

Post 2028 Residential Exchange Program March 21, 2023

9:00am-12:00pm

Join the WebEx Meeting

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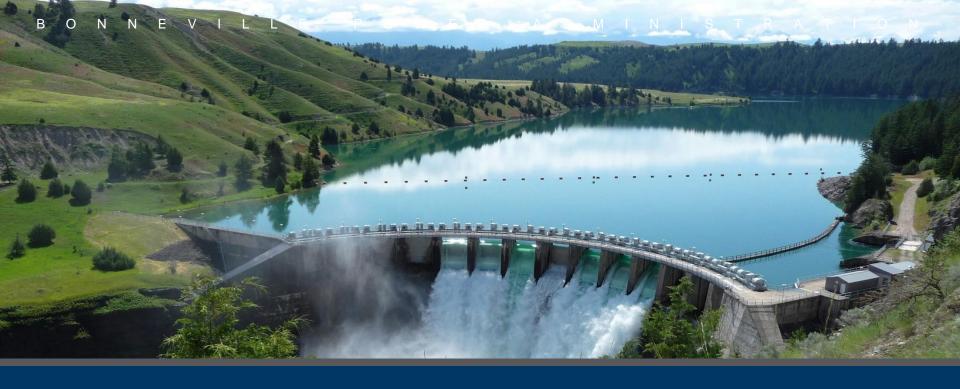




Agenda for March 21, 2023

Time	Topic	Presenter(s)
9:00 – 9:10	Introduction	Scott Winner
9:10 – 9:25	Sub-Phase 2 Scenario List Update	Stephanie Adams and Rich Greene
9:25 – 9:45	Mid-C Treatment in Reference Case	Stephanie Adams and Rich Greene
9:45 – 10:15	Recap: Calculating the Program Case and 7(b)(2) Case Rates & Conservation Treatment in the Rate Test	Stephanie Adams
10:15 – 10:30	Break	
10:30 - 11:00	ASCM Revision Timeline and Topics	Paulina Cornejo
11:00 – 11:30	Settlement vs No-Settlement	Scott Winner
11:30 - Noon	Next Steps, Feedback and Questions	Michael Edwards



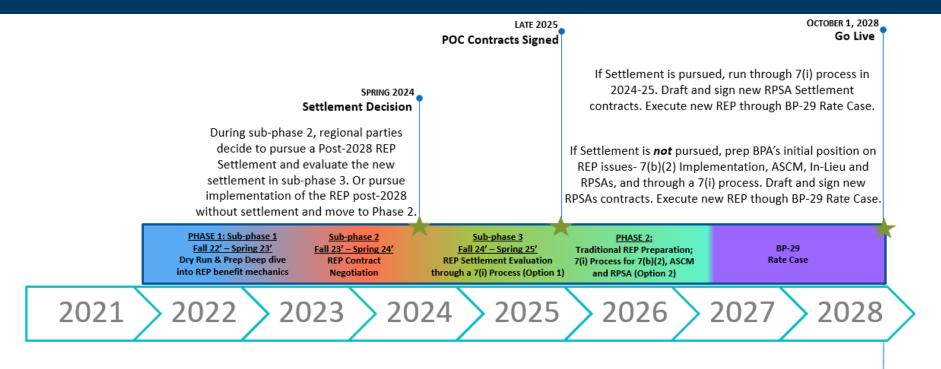


Introduction





Post 2028 Two-Phase Approach Timeline



POC Contract Delivery Readiness 2026 - 2028

Public Process Plan – Two-Phase Approach

- Phase 1 is comprised of three sub-phases designed to support and facilitate regional efforts towards a new REP settlement. If successful, implementation of the REP under new settlement agreements will commence BP-29 (October 1, 2028).
- Phase 2 focuses on positioning on REP issues and policies to implement the program traditionally, for the BP-29 rate case.

Phase 1 – Settlement (2022-2025)

Sub-Phase 1: **REP Dry Run and Preparation** (Fall 2022 - Spring 2023)

Sub-Phase 2: **REP Contract Negotiation** (Fall 2023 -Spring/Summer 2024)

Sub-Phase 3: **REP Settlement Evaluation Process and Decision (7i)** (Fall 2024 - Spring 2025)

The settlement phase builds on the foundation established by the 2012 REP Settlement-BPA's focus and efforts are to facilitate and encourage regional discussions towards a structured settlement of the REP.

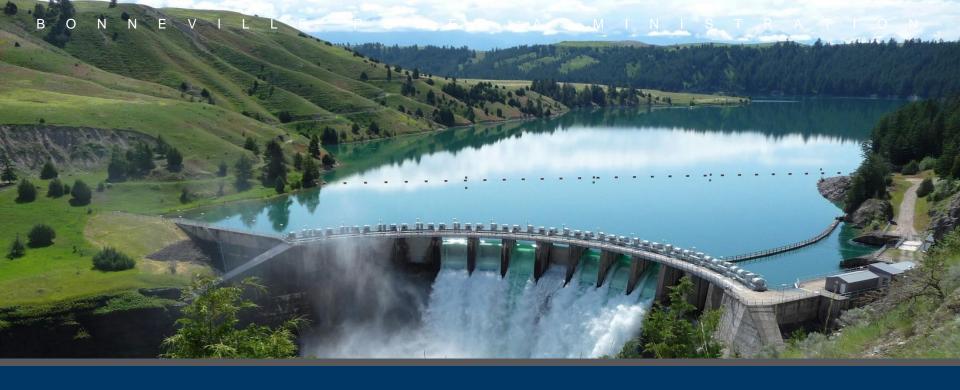
Phase 2 -TRADITIONAL REP **PREPARATION PHASE** (2026-2029)

If no settlement is reached in 2025, BPA must shift its focus from facilitating and supporting settlement discussions to preparing its positions and policies for the BP-29 rate.



Informational Resources and Contact

- We encourage participants to access educational and background information on REP, which can be found on the Post-2028 REP external webpage.
 - If parties are seeking additional information not posted here, please email us directly with your inquiry.
- The Post-2028 REP team can be contacted directly via email to: REP2028@bpa.gov.



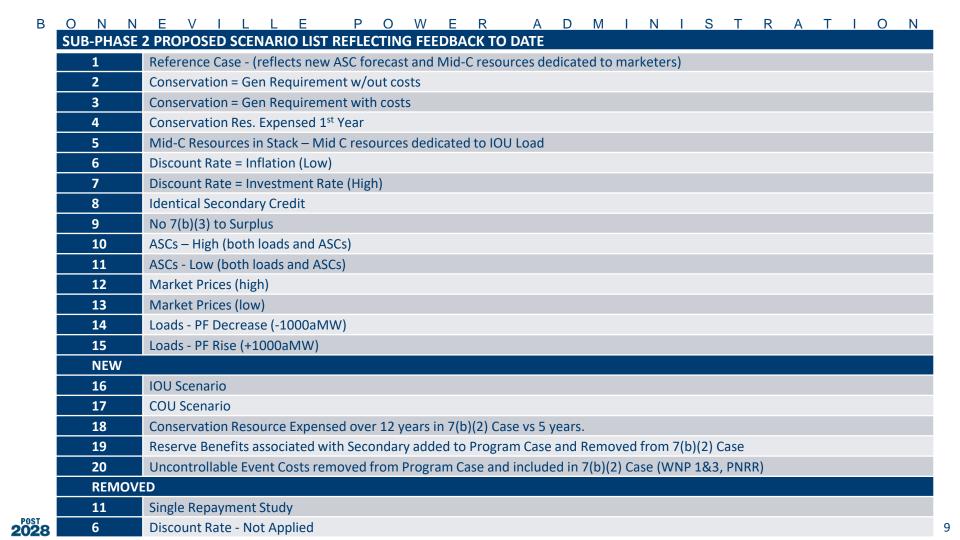
Sub-Phase 2 Scenario List Update





Sub-Phase 1 Scenario List

SCENARIO LIST				
1	Reference Case	15	ASCS - HIGH	
2	No TS in ASCs	16	ASCs - Average of High/Low (V1)	
3	Conservation = Gen Requirement w/out costs	17	ASCs - Average of FY22-25, Hist. Growth (V2)	
4	Conservation = Gen Requirement with costs	18	ASCs - Double	
5	Conservation Res. Expensed 1st Year	19	ASCs – Test Period Equal to Rate Period ASCs	
6	Mid-C in Stack	20	ASCs – Test Period decline 10% from Rate Period ASCs	
7	Discount Rate - Not Applied	21	BPA Conservation - High (+50%)	
8	Discount Rate = Inflation	22	BPA Conservation - Low (-50%)	
9	Discount Rate = Investment Rate	23	Loads - PF Decrease (-1000aMW)	
10	Identical Secondary Credit	24	Loads - PF Rise (+1000aMW)	
11	No 7(b)(3) to Surplus	25	High Loads and High Resources	
12	Single Repayment Study	26	Low Loads and Low Resources	
13	In Lieu - Regular	27	Market Prices - High	
14	In Lieu - Green	28	Market Prices - Low	
		29	Cost Increase (\$100 million)	



IOU Scenario

- IOU's requested the following best case scenario be included in the Sub-Phase 2 REP Analysis which reflects a combination of treatments listed below:
 - Allocation of Section 7(b)(2) Trigger Amounts to all other power sold this is reflected in the reference case.
 - Not Increasing 7(b)(2) Case Loads By Conservation Load Reduction and including all **Conservation costs** – this is scenario 4, Conservation = General Requirements with costs.
 - Reserve Benefits from Secondary and Firm Surplus Sales if basing this on the IOUs' position in WP-07S, BPA could evaluate modeling this by multiplying the secondary inventory by the operating reserves rate.
 - Discounting of the Stream of 7(b)(2) Rate Projections using the High Discount Rate (i.e. BPA's Risk Adjusted Discount Rate/Investment Rate) – this is reflected in Scenario 9.
 - Not Including in Resource Stack Output from the Mid-Columbia Dams sold to Non-Preference **Purchasers** - this scenario assumes no Mid-C hydro resources are made available in the 7(b)(2) Case Resource Stack.



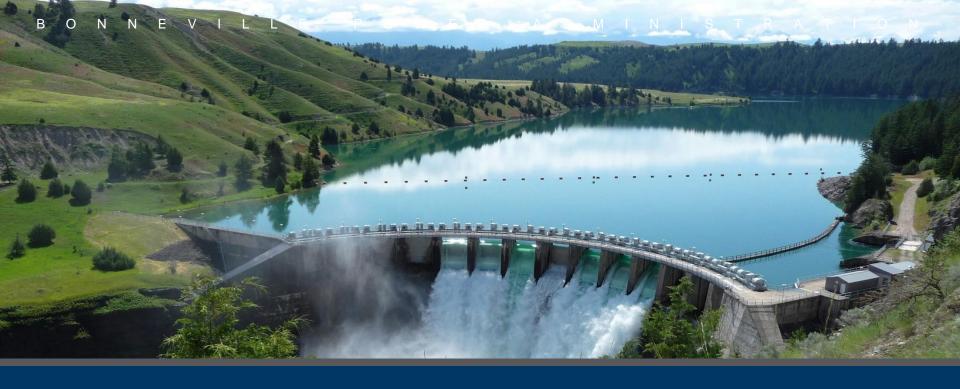
IOU Scenario (continued)

- Costs of Uncontrollable Events should be excluded from Program Case and included in 7(b)(2) Case and referred to as WNP 1&3, PNRR and Financial Reserves for Risk
 - In regards to WNP 1&3 debt, debt optimization and the multiple RCD programs have utilized WNP 1&3 debt to provide capital related cost savings to customers. BPA staff will need to investigate this further.
 - In regards to Planned Net Revenue for Risk and Financial Reserves for Risk, these costs, if forecast are reflected in both the Program Case and the 7(b)(2) case in the reference case analysis. This scenario would remove the cost from the Program Case only.

COU Scenario

Scenario is based on 2012 REP:

- No conservation adjustment to 7(b)(2) Case loads; therefore, no conservation resources available in 7(b)(2) resource stack,
- use Program Case repayment study in 7(b)(2) COSA,
- include Mid-C resources in 7(b)(2) stack (IOU Loads),
- no 7(b)(3) allocation to surplus sales,
- use inflation rate to discount rate streams, and
- 7(b)(2) Case conservation resources capitalized over useful life (ref. case).



Mid-C Treatment in Reference Case





Mid-C Treatment in Reference Case & Scenario 6

Sub-Phase 1 Reference Case

- The Sub-Phase 1 REP Reference Case Analysis assumed, as a simplifying assumption, no Mid-C resources are available in the section 7(b)(2)(D) Resource Stack. This assumptions meant other, more expensive resources would be used to serve the section 7(b)(2) loads (increasing the costs of the 7(b)(2) Case).
- However, portions of Mid-C resources sold to marketers or other non-5(b) customers (i.e., neither preference customers nor IOUs) should be included in the 7(b)(2)(D) Resource Stack.

Scenario #6 – Inclusion of Mid-C Resources

Residential Exchange Program - Sub-Phase 1 Dry Run and Preparation

- In the Sub-Phase 1 REP analysis this scenario includes the portion of resource output forecast to be sold outside of the region and/or to marketers. It does not include any output dedicated to IOU loads.
- To conform to the Public's position in WP-07S and REP-12, the Mid-C Resource Scenario #6 should have included in the Resource Stack Mid-C Resources sold to the IOUs.

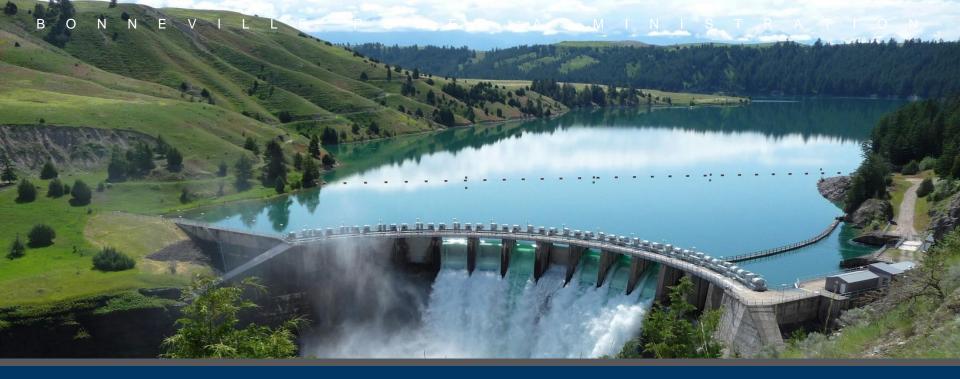
Sub-Phase 2 REP Analysis:

- The Reference Case will reflect Mid-C resource output forecast to be sold to marketers.
- Scenario #6 will include sales to the marketers and the forecast portion of Mid-C resource output dedicated to IOU
 loads.

How Does this Impact REP Benefits in Sub-Phase 1

- If this approach had been reflected in the Sub-Phase 1 reference case for FY 2022-23 and FY 2029-30 rate periods the following REP Benefits would have resulted.
- Some minor updates in O&M levels were reflected for the Mid-C resources; as a result scenario 1b is slightly different from 6a.
- The Revised Reference Case shows lower net REP benefits; as a result it's reasonable to assume most scenarios would result in lower net REP Benefits using the revised Reference Case.
 - Staff will not be refreshing Sub-Phase 1 analysis for this change; participants will be provided update results in the Sub-Phase 2 process.

	Scenario	FY 2022-23	FY 2029-30
1 a	Reference Case – Original	\$31.8	\$81.3
1b	Reference Case – Revised Resource Stack	\$(17.0)	\$18.6
6a	Mid-C in Stack - Original	\$(22.1)	\$17.7
6b	Mid-C in Stack – Revised Resource Stack	\$(31.8)	\$16.2



Recap – Calculating the Program Case and 7(b)(2)

Case Rates & Conservation Treatment

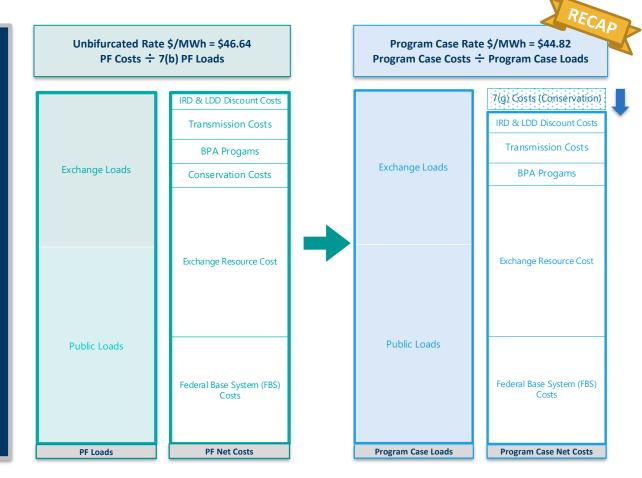
in the Rate Test





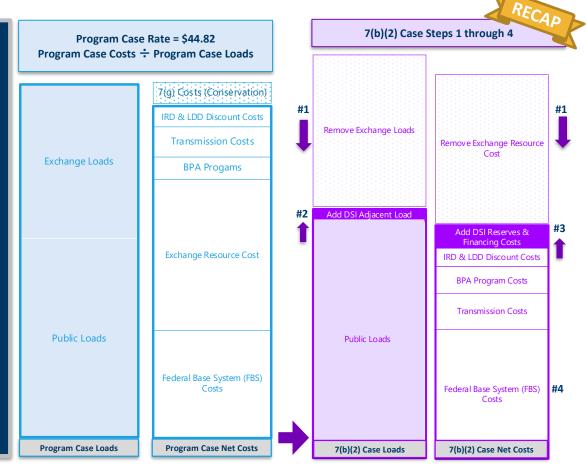
Determining the Program Case Rate used in the 7(b)(2) Rate Test in the Reference Case

- The Program Case rate uses the Unbifurcated Rate as a base.
- The Program Case is adjusted based on terms set forth in Section 7(b)(2) of the Northwest Power Act.
- To get to the Program Case Rate, BPA removes Applicable 7(g) costs (conservation, uncontrollable events, billing credits, and excess experimental resources costs) per the Northwest Power Act, which lowers the Program Case Rate.



Determining the 7(b)(2) Case Rate requires multiple adjustments

- The 7(b)(2) Case uses the Program Case rate as a base prior to making adjustments set forth by Section 7(b)(2) of the Northwest Power Act and the 2008 7(b)(2) Implementation Methodology
 - No REP purchases and sales. (7(b)(2)(C))
 - DSIs are served by their local utility instead of BPA. (7(b)(2)(A))
 - Power reserve benefits and reduced financing costs available under the Act are not achieved. (7(b)(2)(E))
 - The Federal Base System (FBS) resources are used to serve 7(b)(2) Case loads first and all costs associated with the FBS are included in the 7(b)(2) Case. (7(b)(2)(B))



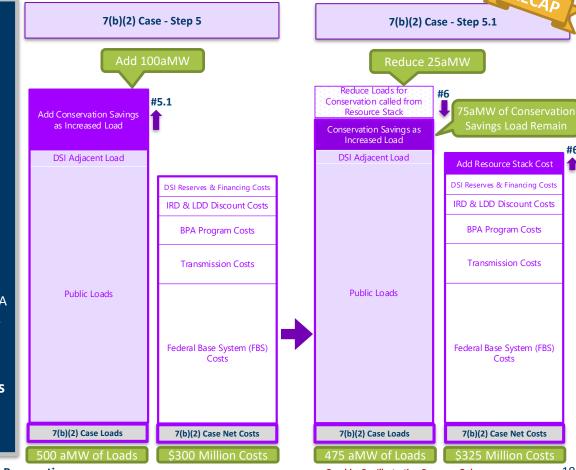
Determining the 7(b)(2) Case Rate requires multiple adjustments (continued)

- 5) After the FBS is exhausted, other resources owned by publics are called upon in least cost order. (7(b)(2)(D))
 - Resources BPA has acquired from customer, but not included in the FBS (Type 1)
 - Resources owned by customers, but not dedicated to 5(b) load (Type 2)
 - Other resources (Type 3)

5.1) **Treatment of Conservation***

- Considered a Type 1 resource.
- 7(b)(2) Case Loads are increased by the amount of BPA acquired conservation included in the Resource Stack.
- 6) Final 7(b)(2) Case loads are decreased to the extent that conservation is selected from the Resource Stack and the associated resource cost is added.

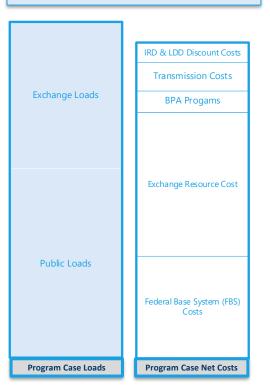
*This is based on 2008 7(b)(2) Implementation Methodology and Legal Interpretation.

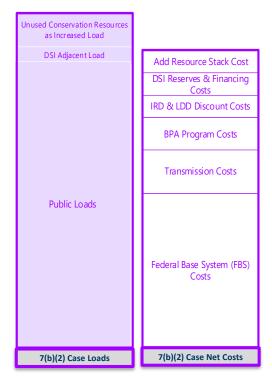


Summary of Final Program Case and 7(b)(2) Rate Components

Program Case Rate \$/MWh = \$44.82 Program Case Costs + Program Case Loads

7(b)(2) Case Rate \$/MWh = \$26.71 7(b)(2) Case Costs ÷7(b)(2) Case Loads



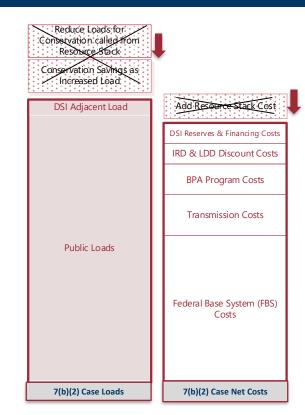


Conservation Treatment: Scenario 3 (No Conservation)



- In Scenario 3 Conservation is treated similar to the Program Case.
 - Both Program Case and 7(b)(2) Case have the same loads; no adjustment is made in the 7(b)(2) Case for conservation.
 - Because conservation costs are removed from the Program Case and the 7(b)(2) Case as applicable 7(g) costs, conservation as a resource costs is not included in Resource Stack per 7(b)(2)(D).
 - No conservation related costs are included in the 7(b)(2) Case.
- This scenario produces lower Net REP benefits compared to the Reference Case because it lowers the 7(b)(2) load obligations without incurring any additional costs which reduces the 7(b)(2) Rate in comparison to the Program Case Rate.

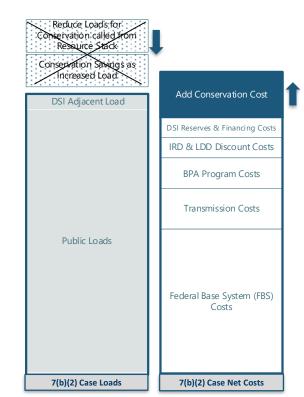
to inpurious to the Frogram case states		Program		
	REP-Total	Case	7b2 Case	Trigger
1 FY 2022-23 Reference Case	\$ 31,840	\$ 42.25	\$ 25.95	\$16.30
3 Conservation = Program Case w/out Conservation Costs	\$ (28,541)	\$ 42.45	\$ 24.84	\$17.61
4 Conservation = Program Case with Conservation Costs	\$110,649	\$ 41.99	\$ 27.40	\$14.59
5 Conservation Resources in Resource Stack Expensed Year 1	\$ 71,476	\$ 42.12	\$ 26.68	\$15.44



Conservation Treatment: Scenario 4 (Conservation Costs only)

- In Scenario 4 Conservation is treated similar to Scenario 3 except the total cost of conservation that was removed from the Program Case is added to the 7(b)(2) Case.
 - The Program Case and 7(b)(2) Case loads are the same; no load adjustment is made for conservation.
 - The total amount of conservation costs removed from the Program Case are included in the 7(b)(2) Case.
 - Conservation is not included as a resource in the Resource Stack.
- This scenario produces higher Net REP benefits compared to the Reference Case because it increases fixed costs for conservation. which is spread across the smaller 7(b)(2) load obligation.

		Program		
	REP-Total	Case	7b2 Case	Trigger
1 FY 2022-23 Reference Case	\$ 31,840	\$ 42.25	\$ 25.95	\$16.30
3 Conservation = Program Case w/out Conservation Costs	\$ (28,541)	\$ 42.45	\$ 24.84	\$17.61
4 Conservation = Program Case with Conservation Costs	\$110,649	\$ 41.99	\$ 27.40	\$14.59
5 Conservation Resources in Resource Stack Expensed Year 1	\$ 71,476	\$ 42.12	\$ 26.68	\$15.44

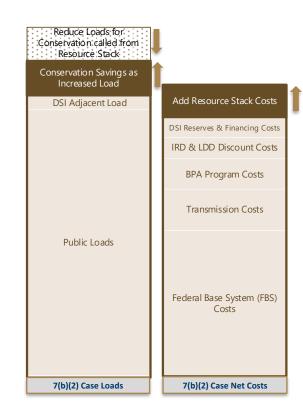


Conservation Treatment: Scenario 5

(Expensed portion of Conservation Resource is Recovered the First Year)

- In Scenario 5 Conservation is treated similar to the Reference Case except the total cost of Conservation increases when called upon from the Resource Stack to reflect the cost being recovered over one year instead of five years.
 - 7(b)(2) loads are increased for Conservation savings.
 - Conservation Resources are included in the Resource Stack.
 - The expensed portion of conservation resource costs included in the Resource Stack are recovered over one year instead of five years.
- This scenario produces higher Net REP benefits compared to the Reference Case because it increases Resource Stack costs.

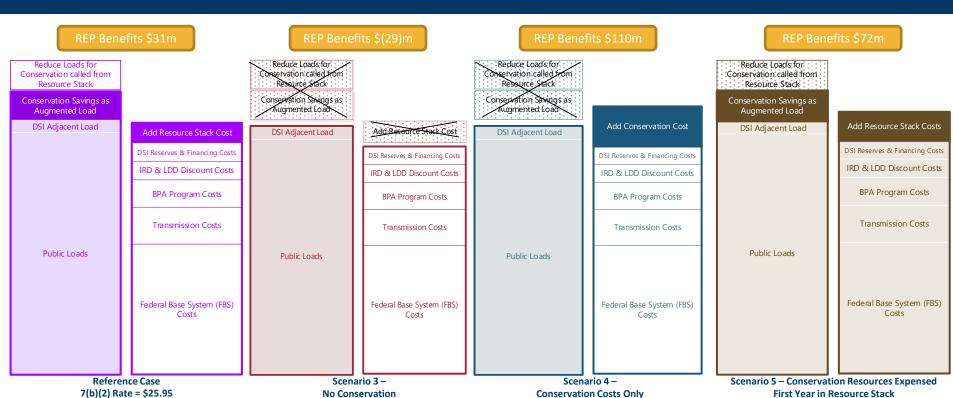
		Program		
	REP-Total	Case	7b2 Case	Trigger
1 FY 2022-23 Reference Case	\$ 31,840	\$ 42.25	\$ 25.95	\$16.30
3 Conservation = Program Case w/out Conservation Costs	\$ (28,541)	\$ 42.45	\$ 24.84	\$17.61
4 Conservation = Program Case with Conservation Costs	\$110,649	\$ 41.99	\$ 27.40	\$14.59
5 Conservation Resources in Resource Stack Expensed Year 1	\$ 71,476	\$ 42.12	\$ 26.68	\$15.44



Conservation Treatment Scenarios

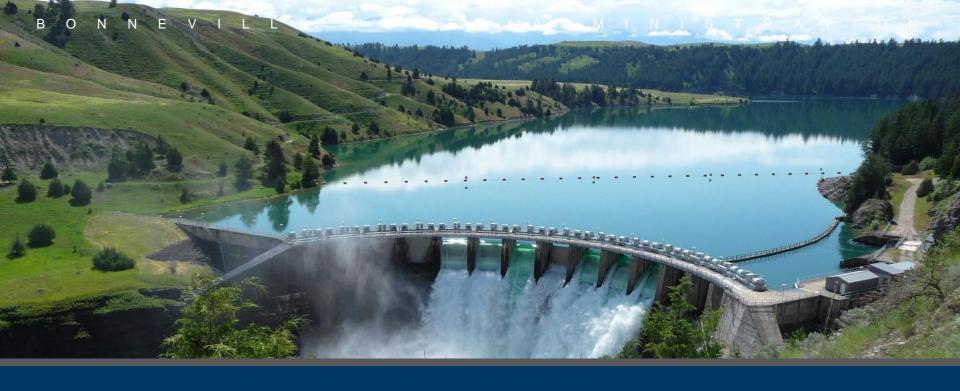
7(b)(2) Rate = \$24.84





7(b)(2) Rate = \$27.40

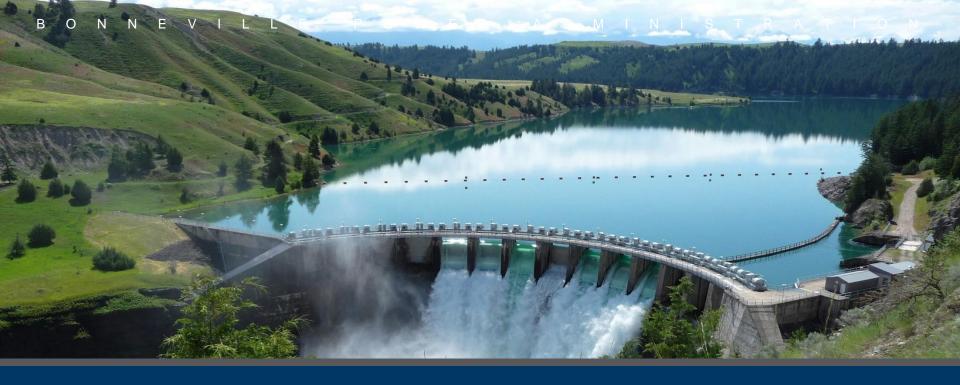
7(b)(2) Rate = \$26.68



BREAK!







Average System Cost Methodology Revision Timeline and Issues



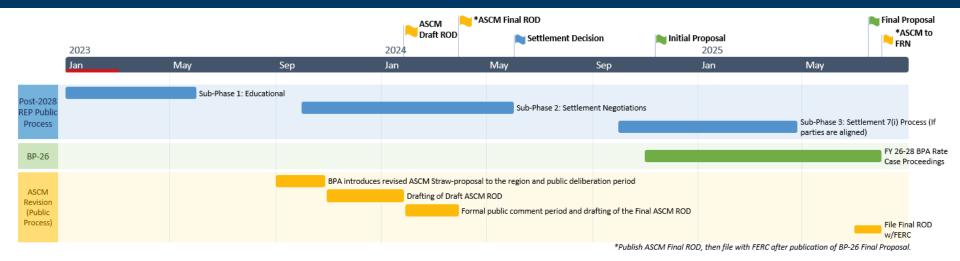
Original ASCM Revision Timeline



- *Publish ASCM Final ROD and file with FERC after publication of BP-26 Final Proposal.
- The Average System Cost Methodology (ASCM) revision process will run parallel to post-2028 REP efforts, but be an independent formal process.
- **Step 1:** BPA introduces a straw-proposal of revisions to the ASCM, and in accordance to Section 5(c)(7) of the NWPA, engages regional parties (Pacific NW utilities, PUCs, the Council) in deliberative discussions.
- **Step 2:** BPA publishes a Draft ASCM Record of Decision and opens up a formal comment period.
- **Step 3:** BPA publishes the Final ASACM ROD and file with FERC post publication of the BP-26 Final Proposal.



ASCM Revision Timeline Aligned w/Sub-Phase 2



- Process steps are the same, however, publication of the Final ASCM ROD with FERC will be pushed out until after publication of the BP-26 Final Proposal to avoid conflict with the currently 2012 REP Settlement contracts.
- This timeline aligns with Sub-Phase 2: Settlement Negotiations process.
- Time gap between publication of the Final ASCM ROD and submittal with FERC risks re-negotiation of revisions.



Areas of Consideration – Transmission Costs

- Transmission invests (costs and revenues) have been in and out of the ASCM since the first methodology iteration.
 - In the 1981 methodology transmission costs were permitted in the ASC calculation.
 - Then in the 1984 iteration, Bonneville concluded that there was no legal requirement to treat transmission investments as a "resource" cost under Section 5(c) referencing that elsewhere in the statute the term "resource(s)" was used synonymously with "generating facility" and "conservation measures".
 - IOUs argued that exclusion of transmission costs would distort the comparison of "coal by wire" and "coal by train". Additionally, they contended inclusion of transmission costs in ASCs would not incentivize unnecessary transmission builds as not all such costs are recovered through rates.
 - Ultimately, BPA and parties agreed to allow exchange of existing transmission costs (facilities in-service as of July 1, 1984), but greatly limited costs of new transmission facilities.
 - In the 2008 iteration ALL transmission costs and revenues were re-introduced to the ASC calculation so to ensure equitable treatment among exchanging utilities with differences in generation location relative to loads.
 - At the time coal fired generation was a significant proportion of generation portfolios and some utilities had their coal fired generation closer to the mine-mouth but further from the load, thus incurring high transmission costs, whereas other utilities has such generation closer to load. Utilities argued that these cost structure differences could result in significant differences among ASC levels, therefore to ensure equitable treatment all transmission costs were permitted in ASCs.



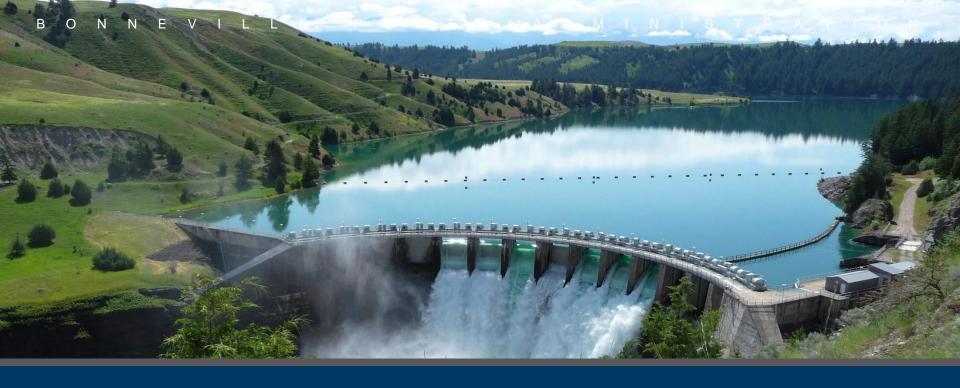
Areas of Consideration – Carbon Policy & Major Resources

- At the time the Final ASCM ROD was published, no decision was made on treatment of environmental attributes, RECs or carbon credits.
 - Though resource costs incurred to meet carbon policy requirements are allowed in ASCs, no specific guidance is provided for costs incurred in meeting such requirements alternatively. Any penalties incurred are treated as taxes and excluded.
 - Utilities have different exposure to state policy, and multijurisdictional utilities have differing exposure to different state policies. Revisions to the ASCM would seek reasonable treatment of costs among participating utilities.
- Treatment of New Major Resource Additions and Removals.
 - The 2008 ASCM permits within Rate Period changes to all participating utilities' ASCs for major resource additions/removals that commence/cease operations anytime during Rate Period.
 - However, under the 2012 REP Settlement, IOUs agreed to forego within Rate Period ASC adjustments, in order to "fix" their ASCs through the rate period, but retained ability to include new resource costs for resources for resources that commence/cease operations prior to the start of the such rate period.
 - This misalignment needs correction in ASCM.



Areas of Consideration – New Power Contracts

- Interplay of new post-2028 Rates Methodology and Power Contracts and ASCM
 - For public customers with Regional Dialogue CHWM contracts that participate in the REP, the 2008 ASCM excludes costs to serve Above-Rate Period High Water Mark load (Tier 2 load) from ASCs.
 - Since REP benefits are included in Tier 1 costs under the Tiered Rates Methodology (TRM) this limitation comports with the TRM principle of no bleed-over of Tier 2 costs in Tier 1 rates.
 - Tier 2 costs are removed, and any costs to the exchanging utility for Above RHWM load service are removed from its ASC.



Settlement vs No-Settlement





REP Implementation under Settlement

Pros and Benefits	Cons and Considerations
Provides long-term certainty associated with costs REP benefits in BPA's power rates.	The REP benefit stream is computed for long-term period; variability in forecasts and actuals is inherent and increases
REP benefits in aggregate may be fixed per rate period, but individual allocation to each participating IOU is determined at each rate period.	over time. Such variability, may arouse the hindsight mentality that settlement was favorable to one camp over the other.
Proactively seeks regional alignment on REP implementation outside of courts thus avoiding uncertain and protracted litigation.	Settlement may not be adaptable to industry changes and BPA's financial position.
Legal settlement framework sustained by the courts.	
Significantly less administrative burden to implement for both BPA and REP participants.	
Possibly waive in-lieu provision and deemer accounts.	Limits implementation flexibility.

Implementation Process under Settlement

Under current 2012 REP Settlement:

- Administrative process of the program is streamlined and litigation free
 - Presently, the bi-annual ASC determination process, which runs parallel to BPA's rate case proceedings, is managed by two BPA staffers.
 - Meanwhile, management of the RAM model that produces PFx rates and allocates REP benefits to each IOU consists of one BPA staff person.
- Two-prong process to determine REP benefits
 - Formal ASC Review process parallel to BPA's Rate Case Proceedings.
 - Utilities report system costs and revenues, and loads which BPA staff evaluates in accordance with the 2008 ASCM. ASCs and exchange loads are calculated for Rates.
 - ASCs and exchange loads are inputs in RAM to calculate individual PFx rates and parse the REP benefits pie amongst the participating IOUs.
 - REP benefits for participating COUs are not included in fixed benefits.



REP Implementation under No-Settlement

Pros and Benefits	Cons and Considerations
Costs and benefits will change each rate period. Creates a connection between BPA's current costs and revenues and the REP.	Low certainty in REP costs and benefits. Though current analysis displays lower benefits, actual assumptions and inputs into calculating REP benefits are uncertain and the
REP and BPA's implementation of rate test is adaptable to current events and new conditions in energy industry.	region risks the potential of benefits resulting higher than current projections.
Eventually, disputes of REP issues would be resolved through the courts and provide some long-term certainty over REP implementation.	Litigation exposure over REP issues increases uncertainty of BPA's rates until all issues have been settled through the courts. For example, no-settlement increases likelihood and frequency of disputes over IOUs' ASCs before BPA and at FERC.

below BPA's PFx rate.

BPA has additional tools to manage REP costs to remain

competitive for the long term (e.g., in lieu).

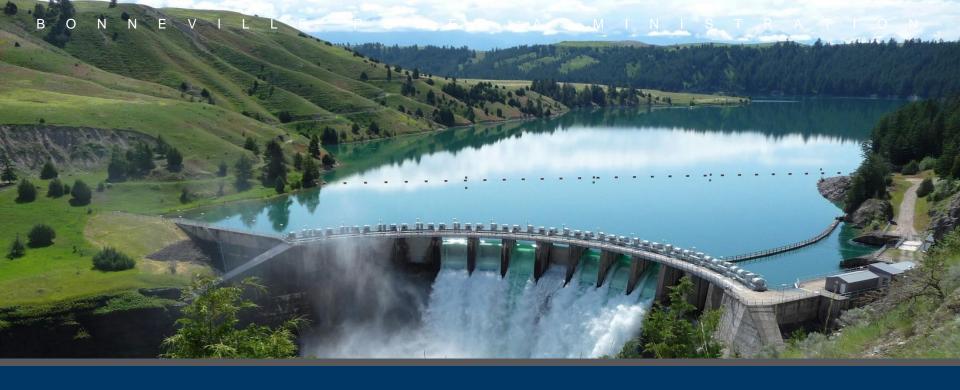
Potential dispute over implementing In-lieu, and of deemer

account balances for participating utilities whose ASCs fall

Implementation Process under No-Settlement

Potential implementation process without a settlement agreement:

- Administrative process will be more burdensome. BPA will need to bolster staff to perform 7(b)(2) rate test in each rate period (i.e., re-initiate separate section 7(b)(2) rate test study, testimony).
- Return of 7(b)(2) implementation issues in rate case will make reaching settlements of power rate cases much more difficult.
- Regional disagreement on REP will draw attention and resources away from dealing with real-time power/transmission issues to, instead, focusing on interpreting section 7(b)(2) and what Congress was thinking in circa 1979-80.
- Heavier workload for BPA and IOUs on ASCs, and larger potential for disputes.
 - Most litigated part of REP is ASCs. Dozens of cases decided by FERC regarding IOUs' ASCs from 1980s-1990s.
 - Six published decisions from Ninth Circuit over ASCM or its implementation.
- Two-prong process to determine REP benefits
 - Formal ASC Review process parallel to BPA's Rate Case Proceedings.
 - Will likely remain the same, but will need to modify in consideration of potentially implementing In-lieu and tracking deemer accounts.
 - Power rates group will utilize ASC inputs from the ASC determination process, but workload will increase in needing to run the 7(b)(2) Rate Test.



Next Steps, Feedback and Questions





Thank You!

Post 2028 REP Lead Sponsor:

Kim Thompson, Vice President, Northwest Requirements Marketing

Post 2028 REP Team:

Stephanie Adams, Paulina Cornejo, Scott Winner, Daniel Fisher, Rich Greene, Neil Gschwend, Kelly Olive, Michael Edwards, Jonathan Ramse

