

BP-26 Rate Case and TC-26 Tariff Proceeding Workshop

June 26, 2024



Agenda June 26th

	BP/TC-26 Pre-Proceeding Workshop	
Time*	Topic	Presenter
9:00 a.m. – 9:10 a.m.	Introduction, Meeting Protocols, Comments and Agenda	Brian McConnell
9:10 a.m. – 10:20 a.m.	Non-EIM Balancing	Frank Puyleart, Bill Hendricks
10:20 to 10:30 a.m.	Break	
10:30 a.m. – 11:30 a.m.	GI Reform – Withdrawal Penalties	Rebecca Fredrickson, Bill Hendricks
11:30 a.m. – 12:00 p.m.	WA Cap-and-Invest Program	Alisa Kaseweter
12:00 p.m. to 1:00 p.m.	LUNCH	
1:00 p.m. – 1:10 p.m.	GI Reform - LGIA	Kim Gilliland
1:10 p.m. – 1:30 p.m.	GI Reform – Affected Systems	Rebecca Fredrickson
1:30 p.m. – 2:00 p.m.	Attachment K Transmission Planning – FERC Order Update (inform)	Ravi Aggarwal/Jennifer Gingrich
End of Meeting		
	TC-24 Settlement Commitment	
Time*	Topic	Presenter
2:10 p.m. – 2:30 p.m.	BPA's Forecast Requirements in EIM (TC-24 Settlement Commitment)	Melanie Bersaas, Frank Puyleart

^{*} Times are approximate

WebEx Meeting Participation and Asking Questions

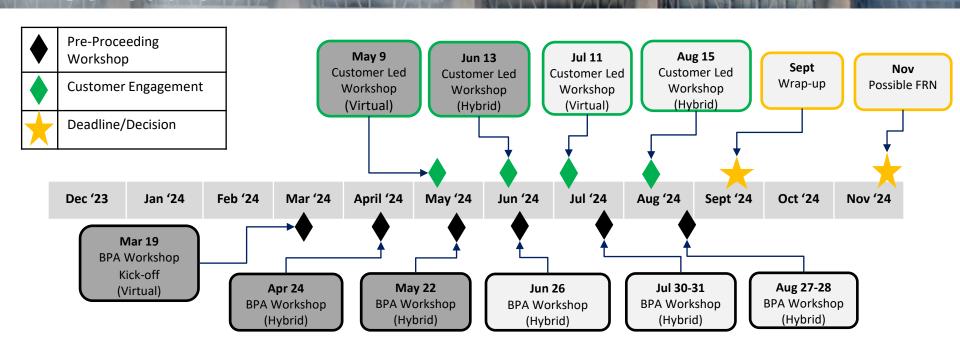
- After you join the WebEx, you will be automatically muted.
- Please identify your company in your display name on WebEx.
- To be recognized for asking a question:
 - 1. Use the "Raise your Hand" option to signal you have a question
 - 2. Or use the Chat option to send a question request to "Everyone"
- Once recognized, unmute yourself and state your name and company before commenting/asking your question – participants in the RHR are also asked to do this.
- When finished speaking please remember to re-mute and/or lower your hand.





Proposed BP/TC-26 Pre-Proceeding Workshop Schedule

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Procedural schedule dates are draft only

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Approach to Customer Engagement

 Most identified issues will be presented according to the following process at workshops (multiple steps might be addressed in a single workshop):

Phase One:
Approach Development

Phase Two: Evaluation

Phase Three: Proposal Development

Step 1: Introduction & Education

Step 2: Description of the Issue

Step 3: Analyze the Issue

Step 4: Discuss Alternatives

Step 5: Discuss Customer Feedback

Step 6: Staff Proposal

Teams will follow the steps that may be covered in one workshop or more based on the complexity of the issue.

Customer Led Workshops

- Within one week after every workshop, customers can request a Customer Led workshop that would focus on topics presented in the previous workshop.
- Customers should provide the topic and estimated time needed for discussion with BPA SMEs.
- BPA will not create new content this is an opportunity to ask further questions on materials previously presented.
- Opportunities for customers to present on topics of interest, where BPA will be in listening mode.

Customer Comment Process

- Thank you to everyone who submitted comments on the May 22 workshop topics.
- BPA is using the same comment tracking and response process that was developed in BP/TC-24, which includes the following:
 - All customer comments will be posted to the BP-26 Rate Case website.
 - BPA will create a consolidated customer response (CCR) document for each workshop that will be posted/updated at the same time as other workshop materials.
 - The CCR is organized to address comments listed by the workshop date where the comments were received.
 - The CCR will provide direct responses or identify other forums or future BP/TC-26 workshops where BPA expects to provide a response.
 - To the extent possible, BPA will endeavor to provide responses prior to the next workshop in the Customer Comments section on the BP-26 website (updated CCR will be posted with workshop materials)
 - All comments will have a response



Non-EIM Balancing



Steps covered today

- Step 1: Introduction and education
- Step 2: Description of the issue
- Step 3: Data and/or analysis that supports the issue
- Step 4: Discussions on possible alternatives to solve issue



Step 1

Introduction and education



Background

- When BPA is participating in the EIM, Generation Imbalance (GI) charges are moved from Schedule 9 to Schedule 9E of the Tariff.
 - Schedule 9 defines GI as the difference between scheduled and actual energy delivered from generation resources.
 - Schedule 9E defines GI as the deviation of the Transmission Customer's metered generation calculated as Uninstructed/Instructed Imbalance Energy (UIE/IIE).
- Effectively, under:
 - Schedule 9 GI is calculated using BPA BA data.
 - Schedule 9E GI is a pass through of what is modelled in the EIM.



Step 2 and 3

Description of the issue and data that supports the issue



ISSUE

- Generating resources might be causing an imbalance on the BPA BA without being assessed any charges for the imbalance caused.
- BPA has identified several network model parameter mismatches that can create imbalance not seen by the EIM.
 - Base Schedule Mismatch
 - Outage Sync Issues
- It is possible that more situations could arise that have yet to be seen.
- Assessing charges associated with these imbalances would require a change to the rate schedule, tariff, and business practices.

Base Schedule Mismatch

- A customer might submit a schedule above the pMax modelled in the EIM.
 - Customers establish and submit their pMax as part of MOD32, which can be lower than their transmission rights
 - Actual imbalance on BPA's BA is based on the submitted schedule which would auto-approve within their transmission rights
- EIM caps the Base Schedule at the pMax.
 - Any UIE/IIE is then calculated based on the Base Schedule at the pMax and passed through to BPA to assess 9E GI charges.
- The actual imbalance caused on BPA's BA will differ from the imbalance calculated from the UIE/IIE that is passed through from the EIM.

Outage Sync Issues

- When an outage occurs, planned or unplanned, multiple systems need to be informed.
- Occasionally, not all systems will get the same data at the same time and actual imbalance on BPA's BAA will differ from the UIE/IIE information that is passed through via the EIM.
 - Similar impacts to the Base Schedule Mismatch.

Cost Impacts of Non-EIM Balancing

 Since joining the EIM in May 2024, the average monthly discrepancy has been roughly \$71 thousand, which sums to \$1.3 million annually.



Step 4

Possible Alternatives to Solve Issue



Alternatives

- Adding language to the tariff, rate schedule and business practices for these instances will be necessary to recover the cost for any GI charges that are not currently being assessed.
- Option 1: Specific language
 - Added to ensure that GI charges will be assessed when specific instances arise
 - If a situation will be ongoing and easily identified, adding specific language is preferred
- Option 2: General language
 - Added to specify that any imbalance caused on BPA's BA that is not being assessed through the EIM will be recovered at the EIM Load Aggregation Point (ELAP)
 - ELAP is the average Locational Marginal Price (LMP) across the hour and across all nodes in the BAA
 - If a situation is sporadic or unknown, general language would ensure that all costs associated with imbalance caused could be recovered



Questions?



GI Withdrawal Penalties

Step 3: Data and/or analysis that supports the issue

Step 4: Discussions on possible alternatives to solve issue





Step 3: Data and/or analysis that supports the issue



Background

- In February 2023, BPA's large generator interconnection queue contained more than 120 GW in requested capacity.
- Under BPA's first-come, first-served serial study process, BPA could not reasonably process these requests.
- BPA identified that the large generator interconnection queue had a backlog due to 1. the number and size of the requests received, 2. the inefficiencies in addressing each request individually, and 3. complications caused by withdrawals.
- BPA initiated region-wide discussion
 - Customers agreed that the serial study process was not working and without reform it could take 5 years or more for a request to be processed.
 - Customers agreed a cluster study process would improve the process.
- Through TC-25 Settlement, BPA adopted a first-ready, first-served cluster study process.

TC-25 Commitment-GI Withdrawal Penalties

In recognition that withdrawals could continue to cause complications, BPA committed to hold workshops to discuss proposals for withdrawal penalties.

TC-25: Terms of the Settlement section 5:

- Bonneville will hold the following stakeholder workshops:
 - **d. Withdrawal Penalties.** Before the BP-26 and TC-26 proceedings, to discuss proposals for withdrawal penalties under the LGIP and necessary revisions to the LGIA study deposits and commercial readiness deposits.

Order 2023/2023A and how BPA is considering it in the process

- Withdrawal Penalties The final rule requires the transmission provider to impose a withdrawal penalty if the withdrawal of an interconnection customer from the queue has a material impact on the cost or timing of any interconnection requests in the cluster study. These withdrawal penalties are meant to deter nonviable projects from entering or remaining in the interconnection queue and to mitigate potential harm to other interconnection customers in the queue.
- Although GI Withdrawal penalties are considered using the Order 2023/2023A, the charge for the penalties will be using the rates principle

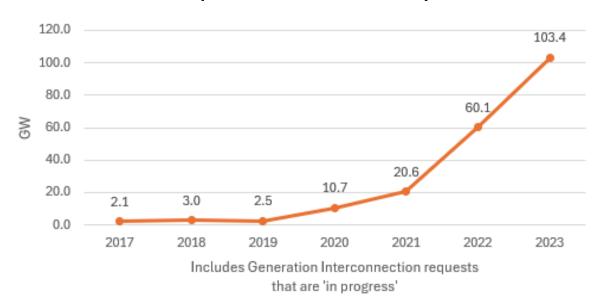
Problem Statement

 Continued concerns with customers withdrawing a Large Generator Interconnection Request from the BPA Interconnection Queue, which may impact a need for a restudy, cost allocation, possibly increasing further withdrawals and delaying the start of subsequent cluster study processes.

Generation Interconnection Queue Activity

By the end of 2023, BPA had over 400 active requests to interconnect new generation resources to the FCRTS.

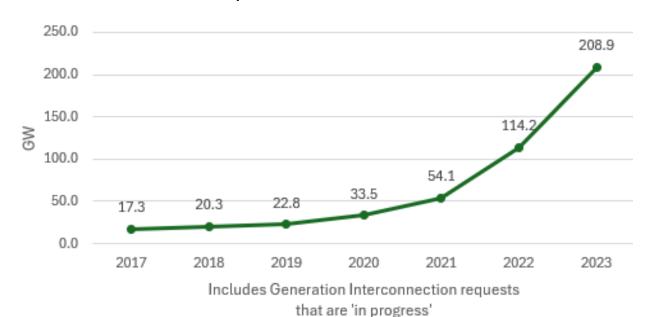
GI Requests: Total GW/year



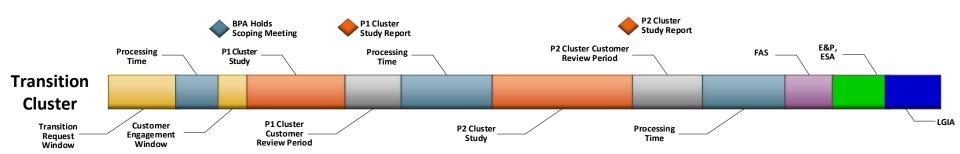
Generation Interconnection Queue Volume

- 208 GW represents all generation GW in the queue
- 166.5 GW of which is eligible for the Transition Cluster

GI Requests: Total GW in Queue

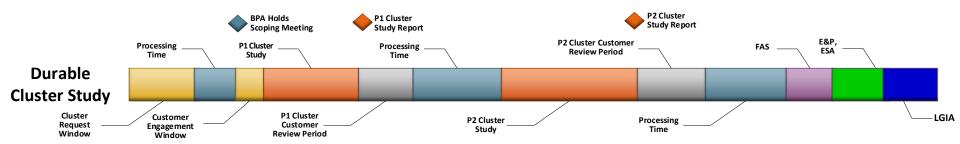


A GI Reform Timelines



Re-studies for Phase One Cluster Study and Phase Two Cluster Study are not included but may be a possibility depending on withdrawals.

BPA GI Reform Timelines



- Re-studies for Phase One Cluster Study and Phase Two Cluster Study are not included but may be a possibility depending on withdrawals.
- The first durable Cluster Study will not be initiated until the Transition
 Cluster is complete. Any delay to the Transition Cluster Study due restudies
 triggered by withdrawals may result in a delay to initiating the first durable
 Cluster Study.

Customer Feedback

- Should BPA staff propose a GI withdrawal penalty?
 - BPA received comments from four customers on this topic and they all supported some form of withdrawal penalty
- When should the penalty apply?
 - All but one customers that responded believed the penalty should apply to transition and durable with caveats
 - Some suggested the first phase should not have penalty
 - Some suggested the penalty should be gradual and increase significantly as projects move through the phases
 - Some suggested that no charges should take in effect until BP-26 rates are effective
 - One customer recommends penalty should not apply to transition, however, would recommend a penalty during the durable cluster studies

How should the penalty funds be allocated?

 All customers that responded recommended penalties should be allocated to those impacted and used to perform restudies

Other general comments:

- Suggestions on collecting security specific for potential risk of withdrawing
- Suggestions on possible development of penalties



Step 4: Discussions on possible alternatives to solve issue



Concerns that a withdrawal could:

- Cause a need to restudy a cluster creating uncertainty as to when the study process will conclude, what final study costs will be, and when a project will be commercially operable
- Affect the cost allocation of shared network upgrade creating uncertainty as to final facility costs
- Trigger a cascade of further withdrawals
- Delay the start of a subsequent cluster study process

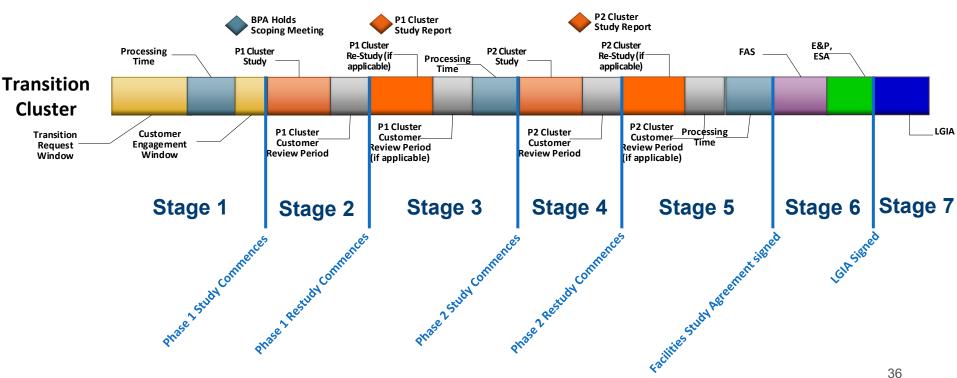
Criteria to review alternatives

- Align with cost causation by fairly allocating costs based on proportionate share
- Simplicity, clarity, transparent public process, and feasibility of application and implementation
- Send the appropriate incentives to encourage projects to remain commercially viable through the process

Withdrawal Stages

Withdrawal Stage		Description	
1	Valid Request	Before Phase 1 commences	
2	Phase 1 Study	After Phase 1 commences and before a Phase 1 restudy commences	
3	Phase 1 Restudy	After Phase 1 restudy commences and before Phase 2 commences	
4	Phase 2 Study	After Phase 2 commences and before a Phase 2 restudy commences	
5	Phase 2 Restudy	After Phase 2 restudy commences and before FAS is signed	
6	FAS Executed	After FAS is signed and before LGIA is signed	
7	LGIA Executed	After LGIA is signed and before energization of project	

Withdrawal Stages



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Penalty Calculation - Status Quo and Alternative 1

Status Quo

 No penalties at any point of the interconnection process

Alternative 1

- No penalties for stage 1 or stage 2, starting once a Phase 1 restudy or Phase 2 commence
- Costs per MWs of interconnection request
- Increased penalties based on MWs as a project moves through the stages

Withdrawal Stage		Status Quo	Alternative 1
1	Valid Request	None	None
2	Phase 1 Study	None	None
3	Phase 1 Restudy	None	\$6k/MW
4	Phase 2 Study	None	\$12k/MW
5	Phase 2 Restudy	None	\$18k/MW
6	FAS Executed	None	\$24k/MW
7	LGIA Executed	None	\$30k/MW

Penalty Calculation - Order 2023

- BPA reviewed pro forma withdrawal penalty calculations, shown in the table below, to help identify similar penalty calculations on next slide.
- BPA's cluster study process is different than pro forma (e.g. BPA has two phases for its cluster study)

Phase of Withdrawal	Total Withdrawal Penalty (if greater than study deposit)
Initial Cluster Study	Two times study costs
Cluster Restudy	5% of network upgrade costs
Facilities Study	10% of network upgrade costs
After Execution of the LGIA	20% of network upgrade costs

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Penalty Calculation – Alternative 2

Alternative 2

- Any penalty would be the greater of the study deposit or the calculated penalty according to the schedule
- A withdrawal during stage 2, a customer would pay twice it's share of the actual study costs
- Once network costs are allocated, penalties are based on the previous study's network upgrade cost allocation
- Increased penalties based on network upgrade costs as a project moves through the stages 3 through 7

	Withdrawal Stage	Alternative 2
1	Valid Request	None
2	Phase 1 Study	2x study costs
3	Phase 1 Restudy	5% of Allocated Costs
4	Phase 2 Study	7% of Allocated Costs
5	Phase 2 Restudy	9% of Allocated Costs
6	FAS Executed	10% of Allocated Costs
7	LGIA Executed	20% of Allocated Costs

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Penalty Calculation – Alternative 3

Alternative 3

- The MWs of all a customer's requests would be summed
- Customers with large amounts of projects in the queue would be subject to higher withdrawal penalties
- Customers with small amounts of projects in the queue would be subject to lower withdrawal penalties
- Increased penalties based on MWs as a project moves through the stages

Withdrawal Stage	Alternative 3	
	LESS than 1,000 MW of projects submitted	MORE than 1,000 MW of projects submitted
1	None	None
2	\$4k/MW	\$8k/MW
3	\$6k/MW	\$12k/MW
4	\$8k/MW	\$16k/MW
5	\$10k/MW	\$20k/MW
6	\$12k/MW	\$24k/MW
7	\$14k/MW	\$28k/MW

Exceptions

- Withdrawal does not have a material impact on the cost or timing of any interconnection requests
- Substantial increase in costs:
 - Network upgrade costs assigned have increased more than
 50% compared to costs from the previous cluster study/restudy
 - The Facilities Study Report and the network upgrade costs have increased by more than 100% compared to costs from the last cluster study

Eligibility and Allocation

 BPA is currently evaluating the eligibility and the allocation of the penalties assessed

Information Mapping

- Language in the Tariff will clarify that there are withdrawal penalties and refer to the Rates Schedule for the structure
- The Rates Schedule will document the penalty structure as well as the exceptions
- The use of funds will be outlined in the Withdrawal Penalty Business Practice



WA Cap-and-Invest Program Charge



Steps 1 & 2: Introduction and Education & Description of Issue

WA Cap-and-Invest Program Charge

- Washington's Climate Commitment Act (CCA), also referred to as the cap-and-invest program, began January 2023.
- Sales of federal power into Washington are considered imported electricity. The entity with the compliance obligation is the First Jurisdictional Deliverer or FJD.
 - The CCA gives BPA the option to decide if it will participate in WA's program as the FJD.
- Bonneville is not currently the FJD but could opt to take on that role at a later date.
- If Bonneville opts to be the FJD, it expects Washington customers receiving no cost allowances from the state associated with emissions from federal power sales to serve their load to transfer those allowances to Bonneville.
- BP-24 included language to ensure that if Bonneville opted to be the FJD and customers did not agree to transfer no cost allowances they would otherwise cover program compliance costs associated with power purchased from Bonneville.

Proposed Action Proposed Action Proposed Action Proposed Action Proposed Action Proposed Action Proposed But Proposed But

WA Cap-and-Invest Program Charge

Staff reviewed the GRSP language and do not propose changes for BP-26

In BP-24, the charge:

- Applies to a customer buying power at the PF, NR, or FPS rate that:
 - Does not register with WA Dept of Ecology and thus does not receive no cost allowances, or
 - Does not sign a power sales contract revision and thus does not agree to transfer no-cost allowances for the federal system to Bonneville.
- Is the cost to BPA of buying the allowances necessary to cover the compliance obligation plus a 25 percent cost adder.

BP-24 rates do not include costs that BPA would expect to incur if BPA opted to be the FJD.

• Ex: costs for procuring allowances for surplus sales and for PF sales (if compliance obligation no cost allowances), administrative costs.

FJD Decision Process

- BPA remains committed to a public process before making the decision to be an FJD under Washington's cap-and-invest program.
- The public process is not part of the rate case.
- No current timeframe for such process.
- Evolving program. Expecting pertinent updates to Ecology's program rules due to a 2024 amendment to the CCA.
- Uncertainties (e.g., ongoing rulemakings related to linkage with California and organized markets, Initiative 2117)



GI Reform Large Generator Interconnection Agreement (LGIA)

Review of April Workshop (Steps 1 and 2)

- In TC-25 BPA changed Attachment L of the Large Generator Interconnection Procedures (LGIP), which necessitates revisions to the LGIA template in Attachment L, but BPA delayed revising the template during the proceeding due to time constraints.
- BPA will also analyze FERC Orders 2023 and 2023-A for language included in the pro forma LGIA.
- The Objective of this effort is to align BPA's Tariff LGIA template with TC-25 reforms and/or the pro forma Tariff.

Update on BPA's Review of the LGIA

- BPA is continuing to review portions of the current Tariff LGIA template that are inconsistent with BPA's TC-25 reforms and/or the FERC pro forma Tariff modifications made in Orders 2023 and 2023-A.
- BPA also intends to include minor edits and formatting changes to other sections of the LGIA to make them consistent with the FERC pro forma.
- BPA will provide customers with a summary of its review and the proposed redlines to the LGIA in the July TC-26 workshop.

Next Steps Next Steps

- July 19 to 22: BPA will post proposed redlines to the LGIA and a table summary for July workshop (at least 1 week before workshop)
- July 30: BPA will discuss the summary of its review and answer any questions from participants in the July 30 TC-26 workshop
- August 14: Customer comments due on July workshop topics
- August 23: BPA will post responses to July workshop comments or share comments it will address in September TC-26 workshop
- September 20: BPA will post updated proposed redlines to the LGIA for September 25 workshop
- September 25: BPA will address all feedback on LGIA in the September TC-26 workshop



GI Reform - Affected Systems Studies



What We Heard We Repower Administration No.

Received comments from 3 customers:

- Supports BPA developing an efficient, consistent, and sustainable process for performing Affected System studies in parallel with TSEP and interconnection studies that coordinates with neighboring Transmission Providers' processes.
- Customers whose requests cause an Affected System Study need should have the same visibility into the study process as customers whose requests are directly being studied in the process.
- Recommends BPA cluster Affected System Studies needs and include those needs in the next BPA study process assessing network impacts and needs. This could be part of each phase of interconnection study as well as the TSEP cluster study.
- BPA should be assessing network needs and upgrades once a year. This should be sufficient to coordinate with other Transmission Providers' processes. Anything less, is likely to be seen as insufficient by both customers and neighboring Transmission Providers.

What we heard from customers (cont.)

- Encourage BPA to comply with the Order 2023/Order 2023-A timelines for completing Affected System Studies with its neighbors. The Affected System Studies that BPA must undertake for its neighbors are just as important for the region as the studies BPA undertakes directly.
- To the extent possible, BPA should conduct Affected System Studies for its neighbors independently and in parallel with its interconnection cluster study processes. BPA should make every effort to deliver its own Affected System Studies on the same timeline.
- BPA should coordinate and collaborate with its neighbors to develop a regional process to complete Affected System Studies
- Affected System Study processes and timelines should be transparent.
 - When BPA is asked to conduct an Affected System Study, it should provide the transmission provider and the transmission provider's customer(s) with the estimated timeline to complete the study, as well as regular updates on progress.

Decision on How to Proceed

- BPA has determined that Affected System Studies will not be evaluated as a part of TC-26.
 - We are in a period of transitioning and focusing on the new Interconnection two phase cluster study process.
 - We are prioritizing getting experience with the new cluster study approach.
 - We understand several neighboring utilities are starting the process to incorporate affected systems into their tariff and processes and we do not have enough information on what that may look like for them.
 - We have limited resources and would recommend that since we are going through a transition, the changing for affected systems could be made in a business practice.
 - Business Practice process still provides customer engagement and will allow customers and staff to engage in a collaborative manner without going through the formal process to change the tariff.

- BPA will continue to work with our neighbors when we receive Affected System Study requests
 - Description of current process
 - Generator Developer is responsible for requesting an Affected System Study agreement after they have a Interconnection System Impact Study Report from the host Transmission Provider
 - Send to <u>interconnection@bpa.gov</u> along with ISIS report and model
 - No application, no application fee
 - BPA will tender an Affected System Study agreement before holding a scoping meeting

Next Steps Next Steps

- We will continue to monitor and evaluate Orders 2023/2023A compliance filings to understand how jurisdictional utilities are proceeding with Affected System Studies policy implementation
- If we contemplate changing policy, we will use the established customer engagement processes



Attachment K – Regional Transmission Planning Update (Inform)

Issuance of FERC Order No. 1920: Building for the Future Through Electric Regional Transmission Planning and Cost Allocation, 187 FERC ¶ 61,068 (2024)



Order No. 1920

- On May 13, 2024, FERC issued a new transmission planning and cost allocation rule that builds on Order Nos. 888, 890, and 1000.
- Reforms relate to long-term regional planning (over a 20-year horizon), including the following areas:
 - Long-term transmission planning to anticipate future needs
 - Consideration of broad set of benefits
 - Opportunities to modify in-kind replacement of existing transmission facilities for purposes of "right-sizing"
 - Consideration of interconnection information
 - Consideration of alternative technologies
 - Benefits analysis over long-term horizon
 - Opportunities to expand states' role

NorthernGrid Regional Planning

- Bonneville is reviewing Order No. 1920.
- Bonneville's approach to Order No. 1920 is anticipated to be consistent with its existing approach to regional planning through existing NorthernGrid planning process.
- Bonneville participates in regional planning through NorthernGrid and will coordinate with NorthernGrid members to incorporate Order No. 1920 reforms into the NorthernGrid planning processes.
 - Order No. 1920 will become effective August 12 (60 days after publication in the Federal Register).
 - Jurisdictional transmission providers need to submit compliance filings within 10 months of the effective date, with interregional transmission coordination requirements due 12 months from the effective date.

Bonneville's Attachment K

- Bonneville's participation in coordinated regional planning with Northern Grid's mixed jurisdictional membership has resulted in the following Attachment K structure:
 - Bonneville's Attachment K cites to the NorthernGrid planning process, maintained on the NorthernGrid website.
 - Bonneville's Attachment K addresses the ongoing need to align the regional planning process in Bonneville's tariff language with the jurisdictional participants' tariffs to the extent that NorthernGrid members need to revise the NorthernGrid processes (e.g., as with the issuance of a new FERC order).

Next Steps Next Steps

- Amendments to Bonneville's Attachment K will start with coordination, negotiation, and agreement among all NorthernGrid members and will proceed according to the following sequence:
 - (i) NorthernGrid members negotiate potential changes to the planning processes;
 - (ii) NorthernGrid jurisdictional participants make tariff filings with FERC related to the NorthernGrid jurisdictional process;
 - (iii) FERC accepts the jurisdictional revised tariffs;
 - (iv) all NorthernGrid members modify the planning agreement, as necessary, to align the non-jurisdictional process to the jurisdictional process; and
 - (v) Bonneville proposes tariff changes through a future terms and conditions proceeding.



EIM Forecast Data Submittal Requirements

TC-24 Settlement Commitment Workshop

June 26, 2024



Settlement Language

- TC-24 Record of Decision, Attachment 1, Section 7.a
 - Before the TC-26 proceeding, BPA will hold a stakeholder workshop to compare BPA's Forecast Data submittal requirements in Attachment Q section 4.2.4.1 to other third-party EIM participant's requirements.

Tariff Language Tariff Language

4.2.4.1 Transmission Customers with a BPA EIM Participating Resource or Non-Participating Resource in the BPA BAA

A Transmission Customer with a BPA EIM Participating Resource or a Non-Participating Resource is not required to submit Forecast Data for:

- 1) resources located in BPA's BAA that are less than three MW and not included in the MO's network model; or
- 2) behind-the-meter generation which is not contained in the MO's network model.

Each BPA EIM Participating Resource Scheduling Coordinator shall provide to the BPA EIM Entity the energy bid range data (without price information) of the respective resources it represents that are participating in the EIM.

Each BPA EIM Participating Resource Scheduling Coordinator shall also provide the BPA EIM Entity with Dispatch Operating Point data of the respective resources it represents that are participating in the EIM.

MW Specification WER ADMINISTRATION

A Transmission Customer with a BPA EIM Participating Resource or a Non-Participating Resource is not required to submit Forecast Data for:

 resources located in BPA's BAA that are less than three MW and not included in the MO's network model

- 11 of the 13 participants surveyed have near identical language to that of BPA.
 - One participant sets the threshold at five MW
 - One participant specifies "any resource whose output is significant enough to be continuously monitored for BAA operations"

Behind-the-meter Generation

A Transmission Customer with a BPA EIM Participating Resource or a Non-Participating Resource is not required to submit Forecast Data for:

2) behind-the-meter generation which is not contained in the MO's network model.

- 12 of the 13 participants surveyed have near similar language to that of BPA.
 - The one participant that doesn't explicitly state this condition in their tariff points to a business practice that does state it.

Bid Range & Dispatch Operating Point

Each BPA EIM Participating Resource Scheduling Coordinator shall provide to the BPA EIM Entity the energy bid range data (without price information) of the respective resources it represents that are participating in the EIM.

Each BPA EIM Participating Resource Scheduling Coordinator shall also provide the BPA EIM Entity with Dispatch Operating Point data of the respective resources it represents that are participating in the EIM.

- Consistent across all participants surveyed
 - Some tariffs specify that a participating resource will only need to provide this information if not already provided by the Market Operator, while most do not have this condition.

Other Language Contract Contra

- Several of the surveyed tariffs have language that specify that submissions must be in the format and within the timing requirements established by the MO.
- One tariff specifies addition forecast submissions that are required for Variable Energy Resources that include:
 - resource Forecast Data with hourly granularity and resource
 Forecast Data with 5-minute or 15-minute granularity.
 - a three-hour rolling forecast with 5-minute (or 15-minute)
 granularity, updated every 5 minutes (or 15 minutes)

Recommendation

 BPA believes that our current tariff language is in line with other EIM participants' tariffs and is not recommending any changes to Attachment Q section 4.2.4.1.



Questions?

Meeting Wrap-up

- Please send any feedback, with your topic you are addressing by Wednesday, July 10, to BPA's Tech Forum at techforum@bpa.gov, with a cc to your Power and/or Transmission Account Executive.
- If you would like to have a customer led workshop on July 11, please send us the topic that you would like additional information on or send us your proposal by June 28, and how much time you will need, to BPA's Tech Forum at techforum@bpa.gov, with a cc to your Power and Transmission Account Executive.
- The next workshop will be on July 30-31, and it will be hybrid.



Appendix



BP-26 and TC-26 Workshops: Proposed Dates for Topics

Date	Rate/Tariff Topics
July 30 & 31 (Tue-Wed)	Transmission Rates Gen Inputs Rates (with New Technology Pilot) Rates Forecast EIM Charge Codes Power Rates New Large Single Load (NLSL) UnAuthorized Increase (UAI) Tier 2 & Demand Charge Pricing Tariff ROFR Queue Management Transmission Line Ratings – FERC Order 881 implementation GI Reform – LGIA Network Loss Factors

BP-26 and TC-26 Workshops: Proposed Dates for Topics

Date	Rate/Tariff Topics
August 27 & 28 (Tue-Wed)	 Transmission Rates Energy Storage Devices Non-EIM Balancing GI Withdrawal Penalties Power Rates Revenue Requirements Risk Western Resource Adequacy Program (WRAP) – Follow up Tariff Tariff clean-up – ministerial edits to Attachments L and R Redline draft proposed tariff

BP-26 and TC-26 Workshops: Proposed Dates for Topics

Date	Rate/Tariff Topics
September 25 (Wed)	Transmission Rates
,,	Power Rates
	Tariff • GI Reform – LGIA
	Network Loss Factors (if needed)