Comments of Cypress Creek Renewables on the TC-25 Tariff Proceeding Workshop

Bonneville Power Administration, April 26-27 2023

Cypress Creek Renewables (CCR), a utility-scale solar and battery storage developer and Independent Power Producer, submits the following comments on several elements of the TC-25 Tariff Proceeding Workshop proposal, organized based on the 'leanings index' on slide 129.

BPA's proposed First-Ready / First-Served (FR/FS) Cluster Study process is inefficient and lacks binding information

Staff Leaning

- BPA Staff proposes a FR/FS phased cluster study approach divided into a two-Phase Cluster Study and Facility Study. Phase I includes power flow and short circuit analyses; Phase II includes these analyses as well as stability and EMT if needed.
- All cost estimates and estimated time to construct are non-binding and in Phase II based on good faith.
- BPA also proposes a 'tie-breaker' methodology for determining priority access for interconnection.

CCR comments

- CCR supports the intent of Phase I: to provide information to interconnection customers (ICs) quickly in order to accelerate queue withdrawal decisions, or alternatively to enable a subset of remaining ICs to proceed into the Phase II cluster study and Phase II re-study.
- To make the Phase I process more efficient, however, BPA should move the redundant short circuit analysis solely to Phase II. The Phase I power flow study is more appropriate to provide a relatively rapid assessment of network upgrades (NUs), whereas short circuit provides limited upgrade information based on impact to circuit breakers. CCR recommends BPA reduce the Phase I timeline adjustment to reflect a reduced scope of work. We concur with BPA that a separate non-binding informational study phase prior to Phase I as originally proposed in the FERC NOPR in RM22-14-000 has no value to ICs and detracts from scarce staff resources.
- More broadly, the non-binding nature of all proposed cost estimates and estimated construction timelines throughout each Phase does not address current IC uncertainty around these critical factors inhibiting decision-making. Today, the IC has no reasonable expectation of timely study results due to the "Reasonable Effort" standard, which the FERC NOPR in RM22-14-000 is proposing to eliminate, but which is outside the scope of the BPA queue reform proposal. Cost and schedule uncertainty are **the** primary barriers to IC project underwriting and contracting, and as such represent a fundamental barrier to commercial readiness requirements considered in this process. Non-binding information without recourse for significant cost increases between study phases or significant timeline extensions beyond non-binding estimates does nothing to solve the problem.
- Accordingly, we recommend BPA consider binding cost and schedule elements during the facilities study phase, when project interconnection facilities costs are not dependent on actions of other interconnection customers.
- Without that binding information, ICs will continue to be unable to sign commercial term sheets (PPAs) that incorporate a certain cost and schedule, which are contemplated as commercial readiness demonstration requirements to enter Phase II, prior to the Facilities study. Non-binding cost and schedule information raises the risk that the IC will be unable to perform its obligations under its offtake agreement, to the detriment of both the IC and the offtaker; this also increases BPA's risk that associated transmission service rights will not align with the timing and cost of the interconnecting generating resource.

- CCR generally supports the tie-breaker methodology, but recommends BPA share results about priority interconnection in a transparent manner within the cluster.

Commercial readiness requirements must be updated to increase risk to more speculative projects to enter and progress through the process, as well as reflect the realities of procurement and development processes

The following tables summarize several process components contained in 'Staff leaning' proposals related to commercial readiness and cost allocation, among others. A CCR proposal that balances the interests of the BPA proposal with the realities of project development follows.

Staff Leaning

	Application	**Phase I** (Payment to enter Phase I cluster study)	**Phase II** (Demonstration 1- prior to entrance to Phase II)	**Phase II re-study**	**FAS**	**ESA**
Incremental Milestone Deposit (MD)			2x Phase II Study deposit, capped $500,000	MD2 = 3X Phase II study deposit- MD1 (Payment to enter Phase II cluster study)	MD3 = 20% of NU – MD2; (Payment to enter re-FAC study phase)	None required, tied to permitting milestones
Study Deposit*	Application fee: $10,000	$25,000 + $500/MW, capped at $100,000	$50,000 + $1,000/MW, capped at $250,000		Good faith estimate	
Commercial Readiness – Site Control	Exclusive site control w/ regulatory limitations clause, defined as Generating Facility					
NU Cost allocation	- Station equipment allocated on per capita - NU costs allocated based on level of service and the interconnection customer's share of the proportional capacity					
Commercial Readiness – Development Milestones			Commercial milestones Prior to Phase II**			
Penalty for Withdrawal after Satisfying Milestone		Partially or fully non-refundable depending on study phase/timing and impact of withdrawal (slide 57)				

*All study deposits except the application fee are refundable based on BPA's actual costs.

** While Alt 2 (slide 57) does not include additional commercial readiness requirements (e.g., term sheet), it notes staff is considering Alternative 3, readiness deposit or commercial milestones. The Leanings index lists demonstration 1 would be prior to entrance to Phase II."

CCR Comments

Milestone and study deposits

- The proposed milestone deposits and study deposits upon which one milestone payment is based are far too low given the size of the BPA queue, and the need to significantly increase BPA's resources to process queue applications more efficiently.
- Study deposit amounts should be based on the underlying request for service, based on a differentiated scope.
- Benchmarked milestone deposits of $4,000/MWac as required in MISO, SPP, and PJM, have not delayed queue entry significantly. CCR recommends a higher deposit amount of $6,000/MWac.
- Next, rather than a 'blend of the NOPR amount and amounts seen in benchmarking' (slide 58), it would be more consistent with other ISO/RTO practices, and send a more consistent price signal to the IC, to instead base the milestone demonstration for Phase II as a percentage (10%) of allocated NUs.
- We further recommend that BPA consider distinguishing the study deposit based on whether the IC requests ERIS or NRIS, given the different scope of work required for each. Such distinctions should be consistent with NOPR guidance to transmission providers to reflect the level of interconnection service.
- Finally, to reduce schedule and cost uncertainty described above, and in light of increased study deposits that should be allocated to improve staff resourcing, CCR suggests a portion of study deposits, above the amount spent, as well as a portion of the milestone payment, should be refunded to the IC if the cluster study, cluster re-study, or facilities study is more than 30 days late after the timeline to be established in the OATT. This proposal will improve not only commercial certainty and open commercial readiness demonstration options as discussed below, but also accelerate withdrawal and restudy timelines.

Commercial readiness – development milestones

- Premature commercial contract demonstration in the form of a term sheet or selection in an RFP/IRP process creates significant risk for both the IC and LSE. Several comments filed in the FERC Interconnection process NOPR RM 22-14-000, which proposed a commercial readiness demonstration requirement as a requirement to queue entry and progression, are relevant to BPA's consideration of alternative 2 – commercial readiness:
    - Early stage readiness requirements would force parties to enter into agreements prematurely, which will lead to inaccurate cost estimates incorporated into those agreements. (Pine Gate Renewables NOPR Comments at 29-30). LSEs and bidding generators would both be harmed. Bidding generators would have significant risk imposed upon them by virtue of seeking commercial arrangements without sufficient knowledge of interconnection costs and likely have a smaller scope of opportunities to even bid for LSE solicitations which would prioritize resources with more certainty to their interconnection costs. Likewise, LSEs could see higher bids from resources due to the uncertainty in interconnection upgrades. (American Clean Power NOPR Comments at 35).
    - The CRD options are in conflict with industry accepted timelines for development, finance, and construction. (Pine Gate Renewables NOPR Comments at 25-26).
    - As a form of commercial readiness demonstration, CCR would support a discretionary permit, moved to the facility study phase, as evidence of commercial readiness, with an exemption for projects sited on public lands. This option would be more compatible with development practices.
    - A commercial term sheet is not workable until after LGIA execution, given that the IC has no ability to sign commercial contracts for a delivery of energy based on a contracted COD given current BPA interconnection performance, and absent any penalties or other proposals to eliminate Reasonable Effort Standards.

- However, if BPA adopts a study and milestone refundability standard for delayed study results as suggested above, CCR would be willing to support a commercial term sheet as a demonstration of readiness during the Facilities study phase.

Site control

- As defined on p. 50, CCR is supportive of full site control, but also recommends BPA set a reasonable separate application for the generator tie, e.g., 50% at application. Such a requirement will further force siting discipline.

Withdrawal Penalties

- Withdrawal penalties should be equal on the milestone deposit amount as listed below. Penalties should be at risk after payment required in order to enter the subsequent phase.
- BPA should also consider withdrawal penalty exclusions. In response to the RM22-14-000 NOPR, the Clean Energy Associations suggested the Commission establish a maximum cost band that shrinks from the cluster phase (e.g. 150% of the upgrade cost) to the facilities study phase (e.g. 125%). If upgrade costs increase by 50% of the estimated figure from the cluster phase, or 25% from the facilities study phase, ICs would have the ability to withdraw without forfeiting at-risk deposit funds (although the portion of the deposit actually utilized for performing the studies would not be refunded). The Commission should ensure that ICs have increasing confidence in cost estimates as the interconnection process progresses, and any withdrawal penalties should be assessed only for projects have been assigned upgrade costs that remain within the cost band (Clean Energy Associations comments at p. 41).

Network Upgrade Cost allocation

- NUs should be allocated based off proportional impact, not proportional capacity. Allocating based off capacity requires engineering judgment which can be subject to inconsistency and result in unfair cost allocation. Proportional impact (DFAX) is a fair way to assign upgrade costs by burdening the largest contributors with the largest share of the upgrade, and it is increasingly becoming the standard across most markets for that reason. Proportional capacity results in subsidizing projects by burdening lesser contributing projects to reduce the burden of higher contributing projects.

CCR proposal

	Application	**Milestone 1 (Enter Phase I) M1**	**Milestone 2 (Enter Phase II) M2**	**Milestone 3 (Phase II restudy) M3**	**Milestone 4 FAS**	**ESA**
Incremental Milestone Deposit (MD)*		$6,000/MWac (Payment to enter Phase II cluster study)	MD2 = 10% of NU – MD1 (Payment to enter Phase II cluster re-study)	N/A. Payment to enter cluster is sufficient	MD3 = 20% of NU – MD2; (Payment to enter study phase)	None required, tied to permitting milestones
Study Deposit	Application fee: $10,000	> 20 MW < 80 MW $35,000 for NRIS $17,500 for ERIS > 80 MW < 200 MW$150,000 for NRIS $75,000 for ERIS				

		> 200 MW $250,000 for NRIS $125,000 for ERIS				
Commercial Readiness – Site Control	50% Gen Tie 75% gen site control	Gen Tie 50% Gen Site 100%		Gen Tie 90% Gen Site 100%		
NU Cost allocation	- DFAX cost allocation for network upgrades					-
Commercial Readiness – Development Milestones					Discretionary permit or commercial term sheet as defined	
Penalty for Withdrawal after Satisfying Milestone		50% of M1	100% of M1	10% of NUs	20% of NUs	

***** Milestone deposit payments should be payable, at the IC's discretion, as cash, letter of credit, or surety bond.

Technical Studies Requirements should be complemented with efforts to increase transparency into GI criteria

Staff leaning

- BPA proposes to require the IC submit a model attestation accepting BPA's use of generic performance models for entry into the Phase I cluster study, and acknowledging detailed models for Phase II.

CCR comments

- Aside from model requirements, BPA does not address how GI study processes will derive cost estimates delivered to the IC. Greater transparency into the GI process is more valuable than an interconnection capacity heat map.
- Key GI study criteria assumptions that can significantly impact the cost estimate include which NERC TPL criteria are assumed, and whether and the extent to which the use of operational tools (re-dispatch methods) address thermal violations.
- As part of the customer cure process, we recommend greater transparency into GI study criteria applied as part of its analysis.

Transition process eligibility must be reduced to avoid unnecessary delays

Staff Leaning

- Transition serial eligibility: BPA would allow customers who demonstrate commercial readiness requirements, site control, and are in late stage in the current interconnection queue to remain under the current process, so long as the processing of these requests would not unduly delay the start of a new cluster study process
- Transition cluster eligibility: BPA would allow non-late stage customers who demonstrate commercial readiness requirements and site control in the current queue to participate in the transition cluster study, so long as the processing of these requests would not unduly delay the start of a new cluster study process

CCR comments

- BPA's proposal requires greater precision, including a more specific queue entry cutoff for eligibility, and the point at which the transition would commence. A transition cluster that is too large may be challenging to assess, based on other RTO experience (MISO). Eligibility restrictions should be based on clear milestones.
- Customers should be eligible for the transition serial queue only if they have a completed facilities study in hand by the effective date of the transition (We presume this is October, 2025, but request confirmation from BPA in further discussions).
- Customers that submitted an interconnection request after the queue reform launch, on or about March 15, 2023, should be excluded from transition cluster eligibility, given that they should have had reasonable expectation that new requirements would replace the queue entry requirements in place prior to reform.

CCR appreciates the opportunity to provide these comments and looks forward to further discussion.