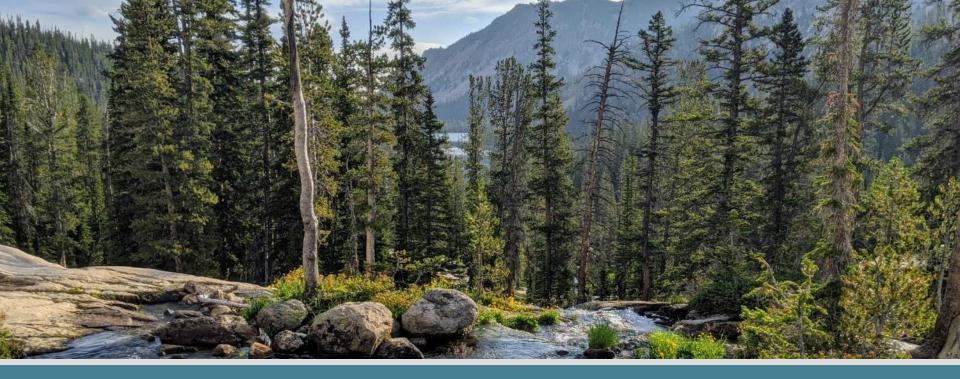


Provider of Choice IOU Service; Rate Construct

October 12, 2022







Today's Workshop Michelle Lichtenfels, Program Manager, Provider of Choice

Agenda

Time Start	Time End	Торіс	Presenter(s)
9 a.m.	9:05 a.m.	Intro and Expectations	Michelle Lichtenfels
9:05 a.m.	9:15 a.m.	Correction from October 5 Workshop	Kim Thompson
9:15 a.m.	9:45 a.m.	IOU Service Proposal	Sarah Burczak
9:45 a.m.	10:00 a.m.	Break	
10:00 a.m.	11:45 a.m.	Rate Construct: Tiered Rates v. Buy and Meld	Daniel Fisher
11:45 a.m.	12:00 p.m.	Q&A and Wrap-up	All



Format

- Presenters will take pauses 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.
- O 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.



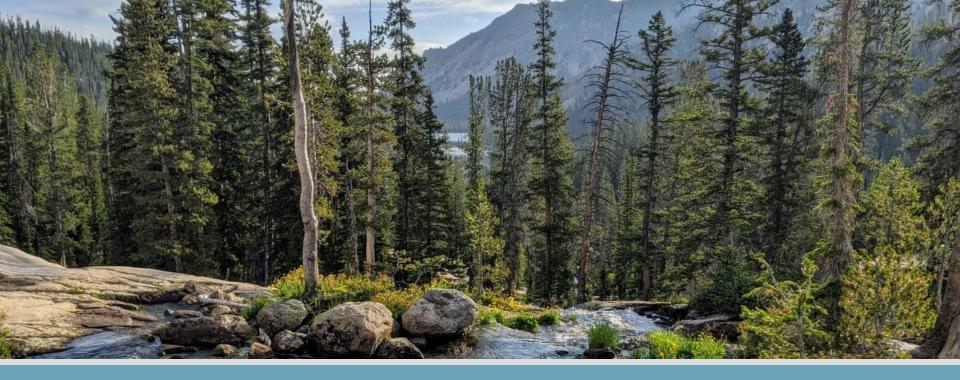


Workshop Roles & Expectations: Participants



- 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.





Correction from October 5 Workshop on Unspecified Non-federal Resources Kim Thompson, VP of Requirements Marketing

Unspecified Resource Advice Grounded in The Act

- BPA received a question during Oct. 5 workshop regarding the application of unspecified non-federal resources for the Provider of Choice contracts.
- Advice given during workshop was statutorily grounded in the NW Power Act [paraphrased below from §5(b)(1)]:
 - Any resources used to serve a firm load shall be treated as continuing to be so used, unless such use is discontinued with the consent of the Administrator, or unless such use is discontinued because of obsolescence, retirement, loss of resource, or loss of contract rights.





Correction on Regional Dialogue Unspecified Non-federal Resources

- On review, the 5(b)9(c) Policy, Regional Dialogue Policy & ROD, and the Regional Dialogue contract together address the statutory concerns and direct the treatment of unspecified non-federal resources.
- Section 3.3.2.2 of body of Regional Dialogue agreement:

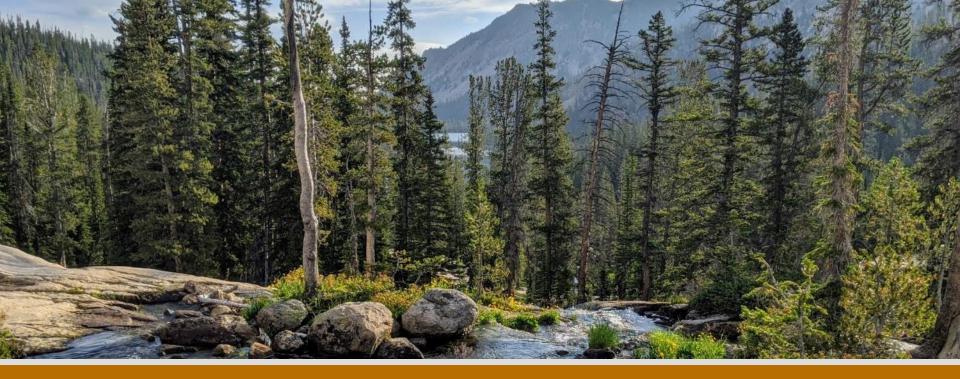
"Upon termination or expiration of this Agreement any Unspecified Resource Amounts listed in Exhibit A shall expire, and «Customer Name» shall have no further obligation to apply Unspecified Resource Amounts."



Provider of Choice Unspecified Non-federal Resources

- Unspecified non-federal resources will not be assumed under Provider of Choice contracts, and BPA will not require customers to request resource removal determinations for their Regional Dialogue Unspecified Resource Amounts.
 - The Unspecified Resource Amounts will remain in the CHWM tool as an option to turn on to see the impact to the calculation.
- BPA currently plans to cover non-federal resources, including considerations for CHWMs, at the Nov. 9 workshop.
- Please contact your AE and/or email post2028@bpa.gov with any additional questions.
- We appreciate your feedback and attention to this issue.





IOU Service Proposal Sarah Burczak, Policy Lead for Provider of Choice

Context

Under section 5(b) of the Northwest Power Act, investor-owned utilities (IOUs) have a right to purchase power from BPA up to their net requirements load at the 7(f) New Resources (NR) rate.

BPA's Provider of Choice Concept Paper largely focused on PF load service. BPA committed to discussing 5(b) service for IOUs at a workshop.

Today's workshop will share the proposed offering and how to engage in process.



Regional Dialogue

- Under Regional Dialogue, the investor owned utilities signed Block contracts in late 2008.
 - Any power sales under the contract would be at the NR rate.
 - Contract referred to as the NR Block contract.
- The contracts included specific election windows during which IOUs could elect power purchases and deliveries under the contract.
 - All election windows have passed, with no IOU customers electing to exercise right to a power purchase.
 - As such, purchases of actual power will not occur under these contracts.





Provider of Choice Product Offering

- BPA intends to offer a standalone Block product to IOUs, similar to standalone Block product offered to PF customers.
 - Flat annual block of energy, or a block of energy shaped monthly to their net requirements shape.
- BPA does not plan to offer the Load Following or Slice/Block product to IOUs.
 - Load Following's full requirements is not practical with IOU resource mix.
 - Slice product includes an inherent sale of BPA secondary power which is beyond 5(b) sales.



Net Requirements Determination

Net Requirement = Total Retail Load – Dedicated Resources

BPA would need to determine a net requirement for an IOU requesting 5(b) service.

- This will include actual and forecast load data as well as comprehensive resource data.
- While BPA would leverage any data submitted today, it would require additional data submittals and work by both IOUs and BPA staff to determine.

BPA is not intending to calculate a net requirement for any IOU customer until service is requested.



Carbon Considerations

BPA proposes to mirror its proposed approach to Tier 2 load service for purposes of sharing the environmental attributes of the federal system.

The proposed approach is to pass along the RECs and carbon attributes associated with the amounts of power that are purchased from BPA.



Contract Development and Timeline

- Contract would be negotiated, reviewed and offered at the same time as the public power customers' contracts.
- Signing deadlines currently projected as December 2025.
- BPA would require at least three-year notice before power could be purchased.
- Offer 20-year contract term.



New Resource (NR) Rate

- Sales of power to IOUs under Section 5(b) are sold at the Section 7(f), NR rate.
- The NR rate would be determined through future rate proceedings and includes:
 - The cost of the FBS resources not otherwise allocated to preference customers under Section 7(b).
 - New resources.
 - Exchange resource costs.
 - An allocation of the Section 7(b)(3) surcharge (if applicable).



Next Steps

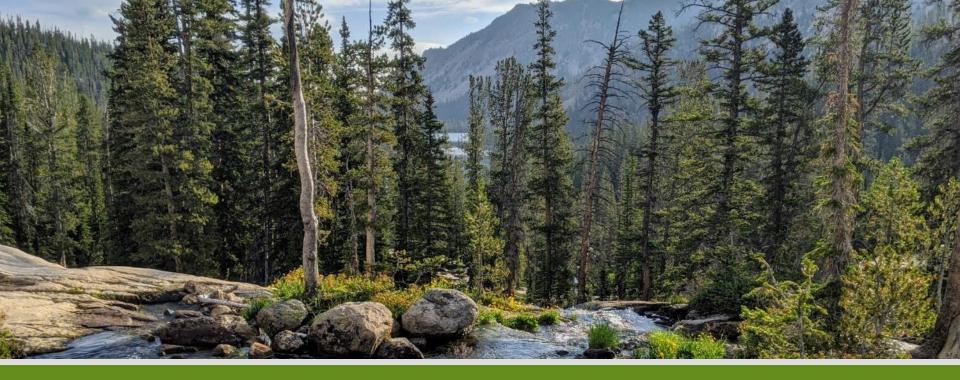
Bonneville recommends interested parties track workshop discussions around system size, resource acquisition, carbon and the Block product.

IOUs should reach out to BPA if interested in pursuing a contract or with proposals for different service offerings.





10 minute break



Rate Construct: Tiered Rates v. Buy and Meld Daniel Fisher, Power Rates Manager

Today's Objectives

- Review the available rate constructs and principles of each construct.
- Discuss the trade-offs of pursuing different rate methodology options.

The time to test commitment to tiered rates is now.



Landscape

Based on earlier workshop discussions, key issues that have been identified include:

- Electrification load growth expected in the 2030s.
- Assurance of how BPA can meet future load growth and the cost of that power.
- Building additional flexibility into contracts such as the integration of non-federal resources.
- Ability to use billing credits in future construct.



"Hybrid" Rates Construct

- As we explore policy options, we need to ensure a common understanding of the path for Provider of Choice.
- Landscape concerns and resource acquisition and flexibility requests by customers can be construed as a "hybrid" rates construct.
 - "Hybrid" because it includes concepts of "buy and meld" (growing the Tier 1 system early) and tiered rates.



Features that blur rate constructs

• Requests to:

- Augment Tier 1 notably above current firm output
- Build-in universal room-to-grow
- Enable billing credits
- Trade HWM headroom

... all of which:

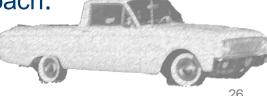
- Forestall individual exposure to Tier 2
- Expose customers to melded costs
- Increase Tier 1 costs as new resources are folded in

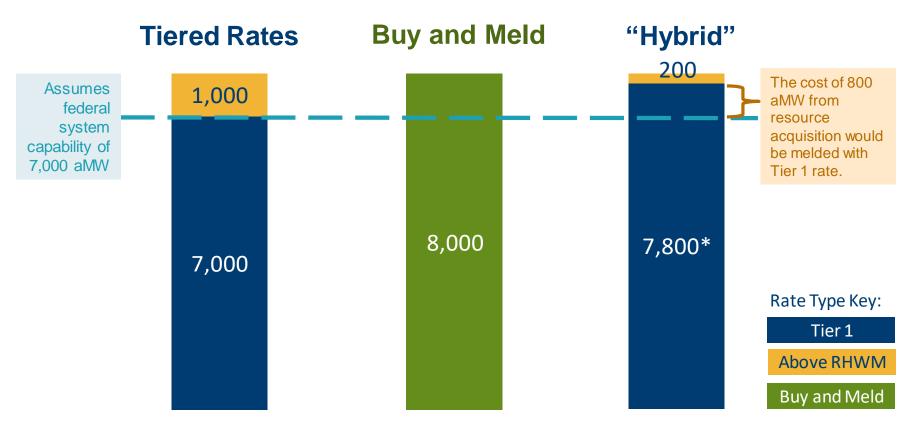


Why explore this now?

Exploring the rate construct is foundational and will help inform other topics:

- Confirm benefits of tiered vs. hybrid vs. melded model.
- Test whether tiered rates work for *all* customers. ۲
- Avoid a knee-jerk reaction: *it's too late to change, change is scary*. ۲
- Ground ourselves in the goal on non-federal resources:
 - "Contracts offer customers flexibility to invest in and integrate non-federal _ resources."
- 'Hybrid model' is seemingly the compromise approach. ٠
 - But can a hybrid achieve either approach well? _





*7,800 aMW was chosen for illustrative purposes. Potential Tier 1 system size still needs thorough discussion. Also, BPA will only acquire resources to serve its load obligation.



Rate Change Examples

\$80/MWh Acquisition/Billing Credit Cost	Rate Period 1	Rate Period 2	Rate Period 3	Rate Period 4	Rate Period 5	Rate Period 6	Rate Period 7	Rate Period 8	Rate Period 9
New Acquisitions/Billing Credits (a MW)	100	200	300	400	500	600	700	800	900
New Costs (\$/MWh)	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80
Existing System (a MW)	7000	7000	7000	7000	7000	7000	7000	7000	7000
Existing System Costs (\$/MWh)	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35
Weighted Cost (\$/MWh)	\$36	\$36	\$37	\$37	\$38	\$39	\$39	\$40	\$40
Rate Change (%)	2%	4%	5%	7%	9%	10%	12%	13%	15%
Rate Delta (\$/MWh)	\$1	\$1	\$2	\$2	\$3	\$4	\$4	\$5	\$5
\$35/MWh Acquisition/Billing Credit Cost	Rate Period 1	Rate Period 2	Rate Period 3	Rate Period 4	Rate Period 5	Rate Period 6	Rate Period 7	Rate Period 8	Rate Period 9
New Acquisitions/Billing Credits (aMW)	100	200	300	400	500	600	700	800	900
New Costs (\$/MWh)	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35
Existing System (a MW)	7000	7000	7000	7000	7000	7000	7000	7000	7000
Existing System Costs (\$/MWh)	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35
Weighted Cost (\$/MWh)	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35	\$35
Rate Change (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rate Delta (\$/MWh)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0



Tiered Rate Construct

Tiered ratemaking is based on allocation of costs, not power.

Why tiered rates?

- By limiting the amount of power available at Bonneville's lowest cost-based Priority Firm rate:
 - Protects the value of the existing federal system.
 - Insulates customers from the cost to serve others' growing loads.
 - Promotes regional infrastructure development; customers in charge of own load growth choices.



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 Rates Benefits/Drawbacks

Benefits

- Protects the value of the existing federal system by not diluting the existing federal system rate pool with cost of supplemental resources.
- Provides more certainty around the carbon content associated with power sold at Tier 1 rates. Potentially less impact to the carbon content associated with the overall system.
- Insulates customers from other customers' decisions on how to serve load growth.
- Allows customers to determine best Above-RHWM load service option for them.

Drawbacks

- Creates customer friction between those trying to preserve existing headroom and those trying to reduce Above-RHWM exposure.
- Complex rate design and cost allocation.
- If Above-RHWM load served at a Tier 2 rate does not materialize and acquisitions have been made, creates higher burden for cost recovery amongst those customers with load served at a Tier 2 rate.
- Susceptible to creating unsustainable rate impacts, particularly for small customers whose load growth is more likely to represent a high portion of total load.
- Little development of new specified resources occurred during the Regional Dialogue term.

Buy and Meld Construct

Under buy and meld, any resource acquisition costs needed to meet net requirements are "melded" with the existing federal system costs in rates.

BPA offered a buy and meld construct prior to the Tiered Rate Methodology.





Buy and Meld Rates Considerations

Buy and meld rate design could still incent certain investments or use tools to manage uncertainty, *e.g.*:

- Implement capacity pricing to ensure BPA accurately captures value of capacity (customers that use more capacity pay more, those which use less pay less).
- If there are concerns about acquisition growth rate period to rate period, could set the amount the system or a customer can grow each rate period with any additional growth served at BPA's Unanticipated Load Service rate (which is a rate that reflects market prices) until the load can be melded into the existing system. May have carbon consequences.



Buy and Meld Benefits/Drawbacks

Benefits

- Spreads resource acquisition costs and risks across a broader customer pool.
- Adds simplicity through fewer processes and simpler systems/contracts.
- Removes customer friction between those trying to preserve existing headroom and those trying to reduce Above-RHWM exposure.
- Rate design matches the operational reality that the system is operated and optimized as a single system. BPA acquires what the system needs without cost allocation and rate design complexities.

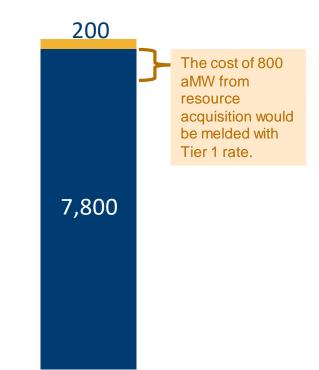
Drawbacks

- Cost of load growth spread amongst all customers.
- Less customer control over the types of resources used to serve their load growth.
- Could potentially impact the overall carbon content in the federal system.
- Uncertainty of policy and rate issues with new rate construct that would need to be focus of policy workshops.

"Hybrid" Approach

Tiered rates construct with larger Tier 1 system:

- Tier 1: Existing federal system plus some acquisition to create a pre-determined Tier 1 system size.
- Above-RHWM load service options include federal offering (Tier 2) and non-federal offering.



"Hybrid" Benefits/Drawbacks

Benefits

 Mostly removes customer friction between those trying to preserve existing headroom and those trying to reduce Above-RHWM exposure.

Drawbacks

- Complex rate design and cost allocation.
- Potential to result in an El Camino effect. Not being particularly better at anything. A melded construct result with the complexities of a tiered rate design.
- Billing credits frustrate the purpose behind the tiered rate construct.



Policy Paths

Tiered Rates – Primary Issues:

- Contract High Water Marks
- Non-federal Resources (both Tier 1 offset as proposed in the concept paper and for Above-RHWM load)
- Carbon
- Above-RHWM load service options
- Demand rate construct

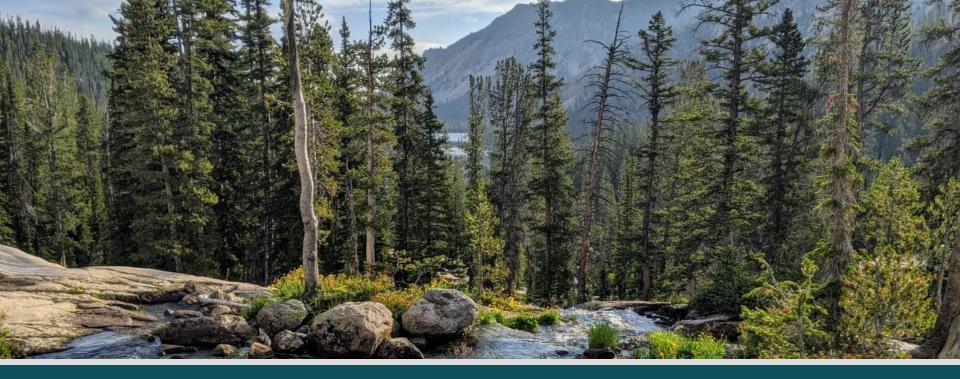
Buy and Meld – Primary Issues:

- Billing credits
- Non-federal Resources (What's take or pay?)
- Carbon
- System size and load growth limitations
- Demand rate construct



Discussion and Next Steps

- Initial thoughts and concerns?
- Seeking feedback on preferred approach.
 - Which is preferred AND Why?
- Will revisit is subsequent workshops.
- Target to resolve path by mid-December in order to drive secondary policy issues.



Schedule & Feedback Michelle Lichtenfels, Program Manager, Provider of Choice

Mark Your Calendar

Date	Time	Workshop Topics
October 12, 2022	9am – 12pm; Webex	IOU Service Overview; Fall Workshop Schedule
October 19, 2022	N/A	CANCELLED
October 26, 2022	9am – 12pm; Webex	Resource Acquisition Costs; Billing Credits; Carbon; Regional Dialogue Augmentation
November 9, 2022	9am – 12pm; Webex	Non-federal Resources Overview; CHWMs and Resources; Non-federal Minimum Threshold

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



Feedback



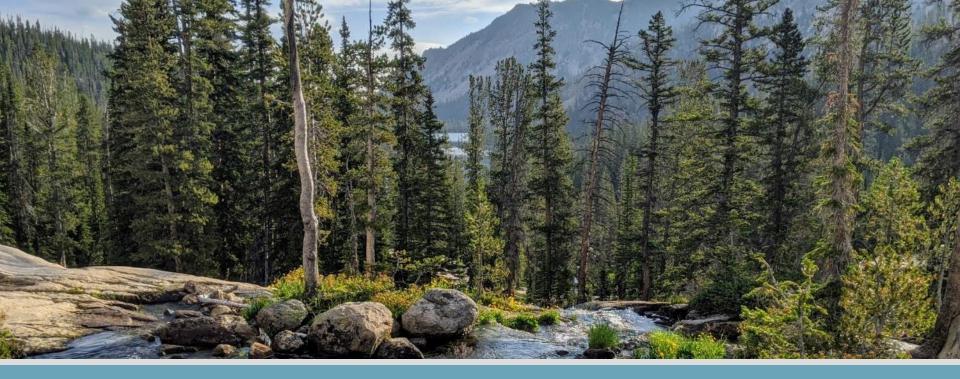
Informal comments accepted and feedback requested:

- Proposed IOU contract as NR Block
- Preferred rate construct

Requested due date:

- Share feedback by October 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.





QUESTION AND ANSWER

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