

RESOLUTION NO. 2681

Date August 27, 2024

A RESOLUTION OF THE COMMISSION OF PUBLIC UTILITY DISTRICT NO. 1 OF BENTON COUNTY REGARDING APPROVING THE 2024 RESOURCE PLAN

WHEREAS, Revised Code of Washington (RCW) 19.280 requires utilities to prepare resource plans that explain the mix of generation and demand-side resources they plan to use to meet their customers' electricity needs in both the short term and the long term; AND

WHEREAS, the requirements of RCW 19.280.030 are dependent on which resource plan type is applicable to the utility:

- 1) *Integrated Resource Plan* – Required by utilities with more than 25,000 customers that are not Full Requirements Customers.
- 2) *Resource Plan* – Required by all other utilities, unless voluntarily electing to develop a full Integrated Resource Plan; AND

WHEREAS, prior to October 1, 2023, the District developed an Integrated Resource Plan at least every four years, or developed a progress report at least every two years; with the District's previous plan being its 2022 Integrated Resource Plan Progress Report, approved by Resolution No. 2608 on August 9, 2022; AND

WHEREAS, effective October 1, 2023, the District became a Full Requirements Customer, as defined by RCW 19.280.020; AND

WHEREAS, the District elects to develop a Resource Plan, which must be produced, at a minimum, every two years; AND

WHEREAS, the District has developed a 2024 Resource Plan that complies with the requirements specified in RCW 19.280.030(5); AND

WHEREAS, RCW 19.280.050 requires the governing body of a consumer-owned utility to encourage participation of its consumers in development of the Resource Plan and to approve the Resource Plan after it has provided public notice and hearing; AND


WHEREAS, at the June 25, 2024, Commission meeting, the District provided an introductory presentation of the 2024 Resource Plan; AND

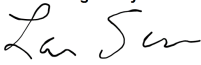
WHEREAS, at the August 13, 2024, Commission meeting, the District reviewed a draft of the 2024 Resource Plan and the Commission approved a motion setting a public hearing for August 27, 2024, at 9:00 a.m.; AND

WHEREAS, a public hearing was held on August 27, 2024, to review the final draft and to allow additional public comment prior to the commission considering final approval and adoption; AND

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of Public Utility District No. 1 of Benton County, that the 2024 Resource Plan be approved, effective August 27, 2024; AND

APPROVED AND ADOPTED By the Commission of Public Utility District No. 1 of Benton County at an open meeting, with notice of such meeting given as required by law, this 27th day of August, 2024.

DocuSigned by:

E167F4090A3B479...
Barry Bush, President

ATTEST:
DocuSigned by:

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Lori Kays-Sanders, Secretary



**2024 Resource Plan
for 2025-2034**

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1. Executive Summary

The District prepares a Resource Plan every two years in accordance with Revised Code of Washington 19.280, as discussed within **Section 2 – Resource Plan Overview**. This Resource Plan incorporates the District’s most recent load forecast and Conservation Potential Assessment, as discussed within **Section 3 - Load**. The Resource Plan considers the District’s existing resources, listed within **Section 4 – Existing Resources**, and then describes, within **Section 5 – Resource Strategy**, the District’s 10-year strategy for meeting its future power supply needs.

The District’s 10-year resource plan is enumerated below and visualized in **Figure 1-1**.

1. Continue pursuing cost-effective, reliable, and feasible conservation, consistent with applicable requirements of the Energy Independence Act and the Clean Energy Transformation Act.
2. Continue with Packwood hydroelectric as a dedicated resource, per the BPA contractual commitment.
3. Through September 30, 2028—the remainder of the District’s BPA Regional Dialogue contract—the District is contractually committed to BPA’s load following contract, including serving its above High Water Mark load with BPA’s Tier 2 power.
4. For October 1, 2028, through 2034—the first 6 years of BPA’s 16-year Post-2028 contract—the District’s strategy assumes, for this Resource Plan and subject to change, continuing with BPA’s load following contract and with serving all above High Water Mark load with BPA’s long-term Tier 2 power.

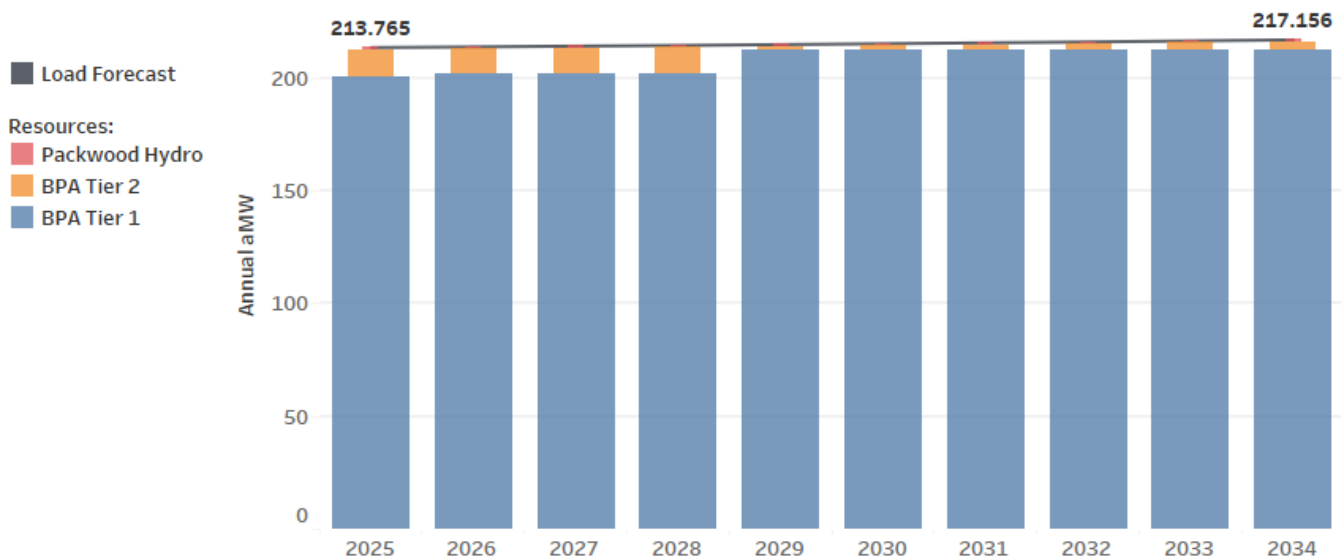


Figure 1-1 – 10-Year Resource Plan

This Resource Plan also describes the District’s strategy for complying with Washington State energy policies, as discussed in the following sections:

- **Section 6 – Energy Independence Act** describes District’s commitment to energy conservation as a resource and the District’s strategy to purchase unbundled Renewable Energy Credits (RECs) to comply with the 15% Renewable Portfolio Standard (RPS) through 2029.
- **Section 7 – Clean Energy Transformation Act** describes the District’s current ~96% clean energy position and the plan to meet the 2030 GHG neutral standard by using unbundled RECs to cover its 4% need, while also satisfying its RPS requirement.

2. Resource Plan Overview

Washington State Law

The District prepares a resource plan every two years in accordance with Revised Code of Washington (RCW) 19.280. As described within RCW 19.280.010, *“It is the intent of the legislature to encourage the development of new safe, clean, and reliable energy resources to meet demand in Washington for affordable and reliable electricity. To achieve this end, the legislature finds it essential that electric utilities in Washington develop comprehensive resource plans that explain the mix of generation and demand-side resources they plan to use to meet their customers' electricity needs in both the short term and the long term.”*

Resource Plan Types

There are two types of resource plans defined by RCW 19.280.020, as described below:

1. **Integrated Resource Plan** means an analysis describing the mix of generating resources, conservation, methods, technologies, and resources to integrate renewable resources and, where applicable, address overgeneration events, and efficiency resources that will meet current and projected needs at the lowest reasonable cost to the utility and its ratepayers and that complies with the requirements specified in RCW 19.280.030(1).
 - Required by utilities with more than 25,000 customers that are not Full Requirements Customers.
 - An updated Integrated Resource Plan must be developed at least every four years and progress reports reflecting changing conditions and the progress of the Integrated Resource Plan must be produced, at a minimum, every two years.
2. **Resource Plan** means an assessment that estimates electricity loads and resources over a defined period of time and complies with the requirements specified in RCW 19.280.030(5).
 - Required by all other utilities, unless voluntarily electing to develop a full Integrated Resource Plan.
 - Resource Plans must be updated, at a minimum, on intervals of two years.

Effective October 1, 2023, the District became a Full Requirements Customer, as defined by RCW 19.280.020—*meaning an electric utility that relies on BPA for all power needed to supply its total load requirement other than that served by non-dispatchable generating resources totaling no more than six megawatts or renewable resources.*

As a Full Requirements Customer, the District has prepared a Resource Plan for 2024, rather than the Integrated Resource Plans that have been prepared in the past. The District’s previous resource plan was its 2022 Integrated Resource Plan Progress Report, which was a progress report on the District’s 2020 Integrated Resource Plan. Copies of recent resource plans and other supporting documents are available on the District’s “Resource Planning” website.¹

Requirements

Resource Plans must comply with the requirements specified in RCW 19.280.030(5)—per the Resource Plan definition. Refer to **Appendix A – Resource Plan Requirements** for the list of applicable requirements and the sections of this Resource Plan that address each requirement.

¹ <https://www.bentonpud.org/About/Planning-Performance/Resource-Planning>

3. Load

Load Forecast

The District’s wholesale load forecast,² reported as annual average demand (aMW) and annual peak demand (MW), is shown below in **Figure 3-1**. The load forecast’s 10-year annual average demand growth from 2024 to 2034 is only 0.16%. This is the same forecast as described by the 2024 Load Forecast approved in May 2024.³

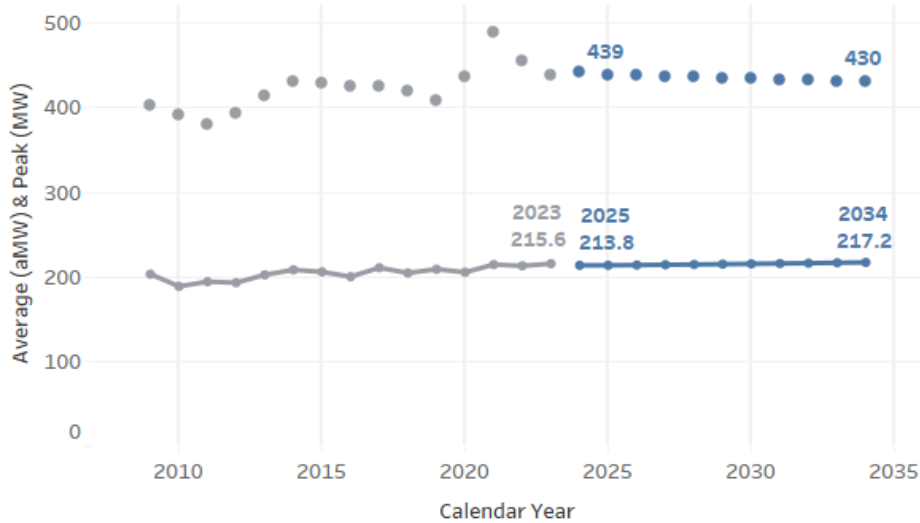


Figure 3-1 – Forecast of annual wholesale load

Conservation

The load forecast includes 11.2 aMW of cumulative conservation over the forecast period, as shown below in **Figure 3-2**, in context of retail load.² The conservation is comprised of 2.0 aMW of residential and 9.2 aMW of non-residential conservation, consistent with the District’s most recent Conservation Potential Assessment (CPA), as referenced within the **Energy Conservation** subsection of **Section 6 - Energy Independence Act**.

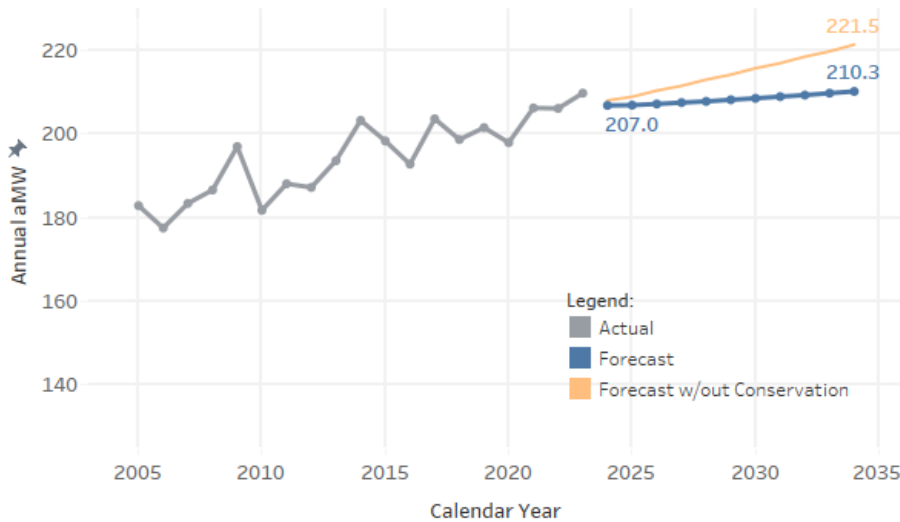


Figure 3-2 – Forecast of annual retail load

² “Wholesale” load refers to the total power supply need, including District system losses. “Retail” load excludes losses.

³ [2024 Load Forecast](#) – Resolution No. 2673, May 14, 2024

Demand Response

In 2021 the District prepared its first ever Demand Response Potential Assessment (DRPA) and intends to prepare a DRPA every two years in conjunction with its CPA. The District completed its second DRPA on January 9, 2024. Back on October 11, 2022, at a Commission strategic planning session, District staff presented the status of demand response program development and recommended that the District evaluate new drivers of demand response after its conversion to BPA’s load following contract and to wait for BPA’s Post-2028 rate design before developing its demand response strategy.⁴ As also recommended, the District has implemented rate-based demand charges, including time-of-day demand for residential customers, and voltage optimization for energy efficiency.

Electrification

Per RCW 19.280.030(5)(e), Resource Plans need to account for i) modeled load forecast scenarios of zero emissions vehicles, ii) relevant information in electrification of transportation plans, and iii) assumed use case forecasts and the associated energy impacts.

Furthermore, the RCW encourages using the forecasts generated by the Department of Transportation’s mapping and forecasting tool created in RCW 47.01.520, however, this tool is not yet available. According to the tool’s project manager as of June 2024, *“We are working on a prototype map application now and intend to engage with the electric utility community soon. Late October is our target for the first release and presume subsequent releases in quick fashion as needed.”*

Load forecast scenarios and use cases related to electric vehicle growth and natural gas to electric conversions were analyzed in the 2022 Load Forecast⁵ and remain representative for consideration by this Resource Plan. The 2022 analysis included low/high growth scenarios for both electric vehicles and natural gas to electric conversions. The resulting cumulative load addition by calendar year 2034 is summarized below in **Table 3-1**.

Table 3-1 – 2022 Load Forecast electrification scenarios

2022 Load Forecast	Cumulative load (aMW) added by Calendar Year 2034	
	Lower Scenario	Higher Scenario
Electric vehicles	1.8	6.8
Natural gas to electric	4.5	8.0
Total	6.3	14.8

The 2024 Load Forecast considered the District’s adopted Electrification of Transportation Plan.⁶ The adopted plan allows the District to offer incentives/rebates, advertise, and promote the adoption of electric vehicles. After adoption, the District began offering a \$250 rebate to customers who purchase or lease a new electric vehicle. Since adoption, the District has provided a total of 56 rebates through April 2024.

This Resource Plan accounts for electrification by acknowledging that under all load growth scenarios, the District’s resource strategy remains the same—to serve the incremental load growth using BPA’s load following contract combined with BPA’s long-term Tier 2 power, as described in **Section 5 – Resource Strategy**.

⁴ Commission Strategic Session: Demand Response Presentation - [October 11, 2022 \(pdf pages 54-97\)](#)

⁵ [2022 Load Forecast](#) - Resolution No. 2600, April 26, 2022

⁶ Electrification of Transportation Plan – Resolution No. 2521, [November 12, 2019 \(pdf pages 165-184\)](#)

4. Existing Resources

Non-BPA Resources

The District has long term power contracts with three non-BPA generating resources as listed below in **Table 4-1**. Effective October 1, 2023, only Packwood is dedicated to serving load and the wind power is being re-sold, however, the wind Renewable Energy Credits are being retained by the District.

Table 4-1 – Existing non-BPA Resource Contracts

Resource	Contract #	Capacity (MW)	Annual Energy (aMW)	Contract End Date
Packwood Hydroelectric	11-51-14	3.7	0.919 ⁷	Ongoing
Nine Canyon Wind - Phase I	01-51-13	3	1	7/1/2030
Nine Canyon Wind - Phase III	01-51-13	6	2	7/1/2030
White Creek Wind - LL&P	07-45-04	3	1	1/1/2028
White Creek Wind - WCWI	08-51-19	6	2	11/21/2027

BPA Power Sales Agreement

Most of the District’s power supply continues to be supplied through a long-term Regional Dialogue Power Sales Agreement with BPA (Contract #11-51-01). Effective October 1, 2023, with BPA’s consent, the District switched its block/slice agreement to a load following product for the remainder of its contract term (through September 30, 2028). Additional details regarding the switch to load following are discussed below in the **Resource Adequacy** subsection of **Section 5 – Resource Strategy**.

Under all BPA contract types, the amount of power that BPA’s preference customers may purchase under BPA’s lowest cost rate is limited to an amount equal to the generating output of the current Federal System, with some limited amounts of augmentation (“Tier 1” power). Any incremental purchases by preference customers from BPA above this base amount of power is sold at a higher rate reflecting the incremental cost to BPA of obtaining additional power (“Tier 2” power). BPA has established for each preference customer a contractually defined level of access to power available at BPA’s lowest cost preference rate (“Tier 1” rates). BPA refers to a customer’s Tier 1 amount as their Contract High-Water Mark or Rate Period High-Water Mark. This Tier 1 amount is based on the customer’s net requirement load for the 12-month period ended September 30, 2010, with adjustments possible each rate period, typically due to Federal System changes or from utility annexation (e.g. City of Richland annexation of District load).

Beginning October 1, 2023, the District has elected to serve its net requirement above its Tier 1 allocation (a.k.a. Above High-Water Mark load) with Tier 2 through the remainder of the contract. For consideration by this Resource Plan, the District’s Tier 1 allocation is:

- 200.923 aMW, for fiscal years 2024-2025, as finalized August 30, 2022.
- 202.081 aMW, “Draft Final” for fiscal years 2026-2028, an increase 1.158 aMW, which reflects BPA’s agreement in principle with Canada on a modernized Columbia River Treaty. Number is subject to change, as BPA will not be publishing final values until late September 2024.

⁷ Packwood is 0.919 aMW under critical water (per Exhibit A of BPA contract). Assume 1.54 aMW under median water.

BPA Transmission

BPA requires that transmission services be purchased separately. BPA's Open Access Transmission Tariff (OATT) delineates the terms and conditions of providing and taking transmission service. The District has executed BPA's Network Integration Transmission (NT) Service Agreement (Contract #22-51-02) for long-term firm transmission service from October 1, 2023, through September 30, 2031. The District previously had a Point-to-Point (PTP) Transmission Agreement that began in May 1997, but it was converted to NT service effective October 1, 2023, in conjunction with the switch to load following.⁸

⁸ The District retains a 1 MW PTP contract (#02-51-22) for transmission service that was not eligible for conversion to NT.

5. Resource Strategy

Resource Adequacy

Resource adequacy is the term used to describe an electricity system’s ability to meet demand under a broad range of conditions including times of peak energy demand during the hottest and coldest days in any given year. The District remains concerned about deteriorating regional resource adequacy, resulting in part from Washington and other western state energy policies. This concern was well described by a Commission resolution passed in November 2019, “*In Support of Actions to Ensure Electric Sector Resource Adequacy in the Pacific Northwest*”.⁹ Similar concerns were emphasized in the District’s November 2021 letter to BPA, requesting the option to convert from slice/block to load following. **As the District considers its future resource choices, resource adequacy will continue to be a key driver of the District’s strategy.**

On December 16, 2022, BPA issued its final decision letter to continue participation in the Western Power Pool’s Western Resource Adequacy Program (WRAP) and electing Winter 2027-2028 as its first binding season. As a participant in the WRAP, BPA would take on the role of Load Responsible Entity for all load following customers and would be contractually bound to meet its firm power contractual obligations regardless of any obligations under the WRAP. The WRAP would provide BPA with a last backstop for the capacity to serve its firm power contractual obligations if BPA were to be deficit and could find no other bilateral counterparties.

The District’s October 1, 2023, conversion from slice/block to load following has been successful at cost-effectively ensuring the District has access to dispatchable energy and capacity to responsibly cover its seasonal energy and capacity deficits. Under the load following contract, BPA is obligated to meet the District’s net requirement load. The change has eliminated the District’s direct participation in power markets as a buyer and seller and is expected to reduce power supply price risk and the risk of not having adequate physical generation to meet demand.

The conversion to load following has mitigated the District’s near-term resource adequacy risk, however, it has also transferred additional risk to BPA, which means the District must remain committed to tracking BPA’s resource adequacy and regional issues that may impact BPA. The District’s resource adequacy monitoring includes, but is not limited to, tracking the studies listed below in **Table 5-1**.

Table 5-1 – Regional resource adequacy studies

#	Entity	Study Name	Frequency
1	BPA	Resource Program	Every 2 years
2	Northwest electric utilities	Integrated Resource Plans	Every 2 years
3	Western Electricity Coordinating Council	Western Assessment of Resource Adequacy	Annual
4	Northwest Power and Conservation Council	Pacific Northwest Power Supply Adequacy Assessment	Annual
5	Pacific Northwest Utilities Conference Committee	Northwest Regional Forecast	Annual

⁹ Resolution No. 2523, [November 12, 2019 \(pdf pages 185-189\)](#)

Resource Plan

The District’s 10-year resource plan is enumerated below and visualized in **Figure 5-1**.

1. Continue pursuing cost-effective, reliable, and feasible conservation, consistent with applicable requirements of the Energy Independence Act and the Clean Energy Transformation Act.
2. Continue with Packwood hydroelectric as a dedicated resource, per the BPA contractual commitment.
3. Through September 30, 2028—the remainder of the District’s BPA Regional Dialogue contract—the District is contractually committed to BPA’s load following contract, including serving its above High Water Mark load with BPA’s Tier 2 power.
4. For October 1, 2028, through 2034—the first 6 years of BPA’s 16-year Post-2028 contract—the District’s strategy assumes, for this Resource Plan and subject to change, continuing with BPA’s load following contract and with serving all above High Water Mark load with BPA’s long-term Tier 2 power. Additional details about BPA Post-2028 contract assumptions are provided in the next section.

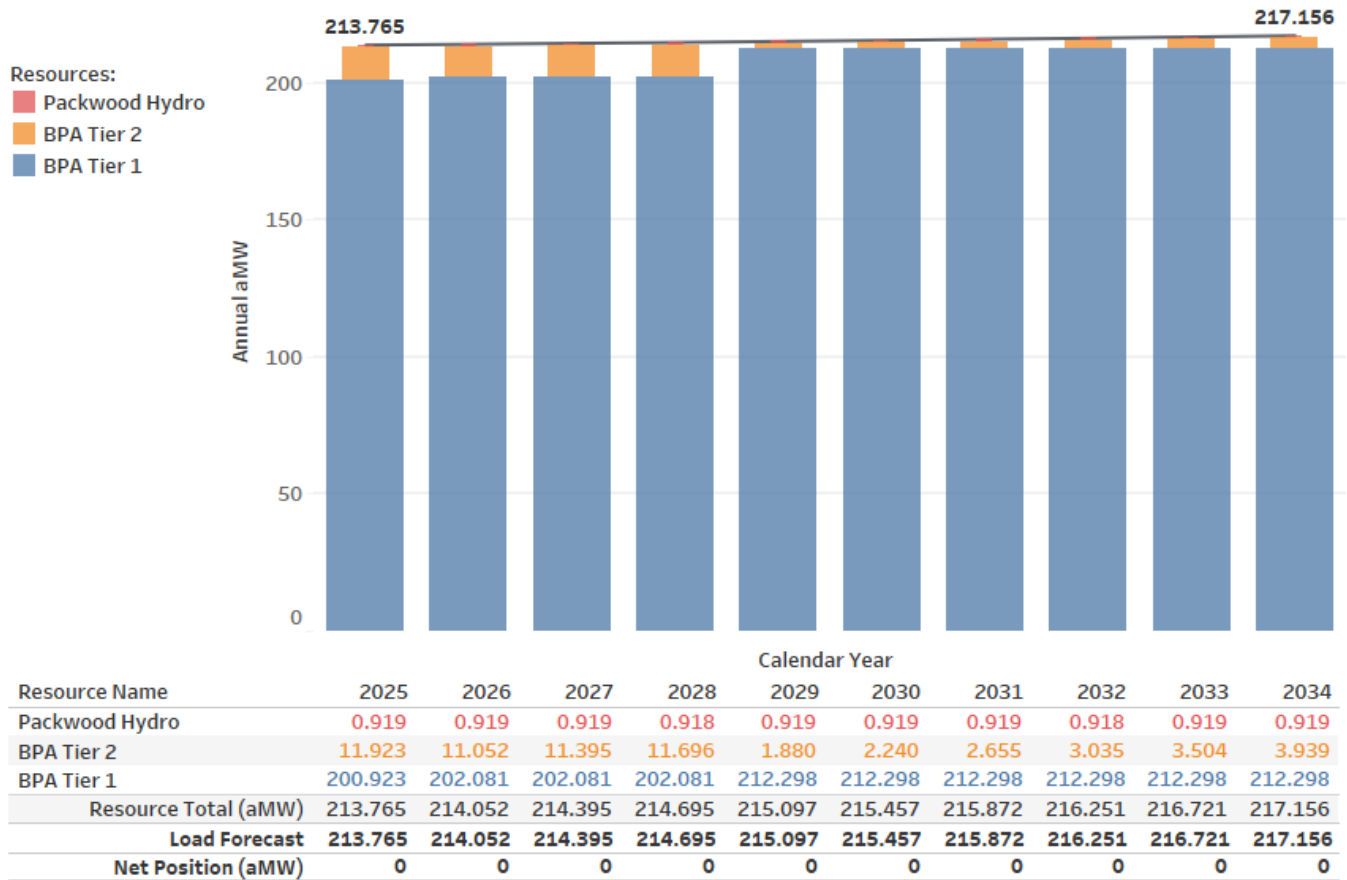


Figure 5-1 – Load and resource net position from 2025 through 2034

BPA Post-2028 Contract

BPA’s Provider of Choice process refers to the development of BPA’s Post-2028 contracts. The current timeline is for customers to execute new contracts by December 2025, committing to 16-years of service from October 1, 2028, through September 30, 2044. BPA expects to release a contract record of decision in September 2025 and all contracts to be executed by December 2025, as shown below in **Figure 5-2**.



Figure 5-2 – BPA Post-2028 Contract Timeline as of 4/9/2024

This Resource Plan makes certain assumptions—enumerated below—about the District’s Post-2028 contract, however, these assumptions are subject to change. The District will separately evaluate its Post-2028 contract options over the next several months, as more BPA contract and rate information becomes available.

1. Customers must elect a product choice of either block, block/slice or load following and then will have a one-time product switch option during the contract. A minimum of three years notice would apply, with the product switch being effective at the start of the next rate period. This Resource Plan assumes load following.
2. BPA has published a preliminary model showing a Contract High Water Mark (CHWM) of 212.298 aMW for the District; however, the model is only representative. BPA expects to publish the preliminary CHWMs in February 2026 and final in May 2026. The District’s CHWM is expected to increase from its Regional Dialogue contract because the model includes a positive proportional share adjustment due to BPA’s system size increasing to a fixed amount of 7,250 aMW and positive adjustments for customer load growth and conservation achievements through 2023, both of which are favorable for the District. The District’s CHWM amount will be fixed for the contract life, unlike the current contract where the amount is subject to change every rate period. This Resource Plan assumes a Post-2028 CHWM of 212.298 aMW.
3. Within 60 days of the final CHWMs, customers must elect an option for serving their above CHWM load. The above CHWM load service options are either electing, 1) BPA’s long-term Tier 2 path, 2) the “flexible” above CHWM path, or 3) a combination of the two paths. The “flexible path” is where the customer is responsible for serving their above CHWM load with a combination of the customer’s non-federal resources, BPA’s short-term Tier 2, or BPA’s Tier 2 Vintage rate. For customers that initially elect any amount of BPA long-term Tier 2, BPA is proposing a one-time option to change (cap, or reduce) their long-term Tier 2 election amount, subject to a change fee and change charge. A minimum of three years notice would apply with the change to be effective at the start of the next rate period. This Resource Plan assumes the long-term Tier 2 path.

6. Energy Independence Act

Energy Conservation

Washington’s Energy Independence Act (EIA or I-937), RCW 19.285, requires the District to pursue all cost-effective, reliable, and feasible conservation resources and to meet conservation targets set using a utility-specific conservation potential assessment methodology. The District’s most recent CPA¹⁰ was an input to the 2024 Load Forecast.

Renewable Portfolio Standard

The District is required to comply with EIA’s 15% Renewable Portfolio Standard (RPS) requirement.¹¹ Historically, the District has annually retired Renewable Energy Credits (RECs) associated with its long-term power supply contracts for the White Creek and Nine Canyon wind projects, BPA wind and incremental hydro allocations, other qualifying REC contracts, and additional quantities from REC market purchases when needed. The District plans to continue using REC purchases to meet its 15% RPS requirement. The District’s existing REC contracts and their forecasted REC amounts are shown below in **Table 6-1**.

Table 6-1 – REC Contracts (MWh) by Vintage Year

REC Contract	Vintage Year										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
3 Degrees	60,000	60,000	60,000	60,000	60,000						
BPA Incremental Hydro	22,215	22,154	22,154	22,154	22,215	22,168	22,168	22,168	22,168	22,168	22,168
BPA Wind	7,867	7,867	7,867	4,006							
Emerald City	66,000	66,000									
Idaho Wind	35,003										
Nine Canyon	23,616	23,616	23,616	23,616	23,616	23,616	11,808				
RPS Associates	40,000	40,000	40,000	40,000	40,000	40,000					
White Creek	24,047	24,047	24,047	22,051							
Grand Total	278,748	243,684	177,684	171,827	145,831	85,784	33,976	22,168	22,168	22,168	22,168

While the table above shows the REC contracts and the total amount of RECs forecasted by their vintage year, it does not represent the actual number of RECs that are available for retirement in any given compliance year. This is because EIA allows RECs that are retired for a given compliance year to originate from vintage years that are the same year as the compliance year, or the previous year, or the next year.

The District’s plan for acquiring and retiring, across multiple years, the unbundled RECs necessary to meet is 15% RPS requirement is further complicated—for the better—by the Clean Energy Transformation Act (CETA), which will result in a step-change reduction in the District’s RPS target (from 15% to about 4%), starting January 1, 2030, whereas the District is able to satisfy its EIA RPS requirement by complying with the CETA GHG neutral standard, as further described below in **Section 7 - Clean Energy Transformation Act**.

¹⁰ [Amended Conservation Potential Assessment](#) – Resolution No. 2670, April 23, 2024

¹¹ 15% of the average of the previous two years annual retail load.

Figure 6-1 below represents the District’s REC target, REC contract amounts, and the REC net position by compliance year—after factoring in the REC vintage year retirement options and the CETA changes. The graph highlights the District’s need to acquire additional RECs starting in compliance year 2027 and increasingly more need through 2029, as existing contracts expire, then reducing significantly starting in 2030. The actual REC procurement strategy (number of contracts, contract amount, contract length, etc.) is outside the scope of this resource plan. Preliminarily, the District should consider a 10-year REC contract for about 35,000 RECs starting in 2026, that will be used for 2027 compliance and another 10-year contract for about 30,000 RECs starting in 2027. These recommendations are subject to change after further analysis.

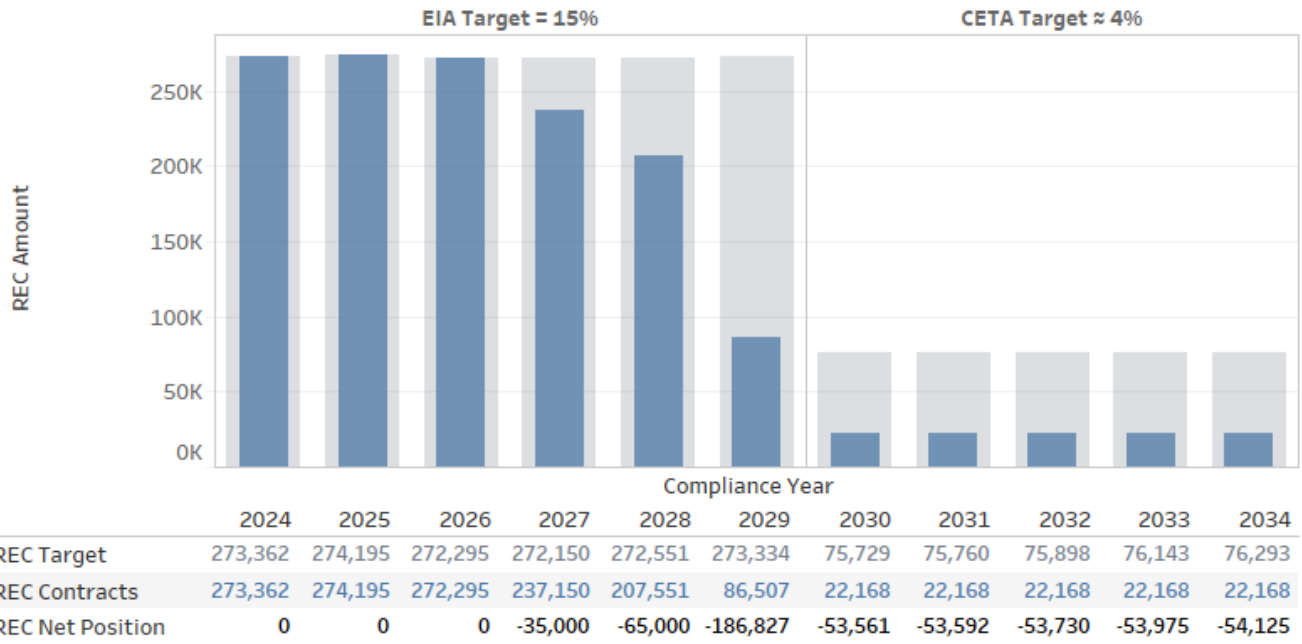


Figure 6-1 – REC Net Position (MWh) by Compliance Year

7. Clean Energy Transformation Act

Washington’s resource planning RCW 19.280.030(5)(d) requires the District to identify *“how the utility plans over a 10-year period to implement RCW 19.405.040 and 19.405.050”*. The District’s implementation plan for these two CETA requirements are described below:

GHG Neutral Standard

The GHG neutral standard (RCW 19.405.040) says, *“(1) It is the policy of the state that all retail sales of electricity to Washington retail electric customers be greenhouse gas neutral by January 1, 2030...”*.

1. The District’s existing and proposed resource strategy of conservation, Packwood hydroelectric and BPA’s load following contract results in the District’s power supply already being about 96% clean.
 - a. Given nearly all the District’s power supply is from BPA, the District’s percentage of clean resources is about the same as BPA’s, which has historically been about 96% clean (85% hydro, 11% nuclear, 4% non-clean), based on the median BPA’s fuel mix data for 2016-2023.¹²
 - b. The District assumes BPA’s clean energy mix will remain near 96% through the 10-year period of this plan (through 2034), including through the remainder its existing BPA contract and into BPA’s Post-2028 contract that begins October 1, 2028.
2. For the remaining 4% of non-clean energy, the District plans to procure unbundled RECs, which is an allowable alternative compliance option (up to a maximum of 20%) to meet the GHG neutral standard.
 - a. From present through 2029, the District expects to easily exceed the GHG neutral standard given the District’s 15% EIA RPS target versus a need of only 4% for the GHG neutral standard.
 - b. Beginning January 1, 2030, and for each multiyear compliance period thereafter through December 31, 2044, the District intends to continue using unbundled renewable energy credits to meet its approximately 4% non-clean energy need, thereby meeting both the compliance obligations of the GHG neutral standard and the EIA RPS.
3. See **Appendix B – Clean Energy Forecast** for the supporting data of the GHG neutral standard REC target.

100% Clean Standard

The 100% clean standard (RCW 19.405.050) says, *“(1) It is the policy of the state that nonemitting electric generation and electricity from renewable resources supply one hundred percent of all sales of electricity to Washington retail electric customers by January 1, 2045...”*.

Currently the 100% clean standard, beginning in 2045, is 21 years into the future and is 11-years beyond the time horizon of this 10-year resource plan, ending in 2034. The District is well positioned currently; however, it is also recognized that the upper limit of the District’s percentage clean energy is limited to BPA’s progress at improving its fuel mix—absent replacing BPA with other resources. The District will be monitoring the changes in BPA’s fuel mix over the next several years, including how their mix changes because of participation in emerging western markets. Lastly, the District will continue to advocate for the benefits of non-emitting nuclear energy and the need for BPA and other utilities to consider nuclear in their resource planning for its long-term benefits for emissions reduction, energy security, transmission availability, reliability, and economic development.

¹² <https://www.bpa.gov/energy-and-services/power/hydropower-impact>

Clean Energy Implementation Plan

Washington Administrative Code 194-40-050 says the following about developing a Clean Energy Implementation Plan (CEIP), *“Each utility must submit by January 1, 2022, and every four years thereafter, a CEIP for resources to be acquired and other actions to be undertaken during the next interim performance period or GHG neutral compliance period to comply with the **GHG neutral standard** and the **100% electricity clean standard**...”*.

CETA requires the District to prepare a 4-year CEIP that is consistent with its Resource Plan, therefore, this Resource Plan will be an input to the District’s next CEIP for the period 2026-2029, to be prepared by January 1, 2026. The District’s previous CEIP for the period 2022-2025 was approved by Commission in November 2021.¹³

¹³ [Clean Energy Implementation Plan for 2022-2025](#) — Resolution No. 2585, November 9, 2021

Appendix A – Resource Plan Requirements

Requirements of RCW 19.280.030(5)	District Comments:
<i>(5) All other utilities may elect to develop a full integrated resource plan as set forth in subsection (1) of this section or, at a minimum, shall develop a resource plan that:</i>	The District shall develop a Resource Plan that meets the requirements of RCW 19.280.030(5), as described below:
<i>(a) Estimates loads for the next five and 10 years;</i>	See Section 3 – Load.
<i>(b) Enumerates the resources that will be maintained and/or acquired to serve those loads;</i>	See Section 4 – Existing Resources, and Section 5 - Resource Strategy.
<i>(c) Explains why the resources in (b) of this subsection were chosen and, if the resources chosen are not: (i) Renewable resources; (ii) methods, commercially available technologies, or facilities for integrating renewable resources, including addressing any overgeneration event; or (iii) conservation and efficiency resources, why such a decision was made;</i>	
<i>(d) By December 31, 2020, and in every resource plan thereafter, identifies how the utility plans over a 10-year period to implement RCW 19.405.040 and 19.405.050; and</i>	See Section 7 – Clean Energy Transformation Act.
<i>(e) Accounts for: (i) Modeled load forecast scenarios that consider the anticipated levels of zero emissions vehicle use in a utility's service area, including anticipated levels of zero emissions vehicle use in the utility's service area provided in RCW 47.01.520, if feasible;</i>	See the Electrification subsection of Section 3 – Load.
<i>(ii) Analysis, research, findings, recommendations, actions, and any other relevant information found in the electrification of transportation plans submitted under RCW 35.92.450, 54.16.430, and 80.28.365; and</i>	
<i>(iii) Assumed use case forecasts and the associated energy impacts. Electric utilities may, but are not required to, use the forecasts generated by the mapping and forecasting tool created in RCW 47.01.520. This subsection (5)(e)(iii) applies only to plans due to be filed after September 1, 2023.</i>	

Appendix B – Clean Energy Forecast

	Compliance Period / Calendar Year										
	EIA Target = 15%						CETA Target ≈ 4%				
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Retail Sales MWh	1,817,495	1,813,109	1,815,550	1,818,458	1,825,992	1,824,408	1,827,466	1,830,982	1,839,221	1,838,184	1,841,871
2-Year Average Retail Sales MWh	1,822,413	1,827,968	1,815,302	1,814,330	1,817,004	1,822,225	1,825,200	1,825,937	1,829,224	1,835,102	1,838,703
REC Target %	15.000%	15.000%	15.000%	15.000%	15.000%	15.000%	4.149%	4.149%	4.149%	4.149%	4.149%
REC Target MWh	273,362	274,195	272,295	272,150	272,551	273,334	75,729	75,760	75,898	76,143	76,293
BPA Fuel Mix % Renewable	84.880%	84.880%	84.880%	84.880%	84.880%	84.880%	84.880%	84.880%	84.880%	84.880%	84.880%
BPA Fuel Mix % Non-emitting	10.941%	10.941%	10.941%	10.941%	10.941%	10.941%	10.941%	10.941%	10.941%	10.941%	10.941%
BPA Fuel Mix % Non-Clean	4.179%	4.179%	4.179%	4.179%	4.179%	4.179%	4.179%	4.179%	4.179%	4.179%	4.179%
BPA Fuel Mix % Clean	95.821%	95.821%	95.821%	95.821%	95.821%	95.821%	95.821%	95.821%	95.821%	95.821%	95.821%
BPA Fuel Mix % Total	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
BPUD Wholesale Load MWh	1,877,109	1,872,579	1,875,100	1,878,104	1,885,884	1,884,248	1,887,406	1,891,038	1,899,547	1,898,476	1,902,285
BPUD Packwood MWh	13,550	13,520	13,520	13,520	13,550	13,520	13,520	13,520	13,550	13,520	13,520
BPUD BPA Net Requirement MWh	1,863,559	1,859,059	1,861,580	1,864,584	1,872,334	1,870,728	1,873,886	1,877,518	1,885,997	1,884,956	1,888,765
BPUD Packwood % of Load	0.722%	0.722%	0.721%	0.720%	0.718%	0.718%	0.716%	0.715%	0.713%	0.712%	0.711%
BPUD BPA % of Load	99.278%	99.278%	99.279%	99.280%	99.282%	99.282%	99.284%	99.285%	99.287%	99.288%	99.289%
BPUD Total % of Load Check1	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
BPUD Renewable % of Load	84.989%	84.989%	84.989%	84.989%	84.989%	84.988%	84.988%	84.988%	84.988%	84.988%	84.987%
BPUD Non-emitting % of Load	10.862%	10.862%	10.862%	10.862%	10.862%	10.862%	10.863%	10.863%	10.863%	10.863%	10.863%
BPUD Non-Clean % of Load	4.149%	4.149%	4.149%	4.149%	4.149%	4.149%	4.149%	4.149%	4.149%	4.149%	4.149%
BPUD Clean % of Load	95.851%	95.851%	95.851%	95.851%	95.851%	95.851%	95.851%	95.851%	95.851%	95.851%	95.851%
BPUD Total % of Load Check2	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
BPUD Retail Renewable MWh	1,548,853	1,553,575	1,542,807	1,541,978	1,544,247	1,548,682	1,551,207	1,551,829	1,554,618	1,559,611	1,562,667
BPUD Retail Non-emitting MWh	197,951	198,554	197,180	197,077	197,370	197,939	198,265	198,347	198,708	199,349	199,743
BPUD Retail Non-Clean MWh	75,609	75,839	75,314	75,275	75,387	75,604	75,729	75,760	75,898	76,143	76,293
BPUD Retail Clean Total MWh	1,746,804	1,752,129	1,739,987	1,739,055	1,741,617	1,746,621	1,749,472	1,750,176	1,753,326	1,758,960	1,762,410
BPUD Retail Total MWh	1,822,413	1,827,968	1,815,301	1,814,330	1,817,004	1,822,225	1,825,201	1,825,936	1,829,224	1,835,103	1,838,703