

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

POWER RESOURCES DIVISION

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TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital

FROM: Frank Lawson, Resources & Strategic Planning Manager (AIC);

Megan Capper, Senior Energy Resource Analyst

DATE: November 4, 2014

SUBJECT: Northwest Regional Power and Transmission Policy Update

OBJECTIVE: Information Only

ISSUE

Management provides the Board an update on regional policy, legislative activites, and market affairs three times a year to provide context for the business environment EWEB operates within as a way to aid the Board in its decision making. This update series rotates through the three topics each year so as to cover one in detail each time. Earlier this year, the Board was briefed on the status of the Northwest power markets and provided with a legislative update on matters pending in Salem and Washington DC. This edition will focus on current issues that primarily involve BPA and FERC.

BACKGROUND

EWEB engages in regional policy work with other public, investor-owned utilities, and trade associations in the Pacific Northwest as a way to extend our influence. While we are the largest public utility in Oregon, we are not large compared to others that impact our industry and it would be imprudent and expensive to stand alone in addressing our interests with Legislative and Regulatory affairs. Strategically, our regional policy work helps us identify external regulatory risks in time to respond to them and, where possible, helps shape the outcome of the discussion to result in new laws, regulations and policies impacting our industry and our business. Additionally, EWEB needs to be prepared for a dynamic and ever-changing future focused on balancing the volatility of both our supply and demand. Our regional policy work centers around the supply side and providing for a stable, predictable and resilient future resource supply.

DISCUSSION

The following items reflect the current status of key topics that EWEB has been actively engaged in with counterparties across the region. Each of them has either direct or indirect financial implications to EWEB.

BPA's General Financial Health

BPA will be facing many challenges in the near future including aging power and transmission infrastructures, advanced technology, human capital resources, and increasing reliability issues. For this reason, earlier in the year BPA solicited customer feedback on its capital investment and debt optimization strategies. This was an opportunity for customers to review and comment on BPA's long-term capital investment forecasts, draft asset management strategies, and methodology for prioritizing capital investments.

EWEB participated in this process and strongly encouraged BPA to collaborate with its customers to develop a long-term strategy that offers sustainable solutions as opposed to short-term cost shifting solutions as we have seen in the past. We understand the balance BPA faces from the pressure to keep rates low while grappling with aging infrastructure and keeping up with technology to stay competitive. Although EWEB is concerned about BPA's increasing costs potentially becoming uncompetitive with market rates, we also see value in a long-term strategy of demonstrated need that goes beyond short-term cost containment.

Transmission Accessibility

EWEB uses BPA Network Transmission (NT) to serve our load, and purchases Point-to-Point Transmission (PTP) for our secondary off-system sales. One of our regional priorities is to work with BPA on its internal processes, modeling assumptions, and business practices to increase our access to transmission to prepare ourselves for a more volatile power supply and load requirements. EWEB is reliant on the availability of BPA's transmission to bring market purchases and other resources to our load. We have also been asking BPA for a mechanism that provides for the planning and construction of new transmission facilities to serve any future load. Our efforts were recently rewarded when BPA began an initiative to holistically evaluate and revise their NT and PTP transmission product characteristics. This process is starting with a customer needs assessment. We will be working with them over the next year on this effort.

BPA Fiscal Years 2015-2017 Rate Case ("BP-16")

BPA's process to determine cost-based rates in BP-16 has begun. A major driver of this process is the Integrated Program Review (IPR) where the revenue requirement and spending levels for Power and Transmission Services is developed and feeds into BPA's Initial Rate Proposal. EWEB continues to encourage BPA to make transparent decisions around trade-offs between infrastructure and re-investment. For example, at EWEB's encouragement, BPA's Initial Rate Proposal will maintain their existing cost allocations between transmission customers which is not only financially beneficial to EWEB but also maintains cost predictability until rational cost shifts are understood.

Based on EWEB and other stakeholder feedback of BPA's proposed program spending, costs are projected to result in an overall rate increase to all BPA customers of slightly less than 7% for Power and 5.5% for Transmission for the two-year period. These projections are consistent with assumptions in our Financial Plan. The rate case process will commence next month with BPA's published Initial Rate Proposal and will end next July with its final Record of Decision (ROD). FERC is expected to approve the ROD prior to the new rates being implemented next October.

BPA's Ancillary Services Agreement

Ancillary services insure the reliability of the transmission system, and include dispatchable balancing resources (reserves), voltage/frequency controls, and other technical services. After a year of interactive workshops, BPA and its customers have agreed on the Ancillary Services Rates for the "BP-16" period. These rates and services are important to EWEB for several reasons. First, EWEB's preference power costs (Tier 1) are offset by the revenues BPA Power Services receives for these services. Additionally, the level of balancing reserves that BPA holds for third parties affects the output of the Federal Columbia River Power System (FCRPS) and our rights to power under BPA's Slice Product. Finally, customers with resources within BPA balancing authority, like EWEB, are subject to the ACS requirements.

From a rate and financial perspective, staff believes the agreement contains value to EWEB as a BPA power customer and a wind owner subject to these rates. We also believe the final agreement is as good or better than we would have received in BPA's Initial Proposal, and it is more reliable than the result of litigating the issues before BPA and potentially before FERC.

Northwest Power Pool Security Constrained Economic Dispatch (NWPP SCED)

The NWPP SCED project attempts to improve the region's ability to integrate wind, increase transmission utilization, improve regional generation dispatch, and ultimately reduce the amount of within-the-hour generation held in reserve for unanticipated events such as loss of generation. California has a similar system in place, and PacifiCorp will participate in the California market beginning November 1st. NV Energy (formerly Nevada Power) will begin to participate in October of 2015.

The fundamental difference between the current system operation and the proposed system operation is the manner in which generation units are dispatched within the hour. Currently each Balancing Area dispatches units to meet its own load requirements. The SCED provides an automated centralized system to dispatch the lowest cost resources on a region-wide basis, based upon the generator's cost as provided by each participating utility. The SCED relies on actual transmission loadings as opposed to scheduled transmission loadings which will increase reliability and increase transmission utilization. The underlying premise is that the system can be operated more efficiently through some degree of automated market centralization rather than relying solely on individual bilateral transactions between parties.

EWEB has stayed involved to better understand the characteristics and effects of this potential new market. In mid-2015 each participating Balancing Authority must determine if there is enough benefit to fund the development of the SCED which is currently estimated at approximately \$30 million dollars. EWEB is working to understand the affects of the SCED since we reside in Bonneville Power's balancing area. Should BPA decide to move forward, it is likely that EWEB would have the opportunity to participate to some degree in the new market and would likely face revised charges, processes, and policies from BPA resulting from their participation in the SCED.

Because EWEB will be subject to BPA rules rather than the rules of the NWPP SCED, we do not currently anticipate participating directly in the funding of the new NWPP SCED, should the region elect to move in that direction. However, we will continue to actively participate in the process design to the extent possible, and work closely with Bonneville and other affected customer groups.

Federal "Clean Power Plan" and 111(d) of the Clean Air Act

On June 2, 2014, the US Environmental Protection Agency (EPA) issued a proposed rule to reduce carbon dioxide emissions from the existing electric power sector. The rule utilizes section 111(d) of the existing Clean Air Act to authorize EPA to set annual interim carbon dioxide intensity targets for individual states. The average effect is an estimated 30 percent nationwide reduction in carbon dioxide emissions by 2030 for the existing electric power sector. The targets vary state by state and the baseline for the targets is 2012. Compliance is to begin in 2020.

While EPA has set the targets, states will be ultimately tasked with creating compliance plans to meet the targets. EPA's targets are based on four "building blocks" for each state: 1) increased coal unit efficiency; 2) offsetting coal generation with natural gas generation; 3) new renewable energy; and 4) new energy efficiency. States may choose in their plans to adjust or discard any of the building blocks in order to select the most cost effective options for a particular state plan, as long as the state target is met and approved by EPA. States may also opt to convert their intensity targets (lbs per MHh) to mass-based compliance guidelines (such as an overall emissions cap) for ease of program implementation; however the EPA has not yet specified a methodology for how to make this conversion. Further guidance in this regard is expected in the final rule.

EPA's 2012 baseline for Oregon is 717 lbs/megawatt-hour (MWh) and the 2030 target is 372 lbs/MWh, a 48 percent reduction over that time period. This presumes the retirement of the only coal plant included in Oregon's baseline, the Boardman Coal Plant in Eastern Oregon. The coal retirement will equate to roughly half of Oregon's targeted reductions. Without any coal plant efficiency potential, Oregon will need to meet the remaining reductions with only the three "building blocks".

While EWEB's power resource "portfolio" is extremely "green," or carbon-free, EWEB staff is closely monitoring the proposed regulations for their possible impact on wholesale markets for electricity. Additionally, although EWEB's power resource portfolio is extremely low in carbon dioxide intensity, the implied carbon liability in EPA's targets is assessed seemingly to states, not to the owners/operators of specific generation sources. There is no clarity yet on how the burden of meeting EPA targets will be allocated within a state amongst load serving entities or generators. It will be prudent to closely track possible regulatory risk not only in the EPA's final rule, expected by June of 2015, but also in the development of Oregon's state compliance plan, due by June of 2016. If the Pacific Northwest or WECC is successful at developing a regional approach, a one year extension will be granted for the compliance plan proposal. EWEB staff will be finalizing internal analysis of the proposed rule soon and will submit written comments to EPA in November. Those comments will likely focus on recommending changes to the proposed rule that would: 1) accommodate regional challenges caused by the variability of the NW hydro system; 2) explain the need to properly credit states and load serving entities that were early adopters in acquiring energy efficiency and renewable; 3) allow alternative compliance mechanisms, such as economy wide carbon pricing; and 4) clarify how to convert the rate based target into a mass-based approach.

Columbia River Treaty Update

The Columbia River Treaty (CRT) is an agreement between Canada and the United States guiding the development and operation of select water resources in the basin for flood control and power generation. The Treaty was implemented in 1964 and although the treaty is "evergreen", either country may terminate most treaty provisions on or after September 16, 2024 by providing a ten year advanced notice.

Although the treaty has provided important benefits, today the the Canadian entitlement under the treaty is grossly imbalanced. Studies by the U.S. Army Corps of Engineers (ACOE) and the Bonneville Power Administration (BPA) show an estimated \$250 to \$350 million in clean hydro benefits that Canada receives annually is approximately ten times the benefits that Pacific Northwest interests receive from coordinated system operations. This cost is borne by electric ratepayers in the Northwest receiving power from BPA and the Mid-Columbia PUDs and this inequity has a noticeable rate impact to customers. EWEB's estimated portion is between \$6.5 million and \$9 million per year. On December 13, 2013, a regional recommendation was sent to the U.S. State Department by ACOE and BPA which included appropriate emphasis on need to rebalance the sharing of power benefits. The Interagency Policy Committee (IPC) of the Administration began consideration of this issue earlier this year. A key milestone, the initial date that notification of a 10 year notice to terminate was permissible, passed in September.

EWEB continues to participate in "the Power Group" a consortium of larger regional utilities closely coordinating with the NW Congressional Delegation, especially with the leadership of Congressman Peter DeFazio, to encourage the State Department to act expeditiously on the regional recommendation. Additionally, this group is advocating for the primary focus of the treaty to remain on flood control and power generation. This group acknowledges that while some ecosystem interests can be reasonably addressed in treaty renegotiations, that topic can and is being robustly addressed in other venues including a regional \$700 million budget for species recovery. However, the treaty is the only venue that can address and correct the imbalance in the Canadian entitlement.

TBL ASSESSMENT

A TBL assessment was not conducted to provide this update. However, as management develops and articulates EWEB's position throughout the region, EWEB staff takes into consideration the impacts to us and to the region from all three perspectives - impacts to society, to the environment and to utility economics.

RECOMMENDATION

This information is provided for informational purposes only.

REQUESTED BOARD ACTION

No board action is being requested at this time. If you have questions or comments, please contact Frank Lawson at (541)685-7621 or $\underline{frank.lawson@eweb.org}$, or Megan Capper at (541)685-7363 or $\underline{megan.capper@eweb.org}$.