can be acquired for what period of time?” he asked. “If you want a fixed, 10-year contract that’s guaranteed, you won’t get it on the spot market. The question is that suppose you go to market for 500 MW, you won’t find it at \$35 per MWh. It’s a market that’s being priced at the variable cost of generation because there’s surplus. Once you get beyond surplus and have to go out and build a new plant, you’re at \$80 per MWh.”

“You’re not going to find anyone offering 20-year contracts for market prices today that are load following,” Eckman added.

Council Member Yost said that the other side of the issue is that if we continue to raise the cost of BPA between now and 2028, there might be other options for co-ops to purchase power. He said that the problem is that they have heard from a lot of co-ops that, due to no-load growth, conservation costs their customers more money. “On energy efficiency, on the whole it’s a good deal,” he said. “The amount of energy efficiency we’re putting into the plan is a good number. But there should be a way for BPA to make adjustments to get the most conservation done for the price, and not do harm to some of these smaller utilities where their customers have to pay more,” he said.

Eckman said that the action plan has identified different approaches to deliver the best bang for the buck, in different ways than what's occurring now. It's a way of getting the regional benefits without doing harm, he said.

Karier remarked that the new plan is a least-cost plan. "We checked what happens if you do less energy efficiency, the system cost rises," he said. "If you do less demand response, you pay \$1 billion more in the system. So those aren't the cost drivers, they're the cost savers. We have to make sure we're keeping rates as low as possible."

Member Karier said that on the issue BPA's rate competitiveness, we need to get a chart about BPA's prices over the last 30-40 years. There have only been two major rate increases in recent history. One was WPPSS from 1980 because we overbuilt nuclear energy. Another time was 2000-2001 from the energy crisis because we underbuilt. Energy efficiency is at the heart of this, because when we didn't do it we had to pay.

Member Booth said he's talking about the competitiveness of BPA to afford a \$700 million Fish and Wildlife program. "When BPA released its seven percent rate increases, that's not an insignificant amount," he said "For some utilities, they're going up 11 percent. So they're all out there now getting power elsewhere. My thinking is that you've got a golden goose, and then some want to fund more Fish and Wildlife. I'm glad we've decided that's enough."

Member Rockefeller said the \$700 million is not a direct expenditure number. "Our number is \$250 million," he said. "We tend to take the burden of defending the entire number, but it's not our number."

Council Business

Northwest Power and Conservation Council Motion to Approve the Minutes of the July 14-15, 2015, Council Meeting

Member Booth moved that the Council approve for the signature of the Vice-Chair the minutes of the August 11-12, 2015, Council Meeting held in Missoula, Montana. Member Bradbury seconded. No additions or corrections to the minutes. Motion passed unanimously.

Northwest Power and Conservation Council Motion to approve term renewals for Independent Scientific Review Panel Members David Heller, Scott Lutz, Carl Schwarz, Greg Ruggerone, Steve Schroder, Chris Wood and Robert Naiman.

Member Booth moved that the Council reappoint the following seven members to the Independent Scientific Review Panel: David Heller, Scott Lutz and Carl Schwarz for terms from October 1, 2015 to September 30, 2018; and Greg Ruggerone, Steve Schroder, Chris Wood and Robert Naiman for terms from October 1, 2015 to September 30, 2019, as presented by staff.

Member Bradbury seconded. Motion passed unanimously.

Northwest Power and Conservation Council Motion to enter into a regional portfolio model software support contract with Navigant Consulting for Fiscal Year 2016

Member Booth moved that the Council authorize the staff to contract with Navigant Consulting for technical support for the redeveloped Regional Portfolio Model on an as-needed basis, for a one year term beginning October 1, 2015 and ending September 30, 2016, for an amount not to exceed \$50,000, as presented by staff [and with the changes made by the Members at today's meeting].

Member Bradbury seconded. Motion passed unanimously.

Northwest Power and Conservation Council Motion to allow the Council RFP Committee to negotiate a contract with Owen Jones & Partners to redesign and redevelop the Council's websites

Member Booth moved that the Council authorize the staff to negotiate a contract with Owen Jones & Partners to redesign and redevelop the Council's website, as presented by staff [with the changes made by the Members at today's meeting].

Member Bradbury seconded.

Discussion:

Member Lorenzen remarked that he's comfortable with how staff has gone about the process.

Motion passed unanimously.

Northwest Power and Conservation Council Motion to release the Council's draft report to Congress for Fiscal Year 2015 for 90 days of public comment.

Member Booth moved that the Council release the Draft Report to Congress for Fiscal Year 2015 for 90 days of public comment ending Monday, December 21, 2015, as presented by staff [with the changes made by the Members at today's meeting].

Member Bradbury seconded. Motion passed unanimously.

Chair Rockefeller adjourned the meeting at 11:59 am

Approved October 14, 2015.

____/s/ Bill Booth
Vice-Chair