

ORDER 2023 CONCEPTUAL AMENDMENTS

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Renewables on behalf of:





The Members of RENEW

The comments expressed herein represent the views of RENEW and not necessarily those of any particular member.



OUTLINE

RENEW developed six amendments to ISO's Order 2023 compliance proposal, described in concept in the posted memo. Today's slides provide an overview.

1. Allow customers to revert from a CNR interconnection request to an NR interconnection request after seeing the results of the cluster study
2. Allocate study costs separately for NRIS and CNRIS portions of the cluster study
3. Perform a serial CNR-Only study as part of the serial transition study process
4. Clarify that a list of both NR and CNR contingent facilities will be included in the cluster study and restudy reports
5. Create a Customer Engagement Window Within the Transitional Cluster Study Process Without Extending the Transition Timeline
6. Add an exemption to withdrawal penalties in the situation where an Interconnection Customer received incorrect or misleading information in the scoping meeting

RENEW AMENDMENT #1

The background of the slide features three stylized wind turbines. The largest turbine is in the foreground on the left, with a grey tower and three grey blades. Behind it and to the right are two smaller turbines, also with grey towers and blades. The towers of all three turbines have a yellow base. The sky is a light, clear blue.

Allow customers to revert from a CNR interconnection request to an NR interconnection request after seeing the results of the cluster study

CURRENT PROCESS

- A customer goes through the interconnection study process to determine the upgrades required to obtain energy interconnection service
 - If the upgrades are reasonable, the project may move forward as energy-only and/or pursue capacity interconnection service
- The customer goes through the FCM qualification process to determine any incremental upgrades required to obtain capacity interconnection service
 - If no upgrades are identified, or the upgrade cost is manageable, the project may move forward with obtaining capacity interconnection service
 - If the upgrade cost is too high, the project can forego capacity interconnection service and continue moving ahead with an energy only interconnection
 - If the upgrades are too complex to determine during the qual process or would take too long to build, the project is not qualified for capacity and may move ahead as energy-only

ISO COMPLIANCE PROPOSAL

- A customer with a CNR interconnection request must complete the process for obtaining both energy and capacity interconnection service or must fully withdraw from the cluster
- The cluster study report may show upgrade requirements for energy interconnection service are reasonable and the project would be viable to move forward as energy-only
- However, if the report shows unexpectedly high incremental upgrade requirements for capacity interconnection service, such that the project would not be viable, it would be required to withdraw
 - This project could pursue an energy-only interconnection in the subsequent cluster
- When the project withdraws it could trigger a restudy of both the NR and CNR portions of the cluster study
- Despite the helpful information in the heat map, there is no way for a customer to estimate its upgrade requirements with confidence due to the unknown of who else will be in the cluster

CONCERNS WITH THE ISO PROPOSAL

- An otherwise-viable energy-only project could be made non-viable due to its capacity upgrade requirements
 - Its only option would be to withdraw
 - Could pursue an energy-only interconnection in the subsequent cluster
 - Would be charged the withdrawal penalty and would have to pay for a second cluster study
 - Would delay project by at least 18 months
 - High risk – no guarantee the energy-related upgrades in the subsequent cluster will be similar to those identified in the completed cluster study
- For the remaining cluster members, restudy delays, restudy costs, and risk of cascading withdrawals due to shifting cost allocation would all be greater than if the project were allowed to continue as energy-only
 - A full withdrawal could trigger restudy of the energy and capacity portions of the cluster study
 - Were the customer able to continue as energy-only, there would be no need to restudy the energy portion of the cluster study

CONCERNS WITH THE ISO PROPOSAL, CONTINUED

- Order 2023 intended to reduce speculative interconnection requests and their subsequent withdrawals
- There is no way for a customer to reliably estimate its CNR upgrade costs before entering the cluster study process given the unknowns about other customers in the cluster
- RENEW appreciates the desire to prevent cascading withdrawals from the cluster, but believes the ISO proposal would exacerbate the concern rather than minimizing it
- The ISO proposal would prevent otherwise-viable energy-only projects from moving forward to commercial operation on a timely basis, result in additional withdrawals, reallocation of costs, and further withdrawals.
- The ISO proposal may create an incentive for customers to pursue a CNR interconnection in the subsequent cluster study, after completing their NR interconnection study
 - This would add costs and delays for interconnection customers
 - This could reduce new supply available in the capacity market

RENEW AMENDMENT CONCEPT

- Allow CNR Interconnection Requests to downgrade their requested service to NRIS
 - after reviewing the results of the cluster study (or transitional cluster study), or
 - after reviewing the results of the restudy or facilities study if the capacity-related upgrade cost estimate has increased by more than a specified threshold from the initial cluster study
- Perhaps charge a partial-withdrawal penalty or require an additional Customer Readiness Deposit for such a service downgrade to discourage customers from taking this as a “free option” if they are not initially serious about wanting both energy and capacity interconnection service.
 - RENEW is not certain about this and would appreciate feedback on whether this would be necessary/helpful

RENEW AMENDMENT #2

Allocate study costs separately for NRIS and CNRIS portions of the cluster study



CURRENT PROCESS

- A customer goes through the interconnection study process to determine the upgrades required to obtain energy interconnection service
 - The customer pays the full cost of its interconnection study
 - Typical costs are mid-6-figures
- The customer has the option to go through the FCM qualification process to determine any incremental upgrades required to obtain capacity interconnection service
 - A customer that does not seek capacity qualification has no costs related to a capacity deliverability study
 - The customer pursuing capacity pays the full cost of its capacity deliverability study
 - If the upgrades are too complex to determine during the brief qual process or would take too long to build, the project is not qualified for capacity, so the study is quite simple
 - Typical costs for the capacity deliverability study (including identification of upgrades) are 3- to 4-figures

ISO COMPLIANCE PROPOSAL

- Step 1: ISO would identify NRIS (energy interconnection) upgrades first
 - Upgrade costs are allocated among customers in the energy portion of the cluster study (NRIS and CNRIS customers)
- Step 2: ISO would incorporate the NRIS upgrades from Step 1 in the CNRIS (capacity interconnection) study case and determine if any incremental upgrades are required for the capacity service requests
 - Any incremental upgrade costs for capacity are allocated among customers in the capacity portion of the cluster study (CNRIS and CNRIS-Only customers)
- ISO would pool the study costs from Step 1 and Step 2 and allocate them amongst all customers, regardless of their interconnection service type
 - 50% allocated per-capita, 50% on a per-MW basis (based on summer NRIS or, for CNR-Only requests, based on summer CNRIS)
 - Energy-only customers do not participate in Step 2, but would pay a share of the Step 2 study costs
 - CNR-only customers do not participate in Step 1, but would pay a share of the Step 1 study costs

ISO COMPLIANCE PROPOSAL, CONTINUED

- In the Capacity FAQ document ISO posted on 11/17/23, ISO wrote:
 - A. It is appropriate for all cluster members to share in the full study costs because establishing the base case in Step 1 is required to perform both Step 1 and Step 2 of the study
 - B. Since the Step 1 results are an input to Step 2, customers in Step 2 both require and benefit from Step 1 and should pay for a share of Step 1
 - C. ISO cited paragraph 421 of Order 2023 which says that tracking cluster study costs for each interconnection customer separately would increase the administrative burden on ISO, offer little benefit, and likely could not be done accurately

CONCERNS WITH THE ISO PROPOSAL - A

- Establishing the base case in Step 1 is required to identify the NRIS upgrades
 - This base case includes all prior and proposed NR and CNR interconnections at their NR service level
- A separate base case must be established for Step 2
 - This case does not include any energy-only interconnections and reflects the summer CNR service level of all prior and proposed capacity interconnection customers
- RENEW believes it is appropriate to allocate the cost of establishing the base case for Step 1 to the customers participating in that portion of the cluster study (NR and CNR customers) and to allocate the cost of establishing the base case for Step 2 to the customers participating in that portion of the cluster study (CNR and CNR-only customers)
- Minimal costs are truly common to all customers (e.g., holding the scoping meeting)
 - RENEW believes these costs could be divided evenly between the Step 1 and Step 2 buckets or tracked separately from Step 1 and Step 2 to be allocated amongst all customers

CONCERNS WITH THE ISO PROPOSAL - B

- RENEW believes that forcing NRIS customers to pay for other customers' CNRIS study work, and forcing CNRIS-only customers to pay for other customers' NRIS study work, is
 - inappropriate, and
 - could significantly increase the study cost for CNR-only customers, creating a barrier to capacity market entry
- Saying that CNRIS-only customers in Step 2 benefit from the NRIS study work in Step 1 is like saying that projects seeking FCM qualification today are beneficiaries of the interconnection studies that other customers have previously performed
 - yet resources seeking FCM qualification today are not asked to pay for other projects' interconnection studies

CONCERNS WITH THE ISO PROPOSAL - C

- RENEW believes that tracking the Step 1 and Step 2 costs separately and allocating them only amongst customers participating in that portion of the study is reasonable
 - This would require costs to be tracked in two (or at most three) buckets
 - This is not what FERC was describing when they said that it wouldn't be reasonable to track every individual customers' study costs separately
 - The administrative burden of tracking expenses in two (or at most three) separate buckets is minimal and reasonable, would offer benefit to customers, and could be done accurately

CONCERNS WITH THE ISO PROPOSAL - OTHER

- Historically, study costs for energy interconnection have been two orders of magnitude higher than the capacity deliverability study cost
 - Capacity study costs will likely be substantially higher than historical levels in the new cluster process, given that ISO will be required to identify capacity-enabling upgrades, unlike the current process
 - Even so, we expect there to be a large difference in the cost of Step 1 and Step 2
 - Requiring a CNR-only customer to pay 6-figures for a capacity deliverability study will create an unnecessary financial barrier to capacity market entry
- The withdrawal penalty is 9x the customer's allocated study cost for the transitional cluster and 2x study costs for withdrawals during the initial Cluster Study phase of subsequent clusters
 - This amplifies the impact of allocating what RENEW believes are NR study costs to CNR-only customers (and vice versa)
 - In ISO's proposal, CNR-only customers would be allocated costs for Step 1 that they had nothing to do with, and if they withdraw after seeing their initial study results they would then have to also pay either 2x or 9x those inappropriately allocated study costs

RENEW AMENDMENT CONCEPT

- Track the NRIS (Step 1) and CNRIS (Step 2) cluster study costs separately
 - For both the transitional and post-transitional cluster studies and restudies
- Costs that are truly common to all customers regardless of service type requested (e.g., holding the scoping meeting), could be divided between the two buckets
- Allocate the NRIS (Step 1) study costs only amongst NRIS and CNRIS customers
- Allocate the CNRIS (Step 2) study costs only amongst CNRIS and CNRIS-Only customers



RENEW AMENDMENT #3

Perform a serial CNR-Only study as part of the serial transition study process*

* Note: This proposal builds on the concepts presented by New Leaf at prior TC meetings

PRIOR PROCESS

- When the FCA 18 Show of Interest window closed on 5/8/23, some customers in the interconnection process decided to wait to until the FCA 19 qualification process
 - Order 2023 had not been issued
 - FCA 19 had not yet been delayed
 - These customers expected to receive notification from ISO on 9/27/24 about whether they were qualified for the FCM and whether ISO anticipated any capacity upgrade requirements
 - For those projects that rely on capacity revenues to make their project viable, this notification could be a key milestone to allow them to obtain financing and move ahead towards construction
- If qualified, they had expected to be able to offer their capacity in FCA 19, starting 2/3/25
 - If they had an early COD, they could have selected critical path schedule (CPS) monitoring between 10/28/24 and 11/4/24 to be eligible for reconfiguration auctions that would occur after the CPS election for commitment periods after their planned COD

CURRENT PROCESS

- On 1/2/24 FERC accepted ISO's proposal to delay FCA 19 by one year
 - This delays by a year, until 9/26/25, the notification of qualification that some developers rely on, delaying their ability to secure financing and begin construction
 - It also would have delayed until 10/27-11/3/25 the ability to elect CPS monitoring, preventing early-COD resources from participating in reconfiguration auctions held in late 2024 into 2025
- To address only the second of these concerns, ISO included a “supplemental reconfiguration auction (RA) qualification” process for early-COD projects to enable them to participate in reconfiguration auctions held in late 2024 into 2025
 - Projects without a CSO with a planned COD prior to 6/1/26 could go through this supplemental RA qual process in 2024 on the same schedule that would have been used for FCA 19 absent the delay
 - These projects would be able to participate in the reconfiguration auctions
 - A resource locks in its CNRC and CNRIS by obtaining a CSO, so once these resources obtained a CSO in a reconfiguration auction, they would not have to go through a future capacity deliverability study

ISO COMPLIANCE PROPOSAL

- ISO proposes to establish the base case for the transitional cluster study by 9/1/24, prior to the completion of the supplemental RA qual process
 - Resources qualified through the supplemental RA qual process that obtain a CSO in a reconfiguration auction:
 - would be able to obtain a CSO in the early reconfiguration auctions, but
 - would not lock in their CNRIS, and
 - to participate in FCA 19 would have to go through the capacity portion of the transitional cluster study to obtain CNRIS, or
 - to participate in a later FCA would have to go through a subsequent cluster study
 - *Note: it's unclear if the first non-transitional cluster study would enable qualification for FCA 20 or if the first FCA for which non-transition projects could qualify would be FCA 21*

CONCERNS WITH THE ISO PROPOSAL

- For projects seeking FCA 19 qualification without an early COD
 - Customers would learn their initial capacity upgrade requirements approximately 6 months after they had expected to had FCA 19 not been delayed
 - This six-month delay extends the uncertainty for these projects about their ability to qualify to offer capacity, which for some projects will delay their ability to obtain financing, begin construction, and ultimately their COD
- For projects with an early COD going through the supplemental RA qual process
 - Customers would be able to participate in reconfiguration auctions in late 2024 into 2025 to obtain a CSO, but would not be able to lock in their CNRIS until they went through a cluster study
 - If any upgrade requirements were identified in the supplemental RA qual process, these customers likely would not pursue them, as they would have no certainty about whether additional upgrades might be identified as part of the cluster study process

RENEW AMENDMENT CONCEPT

- Perform a serial CNR-Only study that as part of the serial transition study process
 - Only projects with a completed SIS are eligible for the serial transition study process, this would remain unchanged
- Eligible resources for the serial transition study could (new options in bold):
 - request a serial Facilities Study,
 - **request a serial CNR-Only study,**
 - **request both a serial Facilities Study and CNR-Only study,**
 - request to proceed to an expedited interconnection agreement,
 - request to have their CNR-only request studied as part of the transitional cluster, or
 - withdraw without penalty

RENEW AMENDMENT CONCEPT – HOW THE SERIAL CNR-ONLY STUDY WOULD WORK

- Queue priority order would be respected, as called for in O2023 for the serial transition study
- The study would be performed using the same overlapping impact study process that has existed to-date
- If an overload were identified as requiring a network upgrade, this would be grounds for the resource to be ineligible for obtaining capacity interconnection service through this serial transition study process
 - Such a project would need to go into a cluster study (either the transitional or a post-transitional cluster study) to have their upgrades identified and lock in CNRIS
 - Optional: the study agreement could be structured such that a project in this situation could default back to the transitional cluster study for CNR-only service to enable more projects to be available to participate in FCA 19. This would require serial CNR-only projects to submit the same deposits and site control as CNR-only projects in the transitional cluster study.
- If no upgrade requirements were identified, the project could proceed to executing an Interconnection Agreement that included CNRIS

RENEW AMENDMENT CONCEPT – HOW THE SERIAL CNR-ONLY STUDY WOULD WORK

- The serial transitional CNR-Only study would occur at the same time as the serial transitional Facilities Studies
 - 5/31/24 – ISO issues transitional study agreement
 - 7/30/24 – customers return agreement, deposit, site control
 - 10/28/24 – ISO issues transitional serial study reports
- Because no network upgrades would result from this study, the results would not impact the NRIS base case for the transitional cluster study established by 9/1/24
 - This is why projects requiring upgrades would not be eligible to lock in CNRIS through this process
- Results of this study would be reflected in the CNRIS base case for the transitional cluster study, which would not be established until early 2025
 - There would be no delay to the transitional cluster study
- The withdrawal penalty would be 9x the study costs, just like the other transitional studies

RENEW AMENDMENT CONCEPT – HOW IT INTERACTS WITH SUPPLEMENTAL RA QUAL PROCESS

- The Supplemental RA Qual process would be modified to exclude the overlapping impact test
 - It would look to the results of the serial CNR-only study for the capacity deliverability information, just like future FCA qualification processes will look to the cluster study results for this information
- The final qualification determination notification from the supplemental RA qual process could be delayed by a week to coincide with the CNR-only study completion date of 10/28/24
- The CPS monitoring election window could remain 10/28-11/4/24
- Early COD resources (that do not require upgrades for capacity deliverability) would thus be able to lock in CNRIS and participate in early reconfiguration auctions

RENEW AMENDMENT CONCEPT – ALIGNS WITH 02023 INTENT

- This serial CNR-Only transitional study would
 - allow late-stage projects with a complete SIS to lock in their eligibility for participation in the FCM to obtain financing and move ahead with construction
 - allow early COD projects to participate in early reconfiguration auctions and lock in CNRIS
- The intent of the transition in Order 2023 appears to be to allow late stage projects that are ready to go to get through the interconnection process fast rather than getting slowed down by a cluster study
 - This would be a way to meet this intent for capacity market participation which is not explicitly addressed in the order.

P856: "... [the] proposed transition process will create an efficient way to prioritize and process interconnection requests, based on how far they have advanced through the interconnection process and their level of commercial readiness. We further find that the transition process, as adopted herein, appropriately balances the need to move expeditiously to the new cluster study process with the need to respect the investments and expectations of interconnection customers at an advanced stage in the existing interconnection process.

The background features three stylized wind turbines of varying heights and positions, set against a light blue sky with a few birds in flight. The turbines have grey blades and towers, with yellow bases. The text is overlaid on the left side of the image.

RENEW AMENDMENT #4

Clarify that a list of both NR and CNR contingent facilities will be included in the cluster study and restudy reports

WHAT ARE CONTINGENT FACILITIES?

- As described in Section 3.8 of the LGIP, contingent facilities are Interconnection Facilities and Network Upgrades associated with higher Queue Positions or planned/proposed transmission projects that are not yet in service but upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing

ISO COMPLIANCE PROPOSAL

- ISO's proposed Section 3.8 of Schedule 22 (the LGIP) on identification of contingent facilities says "System Operator shall identify Contingent Facilities before the execution of the LGIA... Contingent Facilities that are identified during the evaluation of the Interconnection Request shall be documented in the ~~Interconnection System Impact~~ Cluster Study report or the LGIA for the Large Generating Facility."
- It is not clear from this language
 - whether these facilities will affirmatively be identified and then listed in the cluster study reports or will only be listed in the reports if incidentally identified during the cluster study, or
 - whether both NRIS and CNRIS contingent facilities will be identified and listed in the report

CONCERNS WITH THE ISO PROPOSAL

- Order 2023 proforma language for Section 3.8 of Schedule 22 says “Transmission Provider shall post in this section a method for identifying the Contingent Facilities **to be provided to Interconnection Customer at the conclusion of the [System Impact] Cluster Study...**”
- Particularly given the new Cluster Readiness Deposits and Withdrawal Penalties that ramp up with each step of the new process, RENEW believes it is important that this information be provided with the study reports so that customers can make fully informed decisions about whether to move ahead to the next stage in the process or withdraw.
- Providing this information in the interconnection agreement is too late for customers to be able to make informed decisions at the earlier decision points in the process

RENEW AMENDMENT CONCEPT

- Clarify the language in Section 3.8 to indicate that both NR and CNR contingent facilities will be identified as part of the cluster study and listed in the cluster study report (or restudy and restudy report)
- Also clarify the study agreements to indicate that these contingent facilities will be included in the report

The background features three stylized wind turbines of varying heights and positions, set against a light blue sky. The turbines have grey towers and three blades each. The blades are a light grey color. The towers are also grey, with a yellow base. There are a few small, white birds flying in the sky. The overall style is clean and modern.

RENEW AMENDMENT #5

Create a Customer Engagement Window Within the Transitional Cluster Study Process Without Extending the Transition Timeline

ISO COMPLIANCE PROPOSAL – POST-TRANSITION CLUSTERS

- The post-transitional cluster study process includes a 60-day customer engagement window following the cluster entry window during which
 - ISO notifies customers of all of the Interconnection Requests that are potentially eligible to join the cluster including their requested interconnection service levels,
 - ISO issues NDAs and convenes a scoping meeting at which customers may ask questions and receive detailed feedback about their proposals.
- With the benefit of this information, the customers can then make a final decision about whether to execute the cluster study agreement and submit the study and customer readiness deposits

ISO COMPLIANCE PROPOSAL – TRANSITIONAL CLUSTER

- The transitional cluster study process laid out in the Order and ISO’s compliance proposal does not benefit from this customer engagement window.
- All customers with an active queue position as of the transition eligibility deadline (currently proposed as May 1, 2024), would be identified as *potentially* eligible for the transitional cluster study.
- ISO is required to tender all of these customers a transitional cluster study agreement by the effective date (currently proposed as May 31, 2024).
- These agreements must be executed within 60 calendar days or else the Interconnection Request is withdrawn
- During this 60-day window when these customers consider whether to execute their agreements, ISO proposes that they will have access to the information in the public queue but nothing further

CONCERNS WITH THE ISO PROPOSAL

- Without sufficient information about potential members of the transitional cluster or the ability to ask the ISO or interconnection transmission owners questions about a proposed interconnection, customers are asked to decide whether to enter the transitional cluster with incomplete information
- This could lead to a higher risk for subsequent withdrawals and restudies

RENEW AMENDMENT CONCEPT

- Create a transitional customer engagement window within the 60-day period when customers are considering whether to execute their study agreements
 - ISO would issue NDAs along with transitional cluster study agreements on the effective date
 - ISO would hold a scoping meeting within the next 60 days for customers who executed the NDA
 - Within 10 Business Days of the effective date, ISO would make available to the customers potentially eligible to join the transitional cluster the same information that would normally be provided to potential cluster members 10 days after the start of the post-transition customer engagement window,
 - This should include the net summer and net winter NRIS being requested by all potential members of the cluster, as well as the net summer CNRIS being requested

RENEW AMENDMENT CONCEPT, CONTINUED

- ISO does not currently have the CNRIS levels being requested by CNR or CNR-Only interconnection customers in the queue,
 - The current process has customers submit these requested values during the FCA qualification process (subject to a cap of the NRIS service level requested in the interconnection process)
 - RENEW recommends that ISO require customers with active CNR or CNR-Only interconnection requests to provide this information to ISO by the May 1 effective date or else be subject to either withdrawal or a downgrade from a CNR to an NR service request
 - ISO would then be able to inform potential transition cluster members about the requested CNR service levels within 10 business days of the May 1 effective date
- This customer engagement window would not slow the transition process down, would give customers better information when deciding whether to enter the transitional cluster, and could avoid the need for later restudies



RENEW AMENDMENT #6

Add an exemption to withdrawal penalties in the situation where an Interconnection Customer received incorrect or misleading information in the scoping meeting

ISO COMPLIANCE PROPOSAL

- In the cluster study process, ISO will convene a group scoping meeting including the Interconnecting Transmission Owners and all Interconnection Customers.
- Based on the information shared in that scoping meeting, customers will decide whether to move ahead into the initial cluster study.
- Once a customer moves into the initial cluster study, withdrawal penalties are applied if they withdraw, with a small number of exceptions

CONCERNS WITH THE ISO PROPOSAL

- Interconnection Customers take significant risk in the interconnection process. They must make decisions based on the information available to them about whether to proceed in the interconnection process.
- It can happen on occasion that incorrect or misleading information is provided to the customer during the scoping meeting.
 - This is not to suggest that any party would intentionally or knowingly provide incorrect or misleading information, but even with the best of intentions it can happen that incorrect information is shared.
- When this happens today, the interconnection customer must deal with the variety of consequences, but is not charged a withdrawal penalty.
- With the introduction of a withdrawal penalty, it is appropriate to create an exception for this to protect everyone in the process.

RENEW AMENDMENT CONCEPT

- RENEW believes it would be appropriate to add an exception for charging a withdrawal penalty in the case where a customer made the decision to proceed into the initial cluster study based on information provided by ISO or the Interconnecting Transmission Owner at the scoping meeting that was later, in the course of the initial cluster study, determined to be incorrect or misleading.

THANK YOU.

