March’s Council meeting was packed to the gills to hear Bonneville Power Administration Administrator Elliot Mainzer’s candid assessment of the agency’s challenging business climate, and what his team plans to do going forward to keep its stature as the “region’s engine of the region’s economic prosperity and environmental sustainability”.

Mainzer wasn’t shy in addressing some of the hard work that has to be done — and the difficult conversations that need to take place — regarding spending, new products, the energy imbalance market, fish and wildlife costs, energy-efficiency programs and transmission services. A number of fish related issues rounded out the meeting.

All members were in attendance. The next Council meeting is in Portland, Oregon, on April 10 and 11, 2018.

Bonneville’s Elliot Mainzer lays out a game plan to right the ship

Difficult decisions ahead

Bonneville Power Administration Administrator Elliot Mainzer didn’t flinch while laying out his agency’s plans to navigate some very rough seas. Appearing before the Council, he candidly talked about the need for cost discipline, innovation and strategic investment at the 81-year-old agency.

“As long as I’ve been at Bonneville, which is now about 16 years, we’ve always worked off this vision statement of Bonneville as an engine of the region’s economic prosperity and environmental
sustainability,” Mainzer said. “We’ve also had a corollary to our vision and mission to deliver on our public responsibilities through a commercially successful business.”

But he said that the proliferation of cheap natural gas and new renewables, relatively modest load growth and huge market transformation have become enduring trends and Steve Kern accurately pointed out the added pressures on Bonneville’s cost structure at the last Council Meeting. “When you look at what’s been going on in the last few years, with the pressure on our revenue streams, the pressure on our cost structure, the changes in the industry, the collapse in wholesale electricity prices, I think that the commercial pressures on Bonneville have become much more significant than we’ve experienced in the past.”

Mainzer said he’s not in a panic mode, but rather, “I’m in a very significant sense of urgency mode. I do think the risks facing Bonneville are real, and I feel that even though we have 10 years left on our long-term contracts until 2028, the time for real action is now.”

Bonneville isn’t currently competitive on a pure price-point basis but there is still tremendous value in the product he said, noting that it is carbon-free, dispatchable, firm and reliable. And the agency has concluded that they can’t grow Bonneville’s aggregate cost structure if they’re going to be competitive in the future. Mainzer’s thought a lot about where they need to land to keep the bigger utilities on board, and to make sure that smaller requirements customers still see BPA as a competitive offer in next long-term contract negotiations.

The 2018 Strategic Plan has four primary components that address the agency’s approach to spending, planning and developing new products:

1. **Strengthen financial health by meeting objectives for cost management, liquidity, debt utilization, debt capacity and credit ratings.**

Mainzer said first-and-foremost, they need to improve their cost management discipline and hold program costs at or below the rate of inflation by business line. From supply chain, personnel costs, and information technology; to working closely with the Corps, the Bureau, and Energy Northwest, “everything is being evaluated,” he said. “It extends to our fish and wildlife program and our energy efficiency program. We’re really trying to be disciplined about our costs.”

Another pressing issue is Bonneville’s debt capacity. With a limited amount of federal borrowing authority, they established a goal of maintaining sufficient debt capacity to fund their capital program on a rolling 10-year basis and preserve what’s left of their available financing from the U.S. Treasury. “This means we’re going to have to look for additional sources of capital financing,” he said.

The third general area is liquidity, he said. Over the last decade, Bonneville has burned through about $800 million of cash, which is due to issues such as losses in the secondary market and trying to keep rate increases as low as possible. “We are down close to zero in cash reserves in the power business line — that is an unacceptable position to be in,” Mainzer said. “We set a modest goal of maintaining 60
days cash in each of the business units. Right now, the transmission side is well above that; power is right at the bottom. We have to take steps now — we’ve heard this loud and clear — from the credit rating agencies, just to have the financial resiliency to ride through shocks to the system.”

2. Modernize assets and system operations to leverage and enable industry change.

Mainzer said Bonneville is administering an industry-leading asset management program that extends across power, transmission, fish and wildlife, information technology and facilities. A key component of this goal is grid modernization. Automation will provide opportunities to participate in the sub-hour scheduling markets.

Further, Mainzer talked about upcoming discussions with CAISO to see what the terms of joining the Energy Imbalance Market might look like for Bonneville. “As we’ve watched Puget, Portland General and Idaho Power, and now Powerex, and the other investor-owned utilities in California getting into that market, it is important that we make a decision one way or another, and not sit on the sidelines.”

3. Provide competitive power products and services.

Bonneville is going to have to look at the revenue side of the equation and increase power revenues through new market opportunities for clean capacity – they are not going to cost-manage their way out of the problem, he continued. Their biggest foray into this area was on March 7, when Bonneville and Portland General announced a five-year power purchase agreement for up to 200 MW beginning in January 2021, after the retirement of the Boardman Generating Station in 2020.

“Everyone knows we’ve taken huge hits in the secondary revenue market, just like every other hydro provider up here, he said. “With the cheap gas and the low load growth and the oversupply conditions, it’s been a bloodbath for folks in the wholesale market. So, we’re looking for opportunities to monetize clean capacity, whether it’s up here or down in California, and to try and grow that market over the next five to seven years.”

He also addressed fish and wildlife expenditures, saying that Bonneville doesn’t have the capacity to just absorb higher and higher aggregate fish and wildlife costs. “If we’re going to take on new obligations, if we’re going to be looking at spill on the river, and taking on new costs, we have got to be willing to work together to reprioritize our investment portfolio, to manage aggregate rate impacts.” He said all parties have to be willing to take a hard look at what we’re spending money on, and to make sure they’re getting the biggest biological returns we can.

Energy efficiency and demand response investments need to be aligned with the long-term needs of Bonneville and its customers. Understanding the need for flexibility, Mainzer acknowledged customer concerns and said Bonneville will continue to look at self-funding flexibility and tweaks to the program.
4. Meet transmission customer needs efficiently and responsively.

Even though the Interstate 5 project decision was settled with a non-wire approach last year, Mainzer took pains to proclaim that it doesn’t signal the end of transmission construction. “But you want to have a deeper toolbox,” he said. “You have to be willing to look at the non-wires alternatives on an equal playing field with the big builds.” Using dispatch, flow-control devices, battery storage where appropriate and economical, and the generating capability of the system to manage the transmission grid more efficiently and more responsively are all possible solutions, he said. Planning and siting is key to avoid customers having to get into long transmission queues.

Mainzer expects his copy of the Plan to be dog-eared as he uses it to guide his decisions and chart the course for the next five years. “We want customers to be confident in our capacity for cost management and financial strength. We want our many other valued partners to believe that we are meeting our commitments to be that engine of economic prosperity and environmental sustainability through a disciplined commercial organization,” he concluded.

Pursuing conservation valued in Snohomish County PUD’s resource stack

According to Snohomish County PUD’s integrated resource plan, conservation achievements are deferring the utility’s need to make a decision on a “steel-in-the-ground” asset. “Since 2010, we have acquired 70 aMW, which is deferring our need for a future resource in a mighty way,” said Anna Berg, Snohomish County PUD’s senior manager of power supply.

Snohomish PUD, located north of Seattle, is the second-largest publicly owned utility in Washington and the largest public utility district. It serves almost 350,000 electric customers with a hydro-dominant fuel mix. In addition to a smaller amount of nuclear, coal and natural gas, Snohomish contract for 217 MW wind, owns 130 MW of nameplate hydro, and some biomass and biogas. It also has 11 MW of rooftop solar from its customers. Overall, it’s 98 percent carbon free due to BPA, Berg said.
In addition to conservation, Berg told the Council that Snohomish’s IRP includes further exploration of demand response and other low-cost, low-emissions alternatives for dispatchable, capacity resources.

“I heard Elliot’s conversation,” Berg said, “Perhaps there’s a five-year capacity contract he might be willing to offer up to Snohomish to serve some of our winter needs.”

On an annual energy basis through 2037, in every scenario, Snohomish doesn’t have an energy need unless there’s a low-water situation or a high-growth case, Berg explained. Post 2028, the planning assumption is that BPA will be there.
Council Briefs

**Hydro oversupply triggers costly imbalance**
In the Council’s Power Committee, Bonneville reviewed the challenging and costly oversupply conditions it experienced in spring 2017, when water supply volume was 130 percent of average. Oversupply is where the power system has a supply and demand imbalance. Water that isn’t spilled is passed through the hydropower turbines to generate electricity. With low loads and California solar in full swing, California had limited appetite for exports, Member Tim Baker said. As a result, Bonneville implemented the Oversupply Management Protocol, which displaces non-hydro generation. Under the protocol, BPA has to compensate generators for their displacement-related costs, which totaled $2.2 million last year.

**Under Washington’s Energy Independence Act utilities look to conservation first**
The Power Committee heard a presentation on Washington’s Energy Independence Act (EIA, also known as I-937), which requires electric utilities serving at least 25,000 retail customers to use renewable energy and conservation. Adopted by voters in 2006, it requires utilities to identify conservation potential over a 10-year period and set two-year targets. It’s producing significant results, Member Baker reported, and there are real penalties for not complying.

**Council releases irrigation white paper**
A white paper on the power-system value of conserved irrigation diversions was released for public comment by the Council. The Regional Technical Forum developed savings estimates for measures to reduce water usage for irrigation through reduced pumping requirements. The public comment period ends April 13, 2018.

**PacifiCorp’s Cory Scott voted Policy Advisory Committee co-chair**
Cory Scott of PacifiCorp was voted by the Council to serve as the committee member co-chair for the Policy Advisory Committee to the Regional Technical Forum. Last month, Council Member Tim Baker was appointed as the Council’s co-chair to the committee. The appointments are for one year.

**Marginal Carbon Emissions Rate Study released**
The Council voted to release its study, *Avoided Carbon Dioxide Production Rates in the Northwest Power System*. It evaluates the avoided carbon emissions rate in the WECC and the implications for regional conservation replacing the need for production. According to Council staff, the cost of future carbon dioxide regulation is a significant factor in resource planning in the Pacific Northwest. To avoid making higher-cost resource choices, a direct evaluation of this risk requires an estimate of the carbon dioxide emissions avoided by purchasing conservation or another resource.