



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Schlossberg, Brown, Carlson, Barofsky, and McRae
FROM: Susan Ackerman, Chief Energy Officer, Megan Capper, Energy Resources Manager
DATE: June 1, 2021
SUBJECT: 2021 Annual Integrated Resource Plan (IRP) Update
OBJECTIVE: Information Only

Issue

The intent of this 2021 Integrated Resource Plan (IRP) update is to provide high-level context and an update to the 2011 IRP Action Items.

Background

Integrated Resource Plans are tools to assist utilities in making long-term generation resource decisions under various future scenarios. EWEB completed its last IRP in 2011. Since then, staff have updated the Board annually on the plan's action items. With no immediate need for new power resources, EWEB management and Board of Commissioners determined in March 2020 that an electrification impact study will be the near-term focus of the utility's planning efforts. Since then, staff have completed Phase 1 of the Electrification Study and will present preliminary results of Phase 2 in August. Once complete, staff will be ready to direct its efforts back to Integrated Resource Planning.

Discussion

Summary of 2011 Action Items and 2021 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. Based on the 2011 IRP framework, EWEB's portfolio remains adequate to meet our needs and continues to utilize the market to manage financial risk.

The wholesale energy market continues to be liquid, though prices for summer of 2021 have increased due to a below average water year, anticipated warm weather, and continued coal resource retirements in the region. EWEB is engaged in the Northwest Power Pool's (NWPP) Resource Adequacy Program development, intended to ensure sufficient capacity is available to serve regional load in the face of increasing coal retirements and shifts toward renewable energy

¹ Peak demand due to cold temperatures.

in the West. Frank Lawson serves on a small executive advisory team and EWEB staff are also represented on the Steering Committee and at the Committee level. The RA program moved to the detailed program design phase this past fall and is currently in the process of developing a Governance recommendation for program participants. By early 2022 the program will be non-binding with a plan to implement the binding program by 2024.

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.

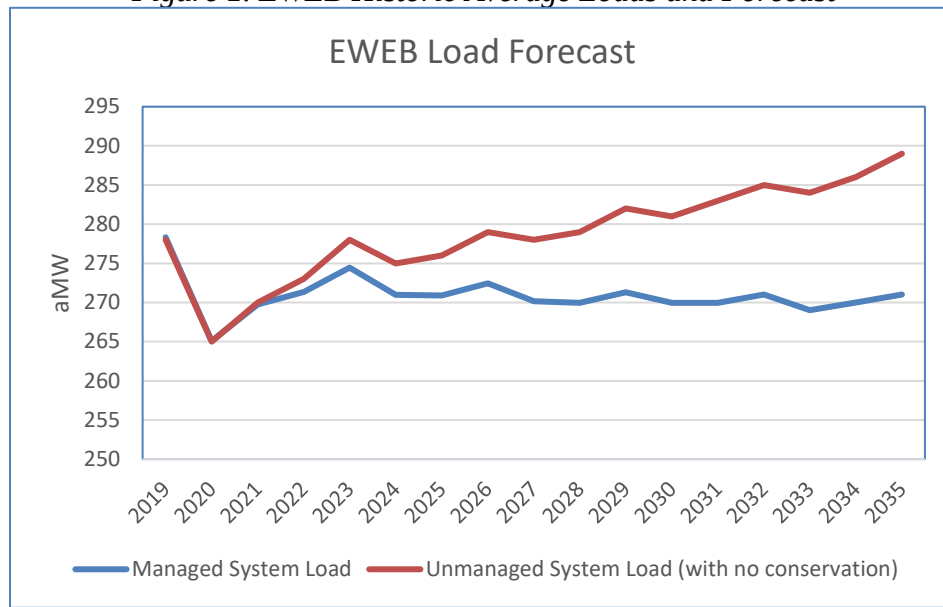
2011 IRP Action Items:	2021 IRP Update:
Meet load growth with conservation.	We have been meeting this action item.
Work with our customers to avoid peaking power plants by using new demand-side management programs.	If the regional generation supply continues to tighten, EWEB will look at both supply-side 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 customer interests.
Enact 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. Since 2011, EWEB has experienced flat or declining loads. As a result, updates to the load forecast have reduced forecasted conservation targets significantly since the 2011 IRP. EWEB continues to fund conservation measures which meet the level of activity required to be reimbursed for our conservation investment in BPA. In addition, EWEB targets conservation measures that help reduce EWEB's peak load.

Economic impacts of COVID-19 contributed to a decrease in load of approximately 5% between 2019 and 2020. Other than the pandemic, some of the decline can be attributed to a large industrial customer closing permanently in early 2020. A return to average load (270 aMW) is forecasted within the next 12-18 months, with conservation maintaining minimal load growth throughout the current planning horizon. Both energy and peak conservation targets in the load forecast are established as minimums.

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. After the concluding these DR demonstration projects, staff concluded that weak wholesale market price signals, both to justify upfront costs and to incentivize meaningful customer behavior, made DR a suboptimal solution at that time. However, as we begin to see evolutions in regulation, market dynamics, and technology, there may be opportunities to revisit this topic in a future IRP. As needed, markets 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. That recommendation will continue to work for the utility.

Annually Update Key Planning Assumptions

Staff have spent the past year working on the Electrification Study to provide an in-depth analysis of potential electrification in EWEB's service territory. In support of this work, new end-use load modeling tools were developed which can be used in future load forecasting efforts. 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.

2021 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. After completion of the Phase 2 Electrification Study in 2021, management anticipates further electricity supply planning work related to enhanced demand forecasting and beginning work on an IRP.

Requested Board Action

This update is for informational purposes only.



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Schlossberg, Brown, Carlson, Barofsky and McRae
FROM: Jason Heuser, Public Policy and Government Affairs Program Manager
DATE: May 21, 2021
SUBJECT: 2021 State Legislative Session Update
OBJECTIVE: Information Only

Issue

The 2021 State Legislative Session convened on January 21st. This memo is to apprise the Board of the status in the legislative process of issues key to EWEB's adopted 2021 legislative agenda and legislative principles. The legislature is in the "home stretch" of the legislative session, dealing now with a small number of unresolved policy matters and negotiations on the biennial state budget and the allocation of funding assigned to Oregon through the federal American Rescue Plan Act (ARPA) approved earlier this year.

Background

Prior to the start of each legislative session, the Board adopts general policy directives for advocacy at the Capitol, which guide the work of EWEB's lobbying activities. When political considerations test the applicability of those directives, the General Manager makes a determination as to whether a fundamental shift in direction is required. The Board may be asked to reaffirm its policy or direct staff to make necessary adjustments.

Discussion

The following is a summary of the status of key legislation of interest to EWEB:

HB 2021 (previously HB 2995) – 100 Percent Clean Energy Standard – Recommendation: MONITOR

Although a tentative agreement on key elements of clean energy legislation appeared to have been reached earlier this month between stakeholders, HB 2021 had been at a standstill until being approved on a 5-2 vote out of the House Revenue Committee on May 20th and referred to the Joint Ways and Means Committee. It would appear the legislation has regained momentum and has a credible chance of being passed into law.

Although a Clean Energy Standard has not been EWEB's preferred greenhouse gas emissions reduction policy, it is the assessment of EWEB staff that the bill has been greatly improved from the initial bill as drafted. Key elements are:

Clean Electricity Targets – requires Oregon's largest investor-owned utilities to reduce greenhouse gas emissions by 100 percent below baseline levels by 2040. Interim goals are 80 percent emissions reduction by 2030 and 90 percent reduction by 2035.

Consumer Protection and Reliability Offramps – utilities would be allowed temporary exemptions from emission reduction targets if compliance with the policy violates a cost cap or undermines the reliability of the electric grid.

Local Government Energy Supply – a process would be established for local governments to work with an investor-owned utility to achieve their local climate action plan's electric sector goals.

New Gas Generation Siting Ban – the Oregon Energy Facilities Siting Council would be prohibited from allowing new or expanded natural gas power plants.

HB 3127 – Use of American Rescue Act Plan Funds for Fire-Affected Watersheds: SUPPORT

The American Rescue Act Plan (ARPA) approved by Congress has sent significant funding to the state to allocate at a fair amount of discretion. EWEB has worked with our local state legislative delegation, Lane County, and the House Wildfire Recovery Committee to submit McKenzie River watershed restoration packages for funding consideration. HB 3127, a wildfire recovery study bill, has been repurposed for replacement with a "gut and stuff" amendment that would make it functionally an omnibus wildfire recovery funding authorization bill. Along with crucial elements such as housing and community redevelopment in fire affected areas, a proposed -2 amendment to HB 3127 contains funding to support McKenzie River water quality monitoring, septic system repair/replacement, community wastewater infrastructure at Blue River, and riparian/flood plain restoration work. HB 3127 is scheduled for a work session on Friday May 28th.

SB 333 – Hydrogen Study – Recommendation: SUPPORT

EWEB staff has testified through the legislative session in support of SB 333, a bill that would direct state agencies to study the potential of and benefits to Oregon from Renewable Hydrogen. The bill has been approved by the legislature and was signed into law by Governor Brown on May 19th.

HB 3103 – Municipal Access to Federal Stored Water – Recommendation: SUPPORT

OWRD recently determined they lacked statutory authority to accept and process character (type) of use water right transfer applications after decades of established practice. This issue came about as an unintended consequence of a legislative change in 1995 that changed water "right" to water "use." This recent determination eliminated a crucial administrative process needed for efficient and cost-effective transfers of water from one use to another. This leaves municipal water providers in the Willamette Basin, including EWEB, without a viable path to access federal stored water in the Willamette reservoirs for future needs. HB 3103 clarifies that OWRD has the ability to resume accepting and processing applications to change the use of stored water. HB 3103 will allow municipal water providers to access critical stored water to meet future demands without purchasing a new water right.

EWEB staff has testified in support of HB 3103 throughout session. HB 3103 was approved by the House Water Committee on April 16th and referred to the Joint Ways and Means Committee where it awaits further action.

Recommendation/Requested Board Action

No action is requested at this time. This is a monthly informational update.



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TO: Commissioners Schlossberg, Brown, Carlson, Barofsky and McRae
FROM: Megan Capper, Energy Resources Manager; Catherine Gray, Sr. Resource Analyst
DATE: May 21, 2021
SUBJECT: Oregon Renewable Portfolio Standard Compliance Report
OBJECTIVE: Annual Oregon RPS Compliance

Issue

In compliance with ORS 469A.170, the Power Planning department is providing the EWEB Board with an annual update as to EWEB's Renewable Portfolio Standard (RPS) compliance.

For the reasons detailed below, EWEB's 2020 Oregon RPS compliance obligation, after exemptions, is zero.

Oregon RPS Compliance Background

In 2007, Oregon enacted Senate Bill 838, the Oregon Renewable Energy Act (Act), which created an RPS that all Oregon electric utilities must follow. The purpose of the RPS is to decrease Oregon utilities' reliance on fossil fuels for electric generation and increase their use of renewable energy sources. In 2016, SB 1547 further increased RPS targets for investor-owned utilities (IOUs) only.

Oregon's RPS establishes standards for electric utilities, requiring that a percentage of their annual retail sales must come from qualifying renewable resources. The exact percentage required and the year the compliance obligation begins differs for large and small electric utilities, and specifically for large IOUs, as shown in Figure 1, below. Therein, the "Utility Size" is determined as a percentage of Oregon's total retail electric sales in the year. EWEB is classified as a "Large Utility" because it provides 3% or more of total state retail electricity sales. PacifiCorp and Portland General Electric are assigned an even larger target based on both size and utility type (IOU).

Figure 1. Annual percentage target of qualifying electricity by year

	Utility Size	2011	2015	2020	2025	2040
Large IOU	3% or more			20%	27%	50%
Large Utilities	3% or more	5%	15%	20%	25%	
Smaller Utilities	From 1.5% to 3%				10%	
Smallest Utilities	Under 1.5%				5%	

The Oregon Public Utilities Commission (PUC) oversees IOU reporting and compliance with the RPS. However, consumer-owned utilities like EWEB are not regulated by the PUC. The statute governing RPS compliance reporting, ORS 469A.170, states: "A consumer-owned utility shall make the report to the members or customers of the utility." EWEB's long term RPS compliance strategy is addressed in

its Integrated Resource Plan (IRP) which is updated every 5 years, or as determined by the EWEB Board of Commissioners.

The Act also defines which types of renewable generation are considered “qualifying electricity.” In general, qualifying renewable resources must have an on-line date of January 1, 1995 or later, with some exceptions.¹

Oregon RPS Compliance Calculation

Figure 2. EWEB 2020 Oregon RPS Compliance Obligation Calculation
in megawatt hours (MWhs) unless noted

Category		MWhs
Retail Sales to Customers	a	2,328,536
RPS Target	b	20%
2020 RPS Obligation BEFORE Exemption	c = a x b	465,707
Generation from Exempt Resources		
BPA Tier 1 net purchases	d	2,277,970
EWEB hydro (owned)	e	243,985
Mid-C hydro (contract)	f	13,249
Total 2020 MWhs from Exempt Resources	g = d + e + f	2,535,204
Percent of Retail Sales from Exempt Resources ²	h = g ÷ a	109%
Percent of Retail Sales Greater than Exempt Resources ³	I = 1 - h	0%
RPS Obligation AFTER Exemption Applied	I x a	0
RECs Required for 2020 RPS Obligation (one REC = one MWh)	I*1	0

Because EWEB’s “Generation from Exempt Resources” exceeds it’s total “Retail Sales to Customers” in 2020, as detailed in the calculation in Figure 2, above, EWEB does not have any RPS compliance obligation in 2020.

Oregon RPS Compliance Rules

Per rules adopted by the Oregon Department of Energy, generation volumes qualifying for RECs are based on values recorded and reported to the Western Renewable Energy Generation Information System (WREGIS). WREGIS is an organizational database that receives monthly generation volumes of renewable generation and serves as the regional system of record to issue, monitor, transfer, and account for Renewable Energy Certificates (REC). One MWh of renewable generation equals one REC. The RECs have identification numbers that indicate the generation project and the month the electricity was generated. The purpose of this system is to ensure that renewable generation and its

¹ See link for a list of conditions under which pre-1995 resources are eligible to produce qualifying electricity,

<https://olis.leg.state.or.us/liz/2016R1/Downloads/MeasureDocument/SB1547/Enrolled>

A later amendment to the RPS allows for pre-1995 woody biomass to qualify, but the RECs will not be eligible for use in compliance until 2026.

² Exempt generation in 2020 exceeds 80% of total retail sales, by 29%, so EWEB can reduce the RPS target by 20% (the amount the exempt generation exceeds 80%).

³ If generation from exempt resources exceeds 100% of retail sales, the number of RECs needed for RPS compliance is reduced to zero.

associated REC are not used to meet the requirements of more than one program.

As detailed above, EWEB's compliance target for 2020 is 20 percent of retail sales, subject to exemptions. Compliance is demonstrated by retiring a quantity of WREGIS RECs equal to the compliance target. Once a REC is retired in WREGIS it is no longer available to be used in any other program. However, if a REC is retired it can be retained, or banked, for future use such as compliance, a voluntary program, or sold to another entity.

Under Oregon's RPS rules, if exempt generation in 2020 exceeds 80 percent of total retail sales, then EWEB can reduce the 20 percent compliance target by the amount the exempt generation exceeds 80 percent. If exempt generation exceeds 100 percent of total retail sales, then EWEB can reduce its compliance target to zero.

Because EWEB's hydroelectric resources, including BPA Tier 1, are considered "exempt generation", these resources significantly reduce EWEB's current and projected compliance targets. These exemptions release EWEB from reducing purchases of BPA Tier 1 energy and from replacing energy produced by non-fossil resources.

As a result, and in accordance with Oregon's RPS rules, EWEB's 2020 RPS compliance obligation results in the retirement of zero RECs.

Greenpower Program

In accordance with the Oregon Renewable Energy Act (Act) EWEB offers voluntary renewable purchases to EWEB customers under the Greenpower program.

The Greenpower program allows customers the choice to voluntarily pay an additional one cent per kWh which contributes to the development and use of renewable energy. Just as RECs are retired to satisfy any obligations under the mandatory RPS, RECs are also retired to match the volume of sales under EWEB's voluntary retail Greenpower program, with one REC retired for every MWh of program sales.

In 2020, sales to EWEB customers under the Greenpower program totaled 18,578 MWhs. EWEB has retired an equivalent quantity of RECs from its portfolio. For additional information on EWEB's Greenpower program please see: [Greenpower | EWEB](#).

Conclusion

Again, EWEB's RPS compliance obligation for 2020, after exemptions, is zero RECs, and resulted in the retirement of zero RECs. Surplus RECs will be banked for future use or sold.

This report will be published on EWEB's website by June 1, 2021.