James Yost Chair Idaho

W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

Council Minutes July 10 and 11, 2018

Tuesday, July 10, 2018

Council Chair Jim Yost brought the meeting to order at 1:33 p.m. All Council Members were in attendance.

Council Members Tim Baker and Jennifer Anders welcomed attendees to Montana.

Reports from Fish and Wildlife, Power and Public Affairs Committees

Fish and Wildlife Committee

Council Member and Fish and Wildlife Committee Chair Guy Norman reported on four items:

- 1. The committee reviewed the Pacific lamprey master plan, which focuses on artificial production, translocation and restoration research. The project has three phases: a laboratory phase, a field phase (which is began this year) and a synthesis stage. The first phase received a positive review from the ISRP. There are some questions that need to be answered by 2022. The committee discussed at what level they would endorse the project. The committee endorses the scientific benefits. The plan is to come to the Council in August with a recommendation to support the project. They fell short of understanding the budget piece because of portfolio prioritization. By August, they will have more information on those budget discussions. The sponsors have been asked to come back with an update on what to expect on the budget.
- Lynn Palensky, program development manager, gave an update on a research project status review of 27 projects. They're being looked at in terms of how they address uncertainties. She also talked about a category review process and its schedule, which begins this November.
- 3. There was a discussion on Bonneville budget reductions with Bryan Mercier, Bonneville's fish and wildlife division executive manager. The focus is on projects with biological and implementation effectiveness. They're looking at efficiencies. BPA has started conversations with sponsors and will reach decisions on final cuts

following those discussions. The process for making cuts will be spread out over the next year due to contracts. Mercier was asked about the Accords discussions and there will be more information coming next month.

4. The Columbia Basin Partnership (CBP) Task Force was discussed. Tony Grover, Fish and Wildlife Division director, provided an update on its provisional goals. The CBP is focused on developing goals for 24 stocks. These stocks represent groupings of the recognized 327 salmon and steelhead populations in the Columbia Basin, consisting of the 210 extant, 117 extirpated and 18 reintroduced populations. The partnership has submitted provisional qualitative and quantitative goals. The plan is to get feedback from participants before next October. There is a plan to have a phase two of that process, which will move into established goals and how to achieve them.

Power Committee

Council Member and Power Committee Chair Tim Baker reported on:

- 1. The Committee saw two draft sections of the Power Plan's Mid-Term Assessment. After receiving feedback, the drafts will be posted for public review. In October, all the sections will be presented to the Council. Today, they looked at Section 5: Demand Response. It measures key progress for regional implementation of demand response since the release of the Seventh Power Plan. They're not updating demand response cost assumptions, but are looking at progress addressing challenges and barriers that were identified in the Plan. The Demand Response Advisory Committee is providing input. They also looked at Section 6: Generation Resources. A lot it was a recap of things the committee has heard before. They received some updated costs for generation technologies, resource acquisitions and retirements, compliance with renewable portfolio standards, carbon emissions and energy production.
- 2. The Committee heard a presentation on wholesale price forecasts and fuel impacts. The Council periodically updates its 20-year forecast of power prices using the Aurora model, which dispatches all the resources in the WECC. We're influenced by what's happening in California and the Southwest, Member Baker said. There is some focus on the important role played by natural gas prices. It looks at the future buildout of renewables and the social cost of carbon. These forecasts will be a part of the Mid-Term Assessment.
- 3. There was a discussion of recorded energy-efficiency savings, which will come before the Council in August. The intent is to look at each type of savings and how they relate to the overall goal. There are discrepancies on how the number is comprised and how the actual savings are reported by IOUs, NEEA and the Council's own analysis. But the reality is that we're in the ballpark. We report on what different entities are going, but a lot of savings are being acquired in addition to that. Although there are some shortcomings, it is still the best method we have. There will be a white paper on the topic in August.

Public Affairs

Council Member and Power Committee Chair Bill Booth reported on:

- 1. A review of the new website design and analytics on the site. Information Officer John Harrison's Columbia River History is the most visited section.
- 2. They talked over plans for August's Congressional Staff Tour, in Washington and Oregon this year. They are expecting good attendance.
- 3. They held a discussion on the Senate Environment and Public Works Committee amendment to the water craft inspection station statute. The bill now has language adding the Upper Missouri Basin. Unfortunately, it also deleted references to the four Northwest states, while still mentioning the Columbia River Basin. This could open the door for other states to try and get at the limited funding.
- 4. A sea lion predation bill was passed by the U.S. House 288-116. Things are less secure in the Senate. Time is running out as we near the campaign season, and it's looking less likely that regional legislation will be passed without unanimous consent. One or two senators could derail it. There is some opposition from wildlife interests. We'll keep our fingers crossed, he said.

1. Briefing on Montana Renewable Resource Development Action Plan

Brian DeKiep, Montana staff member, introduced Bill Pascoe, of Pascoe Energy Consulting, and Mike Starrett, staff energy policy analyst.

The topic is an action item from BPA's 2018 rate case. In past rate cases, intervenors asked for an examination of the eastern intertie on BPA's system. Administrator Elliot Mainzer and Montana's Governor recommended assembling a working group to look at the development of renewables in Montana. They held their first meeting last December in Helena to look at transmission, ancillary services, regulatory, commercial and viability issues, and to explore the opportunities and barriers to Montana's potential renewable resources. They issued a final report last June. The panel discussed the report's findings and recommendations.

DeKiep provided an overview of the transmission system between Colstrip and BPA. The working group found that several hundred megawatts of unused transmission system capacity is available today and can reach mid-Columbia, but not necessarily all the way to Interstate-5 load centers, which is what is being sought. It's a barrier.

Reading from slides, DeKiep said there is enough dynamic transfer capability to support the development of 1,000 MW of wind for export to the Pacific Northwest. This is a requirement for Washington's renewable portfolio standards. Further, the rights-holders of Montana-to-Northwest transmission capacity being used to deliver energy from Colstrip 1 & 2 have flexibility with next steps after retirement. These options could include adding new generation, reassigning the rights, possibly redirecting, etc.

DeKiep said the study results indicate new transmission lines are not needed

to reliably maintain high transfer capability as long as the Colstrip 500-kV system remains intact. With relatively minor investments (compared to new line builds), the existing transfer capability of the Colstrip Transmission System can support a one-for-one replacement of Colstrip generation with new sources, including renewables.

Pascoe said he's been in this business 40 years. He described his background and his current consulting business. He believes there are three main questions: Are Montana markets competitive and are there markets available in Washington and Oregon? If they are, how do you arrange the transmission rights? Third, how do you deal with the ancillary services?

Looking at markets, Pascoe said that advocates for Montana renewables are pushing for exports, but there hasn't been a similar pull from potential purchasers in Washington and Oregon to get at those resources.

Utilities have processes for acquiring resources and three currently have RFPs: Avista, PGE and Puget Sound Energy.

Montana's delivery costs look to be competitive with other available resources. But uncertainties about transmission and integration services have been impediments. The recommendation is that renewables developers should present credible and executable transmission plans to potential purchasers. Purchasers should allow a reasonable period to work with the developer to execute the transmission plan. It's a chicken or an egg thing, he said.

Looking at transmission availability, a good news finding is that you can get it out of here (from Montana), Pascoe said. A second finding is longer range as to when Colstrip 1 and 2 are retired. He discussed a slide on transmission availability numbers — current and prospective. A BPA upgrade and Colstrip 1 and 2 retirements will add up to 500 MW of capacity. Colstrip Transmission System (CTS) and M2W upgrades would boost it further.

Pascoe said that BPA and NorthWestern have had a disagreement on 184 MW of transmission capacity ownership, and it has created some uncertainty. They have made an agreement that whoever sells it first, gets it.

Looking at the Montana intertie, the agreement may need to be modified to facilitate the future use of capacity on the BPA Eastern Intertie and the CTS. A recommendation is that BPA and the CTS owners should review the Montana Intertie Agreement (MIA) and the CTS Agreement, and make modifications as necessary to facilitate future use by resources other than Colstrip. The report recommends that BPA hold a pre-rate case workshop discussion on alternatives for the Montana Intertie rate.

Regarding tariffs and business practices, Pascoe said the report recommends that BPA consider allowing developer-funded NEPA costs to be refunded if long-term firm service is ultimately purchased at rolled-in embedded cost rates.

The last question surrounds integration and ancillary services. The study found that a significant amount of dynamic transfer capability (DTC) is available to support the development of a substantial quantity of Montana wind for export to the Pacific Northwest.

DTC is necessary to comply with the current Washington State RPS, and enables options for integrating Montana wind in Pacific Northwest Balancing Authorities. It was an important finding, he said.

As opportunities arise to meet flexible capacity needs for Montana renewables, BPA should consider requests for providing products and services for integrating resources located outside the BPA balancing authority. It currently does so for resources within its area. We think it's a way for BPA to develop additional revenues, Pascoe said. He remarked that BPA is interested as long as it's a market opportunity and not an obligation.

The report recommends that Pacific Northwest utilities interested in acquiring Montana renewables should include scenarios balancing Montana wind in their own balancing authorities.

Pascoe said many of the transmission and integration challenges for Montana developers could be mitigated by forming a Pacific Northwest Regional Transmission Organization. However, the formation of an RTO is a complex endeavor with potentially significant cost and governance issues.

Looking at RPS issues, the state of Washington has requirements for resources outside the Pacific Northwest, such as those in Montana. The report states that state elected officials and regulators have authority to establish policies regarding the selection of resources used to serve electric consumers in their jurisdictions. While recognizing state prerogatives in setting policies, those who set state renewable portfolio standards should consider the impacts of additional requirements on out-of-state renewable resources, and the propriety of imposing such requirements.

DeKiep read major findings from the planning subcommittee:

- New generation must participate in Remedial Action Schemes (RAS) and coordinate with the Acceleration Trend Relay (ATR) RAS at Colstrip as long as the ATR or its replacement are needed.
- As long as the Colstrip 500-kV transmission system remains intact and with the
 proper enhancements, new transmission lines are not needed to reliably maintain
 high transfer capability. The 500-kV system is also essential for reliable load service
 within Montana and for exports to the Pacific Northwest.
- Adequate voltage support in the Billings area may be a concern with the Colstrip line going away. The location of replacement generation may help address it.

He then listed options for incremental ATC additions:

- Some segments of unused transmission system capacity exist today.
- Transmission system capacity should become available as Colstrip's coal-fired generation retires.
- Assuming transmission service requests to pay for the investment, incremental ATC can be added with three projects:
 - o BPA Remedial Action Scheme (RAS),

- Colstrip Transmission Upgrade, and
- o Montana to Washington.

DeKiep added recommendations for additional studies, including specific recommendations for NorthWestern and for BPA.

Mike Starrett shared some of the major findings from the operations committee:

- The capacity of wind that can be integrated is much greater than the DTC across the Montana Intertie. More than 1,000 MW of wind can be accommodated within the current limit. If movement in one direction only is not deemed to consume DTC on the Montana Intertie, 1,400 MW can be integrated.
- DTC can be approximately doubled by automating voltage control actions on transmission reactive devices.
- If a wind plant located in Montana is integrated with wind resources in the Columbia River Gorge, the incremental increase in the balancing reserve requirement is 25 percent less than that of a same-size plant in the Gorge.

Starrett concluded the presentation by saying that BPA did a good job, not only on the analysis, but in positioning themselves to carry out some of the action items.

Member Karier observed that this is pretty technical presentation. He asked if they could talk about dynamic transfer capability at a lower level. It seems to be a constraint in getting wind in and out of Montana.

Starrett replied that in delivering wind from Montana and Oregon, it's not an issue. Normally, the way the energy would be traded is for the balancing authority to make sure the system is stable. But for Washington's RPS specifically, you can't shape it; they want it delivered exactly as it is — no balancing or anything.

Pascoe said that when you talk to utilities in Washington about the history of the RPS, this was passed by initiative. He believes that the purpose was that if you didn't send the wind out moment by moment in its true shape, it would be melded with "brown energy." They found ways to handle that in California through an accounting exercise, he said. When the initiative was passed, it was seen as a way to keep the green energy from being tainted.

The DTC deals with the short-term variability. Power is scheduled in one-hour blocks. You might try to predict what the wind farm will produce in that hour, and find some balancing resource close to that, and deliver that same amount of power for the entire hour. With DTC, you can send that variable power to another Balancing Authority elsewhere, and they balance it.

With DTC, it's possible to move the wind dynamically out of Montana and into BPA. But we can't add value to it in Montana, Pascoe said. If there was a way to balance it in Montana, it would make it ineligible. DTC is a good answer for the near term. In the longer term, we would want a change to the regulation.

Member Baker said that at a 30,000-foot level, sometimes perception is greater than reality. Many studies show that Montana's resources are some of the best in the nation. There's always been a perception that it's hard to get to market. What we found in this process is that it's complicated, but it's doable. It's the power of having all those stakeholders in the room coming to that understanding, including potential buyers. This process has changed our perception of Montana's resources. That's the most significant accomplishment. We want to make sure that Elliot Mainzer and others get credit. The governor was very excited about this report.

Member Anders asked Pascoe, given your recommendations, what's next?

Pascoe replied that the report has a list of recommendations with a list of parties to follow up with. Some recommendations come with timelines. Some don't. The group will reconvene every six months to chart progress.

2. Briefing on Demand Voltage Reduction Implementation

Ben Kujala introduced Shawn Dolan, vice president of engineering and technical services, Kootenai Electric Cooperative, Inc., which implemented a voltage control demand response (VCDR) program. He provided an overview of the co-op's service area. It has been involved in demand response since 2008, starting with an automated meter reading-based thermostat controls on water heaters. The downside to that program, he said, was that anytime a utility owns a thermostat, the customer thinks it's the utility's fault if anything happens.

In 2016, it began looking at voltage control demand response. Prior to BPA implementing its tiered rate methodology, demand charges were too low for anyone to care. Prior to 2011, BPA's demand charges were below \$3.00 per kW. Now, BPA's above contract high water mark (CHWM) demand charges are between \$6.96 and \$11.64 per kW each month (PF-18 Rates).

Benefits of VCDR:

- It can shave peak demands by 1.5% to 5%,
- It's transparent to customers,
- · It has been used for years in the Midwest and East Coast, and
- It can save a utility a significant amount of money.

The concerns around VCDR included maintaining end-of-line voltage and its effectiveness in a rural area.

Dolan described the program's testing phase. They decided it would pay for itself in two years. He described peak shaving and the system's configuration. A voltage control scheme was adopted. They hooked into every line voltage regulator on their system, as well as load tap changers at every substation. The system monitors system load and aggregates it. If they get within 5 percent of the system peak for that month, it reads the end-of-line voltage at each meter and adjusts the voltage down as low as they can without violating standards. It also monitors temperature, demand shape and recaptures lost energy sales.

Dolan described the importance of measurement and baseline. Dolan said the co-op has saved \$400.000.

Council Member Ted Ferrioli asked if the utility got its water heater thermostat program into multifamily housing. Dolan said they did. BPA had a campaign and got a lot of people to volunteer. They are installing 200 water heater control units in a large, multifamily complex in Post Falls, and they should have them in by the end of the year.

Member Ferrioli asked about managing the customer service element. Fortunately, with the water heaters, I think I got two out of 300–400 installations, Dolan replied. More problematic were the in-house thermostats. The thermostats had small numbers and elderly people couldn't see them, so we would make adjustments.

Member Bill Booth commented that he knows enough about electricity to do his own wiring, and never thought about that 10-volt variation. The customer must not notice. Appliances almost must be calibrated to operate within a 10-volt range. Do you regulate that at the substation? Yes, and at the regulators, Dolan replied.

"Nobody complained that the toaster wasn't working?" Member Booth asked.

Dolan replied that out of 27,000 accounts, only three people noticed they were doing something. One was a navy base on Lake Pend Oreille. Another was a radio talk show host.

Council Member Richard Devlin asked if Dolan could provide another example of something similar being done in the Northwest.

The City of Richland has a similar system, Dolan replied. If you had a rural utility, that's not very load dense and has long lines, the payback may not be big enough. But we have a dense system in the center part.

Member Devlin asked, by those characteristics, could most munis and PUDs utilize this? Yes, replied Dolan.

Council Member Tom Karier asked if the voltage is dropping, are the kW delivered to the customer dropping as well? Are the bills dropping?

Dolan said if you have a resistor, you lower the voltage and you lower the consumption. We sell by the kWh. If we drop it, we sell less kWh and have to raise our rates to meet the margin.

Member Karier asked if it depends where the customer is on the line as to how much the voltage drops. It would be marginally different, Dolan said. Member Karier asked if all customers benefit. Yes, Dolan replied, the savings are passed on in lower rates.

This is focused on the demand side, Dolan said. It's on keeping energy sales stagnant and controlling the demand.

Yost said that Idaho Power tried to do some voltage regulation on the lines. They found that in some rural areas, they had to put solar panels up that the end of the line because it needed a boost. In some of the urban areas, it may be worthwhile, but it depends on what equipment is available. So, it's not quite as effective in the rural areas?

Dolan said it works better in urban, dense areas. Idaho Power is using solar to boost voltage.

So, the savings is overall, Yost said. Individual customer bills didn't go up and down? Right, replied Dolan, we were trying to keep customer bills the same as if we had done nothing. "But the overall rate went down?" Yost asked. Yes, said Dolan. "We do a cost of service survey every couple of years and adjust our rates accordingly. Any margins we make that aren't consumed by operations are returned to our customers in the form of capital credits."

"You were showing a half million dollars?" Yost asked. Yes, replied Dolan.

The meeting recessed at 3:22 p.m.

Wednesday, July 11

Council Chair Jim Yost brought the meeting to order at 9:02 a.m.

3. Council decision on release of Examination of Economic Trends Compared to Energy Efficiency Achievements for public comment

Ben Kujala, Power Division director, said that in looking at overall power consumption, staff was looking for a signal showing the amount of energy efficiency done in the region, and the larger economic trends. Council staff conducted a study to determine if the impacts of energy efficiency in the economy are real and sustainable over a long period of time. The work was motivated by a slide showing the cumulative energy efficiency in the system, 1990–2015.

Looking at the region between 1990 and 2015, utility and BPA programs, energy codes and efficiency standards have produced about 5,900 aMW of load savings, Kujala said. Over the same period, there has been a 25 percent decrease in energy consumption. There also has been a 53 percent reduction in the total energy consumption by dollar of gross state product

Energy consumption dropped by 1 MWH per capita in the residential sector. Contributing to the decrease has been an increase in the use of natural gas for space and water heating. However, on the flip side, larger homes and increased penetration of central air conditioning has added electricity use. Energy efficiency has played a large role in the overall decrease of consumption.

In the commercial sector, total energy demand per unit of output declined by more than 80 percent. In industrial, there has been a 57 percent drop in energy demand. Electricity demand could have been 7,700 aMW higher by 2015.

In sum, there's a 12,000 aMW difference in demand due to energy efficiency, Kujala said.

They are seeking Council approval to release the white paper for public comment.

Member Anders asked if the data centers in the region would change the results from 2015? Kujala said through 2015, they're incorporated into the study. Member Anders asked if recent data center additions would create a huge jump in the numbers. "Since we're normalizing on a per-unit basis, what you have to weigh against the increase in the load is the amount of productivity you get that corresponds with it," Kujala replied. "So, if data centers are producing more value than the industry they're replacing, then that's just a shift that's on top of the energy efficiency you see."

Member Devlin had a comment he said needs to be on the record: We are producing more gross domestic product — significantly more — while our employment numbers may have exceeded where they were in 1990 by leaps and bounds. The demise of the aluminum industry, and the pulp and paper industry has had a significant, human impact on those communities. Even as much as people applaud the demise of coal in Boardman, there were over 400 employees who were displaced, or will be displaced, by the closure of Boardman. And some of those communities don't have replacements. They're in other areas of the region. It's important to keep in mind that there are people being impacted.

"Looking at the industrial area, is it possible to do an analysis (you may not have the data for 1990) of what the energy consumption was in a particular industry then versus what it is now?" Member Devlin asked.

Kujala said it could be possible and they're looking at ways to further refine the study, but it's not part of this white paper. They tried to show change in industry to show there's more going on than just energy efficiency. But they didn't break out each individual industry. Tina Jayaweera, senior energy analyst, added that staff does have estimates by SIC code, but she doesn't know how robust they are.

Member Ferrioli said, "Futurists warn that the frequency and amplitude of change are exponentially increasing. Looking at the footprint of Google in The Dalles a decade ago, in the last five years, it's doubled. In the last two years, it's tripled. The trend toward attracting new consumers is real and identifiable. In Prineville, Facebook has doubled its footprint in the last five years. And the call centers are tremendous consumers of electricity. We can drive 55 mph, look in the rear-view mirror, and get a pretty good look at where we've been through 2015. We're driving at 180 mph and we're still looking in the rear-view mirror.

"I would assume that as soon as this report is released, it will be appropriate to do an update on the high-growth, high-consumption industries so that we have a trend line on the ones we really need to be watching. There are side-stream effects. Our RPS didn't require cooperatives and PUDs to purchase green power until they reached a certain growth level. In both those communities, they've surpassed that threshold. So, it's changing the obligations of the PUDs and co-ops for purchasing green power. That creates a different side-stream of demand that they have to meet. Public utility district impacts. The rate of change is increasing, the amplitude of change is increasing, so more frequent updates — something more forward looking."

Member Karier said it's an interesting paper and he's glad the staff did it. Over the years, we've looked at the total amount of conservation that's been acquired — 6,000 MW over a long period of time. We've always calculated it from the bottom up. This is a way to look at it from the top down using different data. The economy is getting a lot more efficient, maybe twice the 6,000 we

measured. If it had been less than 6,000, we would have had a problem. If reinforces that the bottom up approach is in the ballpark. Some refinements could be done to the paper, maybe more specific industry data would help quite a bit. The overall importance of this is significant: that it shows we're in the ballpark.

Northwest Power and Conservation Council Motion to Release the "Recent Trends in Energy Consumption and their Impact on the Northwest Economy" White Paper for Public Comment

Member Anders moved that the Council approve the release of the white paper, "Recent Trends in Energy Consumption and Their Impact on the Northwest Economy" for public comment for a period of 45 days, as presented by staff and recommended by the Power Committee.

Baker second.

Motion carries without objection.

4. Presentation on Aquatic Invasive Species Prevention: Status, Highlights and Challenges

Leslie Bach, senior program manager, introduced Kate Wilson, Montana Department of Natural Resources and Conservation. Wilson has been working on invasive species for more than a decade. She started her presentation saying that invasive species is one of the biggest issues facing fresh water resources in the Northwest. Montana is the only state in the four-state area with a detection of mussels.

Regionally, they have made progress in the last five to 10 years. She described the growth of boating inspection stations. Regarding funding, she thanked the Council for its advocacy. It was nice to get a federal match. Last year, Montana received \$1.9 million in match from the federal government. It has exponentially increased the program and monitoring. One of the challenges is the 50 percent match. Washington doesn't have the funding Montana does, so it has two inspection stations, versus 40 in Montana.

Wilson is concerned about the Upper Missouri River Basin being added in the federal funding. It had been designated for Columbia River Basin states. That means greater competition for funding without any guarantee that there will be more funding. The Columbia River Basin states would be grateful for anything the Council could do in this area.

In 2017, Montana inspected 86,000 watercrafts. She discussed a map showing where the boats came from. She indicated where there are infested waters in the Midwest. In Montana, they went from less than 100 bodies of water being monitored to more than 240. They have crews checking the bodies of water. They intercepted 17 mussel-infested vessels last year, up from seven in 2016. Currently, they have 30,000 boat inspections and nine infested vessels.

Wilson reviewed state funding comparisons. They vary widely. In Nevada, they have \$600,000 funded by boat stickers. Montana's program isn't funded by boaters at all. They need to find a new funding source. BC and Montana are the only jurisdictions using hydro for fees.

Montana has the most expensive program, but it's also the first line for invasion, Wilson said. They have to pay for quarantine of the reservoirs that tested positive. They're running about \$6.3 million a year. Half is from a hydro fee and half from an angler fee. Wilson said they've been advised that it won't continue past 2019.

Montana's Environmental Quality Council is drafting a funding proposal for the 2019 session. It's a shotgun approach that removes hydro as a funding source. Anglers would still pay the bulk of the fees. There would be boater fees, a general fund appropriation and diverting a portion of an existing gas tax. It's in the public comment process now.

Canyon Ferry had a positive sample come back in 2016. If it's not positive next year, it would be delisted, since three years will have passed. Tiber Reservoir has lots of fishing tournaments. Three different areas tested positive. There's a tight lockdown on traffic using that reservoir. Enforcement was difficult there. There are inspection stations at three of the major launches. They haven't found adults in these reservoirs or another positive test.

She described the strict inspection measures for all watercraft.

The Upper Columbia Conservation Commission (UC3) is new with a mission to prevent the introduction of invasive species.

Highlights from last year include:

- Using eDNA to mussels. But doesn't tell you if something is alive or dead. They assembled a scientific panel to recommend its best use.
- In September, they will be hosting a Columbia River Basin response exercise.
- Wilson showed a video: <u>Be a Montana Superhero</u>

Wilson has been working on fire equipment and seaplanes. They don't manage planes in the air, the FAA does. They are going to try and get an online certification for pilots.

Upcoming events:

- Pacific Northwest Economic Region: July 25, 2018 (Spokane)
- Upper Columbia Conservation Commission: Sept. 26, 2018 (Glacier National Park)
- Western Regional Panel: Oct. 23-26, 2018 (Tacoma)
- Western Governors' Association Montana Workshop: Nov. 14, 2018 (Helena)
- Montana Invasive Species Summit: Nov. 15-16, 2018 (Helena)

Member Norman said he appreciates the efforts to keep mussels out of Washington. If there's a detection, the focus is to prevent further spread. Are there options now for treatment?

Wilson just moved from Alberta, where she ran their program, and they had an effort to register potash as a molluscicide. It's an option gathering support if there's an introduction. Other formulations include copper.

Member Booth observed that if they have a detection, we still don't have to ability to implement a quick treatment. It would be nice to have some type of treatment approved and ready. I guess we have no real plan other than to cordon off the area?

They have booms that go to the bottom, Wilson said. There are ways to keep larvae from floating around. You contain the biggest area you can. There hasn't been a success story with a huge lake. Manitoba had a huge introduction in 2014. They did a potash treatment, and that killed 100 percent of the invasive species. But they didn't go after the ones that left the area. The potash applicator thinks they would be able to cordon off a lake. Most of the permitting is site specific, so you can't do it until you have a detection.

Member Karier praised Wilson's presentation. Now we're worried about seaplanes, he observed. He said he saw research that mussels do better with calcium in the water. Where does Canyon Ferry and Tiber fall in that range? Wilson said most of water bodies fall in Montana fall within that range. She added that she doesn't see seaplanes posting too much of a threat.

Member Booth asked how many inspection stations are in each state. Wilson said there are two in Washington, about six or eight in Oregon, 20 in Idaho and about 35 in Montana. You can see online where all the stations are.

Member Ferrioli asked what would earn a citation. What are the levels of enforcement? In Montana, it ranges from \$85 to \$500, Wilson said. They might have to raise the minimum fine.

Member Anders thanked Wilson for coming and lauded her enthusiasm. With UC3, we're a lot more coordinated.

Bach said the legislation is being tracked by the Council and they will bring something back to the Council, if needed.

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5. Columbia Basin Fish and Wildlife Program: Briefing on the role of ESA and similar matters

John Shurts, general counsel, said that as the Council goes into the next amendment process, one of the largest key issues is the Endangered Species Act (ESA), and how it relates to the Fish and Wildlife Program and the Northwest Power Act. The Council first had to grapple with it developing the 2003 Mainstem Amendments. It continued to be an issue in subsequent programs, such as in 2009 and in 2014. Then we litigated it in the Ninth Circuit, where we got a good decision, he said. But it's still an issue.

At the same time, so many other things are taking place, including biological opinions, recovery plans, environmental impact statements, a new Columbia River fish management plan and various partnership objectives. These are not separate things; they are all linked conceptually. The Council has been at work building a recovery program for 20 years. There are large-scale mainstem, tributary, estuary and production programs. We built a big

regional package to benefit listed and unlisted fish and wildlife. Those become the raw materials that are looked at in other areas. They all get linked through the Northwest Power Act and the actions federal agencies take to implement good things for fish and wildlife.

When BPA spends money for fish and wildlife, it's a Section 4(h)(10)(A) event. It all has to be analyzed if it's good enough to satisfy the ESA. The package doesn't change. What changes is the scale, scope and budgets, Shurts said. The big program is all integrated and linked.

Shurts provided the Council with a lengthy outline about the ESA. He did not go through the entire document, but asked Council Members to read it carefully as these issues would be coming up continually in the Council's work. He added that these are the same points that were presented to the Ninth Circuit.

He urged Members to look the ESA outline through the frame of the biological opinion (BiOp). He talked about what the ESA is, what the Council's obligations are and what federal agencies do to impact it.

Shurts emphasized that Federal agencies have certain obligations and areas of authority. The Northwest Power Act is another set of authorities. Not only how to acquire power, but also to use the fund to protect, mitigate, and enhance fish and wildlife. ESA is not a separate program; it is a regulatory overlay on how agencies should use their existing authorities. They're integrated legal obligations, one is not greater than the other. You have to be consistent with the Northwest Power Act and the ESA. There's also an obligation to comply with NEPA, etc., etc., he said.

For the Council's purposes, the ESA gets integrated through Section 4(h)(10)(A) of the Northwest Power Act. It's where Bonneville is to use its fund to protect, mitigate, and enhance fish and wildlife. It brings in the Council's program.

Referring to page five of his outline, Shurts said there are many BiOps and we have to be aware of all of them. They are an ESA analysis, identifying and analyzing actions that can be implemented under existing authorities (either the original proposed actions or subsequent RPAs), and that if implemented, avoid jeopardy and essentially become ESA requirements.

The Council does not adopt the BiOps or the ESA jeopardy conclusions. They are the things recommended to us to protect, mitigate, and enhance fish and wildlife, and happen to be recognized as sufficient for ESA.

Shurts said that is the best way to understand the role of the BiOps in the Council's Fish and Wildlife Program — as a suite of proposed actions and standards to benefit listed species, which also represent the measures and objectives of the Fish and Wildlife Program to benefit these species.

Could things be operated in a better way? We get recommendations of other stuff to do, he said. We always recognize measures and objectives to minimize impacts, then we get other recommendations and put those into the program as well. We try to make it clear that

measures for unlisted species are just as important as listed species. That's been an important part of what we write in the program. Sometimes those things have been in conflict.

As an example, Shurts discussed the Montana Reservoir Amendment in 2003. Libby and Hungry Horse reservoirs were operated a certain way during the summer. They got different recommendations from Montana Fish and Wildlife and the tribes for operating the two reservoirs. However, this was inconsistent with BiOp requirements and the parties worked to try and harmonize the operations. Montana filed litigation against the Corp and Bureau. They eventually worked out a set of operations, which were integrated into how federal government analyzed operations to benefit listed species and other species.

The Vernita Bar Agreement is another issue with lasting impacts. Another that has never been harmonized has been the recommendations from Upper Columbia tribes on how to operate Grand Coulee to protect resident fish, because the operations go against the BiOp.

Member Norman asked about the integration of ESA and the Fish and Wildlife Program. The BiOp actions is taken from the program, and you indicated it's a matter of scale.

Shurts replied that they have had spill provisions that go up and then we get different recommendations, so it affects the dial to some extent.

With the ESA, there seems to be a sense of urgency associated with protecting fish from extinction, Member Norman said. You have actions, timing, scale and prioritization. Yes, Shurts replied, it has upped the amount, budget and speed of implementation. The ESA hammer gives you that particular focus.

The consistency is still there. Member Norman added.

One reason we have less conflict than before is the Council left room for all of this, Shurts said. The sub-basin planning project was creating a big set of potential raw material for offsite mitigation that may be useful for ESA. ESA is not ours, he said, but we have to do our work cognizant that the federal agencies will evaluate that.

One example of what's not getting done from the prior program is emerging priorities. It looks at what isn't getting done in favor of satisfying this big battleship of a program influenced by ESA. That's still going to be some of the things that the Council does.

Shurts continued: Are there recovery plans on the river? Our job is not to analyze what needs to be done to get a species delisted, he said. We implement recovery plans. If something does get recovered and delisted, we still have measures to still protect species that aren't listed. It doesn't go away.

The MAYFAC partnership is currently looking at biological objectives and numbers for delisting and other goals. We recognize delisting objectives, but they're not Northwest Power Act protected mitigation goals, Shurts said. So, this will come up as a major issue in this next amendment process.

We get questions about the Accords, he said. They're implementation agreements. BPA has to decide how it will spend its money. There's nothing wrong with multiyear commitments. We wanted to make sure the funds weren't used to fund measures that weren't a priority over other measures. The Accords can't take away the Council's decision-making during the amendment process. As this program goes forward, will probably see extensions of a number of these Accords.

There is a gigantic Columbia River System Operations EIS effort taking place. It's not separate, but rather a part of a giant, regional program — a parallel processes. It will feed back into the program.

The Columbia River Fish Management Plan under *U.S. v Oregon* – some may think of it as a separate authority. But it's linked. It's about harvest. It would be better to work out long-term management agreements rather than litigate and schedule harvest year-to-year. Management plans become commitments that aren't just harvest, but also production agreements. Agreements are fine, but they don't come with funding.

Some things are a little different that aren't linked. The Mitchell Act from 1938 predates the Power Act. It's federally funded through NOAA. It's not reimbursed by BPA. We didn't put it in the program because it already has funding and an implementation process. The Pacific Coastal Salmon Recovery Fund is separately funded as well. We stay aware of them, but they're not program measures.

This will go into the administrative record, he said.

The Conservation Report public comment period has been extended to July 16. The Council will get an update in August.

Council Business

Member Yost announced that the comment period for the Northwest Under-served Energy-Efficiency Markets Assessment Draft Report has been extended for 10 days to July 16. The Council will probably get an update on that in August.

Northwest Power and Conservation Council Motion to Approve the Minutes of the June 12-13, 2018, Council Meeting

Member Anders moved that the Council approve for the signature of the Vice-Chair the minutes of the June 12-13, 2018, Council Meeting held in Portland, Oregon.

Member Karier second.

Motion carries without objection.

Northwest Power and Conservation Council Motion to Approve the Proposed Membership Lists for the Council's Power-Related Advisory Committees

Member Anders moved that the Council approve the proposed membership lists for the following advisory committees, as presented by staff.

- System Analysis Advisory Committee
- Resource Adequacy Advisory Committee
- Natural Gas Advisory Committee
- Generating Resources Advisory Committee
- Demand Response Advisory Committee
- Demand Forecasting Advisory Committee
- Conservation Resources Advisory Committee

Baker second.

Motion carries without objection.

Northwest Power and Conservation Council Motion to Approve Adoption of its Fiscal Year 2020 and Fiscal Year 2019 Revised Budget, and Authorize Reprogramming of Available Fiscal Year 2018 Funds for Unanticipated Fiscal Year 2018 Costs

Sharon Ossmann, Administrative Division director, said that last May, the Council released the draft Fiscal Year 2020 and Fiscal Year 2019 Revised budget for a 42-day comment period. They received two comments: one from the Northwest Requirements Utilities and one from the Public Power Council. Both comments asked if the Council was responsive enough to BPA's financial situation. Staff reviewed the budget levels and concluded that the levels proposed were responsive to Bonneville's situation. For example, in Fiscal Year 2019, the revised budget was reduced by \$206,000. In addition, for budgets in Fiscal Year 2020 through Fiscal Year 2023, an additional \$1.1 million in cost-cutting measures were identified. Staff concludes that the levels shown in that draft budget document are those necessary for the Council to carry out its statutory responsibilities, and the recommendation is the budget be adopted.

Member Anders moved that the Council approve the Fiscal Year 2020 Budget and the Fiscal Year 2019 Revised Budget, as presented by staff, and that the Council authorize reprogramming of available Fiscal Year 2018 funds for unanticipated Fiscal Year 2018 costs.

Member Baker second.

Member Karier said he's going to vote against this budget. Bonneville's situation is serious and significant. And Bonneville has responded by going through significant budget reviews, gone through their entire operation and figured out what's essential, what's not essential and have made significant reductions. They've done something similar with the fish and wildlife program, looking at reductions in the range of 10 percent. He encouraged the Council to do the same thing.

The motion passed with Members Yost, Anders, Norman, Booth, Baker, Ferrioli and Devlin voting in favor; and Member Karier voting against.

Northwest Power and Conservation Council Motion to Approve the Final Version of the Report "2017 Columbia River Basin Fish and Wildlife Program Costs Report"

John Harrison passed out a memo with the actual dates for the comment period, May 10 through June 29. He received a call from Tom Iverson, a contractor for the Yakama Nation. He expressed concern about the portrayal of the percentage of the rate Bonneville charges its customers, which is attributable to fish and wildlife. We show actual expenditures in our report and the percentage of rate is much lower. There's a difference between forecasting fish and wildlife costs and the amount that Bonneville will spend as part of its rates process.

Harrison said that Iverson submitted his comment in writing and it is included in the report. The bottom line is that in the report, based on forecasts of costs, Bonneville can attribute 31 percent of the forecasted total costs to fish and wildlife. But when you do the math on the actuals, it's more like 18 percent. This is explained in the report. Next year we could consider a graph with the rate case forecast versus the actual expenditure. Other than that, there were no comments on the report. They also made color changes in the graph requested by Member Devlin.

Member Anders moved that the Council approve the report titled "2017 Columbia River Basin Fish and Wildlife Program Costs," as presented by staff.

Member Karier second.

Member Devlin said he detected a degree of levity the last time he posed a question about forgone revenue. So, he won't bring that up again. What we have describes the methodology Bonneville uses. It says that the loss in terms of revenue was under \$10 million. It also indicates that the power purchased was actually a positive, in the sense that water was retained and later able to be used for power purposes and sold at a higher rate. It indicates when Bonneville forecasts the costs that they would have in the 2016 rate case, they forecast about \$200 million in additional fish and wildlife costs — or loss of power production. I think I understand it, but I'm not sure the casual reader will get that. Anything we can do to provide more clarity to the report for the casual reader would be beneficial. The recommendation we have is a good one to show both the forecast costs of the foregone revenue and what the actual costs were.

Harrison said this year was anomalous. In the 18 years doing this report, we've never had power purchase costs be a negative. It took three or four people at BPA a lot of time to come up with the wording. It had to do with moving water around and then releasing it. It's not likely to happen again. I can arrange a meeting with Bonneville to explain it further.

Member Devlin said it's not that he needs an explanation. What he appreciates about the Council staff is that for most all reports we receive, there's a great emphasis on clarity. The clarity of this report isn't what it should be.

Public Comment There was no public comment.
Chair Yost adjourned the meeting at 11:08 a.m.
Approved August, 2018.
Vice-Chair

Motion carries without objection.