



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Schlossberg, Helgeson, Brown and Carlson
FROM: Susan Ackerman, Chief Energy Officer, Megan Capper, Portfolio Management Supervisor
DATE: July 7, 2020
SUBJECT: 2020 Annual IRP Update
OBJECTIVE: Information Only

Issue

The intent of this 2020 Integrated Resource Plan (IRP) update is to provide high-level context and an update to the 2011 Action Items.

Background

Integrated Resource Plans are tools to assist utilities in making long-term generation resource decisions under various scenarios. EWEB completed its last IRP in 2011. Since then, staff have updated the Board annually on the resulting action items. With no immediate need for new power resources, EWEB management and Board of Commissioners determined in March 2020 that an electrification study will be the focus of the utility's near-term planning efforts. Once complete, staff will be ready to direct its efforts back to Integrated Resource Planning. We expect to take up the next IRP in 2023.

Discussion

Summary of 2011 Action Items and 2020 Update

In the 2011 IRP, EWEB concluded it had no immediate need for new resources, recommending reliance on conservation programs to meet future customer load growth, augmented by market purchases in the event of a new large load. The only instance in which EWEB was forecast to have a potential supply shortage over the 20-year study period was during an extreme (one-in-ten) weather event.¹ Below, we highlight the most relevant changes from our last update. At this time, EWEB's portfolio remains adequate for meeting our resource adequacy needs for at least the next 5 years.

Update to Action Items since 2011 IRP

Below is a summary of each adopted action item with discussion of adaptations to fit with current industry, market, and affordability trends.

¹ Peak demand due to cold temperatures.

2011 IRP Action Items:	2020 IRP Update:
Meet load growth with conservation.	We have been meeting this action item.
Work with our customers to avoid peaking power plants by using new demand-side management programs.	If the regional generation supply tightens with early coal generation retirements, EWEB will look at both supply-side resources and demand-side opportunities to serve peaking needs.
Continue to cultivate regional partnerships.	We continue to work with regional partners to influence regulatory and policy outcomes that reflect our customers’ interests.
Enact a new large load strategy, if needed.	We have a tariff in place for any new large load.
Annually update key planning assumptions and look for material changes.	The updating of assumptions is ongoing. We are configuring and implementing new planning models and adopting best practices to address recent industry changes.

Meet Forecast Load Growth with Conservation

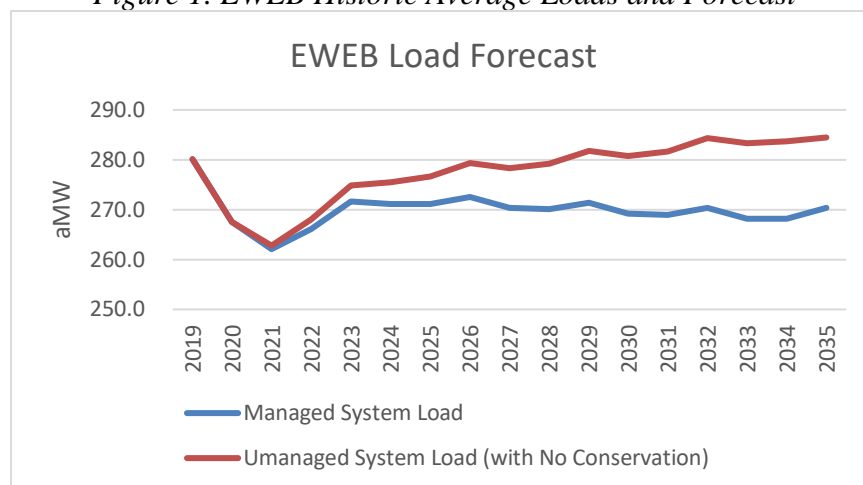
EWEB continues to meet all load growth with conservation.

Annual conservation targets are based on our 5-year average load growth forecasts. This methodology has reduced conservation acquisition targets significantly from the 2011 IRP. In 2017, EWEB began targeting conservation measures that also reduced EWEB’s forecasted peaks in customer consumption. Both energy and peak targets are established as minimums.

In the 2019 update, we reported a 0.3% load growth and a conservation target of 9,500 MWh. For 2020, using the existing 5-year methodology would target a significant increase in conservation for a few years as we project the economy to recover from the impacts of COVID. Given that conservation programs are more efficiently delivered with relatively steady targets, we will maintain our current level of acquisition to ensure the long-term stability of our program. This amount of conservation also meets the minimum level of activity required to be reimbursed for our conservation investment in BPA. In addition, it allows us to meet the “natural demand” for our conservation programs, accommodating customers and contractors who bring projects to us. Finally, this level of conservation is needed to meet other EWEB goals, such as carbon reduction, limited income self-sufficiency, and the goal of helping customers in inefficient rental units.

EWEB is planning for several COVID impact scenarios. The forecast in Figure 1 demonstrates the load impact based on an expected case with moderate recovery in loads by 2022.

Figure 1. EWEB Historic Average Loads and Forecast



Partner with Customers to Avoid New Peaking Power Plants

EWEB has conducted seven demand response (DR) demonstration projects (four residential and three commercial/industrial). These projects demonstrated that control technologies generally work well, but metering, telemetry, and validation methods are required. In pursuing these projects, staff discovered that weak wholesale market price signals, both to justify upfront costs and to incentivize meaningful customer behavior, makes DR a suboptimal solution at this time. However, EWEB will continue regional advocacy for stronger capacity market pricing to maximize the potential of DR products in the future. Until then, staff will continue working with customers and developing high-level DR opportunities, such as the Business Growth and Retention tariff.

At the regional level, EWEB is involved in the Northwest Power Pool's (NWPP) Resource Adequacy Evaluation effort, intended to ensure sufficient capacity at a time of increasing coal retirements and shifts toward renewable energy in the West. EWEB is represented on the Executive Advisory Team and at the Committee level. The initiative is moving from the preliminary program design phase to the detailed program design phase this fall. NWPP is hiring an experienced program consultant to support this phase. The intent is to begin implementation of a nonbinding standard in late 2023 or 2024.

Finally, wholesale markets for both energy and capacity continue to be liquid. When needed, EWEB utilizes the market to meet higher than expected energy and capacity needs caused by extreme weather events. If needed, markets may continue to be a stop gap solution in lieu of a peaking power plant.

Continue to Leverage Regional Partnerships

EWEB staff continues to advocate on behalf of customer owners to preserve and enhance the value of our power portfolio, consistent with our community's values. Building upon decades of successful partnership, EWEB influences BPA decision-making through regular input at the policy and rate case levels. Additionally, EWEB staff engages with decision makers at the state, regional, and federal levels on energy and transmission policy.

Pursue New Large Load Strategy, if Needed

A key discussion in the 2011 IRP was how to serve a new large load, since it is unlikely conservation could ramp up quickly enough to offset such load growth. The IRP recommendation was to rely on existing resources, conservation (where possible), and market purchases to meet the increased demand. We have also established a new tariff for these loads.

Annually Update Key Planning Assumptions

Staff have spent the past year configuring and validating new resource planning models. These tools are kept up to date as new information and assumptions become available, reflecting the best available data to inform resource decisions as they arise.

2020 IRP Update – Next Steps

Management is providing this annual update as part of its commitment to the 2011 IRP. Staff will continue to exercise the flexibility inherent in the 2011 IRP to meeting its objectives, including supporting EWEB's affordability goals. This includes monitoring, engagement, and a comprehensive review of all action items and drivers discussed in this report.

Requested Board Action

This update is for informational purposes only.