BONNEVILLE POWER ADMINISTRATION

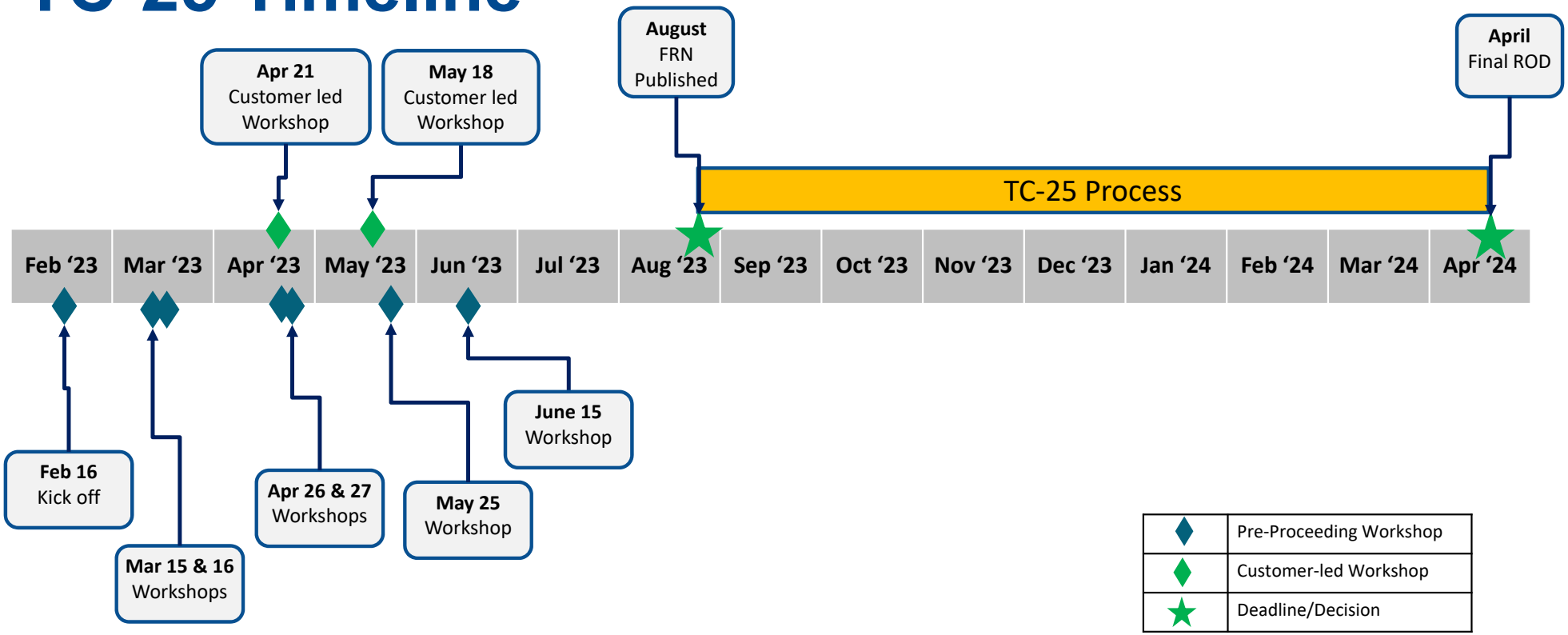
TC-25 Tariff Pre-proceeding Workshop

May 25, 2023

Agenda

May 25		
Time	**Topic**	**Presenter**
9:00 – 9:05	Agenda Review	Rebecca
9:05 – 9:15	Opening Remarks & Response to Comments	Jeff
9:15 – 9:45	Commercial Readiness Requirements	Kevlyn
9:45 – 10:00	General Clarifications	Katie & Kevlyn
10:00 – 10:15	BREAK	
10:15 – 11:15	Scalable Plans (Sub-clusters) Clarification	Christina
11:15 – 11:30	Interest on Deposits	Rebecca
11:30 – 11:55	Study Financials	Rebecca
11:55 – 12:00	Wrap up and Next Steps	Rebecca

TC-25 Timeline



♦	Pre-Proceeding Workshop
♦	Customer-led Workshop
★	Deadline/Decision

Procedural Schedule dates are draft only
Internal Use Only

General Comments

General Comments on What We Heard

- Timeline for the process is too long. Customers made suggestions on how to shorten the timeline
- Need to look at the problem holistically by reviewing all the processes for the LLIP, LGIP and TSR
- Most customers suggested BPA needs to hire additional support to implement the GI process and create more certainty so they can make informed decisions (i.e., timelines met, dashboards, well done studies, etc.)

BPA Responses to General Comments

- BPA would like to thank everyone for their support for the GI process and appreciate customer's support for added FTE to implement the GI process. The additional support and dollars will be discussed in IPR which will be starting next year.
- BPA heard the requests to align the other queue processes (TSEP and LLI) with the LGIP and can consider in the future, but it is not within the scope of TC-25.

BPA Response to Timeline Concerns

BPA heard customer comments that the proposed process timeline is too long and does not meet customer needs.

- We based the proposed study durations on multiple factors:
  - Benchmarking with other Transmission Providers that have either proposed similar timelines (PJM) or have experienced challenges meeting existing timelines (CAISO).
  - Past experience of serial queue study durations and trying to project what this would look like for cluster studies.
  - Trying to set realistic expectations on timelines in an attempt to reduce need for study delay notices.
  - Inability to predict demand
- The only feasible way to reduce the overall process timeline is to reduce customer time.
  - Customer comments: shorten customer engagement, review, validation, and cure periods

Commercial Readiness Requirements

Step 5-6 (updated staff leaning)

Step 5: Discuss what we heard

Customer Comment Summary (1 of 2)

Comment Synopsis
• Include non-financial forms, not just cash for milestones, Term-sheet/PPA or Confirmed TSR or DNR in lieu of.
• Staff preferred alternative limits demonstration of commercial readiness, does not allow non-cash options.
• Refund cluster study if study is more than 30 days late Parties could be forced into pre-mature agreements. • CRD options not aligned with industry standards. • Consider discretionary permit as evidence of commercial readiness. • Commercial term sheet not feasible until after LGIA unless BPA adopts refundability.
• Disconnected from industry accepted practices. • Binding term sheet not feasible without firm cost estimate.
• Project can not enter binding term sheet in developmental cycle without firm upgrade costs.
• Supports site control but not any new commercial readiness criteria.
• How does commercial readiness impact queue priority? • Further info on how time stamps of requirements will be used for tiebreaker and associated risks are necessary.

Customer Comment Summary (2 of 2)

Comment Synopsis
• New readiness requirements will create new administrative burdens (or worse). • Current criteria simple and understood whereas proposed are complex and contentious. • Additionally, likely create market disruptions, inequities and likely to result in massive restudies and are practically infeasible to meet within proposed response times.
• Supports readiness for continuing into Phase 2 cluster study and supports deposit. • However, allow other non-cash mechanisms to demonstrate commercial readiness. • Commercial readiness requirements for Transition are concerning as inconsistent with industry practices.
• Readiness milestones are not meaningful protection. • Some amount of at-risk financial security is ok. • Consider offtake agreements as a readiness milestones. • New readiness milestones should be additional option for study advancement not the only option.
• Don’t adopt overly restrictive requirements. If adopted, project impacts to queue to understand magnitude • Financial only not clearly justified and does not allow qualified options.
• Does NOT support requiring commercial readiness at Phase 1 cluster study. • Supports staff proposal for Phase 2 cluster study.

Step 6: Staff Leaning (Updated)

Staff Leaning (Updated)

Alternative 3: Commercial Readiness Demonstrations or an amount in lieu of

- Executed term sheet;
- Executed contract binding upon the parties for sale of (i) the constructed Generating Facility to a load-serving entity or to a commercial, industrial, or other large end-use customer, (ii) the Generating Facility's energy where the term of sale is not less than five (5) years, or (iii) the Generating Facility's ancillary services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years;
- Reasonable evidence that the Generating Facility has been selected in a Resource Plan or Resource Solicitation Process; or
- Site specific purchase order for generating equipment specific to the Queue Position

OR

- A cash deposit or irrevocable letter of credit in lieu of, in the amount of:

  At Phase 2: Two times the requests study deposits

  At Facilities Study: 20% of the allocated Network Upgrade Cost

When is the Readiness Deposit not at Risk?

Current Leaning: The Commercial Readiness Deposit is not at risk, if

- the withdrawal does not delay the timing of other proposed generating facilities in the same cluster;
- the withdrawal does not increase the cost of network upgrades for other proposed generating facilities in the same cluster;
- the interconnection customer withdraws after receiving the most recent cluster study report and the costs assigned to the interconnection customer have increased %* compared to the previous cluster study report; or
- the interconnection customer withdraws after receiving the individual facilities study report and the costs assigned to the interconnection customer have increased by more than a %* compared to costs identified in the cluster study report.

*Final % TBD based on further evaluation

How much is at risk?

- Impact of withdrawal to others (re-study or cost shift of shared upgrades).

General Clarifications

Summary of Clarification Requests

- Multiple requests to clarify proposed effective date for the reforms, specifically cut-off date for determining eligibility
- Demonstration of Site Control
- Need more details on sub-clusters

Clarification: Proposed Transition Dates

- **Transition Close Date -** no earlier than sixty (60) Calendar Days after the publication date of the Federal Register Notice for the TC-25 Tariff Proceeding.
- **Transition Request Window -** the period in which the Transmission Provider will accept Transition Requests. The Transition Request Window shall open the date of the issuance of the Administrator's Final Record of Decision (ROD) in the TC-25 Tariff Proceeding and close ninety (90) Calendar Days after the issuance of the ROD in the TC-25 Tariff Proceeding
- Proposed effective date for the tariff is the date the ROD is issued.

Clarification: Demonstration of Site Control

- Required for Phase 1
- Exclusive Site Control
  - Generating site only, not gen-tie line
- No deposit in lieu of
- Acreage requirements and format will be specified in a business practice

Scalable Plans (Sub-clusters) Clarification

Clarification: Sub-clusters & Time Stamps

What we heard:

- Need more details on sub-clusters and “time stamps” of demonstrated readiness requirements” as a tie breaker.
- Risk of “time stamp” process being an administrative burden and not appearing transparent or equitable.
- Time stamp could trigger a “race” to submit evidence of readiness upon Phase 1 completion.

Scalable Plans: Definitions

- **Cluster Area:** Defined by the Transmission Provider based on geographic location and/or electric relevance of similarly situated Interconnection Requests.
- **Scalable Plan Block:** Plan of service, as defined by Transmission Provider through interconnection studies, that enables interconnection of some or all requesters in a particular Cluster Area.
  - Contingency analysis and system knowledge will be used to define the Scalable Plan Block.
  - Study results will demonstrate the interconnection limit for each Scalable Plan Block (i.e., MW enabled).

Scalable Plans: Background

- Through benchmarking and observance of Transmission Providers with experience performing cluster studies, areas of high interconnection interest results in Cluster Study plans of service that are more costly than the interconnection customers' projects can bare.
- Scalable Plan Block approach is an effort to determine multiple plans of service, if appropriate, within a given Cluster Area.
- We believe having multiple, Scalable Plan Blocks for high interest areas will combat the issue of endless re-study that other Transmission Providers face as requestors drop out until a goldilocks plan of service is identified.
- A methodology must exist to allocate capacity enabled by a Scalable Plan Block.
- BPA staff leaning is to generate a time stamp at the time an interconnection customer fulfills readiness requirements. This time stamp would be used to allocate Scalable Plan Block capacity.

Scalable Plans: Example of 3 GIRs in Same Cluster Area

Requestors

Requestor	MW Amount	Readiness Reqs Received
Request A	300 MW	1st
Request B	550 MW	2nd
Request C	400 MW	3rd

Cluster Area Study Results

Block	Capacity	Facility Requirement	Energize Timing
Scalable Block 1	0 to 800 MW	POI Substation	3 years
Scalable Block 2	801+ MW	New 230 kV line	7 years

- All three customers are ready to move forward and have demonstrated readiness requirements (i.e., equally ready).
- If there is no tie breaker mechanism, then all of the requests have to wait until both the substation and line are built (7 years) before coming online.
- If there is a tie breaker mechanism based on the time stamp at which the readiness requirements were received, then Request A and the first 500 MW of Request B could interconnect under Block 1. Costs would assigned using BPA's proposed cost allocation methodology.
- The remaining 50 MW from Request B and all of Request C could interconnection under Block 2. Costs would assigned using BPA's proposed cost allocation methodology.

Scalable Plans: Determining Blocks

- **How scalable plan blocks will be determined:**
  - Not every area will have a scalable plan of service for network upgrades.
  - Where Scalable Block Plans are developed, the blocks will be determined based on factors particular to the area
    - Cluster Area System constraints, MWs requested in the Cluster area, feasible plans of service, etc
    - The blocks would be determined based on overcoming identified system constraints.
      - For example, if the requests resulted in the need for a substation to interconnect any generation within the Cluster Area, that would be the first step that would enable a certain amount of MW to interconnect. This would be the first block.
      - If studies then showed that overloads occur at another higher MW threshold, a second Scalable Plan Block would be developed to mitigate the issue, creating a second traunch of interconnection capacity.

Scalable Plans: Staff Conclusion

- Identifying Scalable Plan Blocks, where possible, and using readiness requirements to fit projects into builds will enable parallel execution of Scalable Plan Blocks, leading to more rapid interconnection of projects in a Cluster Area.
  - Without scalable plan blocks, network upgrade costs would be socialized across all projects in a Cluster Area, including the very large and long lead time upgrades.
  - Scalable Plan Blocks enable parallel execution of interconnection facilities and network upgrades that leads to more rapid interconnections.
  - If interest exists in pursuing interconnection for multiple Scalable Plan Blocks within a Cluster Area, those interconnections can be pursued in parallel.
  - Avoids the issue of repeated restudies in search of Goldilocks interconnection plans.

Scalable Plans: Additional Clarifications

- Cost Allocation:
  - For Cluster Areas without scalable plans of service, costs will be calculated and allocated among Interconnection Customers within the same Cluster Area (based on the established cost allocation methodology)
  - For Cluster Areas with scalable plans of service, costs will be calculated and allocated among Interconnection Customers within the same block (based on the established cost allocation methodology)
- Decreases or Withdrawals
  - For Cluster Areas with scalable plans of service, if requests decrease in size (by allowable amount) or withdraw, Customers in a later block may be moved to the earlier block without the need for protracted restudy.
- Material Modifications
  - Modification requests that are deemed as Material Modifications will not be allowed. If the customer wants to move forward with the Material Modification, they must withdraw and submit a new Interconnection Request.

Interest on Deposits

Steps 1-6

Problem

- As we are changing our collection and amount of deposits for interconnection studies, the interest earned on the deposits is higher, shifting those higher costs to other customers who do not benefit.
- Currently we pay the FERC rate for the serial studies

Alternatives for interest on Deposits

- Alternative 1-FERC Rate
- Alternative 2—2 year rate
- Alternative 3-5 year rate
- Alternative 4-10 year rate
- Alternative 5-no interest

Cluster Study Deposits Phase 1	$	1,898,000		FY25 Table 5 Interest rates		
	FY26	FY27		Total Interest	Differential to FERC	
FERC Rate (table 8)	$ 87,497.80	$ 91,531.45		$ 179,029.25		
2 year (table 5)	$ 44,413.20	$ 45,452.47		$ 89,865.67	$ (89,163.58)	-50%
5 year (table 5)	$ 48,968.40	$ 50,231.78		$ 99,200.18	$ (79,829.06)	-45%
10 year (table 5)	$ 57,319.60	$ 59,050.65		$ 116,370.25	$ (62,659.00)	-35%

Cluster Study Deposits Phase 2	$	4,585,000		FY 27 Table 5 Interest rates		
	FY 27	FY28		Total Interest	Differential to FERC	
FERC Rate (table 8)	$ 255,843.00	$ 270,119.04		$ 525,962.04		
2 year (table 5)	$ 137,091.50	$ 141,190.54		$ 278,282.04	$ (247,680.00)	-47%
5 year (table 5)	$ 136,633.00	$ 140,704.66		$ 277,337.66	$ (248,624.38)	-47%
10 year (table 5)	$ 151,305.00	$ 156,298.07		$ 307,603.07	$ (218,358.97)	-42%

Staff Leaning

- Alternative #5: No interest paid on deposits
  - The interest earned on the deposits will not shift costs to other customers who do not benefit
  - Providing upfront costs for a service should include a cost and be borne by the customer requesting the service
  - The policy on whether there should be interest for refunds on deposits will be consistent applied for all deposits (interconnection studies and readiness deposits).
  - Provides incentive to submit only viable requests

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Study Financials

Step 5-6 (updated staff leaning)

Step 5: Discuss what we heard

Summary of What We Heard

- Only one customer supported allocating the study costs based on MW
- Two customers supported 100% allocation based on the number participating
- Most customers supported alternative #2 which is to allocate 50% of the study costs on the number participating and the remaining 50% of the study costs based on the MW

Step 6: Staff Leaning (Updated)

Staff Leaning (Updated)

- Alternative #2: Allocate 50% of the study costs by the number of participants in the cluster study and the remaining 50% of the study costs by MW participating in the cluster study.

- Reasoning:
  - We agree with customer comments. We heard that both participants and MW participating impacts the effort of the study.
  - Consistent with cost causation
  - Transparent and simple to implement

Overview of Staff Leanings (Updated)/Wrap up

Comparison of Original Leaning to Updated Leanings

Reform	Original Leaning (April Workshops)	Updated Leaning (May Workshop)
FR/FS	FR/FS Two-phase Cluster Study	No change
Application Fee	$10k/request, non-refundable	No change
Site Control	At request application: ***Exclusive*** site control (new definition), no deposit in lieu of	No change
Study Deposits	**Phase 1:** $25k base + $500/MW, $100k capped	No change
	Phase 2: $50k base + $1K/MW, $250k capped	No change
	Facilities Study: Based on good faith estimate of request's allocated share of cost for BPA to perform the Preliminary Engineering necessary to complete the FAS report on a non-clustered basis for that Sub-cluster's network plan of service identified in the Phase 2 Cluster Study or Restudy.	No change
Interest on Deposits	N/A	No interest paid

Comparison of Original Leaning to Updated Leanings (cont.)

Reform	Original Leaning (April Workshops)	Updated Leaning (May Workshop)
Commercial Readiness Requirements	**Phase 1:** None **Commercial Readiness Demonstration** OR **Phase 2:** Two times the study deposit, capped at $500k **Facilities Study:** Amount equal to 20% of the allocated network facility cost	**Phase 1:** None **Phase 2:** Commercial Readiness Demonstration OR Two times the study deposit, capped at $500k **Phase 3/FAS:** Commercial Readiness Demonstration OR 20% of allocated Network Upgrades
Network Upgrade Cost Allocation	• Station equipment Network Upgrades are allocated based on the number of Generating Facilities interconnecting at an individual station on a per capita basis. • Transmission and distribution Network Upgrade costs are allocated based on the level of service selected by the Interconnection Customer and the Interconnection Customer's share of the proportional capacity of each individual Generating Facility in the Cluster.	No change
Study Financials	Based on the MWs of the request (pro rata) for cluster study	50% based on the MWs of the request (pro rata) + 50% based on number of participants
Information Access	Provide a publically available interconnection capacity heat map. **Phase 1 Cluster Study:** Provide a preliminary evaluation of system impact, non-binding *typical* estimate of cost, non-binding *typical* estimated time to construct	No change

Comparison of Original Leaning to Updated Leanings (cont.)

Transition Reform	Transition Serial (existing LGIP with new readiness requirements) – Late Stage Requests w/an Executed Facilities Study Agreement	Transition Cluster	Updated Leaning (May Workshop)
Study Deposit	The deposit amount at FAS study would be a good faith estimate of that requests allocated share of the cost for BPA to perform the preliminary engineering necessary to complete the FAS report on a non-clustered basis for that Sub-cluster's network plan of service identified in the System Impact Study.	Phase 1: $25K + $500/MW (max $100K) Phase 2: $50k + $1K/MW (max $250K)	No Change
Site Control	Evidence of exclusive site control for the entire generating facility.	Evidence of exclusive site control for the entire generating facility.	No Change
Commercial Readiness Milestones	• Commercial Readiness Demonstration	• Commercial Readiness Demonstration	No Change

Next Steps

- Customer comments from May 25 workshop due on June 2
- BPA will be sending out draft tariff language no later than June 9
- Wrap-up Workshop June 15
- Comments on the draft tariff language due by COB June 30
- BPA will be responding to comments and posting those responses no later than July 14

Appendix

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.