



Provider of Choice: Peak Load Variance Service (PLVS)

December 18, 2024

PROVIDER OF CHOICE

**POST
2028**



Objectives

Overview of updated PLVS product design.

Discuss WRAP accreditation methodology approach.





PLVS Overview

PLVS Design Updates

- Bonneville has made a number of changes to the PLVS product design in response to feedback on the last shared iteration.
- Where changes have been made, Bonneville has included a “*” next to the feature.

PLVS Design Elements

Feature	Details
PLVS Product Compatibility	PLVS is available to customers who have elected Block with Shaping Capacity option with the peak net requirements (PNR) check. It will count as a product election and a customer can elect their one-time product change right to opt in or out of PLVS.
BWSC Rules Continue	Use of a PLVS Event does not change the underlying rules around the BWSC product. For example, ramp rates would continue at 20% and first half of the month energy usage rules would continue.
Timing	Locked in Day-Ahead along with any other Shaping Capacity
Activating PLVS*	Bonneville has removed the requirement that PLVS must be tied to a load excursion. Tie to load will be determined on a planning basis comparable to other planned product determinations.

PLVS Design Elements

Feature	Details
Initial Notification	A customer must notify Bonneville seven days ahead of an event in order to activate. A customer will have up to three days prior to the start of an event to cancel their activation of the event.
Event Length*	An event may last up to seven days. A customer may schedule back-to-back events.
Notifications and Events*	Customers are allowed nine notifications but limited to six events.
Annual PLVS Pool	<p>Bonneville will calculate the MWh’s in a customer’s Annual PLVS Pool based on the equation: <i>Annual Energy Pool</i></p> $= 150 \times [Greatest\ Monthly\ Delta\ (P10\ PNR - P50\ PNR)]$ <p>A customer’s Block with Shaping Capacity energy limit would increase to each month’s P10 PNR peak during an event.</p>

PLVS Design Elements

Feature	Details
Daily Energy Limit*	<p>Bonneville will calculate a customer’s daily MWh energy limit for each month as:</p> $\text{Daily Energy Limit} = (\text{Monthly P10 PNR} - \text{Monthly P50 PNR}) \times 12$
Energy Charge	<p>Pricing methodology will be established in rate cases; the first rate case (BP-29). Current working assumption: Bonneville intends that PLVS will not come with an additional energy charge if energy neutral in the month; rates if not energy neutral in the month will be determined in the first rate case in BP-29.</p>
Capacity Charge	<p>Pricing methodology will be determined in rate cases with the first rate case in BP-29. Current working assumption: Potentially to align with the treatment of Load Following, PLVS Block may be charged both the reservation fee (the embedded cost capacity), and then, when it’s used, charge them the marginal cost demand rate.</p>



PLVS WRAP Accreditation

WRAP Accreditation Methodology

- PLVS is not a Western Resource Adequacy Program (WRAP) product but may offer capacity that qualifies for WRAP accreditation.
- Bonneville has identified two approaches for accrediting PLVS in WRAP. Bonneville has reviewed the methodologies with the Western Power Pool (WPP) and WPP accepted them.
- The two methodologies are: (1) Multi-season or (2) Seasonal.
- Bonneville is seeking feedback on preferred approach from customers.

(1) Multi-season Methodology

- **Methodology:** Assumes events occur during the nine WRAP months.
 - Targets six of the nine months for accreditation looking across ten years of historical data.
 - An average percentage in each month is calculated and that is what would be assigned to each month.
- **Accreditation:** This does not provide full accreditation in any month but would help to target months where PLVS would have traditionally been used.
- **Availability:** In any month (October – September).

(2) Seasonal Methodology

- **Methodology:** Assumes events occur during one of the two WRAP seasons – winter or summer.
 - Targets six events in one season for accreditation looking across ten years of historical data.
 - An average percentage in each month is calculated and that is what would be assigned to each month.
- **Accreditation:** This does not provide full accreditation in any month but provides more coverage in a single season where a customer may be short.
- **Availability:** In the season elected.
 - For winter: November – March.
 - For summer: June – September.

WRAP Accreditation Examples

Example of what one customer may see. Assumes a PLVS Annual Energy Pool of 8,966 aMW.

	Winter Season					Summer Season			
	November	December	January	February	March	June	July	August	September
Capacity Maximum (MWs)	244.25	281.75	270.75	266.25	262.5	221.25	225.25	233.25	210.25
PLVS Energy Delta (MWs)	47.4	48.55	47.625	47.5	59.775	35.975	26.725	28.25	36.825
Daily Limit (aMW)	24	24	24	24	30	18	13	14	18
(1) Multi: % Hours Covered	32%	56%	51%	53%	18%	19%	51%	46%	30%
(1) Multi: WRAP QCC (MWs)	14.97	27.21	24.33	25.25	10.96	6.83	13.73	12.99	10.90
(2a) Winter: % Hours Covered	47%	75%	76%	64%	52%				
(2a) Winter: WRAP QCC (MWs)	22.49	36.49	36.32	30.60	31.16				
(2b) Summer: % Hours Covered						85%	81%	76%	74%
(2b) Summer: WRAP QCC (MWs)						30.74	21.57	21.39	27.08

WRAP Table Definitions

- **Capacity Maximum** is based on the maximum amount of power a customer could take under Block with Shaping Capacity with PLVS and it is not expected a customer would be able to take this total amount more than a limited number of hours in any month. Capacity Maximum is included to highlight the total capacity that could be placed on BPA in an event.
- **PLVS Energy Delta** is the amount of MWs associated with a customer's PLVS. The PLVS Energy Delta is the amount that BPA could be obligated to serve in an event and would need to plan operationally when an event is triggered. WRAP QCC is the amount BPA would accredit for WRAP to the customer with a corresponding decrease to BPA's available QCC. Effectively the PLVS Energy Delta is equal to a customer's P10 PNR – P50 PNR.
- The **PLVS Annual Energy Pool** is calculated by multiplying 150 by [Greatest Monthly Delta (P10 PNR minus P50 PNR)].
- The **Daily Energy Limit** is established by multiplying a customer's PLVS Energy Delta by 12.



Questions?

Feedback

By January 10, 2025, looking for feedback on:

1. Preferred WRAP accreditation methodology.
2. Whether there is interest in continuing to review contract language.