



Public Utility District No. 1 of Klickitat County

80 Years of Service * 1938-2018

GENERAL MANAGER'S REPORT TO THE BOARD

For the **June 12, 2018 Meeting**

AGENDA ITEMS:

- A. **AUDIT PRESENTATION-** Keith Simovic will be attending the meeting to present the Financial Audit results to the board. The Annual Audit is complete and the board has received a copy of the results to review prior to this presentation.
- B. **CALL FOR BID- Linden Switchyard Construction-** Staff is requesting board authorization to call for bid on the Linden Switchyard Construction package. The pre-bid meeting is scheduled for June 18th at the Goldendale Main office, and the bid opening date is scheduled for July 5th and we expect to award on July 10th.
- C. **CALL FOR BID- Sixprong Substation Relay and Control Panel bid-** Staff is requesting board authorization to call for bid on the Sixprong Substation Relay and Control Panels. There will be a pre-bid meeting on June 18th at the Goldendale Main office, and the bid opening is scheduled for July 5th and we expect to award on July 10th.
- D. **PROFESSIONAL SERVICES APPROVAL-** Staff is requesting that the board approve the addition of BKI-Brown and Kysar Inc., ERM-Environmental Resources, and The Warren Group, LLC and agree to add them to the Professional Services roster for 2018.

NON-AGENDA ITEMS:

1. **Recognition of Exceptional Performance, HW Hill generation Facility:**

- The HW Hill Landfill Gas generation facility achieved 56,000 hours of combustion and steam turbine operations without a single lost time accident.
- The cleaning system and processes were improved during this time and these efforts resulted in operational life of the combustion turbines being double that guaranteed by the manufacturer, saving District in excess of \$5 million in rebuilding fees.
- The department improved efficiencies of the HW Hill gas cleaning and generating system processes and material use, reducing Operation and Maintenance costs from \$5.0 million in 2013 to \$4.3 million in 2017, which is a real dollar reduction from \$5.5 million to \$4.3 million, or 22%.

- The department operated under the knowledge that the facility could be closed and continued to operate and maintain the plant and achieved plant availability rates in the order of 98%.
 - With these accomplishments, the facility was kept operating and was therefore in the position to be converted to a Renewable Natural Gas facility, potentially providing further significant benefits to our customers and community.
 - The Public Utility District #1 of Klickitat County recognizes this exceptional performance and accomplishments and supports an award in District labelled clothing in an amount not to exceed \$225 each per Policy 3.II.E.
2. **Bonneville Power Authority Reporting issue within DOE:** After pledging to not change the reporting structure for BPA, DPE quietly went ahead and made the change—lowering BPA’s point of contact from the Deputy Secretary to the Assistant Secretary for the Office of Electricity. The change is more than just a “demotion” in point of contact, it could potentially slow the approval process for important policy and commercial decisions, lead to undesirable efforts to utilize the resources of BPA to advance DOE policy goals that are beyond the legal mission of BPA, and frustrate the ability of the delegation to engage the Department on important issues.

For these reasons, members of the Northwest congressional delegation have been pushing back on the DOE effort.

The FY 2019 Energy and Water Appropriations Act, approved by Committee, includes language signaling that the Committee does not support the change and warns DOE not to attempt to expand the Power Marketing Administrations’ missions. Representatives Mike Simpson (R-ID), Jaime Herrera Beutler (R-WA), Dan Newhouse (R-WA), and Derek Kilmer (D-WA) successfully advanced this language in the bill.

In the Senate, the Senate Appropriations Committee will take up their version of the funding bill on Thursday. Language directing the Department to continue the long-standing practice of having BPA report to the Deputy Secretary is expected to be added as part of a “Manager’s Amendment.” The language was championed by Senators Patty Murray (D-WA), Jeff Merkley (D-OR), and Steve Daines (R-MT).

With the DOE Assistant Secretary having told congressional committee staff that the reporting change would enable him to hire and fire the Administrator, engage in PMA rate setting, and utilize the PMAs to advance grid reliability for military installations, the effort to preserve the current reporting system is very important.

3. **Columbia River Treaty:** In a May 22, 2018 press release, the US negotiating team issued the following:

“The United States is pleased to announce the start of negotiations with Canada to modernize the Columbia River Treaty regime on May 29-30, 2018 in Washington, D.C. The 1964 Treaty’s flood risk and hydropower operations have provided substantial benefits to millions of people on both sides of the border. The Treaty, a worldwide model for transboundary water cooperation, has also facilitated additional benefits such as supporting the river’s ecosystem, irrigation, municipal water use, industrial use, navigation, and recreation. Modernizing the Treaty regime will ensure these benefits continue for years to come.

As the United States enters these bilateral negotiations with our Canadian counterparts, our key objectives include continued, careful management of flood risk; ensuring a reliable and economical power supply; and better addressing ecosystem concerns. Our objectives are guided by the U.S. Entity Regional Recommendation for the Future of the Columbia River Treaty after 2024, a consensus document published in 2013 after years of consultations among the Northwest’s Tribes, states, stakeholders, public, and federal agencies.

The U.S. negotiating team will be led by the U.S. Department of State and will include the Bonneville Power Administration and the U.S. Army Corps of Engineers Northwestern Division (which together comprise the “U.S. Entity” that implements the Treaty in the United States); the Department of the Interior; and the National Oceanic and Atmospheric Administration.

As negotiations proceed, the U.S. government will continue to engage regional stakeholders, Tribes, state government officials, and other interested groups. For more information regarding upcoming Town Halls, open to the public, please contact ColumbiaRiverTreaty@state.gov. For press inquiries, please contact WHAPress@state.gov.”

4. **Bonneville Power Administration Integrated Rate Process (IPR):** BPA has started its process for its electric rates effective October 1, 2019. As usual, PPC is taking the lead on Public Utilities’ interactions with BPA. BPA’s Focus 2028 goals are to keep rates at or below the rate of inflation between now and 2028. Michael Deen from PPC said today that from what he is seeing initially from BPA, they should meet that target in this rate case. His perspective is that BPA has significantly changed from adding up departmental budgets to the Administrator giving caps on spending. While not ideal in their plan, it is appearing much better than in past years.

I am attaching PPC's initial analysis for your review. For perspective, the IPR related costs represent 47% or \$1.4 billion of a \$2.9 billion budget are IPR costs (chart on page 5), most of the remainder being debt service for existing debt. Of the 47%, 52% are asset related costs, 22% are fish and wildlife costs and 25% are BPA internal costs (chart on page 8). It is important to note therefore that 47% or \$660 million are BPA internal costs, including fish and wildlife costs. The remaining 53% or \$740 million are the Corps, the Bureau of reclamation and Columbia Generating Station. Clearly managing the Corps, the Bureau and Fish and Wildlife are important tasks and BPA is often severely hampered in this area.

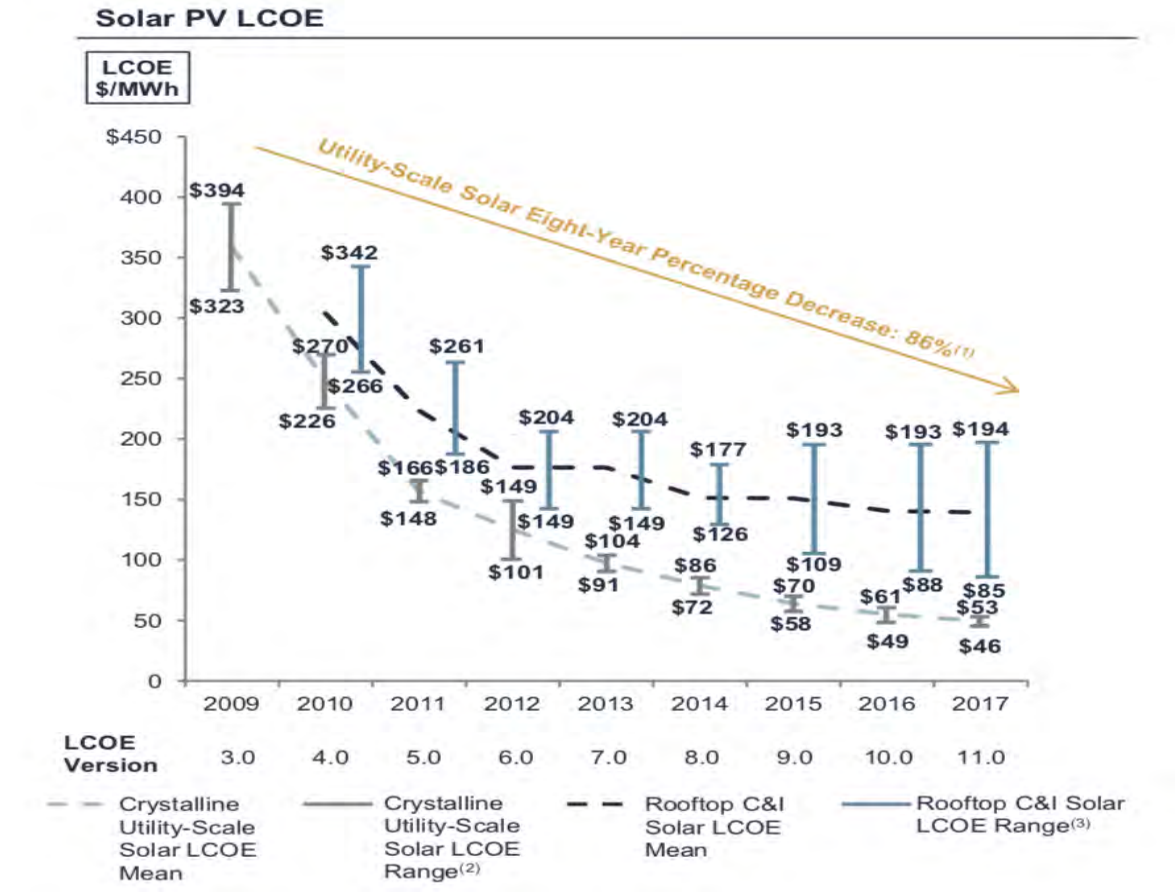
- 5. BPA Access to Capital:** With system improvements expected in the next ten years, BPA has serious limitations on obtaining the required capital. Their borrowing authority is capped at \$7.7 billion and they currently have \$2.7 billion left. This does not include the regional co-operation debt. Between 2020 and 2030, BPA expects to spend \$9.9 billion, while paying off \$3.9 billion, leaving a capital requirement of \$6 billion. They are proposing a mix of treasury spending (\$1.2 billion), regional co-operation debt (\$1.6 billion), lease-purchase options with developers and revenue financing. The details are not yet complete.

Public Power's response has been we support a mixed approach, as much of the prior proposals included a much larger reliance on regional co-operation debt. However, this is caveated with continued efforts to improve cost control and opposition to revenue financing. I asked if financing 100% of capital is really sustainable. PPC staff said that on the power side this is sustainable given the current rates and trends. It does not appear sustainable on the transmission side. I stated that although I may not like the impacts of rate financing, I do not see how a business model where 100% of capital is financed will be competitive in the long term. I am not advocating for BPA to increase rates, but I do think we might be pushing unrealistic constraints on BPA.

- 6. Behind the Meter Renewables and Storage:** I found this information, published in a report by Lazard, who is a respected investment firm that has done levelized cost of generation studies for many years. Levelized just means it includes all costs during the system's life, including capital, maintenance and operation. As expected, there are supporters and detractors of the study. In my opinion, their broad stroke conclusions appear to be very sound. As they are an investment firm, one that was founded in 1848, they are only incented to try and provide accurate data to their investors. They are not tied to technologies or specific desired market outcomes which makes them about as unbiased as they come.

The first finding that I wanted to convey to you is the study says that the rate of cost decrease in solar technologies is slowing. That makes sense. As time passes, generally technology rapidly improves and then the laws of diminishing returns takes over as the technology matures. This is shown in the chart below. The chart also shows cost per MWh. I cannot vouch for the accuracy of the costs shown, as any study is not perfect, but the costs for these

variable resources ARE significantly above market prices for block power purchases. Markets are currently at \$20 MWh and BPA, with full load following are \$35 MWh. We do know that there have been power purchase agreements lower than what is shown in the chart, a few in to the \$30 range for solar, but keep in mind this is not shaped delivery. Also, we do not know the details of those contracts. For example, cash contributions or assuming sunk costs can dramatically reduce the \$ / MWh cost. My point is that just looking at PPAs is not necessarily accurate either. I think the “curve” is accurate.

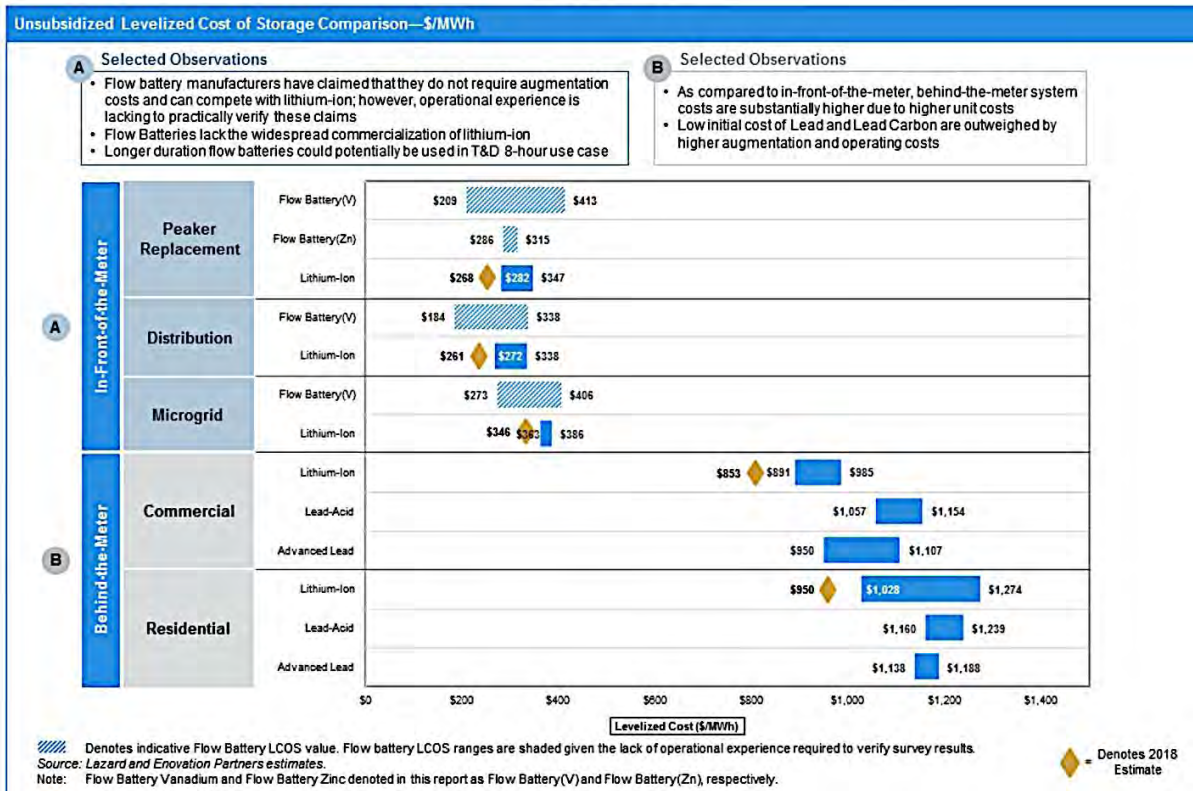


The second piece that is interesting and applicable to our strategic direction, is the following chart on storage costs. Again, I am not so concerned about the perfection of the data, as I am about two important points. First, behind the meter storage is in the range of 4 times more expensive than utility scale storage. This is important to us when we talk about the benefits of the electric system interconnection for our net metered customers today, and more generally, for our customers distributed generation choices years in the future. The utility “death spiral” we hear about is based on an assumption we cannot compete. This data would suggest that that is not a given and done right, we can offer services even if storage prices continue to fall. Lazard suggests that the life cycle cost of behind the metered storage is in the range of \$1000 MWh, or \$1.00 kWh. Our net metering electric system fee is \$0.06 kWh.

We know this is our cost of the T&D system, but the avoided cost of the net metered customer by not providing a battery is \$1.00 kWh. The life cycle cost for utility scale storage is in the range of \$250 MWh, or \$0.25 kWh. That difference gives us room to potentially provide a more cost effective alternative. Keep in mind these costs would apply only to the kWhs that we take into our system and provide back to the customer, they do not apply to their total generation. Again, the magnitudes might be wrong, but the take away for me is that we provide two very valuable services, the provision of the capacity to meet their peak load demand, and storing their excess generation. Our current model only charges the cost of the system to try and avoid cost shift amongst customers. We do not currently charge at all for storage and the RCW's work to prevent this at this time. We know storage costs will come down over time and we need to be aware of the trends, but long term, these trends will determine if we are providing the full electric utility services to our customers 20 years from now, or if we might only provide peaking services or some combination which could include storage services.



LAZARD



I am providing this information for you to think about prior to our revisiting our strategic plan this fall. Over the course of the next couple of years, I think we will be in a much more stable and secure financial footing and that will allow us to focus further out in our strategic planning horizon. I think we all agree that as a public utility, our job is to provide what our

customers want from us. That will take more strategic planning, market study, rate design and I believe T&D investments in the coming years. The T&D investments I am talking about here are not wire size. I am talking about communications and metering, I believe even more strongly than I did last year that our future will include time of use and demand metering if we are to find benefits and synergies between us and our customers. That would require a significant investment. That only means we need to study the right things and implement the right solutions in the right order and at the right time in order to be effective and continue to support our communities as we have for the past 80 years. I think we are very well positioned to work down this path and I would expect the initial study work is a couple years in duration. At that point, we will know more about markets and we can adapt from there. These are exciting times.