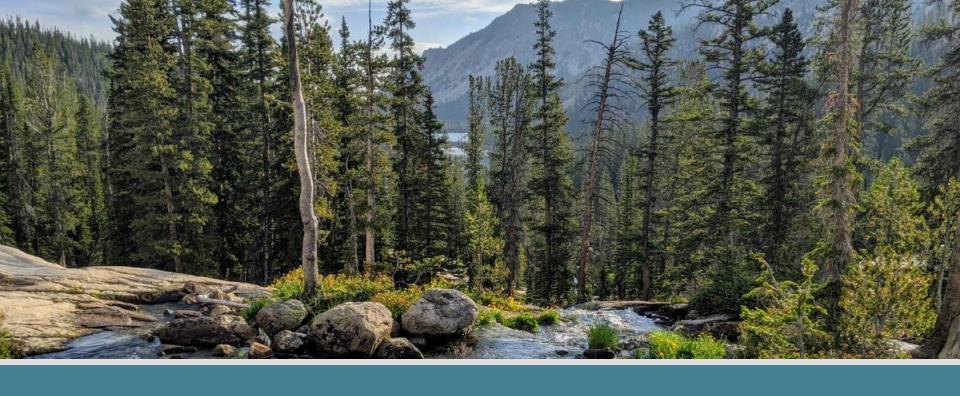


Provider of Choice Phase 1 Workshop: Contract High Water Mark

August 16, 2022







Today's Workshop

Sarah Burczak, Policy Lead

Agenda

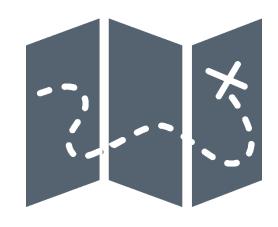
Time Start	Time End	Topic	Presenter(s)
9 a.m.	9:05 a.m.	Objectives and Expectations	Sarah Burczak
9:05 a.m.	9:15 a.m.	Tiered Rates Construct	Sarah Burczak
9:15 a.m.	10 a.m.	Contract High Water Marks	Sarah Burczak
10 a.m.	10:05 a.m.	Break	
10:05 a.m.	10:20 a.m.	Issues connectivity	Sarah Burczak
10:20 a.m.	10:40 a.m.	Post-2028 Rate Methodology (July 21 Follow-up)	Daniel Fisher
10:40 a.m.	Noon	Open Q&A	TBD

Note:

Start and end times are approximate; we will make every effort to align to the planned agenda.

Workshop Objectives

- Promote foundational understanding:
 - Help ensure we're all starting from the same place.
- Carryover from concept paper workshop:
 - Ensure your questions are answered about the rate methodology scope and process.
- Hear from you:
 - Understand what analyses are needed to support constructive Phase 2 workshops.
 - Help us prepare for next discussions.



Three Phase Approach

Phase 1: Issue Development



- Introduction and education
- Description of the issue
 - Public provides feedback for alternative analysis

Phase 2: Alternative Analysis



- Discuss alternatives
- Discuss public feedback
- Note: This is an iterative phase

Phase 3: Policy



- Draft policy position
- Public feedback and discussion; workshops
- Final policy decision

Format

- Presenters will pause for questions.
- There is scheduled Q & A time.
- If a question arises during a presentation, please:
 - Hold your question until a pause, or
 - Write your question in the Webex chat with the corresponding slide number.
- Chat questions will be addressed in the order received.
- We will call on raised hands. You can unmute/mute yourself.
 - Please state your name and organization.

Workshop Roles & Expectations: BPA

- Distribute workshop materials a minimum of 48 hours in advance via email and/or post on BPA website.
 - Materials will not be printed.
- Start and end workshops on time.
- Facilitate and moderate conversations with an eye on workshop objectives and scope.
- Provide open and inclusive opportunities for feedback, both within and following workshops.
- Respect others and assume good intentions.
- Bring a constructive mentality.

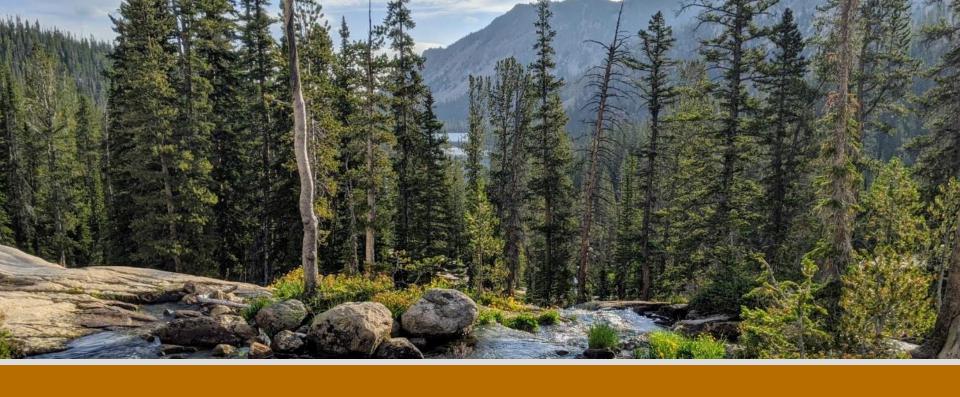


Workshop Roles & Expectations: Participants



- Come prepared by reviewing materials in advance of workshops.
- Participants are empowered to represent utility or organization, as applicable.
- Share your perspective and provide feedback.
- Limit discussion to the scope of each workshop.
 Don't start side conversations.
- Respect others and assume good intentions.
- Bring a constructive mentality.





Contract High Water Mark Overview

Sarah Burczak, Policy Lead

Tiered Rate Construct

- Tiered ratemaking is based on allocation of costs, not power.
- Tiered rates do not eliminate Bonneville's requirement to serve a customer's full net requirements, if a full requirements product is elected.
- Why tiered rates?
 - Limits the amount of power available at Bonneville's lowest costbased Priority Firm rate.
 - Protects the value of the Federal Base System.
 - Promotes regional infrastructure development.

Tiered Rate Pools

- Power sold at the Tier 1 rate is limited by the existing federal system based on firm water conditions.
- If a customer's power needs exceed their Tier 1 allowance, they can elect to be supplied by:
 - Non-federal resources secured by the customer.
 - Additional firm requirements power supplied by Bonneville at an applicable Tier 2 rate.
 - Combination of 1 and 2.
- Tier 1 and Tier 2 costs are kept separate and distinct.
- Tier 2 cost pools are also kept separate from each other.



Tiered Rate Methodology

- The tiered rate construct was formally adopted by the Tiered Rates Methodology.
- Tiered rates were first implemented on October 1, 2011.
- Bonneville established a Contract High Water Mark (CHWM) for each public customer.
 - The CHWM determines a customer's share of the cost of the Federal Columbia River Power System (FCRPS).

Contract High Water Mark

- Sets a public power customer's maximum eligibility to purchase power priced at the PF Tier 1 rate.
- Provides a uniform methodology for determining eligibility for Tier 1 priced power that is applied to any Tier 1 system size option.
- In aggregate, CHWMs cannot exceed the established Tier 1 system size.
- CHWMs are calculated for each customer by taking the customer's total retail load net of existing resources and New Large Single Loads.
- CHWMs are customer-specific and based on each customer's load.
- A customer cannot purchase more power than its net requirements load, regardless of its CHWM or RHWM.

(15 aMW)

Total Retail _ Load (50 aMW)

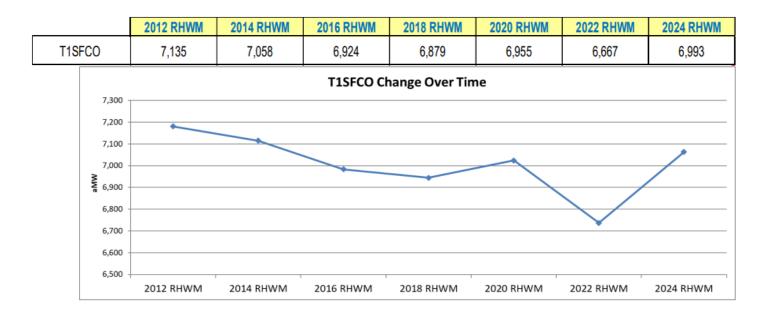
Net Requirement (35 aMW)

NLSL

Rate Period High Water Mark

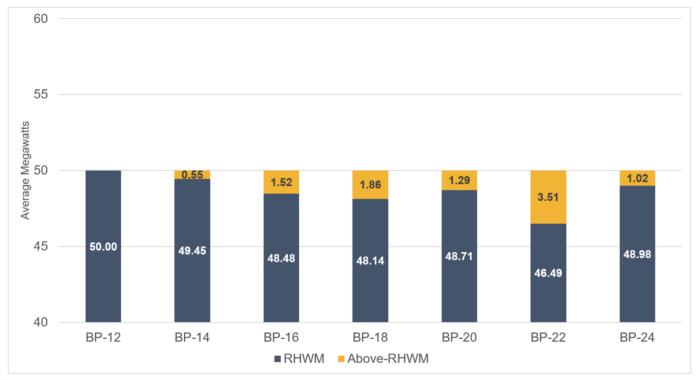
- Every rate period, Bonneville implements adjustments to the CHWM based on the Tier 1 firm system size for that rate period, resulting in a Rate Period High Water Mark (RHWM).
- During the RHWM process, held prior to each rate case, Bonneville recalculates the Tier 1 firm system size to adjust for changes in river operations, fish operations, Treaty operations and the expiration of power purchases.

Tier 1 System Size over Time



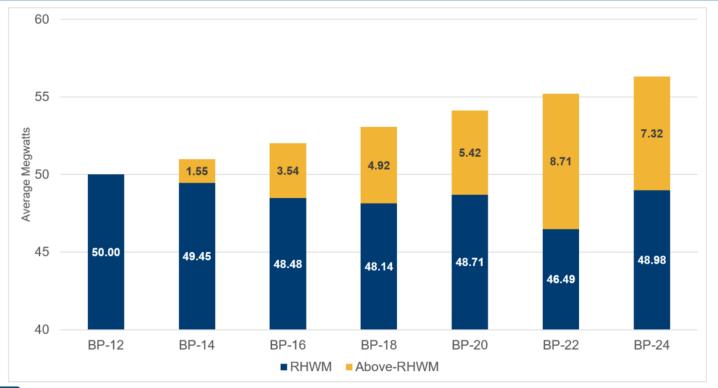


CHWM Example: Flat Load

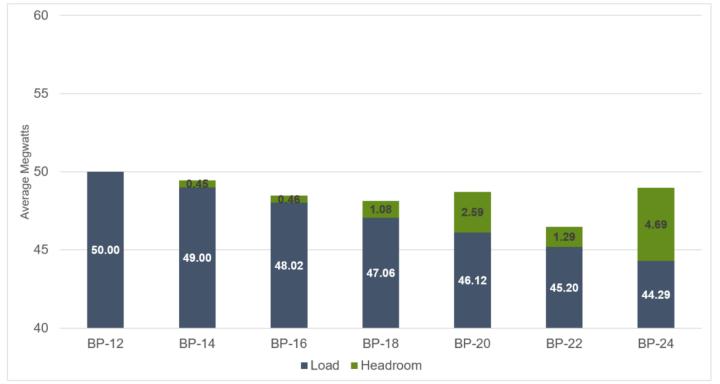




CHWM Example: Load Growth



CHWM Example: Load Loss



Not Discussed Today: Above RHWM

- Any load above the RHWM is considered Above-Rate Period High Water Mark load.
- Customers may choose to have Bonneville serve their Above-RHWM load with:
 - Non-federal resources.
 - Federal power sold at a Tier 2 rate.
 - Combination of the two (federal power and non-federal resources).
- Bonneville presented two Above-RHWM options in its concept paper. While Bonneville looks forward to evolving conversations on options, today's focus is on CHWMs. Options for serving Above-RHWM load will be discussed at a future workshop.

New CHWM Calculation

Bonneville proposes to calculate new CHWMs for the Provider of Choice contracts. The proposed calculation takes into account the following factors:

- 1. New Large Single Loads
- 2. Recalculation year(s)
- 3. Treatment of new and existing resources
- 4. Weather normalized load amounts proposed for CHWM calculations
- 5. Conservation
- 6. Pro-rata scaling, if needed

1. New Large Single Loads (NLSL)

- A New Large Single Load is any new load, or an expansion of an existing load, at a single facility that grows by 10 average megawatts or more in any consecutive 12-month monitoring period, as defined in the Northwest Power Act.
- NLSLs are separately metered and are not part of the customer's general requirements.
- Customers serving NLSLs can buy firm power from Bonneville at Bonneville's marginal cost rate, the New Resource (NR) rate.
- NLSLs are subtracted from a customer's total retail load when determining CHWMs.

2. Recalculation Years

Concept paper proposes to base Provider of Choice CHWMs on FY 2026 loads.

Why?

- A single year provides simplicity for calculations and data verification.
- FY 2026 will provide ample time to perform the calculation and ensure customers know their CHWMs ahead of the contract power deliveries.

3. Resource Treatment

Bonneville proposes that any non-federal resources dedicated to load as of **September 30**, **2026**, would be considered an existing resource and applied to serve a customer's load and reduce their CHWM.

This date could change as conversations around rate methodology process timing and other implementation activities evolve. These nuances would be discussed in future policy workshops.

4. Weather Normalization

- Bonneville proposes to weather normalize customer FY 2026 loads.
- Weather normalization would use data from FY 2021 – FY 2025.
- Irrigation loads would be normalized separately.



5. Conservation

- Bonneville proposes to add self-funded conservation savings from FY 2022 through FY 2026 to customers' measured loads for CHWM.
- Providing this credit will ensure that customers who spend more on conservation than the funding they receive from Bonneville still have an incentive to do so.
- Bonneville remains open to discussing whether and how a conservation savings adjustment should be included in CHWM calculations.

Conservation Discussion: Sept. 8

- September 8 workshop focus area: Conservation
- Pulling together analysis of conservation achievements to share:
 - By rate period since 2011
 - EEI and self-funded
 - Comparison to total resource load and RHWM
- What other data points or analyses are of interest?
- Please provide feedback by Tuesday, August 23 so we have time to review and pull together.

6. Pro-rate Scaling Down

The total of all customer CHWMs cannot exceed the maximum intended Tier 1 system size.

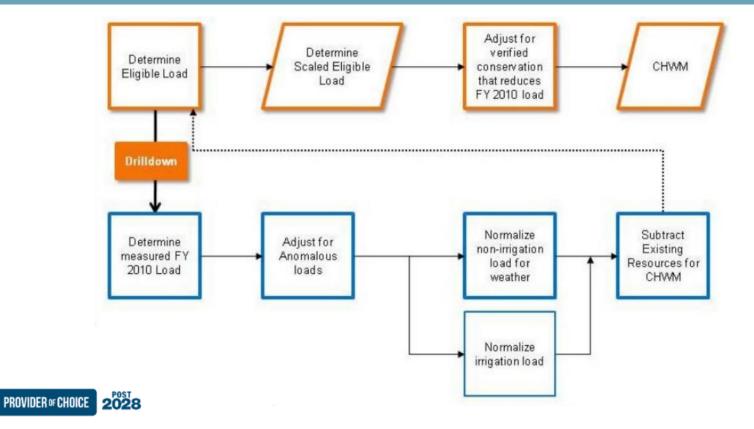
Bonneville proposes that if the selected Tier 1 system size is less than the total of initial customer CHWMs, all customers would share an equal pro rata decrement to their CHWMs.

Pro-rate Scaling Down

Tier 1 System Size	Aggregate CHWMs	Scale Down
7,000 aMW	7,200 aMW	2.778%

In aMWs	Customer A		Customer B	
	CHWM	Above- RHWM	CHWM	Above- RHWM
Unadjusted	50	0	45	5
Adjusted	48.61	1.39	43.75	6.25

CHWM Calculation for RD



Limiting Changes from Regional Dialogue

Developments during the Regional Dialogue contract period could have major impacts on CHWM calculations for Provider Of Choice.

Changes include:

- Substantial load growth.
- Load loss.
- Permanent loss of resource determinations for existing resources.
- Investments in non-federal resources.
- Conservation investments.
- Unspecified contract resources, currently dedicated to load, which may not be renewed going forward.
- Public utilities without a Regional Dialogue contract.

Options to Handle Major Changes

In the concept paper, Bonneville offered options to handle major changes that occurred during the term of the Regional Dialogue contract from not counting any changes to allowing all changes in load to impact new CHWMs.

Bonneville proposes one way to handle significant CHWM changes between the Regional Dialogue and Provider of Choice contract periods is to **include 50% of these changes** as CHWM load for future contracts.

- This option would only be implemented if the new calculation approach is determined to be unpalatable.
- Looking to treat all changes the same not pick and choose preferred changes.

HWM Exchange or Transfer

- There is an assumption that in the future some customers will have unused RHWM, also known as headroom, and some customers will have Above-RHWM load, similar to the paradigm that exists today.
- Customers proposed a HWM exchange or HWM transfer.
- A RHWM Exchange would:
 - Pool unused RHWM and offer to customers to offset Above-RHWM load.
 - Calculate the amount available for this option each rate period.
- A RHWM Transfer would:
 - Allow a customer to transfer their unused RHWM to a customer with Above-RHWM load on a bilateral basis.
 - Transfer unused RHWM for a defined period, which could be longer than a rate period.

Exchange or Transfer (Cont'd)

Bonneville declines to implement a customer suggestion to allow for a RHWM exchange or a RHWM transfer option for its customers.

Why?

- CHWMs are specific to a customer.
- The proposed exchanges would undermine the tiered rate construct by dampening signal for customers to develop or acquire their own non-federal resources or invest in conservation.

Data for Policy Workshops

- Bonneville developed a calculation tool that can provide individual customer CHWMs and Above-RHWMs depending on the CHWM calculation methodology and Tier 1 system size.
- Bonneville can provide the FY 2026 breakdown information but cannot provide the tool as it is backed by customer-specific proprietary data.
- Note: Any data shared ahead of formal calculations is a best estimate using best available data.
 - This data will not be as exact as that used in the CHWM calculation process and there may be changes in numbers when final calculations are complete.

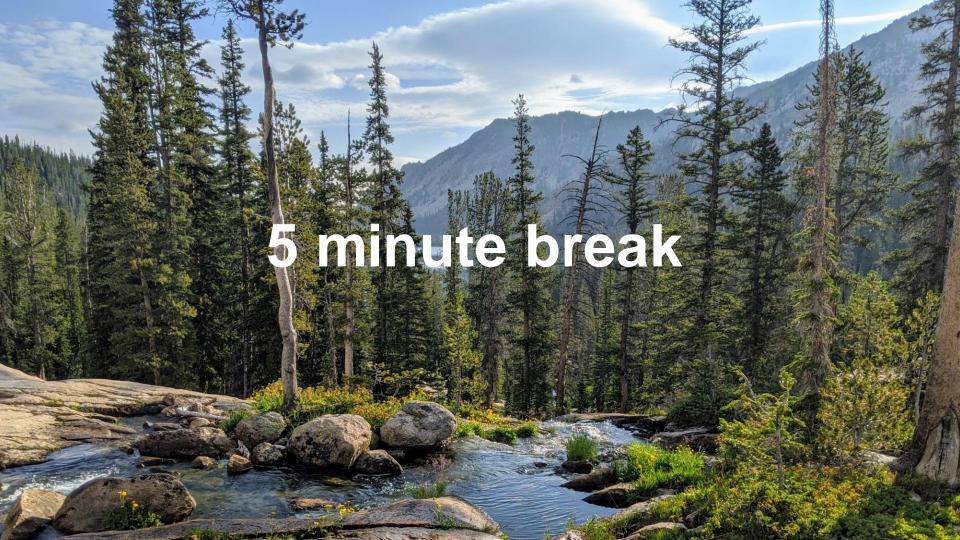
CHWM Scenarios

Three scenarios published:

- Low resources
- High resources
- New utility

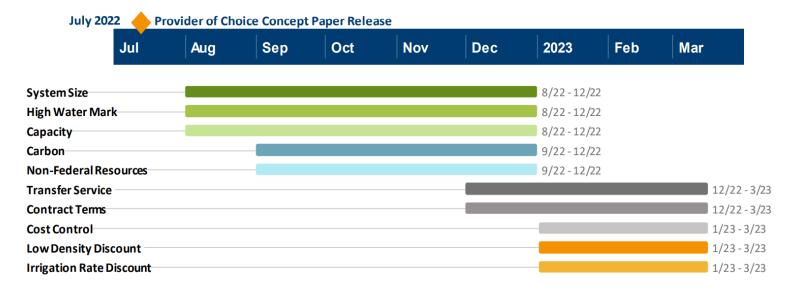
Scenarios available with Provider of Choice meeting materials.

Customer Name	CHWM	Above-RHWM
Alder Mutual		
Asotin County PUD #1		
Benton County PUD #1		
Benton REA		
Big Bend Elec Coop		
Blachly Lane Elec Coop		
Canby, City of		
Central Electric Coop		
Central Lincoln PUD		
Albion, City of		
Ashland, City of		
Bandon, City of		
Blaine, City of		
Bonners Ferry, City of		
Burley, City of		
Cascade Locks, City of		
Centralia, City of		
Cheney, City of		



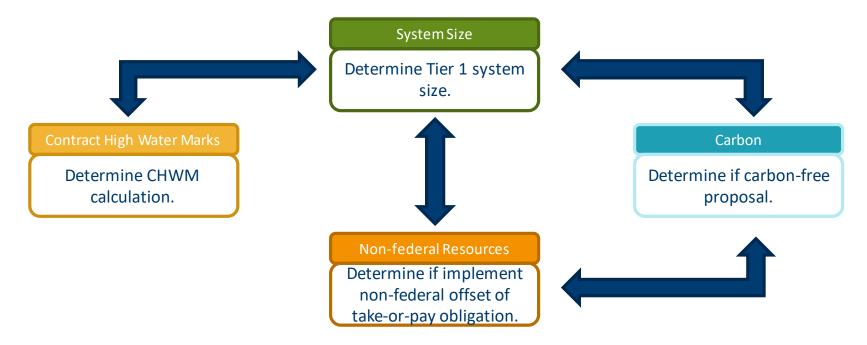
Timeline

This timeline is for illustrative purposes, subject to change, and is not inclusive of all issue work streams and processes.





Iterative Process





Post-2028 Rates Methodology

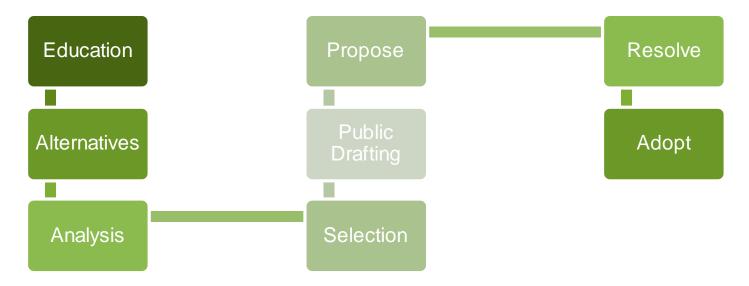
Daniel Fisher, Power Rates Manager

Post-2028 Initiative Timelines



Rate Methodology Process

Bonneville plans to use the same process used to establish the TRM.



Scope and Considerations

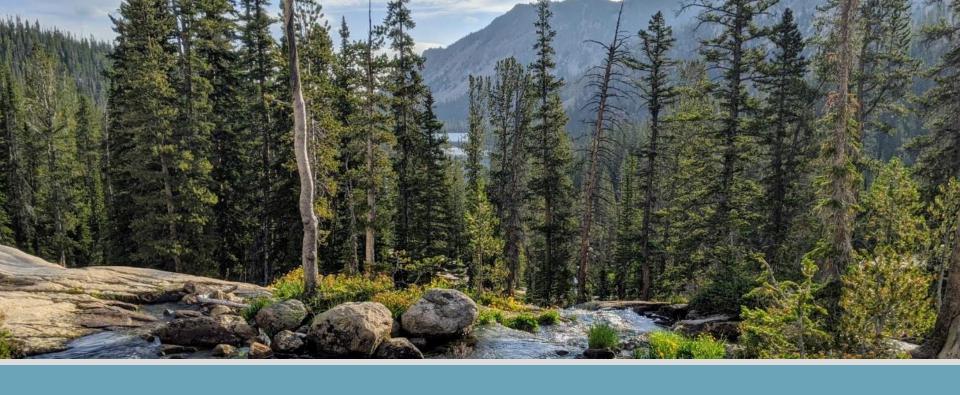
The scope of BPA's rate considerations is currently limited to the PF rate design.

Rate considerations outlined in the concept paper include:

- Timing of rate processes.
- Capacity pricing.
- Long-term risk methodology.
- REP for public customers purchasing power under a tiered rate construct.



QUESTION AND ANSWER



Schedule & Feedback

Sarah Burczak, Policy Lead

Mark Your Calendar

Date	Time	Workshop Type	Topics
August 31	9 a.m. – 12 p.m.	Phase 1: Issue Development	System size
September 8	9 a.m. – 12 p.m.	Phase 2: Alternative Analysis	Conservation
September 22	9 a.m. – 12 p.m.	TBD	TBD
October 5	9 a.m. – 12 p.m.	TBD	TBD

BPA Event Calendar: https://www.bpa.gov/learn-and-participate/public-involvement-decisions/event-calendar

Feedback



Informal comments accepted and feedback requested:

- On today's workshop.
- Data and analysis requests.
- On Conservation topic: please share by August 23 at latest
- Other feedback to help inform September and October workshop topics and agendas.

Timeline:

- Share feedback by August 26 to your Power AE and/or Post2028@bpa.gov with a copy to your Power AE.
- Please note that direct responses will not be provided.

Thank You.

Provider of Choice Lead Sponsor:

Kim Thompson, Vice President, Northwest Requirements Marketing

Provider of Choice Team Leads:

Sarah Burczak, Policy Lead Kelly Olive, Contract Lead Michelle Lichtenfels, Program Manager

Provider of Choice Website:

https://www.bpa.gov/energy-and-services/power/provider-of-choice