Order No. 2023 Related Changes

Equivalent CNRC

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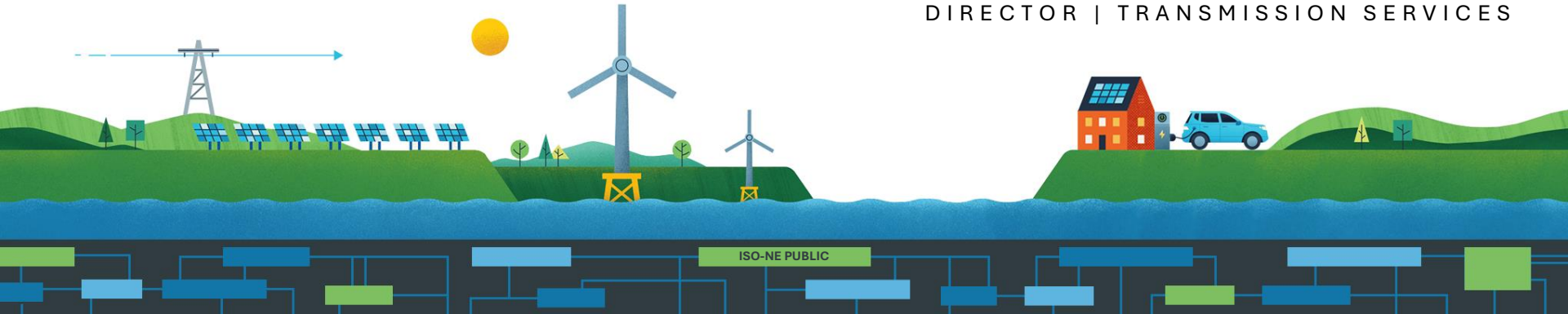

Order No. 2023 Related Changes – Equivalent CNRC

Proposed Effective Date: Q3 2026

- The ISO is proposing changes to the Tariff to formalize the concept of equivalent Capacity Network Resource Capability (CNRC) and address how equivalent CNRC is established, managed, and reduced
  - Continued assignment and management of a capacity deliverability value for all resource types allows the ISO to properly perform deliverability analyses and account for assigned deliverability capabilities (*e.g.*, in capacity market qualification)
- This introductory presentation discusses the proposed changes
  - Presentation of the Tariff redlines for these proposed changes is expected at the November Transmission Committee meeting

BACKGROUND AND NEED

Need for Deliverability Values

- Although the ISO does not assign Capacity Network Resource Interconnection Service (CNRIS) for an amount of CNRC (*i.e.*, a deliverability value) to resources not subject to the ISO Interconnection Procedures, the ISO still needs to assign a deliverability value to such resources to properly perform deliverability analyses and account for assigned deliverability capabilities
  - For example, deliverability values are used in capacity market qualification

Pre-Order No. 2023

- Prior to Order No. 2023, resources not subject to the ISO Interconnection Procedures established, managed, and/or reduced a CNRC equivalent value (*i.e.*, a deliverability value) based on Tariff rules for resources subject to the ISO Interconnection Procedures
- The milestones for establishing CNRC and achieving CNRIS were integrated into Forward Capacity Market (FCM) activities, so the ISO was able to treat both types of resources in the same manner

Order No. 2023 Impacts

- As part of Order No. 2023 compliance, the ISO removed the milestones related to the assessment of deliverability and establishment of CNRC from FCM activities for resources subject to the ISO Interconnection Procedures
  - These milestones now reside fully within the ISO interconnection process in Schedules 22, 23, and 25 of the Open Access Transmission Tariff (OATT)

Need for Proposed Changes

- Tariff changes are needed to clarify how equivalent CNRC is assigned, managed and reduced for resources not subject to the ISO Interconnection Procedures since the ISO no longer has clear Tariff rules to do so

Need for Proposed Changes (cont'd)

- These clarifications are first needed to support qualification determinations for the 2026 interim reconfiguration auction (RA) qualification process
  - Determinations for the 2026 interim RA qualification process are expected in October 2026
  - The next opportunity for resources that have not previously established a deliverability value to participate in capacity market activities are the RAs (and bilateral transactions) where access is enabled by completing the 2026 interim RA qualification process

DETAILS OF PROPOSED CHANGES

Items Addressed by Proposed Changes

- The ISO proposes to address the following items:
  1. Formalizing the concept of “equivalent CNRC”
  2. Describing the methods for establishing equivalent CNRC
  3. Adjusting the timing for performing, and the use of, the “all-or-nothing” deliverability analysis screen in support of establishing equivalent CNRC
  4. Reasserting methods for reducing equivalent CNR

FORMALIZING “EQUIVALENT CNRC”

Formalizing “Equivalent CNRC”

- The ISO is proposing to formalize the concept of “equivalent CNRC”
  - Results in a clear concept used to represent assigned deliverability values to resources not subject to the ISO Interconnection Procedures
  - Will apply to resources not subject to the ISO Interconnection Procedures that require an assigned deliverability value:
    - Generating Capacity Resources (GCRs) mapped to facilities not subject to the ISO Interconnection Procedures (*e.g.*, distribution connected distributed energy resource)
    - Active Demand Capacity Resources (ADCRs)
    - Distributed Energy Capacity Resources (DECRs)

ESTABLISHING EQUIVALENT CNRC

Expectations for Establishing Equivalent CNRC

- To ensure CNRC or equivalent CNRC is properly managed, any resources that establish CNRC or equivalent CNRC are expected to achieve Commercial Operation
  - Under Order No. 2023 compliant rules, resources subject to the ISO Interconnection Procedures require significant Commercial Readiness Deposits, face significant withdrawal penalties, and are tracked closely against the milestones in their Interconnection Agreements
  - Similar commitments and tracking are not visible to the ISO, or in some cases may not exist, for projects not subject to the ISO Interconnection Procedures
- For consistency with resources subject to the ISO Interconnection Procedures, the process to establish equivalent CNRC for resources not subject to the ISO Interconnection Procedures should be supported by clear and trackable commitments related to a resource achieving Commercial Operation

Methods for Establishing Equivalent CNRC

- The ISO is proposing that resources not subject to the ISO Interconnection Procedures can establish equivalent CNRC by using one of two available methods (assuming such resources have been determined to be deliverable based on the "all-or-nothing" deliverability analysis screen*):
  A. Obtaining a Capacity Supply Obligation (CSO) in a capacity market trading activity (*e.g.*, a primary auction, RA, or bilateral transaction)
  B. "Locking-in" equivalent CNRC in advance of participating in the capacity market

- The methods will be compatible with current FCM rules and proposed Capacity Auction Reforms – Prompt/Deactivation (CAR-PD) rules
  – May need some adjustment based on the developed Capacity Auction Reforms – Seasonal Accreditation (CAR-SA) rules

*Additional discussion on the "all-or-nothing" deliverability analysis screen provided later in this presentation.

Method A – Obtaining a CSO

- Established equivalent CNRC would equal the highest amount of CSO obtained in a capacity market activity
- This approach will be very similar to the pre-Order No. 2023 approach used to establish CNRC, where the relevant portion of Section II.48.1.(a) states:
  - *"…summer CNR Capability shall be established as the highest MW quantity of Capacity Supply Obligation obtained by the Generating Capacity Resource for the summer period and winter CNR Capability shall be established as the higher of (1) the highest MW quantity of Capacity Supply Obligation obtained by the associated Generating Capacity Resource for the winter period and (2) the Generating Facility's summer CNR Capability multiplied by the ratio of the Generating Capacity Resource's winter Qualified Capacity to summer Qualified Capacity for the auction in which the entry occurred."*

Method A – Obtaining a CSO (cont'd)

- Specifically, the ISO will use the following formulas when equivalent CNRC is established by obtaining a CSO:
  - When CSO is acquired in the summer season:

$$Equivalent\ CNRC_{winter} = max\left(CSO_{max\ winter}, Equivalent\ CNRC_{summer} \times \frac{QC_{winter}}{QC_{summer}}\right)$$

  - When CSO is acquired in the winter season:

$$Equivalent\ CNRC_{summer} = max\left(CSO_{max\ summer}, Equivalent\ CNRC_{winter} \times \frac{QC_{summer}}{QC_{winter}}\right)$$

- The formulas are consistent with the relevant portion of Section II.48.1.(a), while allowing flexibility if equivalent CNRC is established by obtaining a CSO in a capacity market activity within either the summer or winter season

Method B – "Locked-in" Ahead of Obtaining CSO

- A resource not subject to the ISO Interconnection Procedures can request to establish equivalent CNRC ahead of obtaining a CSO if:
  - The date for achieving Commercial Operation is no more than two years from the date that equivalent CNRC is requested, and
  - It can provide evidence it has:
    - An executed interconnection agreement or equivalent under applicable state tariff, rules or procedures, and
    - Made a financial commitment to the project in the form of:
      - A notice to proceed to the interconnecting entity with an accompanying non-refundable deposit, or
      - An Engineering & Procurement (E&P) agreement, procurement agreement, or other similar agreement that demonstrates direct project equipment procurement and/or construction expenditures equaling 5% or more of the estimated overall project cost

Method B – "Locked-in" Ahead of CSO (cont'd)

- "Locked-in" equivalent CNRC must be assigned to a specific project and will be withdrawn if the specific project has its interconnection agreement (or equivalent) terminated or fails to achieve Commercial Operation within two years from the date that equivalent CNRC is requested
  - A two-year period is proposed to line up with the expected construction timelines for these projects
- The amount of summer and winter equivalent CNRC assigned to a resource would be based on an estimate of summer and winter Qualified Capacity (QC) values
  - The ISO would generate estimates of the QC values consistent with capacity market qualification

DELIVERABILITY REVIEW TIMING

Deliverability Analysis Screen

- The now effective Order No. 2023 related rules introduced an “all-or-nothing” deliverability analysis screen for GCRs not subject to the ISO Interconnection Procedures in Sections III.13.1.1.2.3 and III.13.1.1.2.3B of the Tariff
  - Previously, the deliverability analysis for GCRs not subject to the ISO Interconnection Procedures was included in the Capacity Network Resource (CNR) Group Study performed as part of a Forward Capacity Auction (or interim RA) qualification process
- Note that under both pre/post-Order No. 2023 rules, ADCRs and DECRs* were/are evaluated using an “all-or-nothing” deliverability analysis screening (see Sections III.13.1.4.1.1.3 and III.13.1.4A.1.1.3 of the Tariff)

*DECRs are made of up distributed energy resource GCR and/or DCR components, and will be first eligible to participate in capacity market activities for the 2028-2029 Capacity Commitment Period.

Deliverability Review Timing Requirements

- The “all-or-nothing” deliverability analysis screen performed for resources not subject to the ISO Interconnection Procedures needs to be coordinated with the deliverability analysis performed in a Cluster Study for resources subject to the ISO Interconnection Procedures
- The timing of Cluster Studies is independent of capacity market activities, which makes coordinating an “all-or-nothing” deliverability analysis screen with a Cluster Study challenging if the timing of “all-or-nothing” deliverability analysis screens is set by a capacity market schedule

Proposed Deliverability Review Timing

- The ISO is proposing to perform the “all-or-nothing” deliverability analysis screen for resources not subject to the ISO Interconnection Procedures right after the conclusion of a Cluster Study, and review/adjust it as needed after each Cluster Re-Study window
  - This allows close coordination of the base case of the “all-or-nothing” deliverability analysis screen with the final case coming out of a related Cluster Study or Cluster Re-Study
- Further, the ISO is proposing to use the most recently completed deliverability analysis screen when evaluating deliverability in support of the previously discussed Methods A and B for establishing equivalent CNRC
  - For example, if the most recently completed deliverability analysis screen was completed in October of year “n”, and a resource is being evaluated for deliverability as part of a capacity market activity in April of year “n+1”, the deliverability analysis screen completed in October of year “n” will be checked to see if there no longer is any deliverability space left for the appliable area of the system

REDUCING EQUIVALENT CNRC

Existing Paths to Reduce Equivalent CNRC

- Under current rules, there are two paths* for a resource to reduce its assigned CNRC or equivalent CNRC value:
  1. *Request path:* Submission of a Retirement De-List Bid or Permanent De-List Bid during an FCM qualification cycle
  2. *Time-out path:* Not operating commercially for a period of three calendar years, whereupon the ISO will deem the resource retired
- The CAR-PD proposal replaces Path 1 with a deactivation request process (for both New England Markets Deactivation and Capacity Market Deactivation) and maintains Path 2

*The management of deliverability values related to FCM critical path schedule (CPS) monitoring actions will continue under existing FCM CPS monitoring rules. FCM CPS monitoring will be phased out as part of the CAR-PD rule changes.

Proposal to Maintain the Existing Paths

- The ISO proposes continued extension of these two paths (*i.e.*, the request and time-out paths) to resources not-subject to the ISO Interconnection procedures, with clarifications to support how the resulting retirements/deactivations are treated for these resources

Retirement/Deactivation Outcome

- When a resource not subject to the ISO Interconnection Procedures is retired/deactivated, it is no longer allowed to participate in any ISO markets (or the capacity market in the case of a permanent de-list/capacity market deactivation), and the ISO:
  - Removes any assigned equivalent CNRC
  - Designates the asset as retired/deactivated in its systems
  - Informs the relevant utility that is party to the applicable two-party interconnection agreement that the interconnection agreement should be terminated or amended to remove interconnection service that supports the resource's participation in the ISO markets
- If a resource wants to resume participation in the ISO markets, it must take the steps in the applicable interconnection process to be once again interconnected in a way that supports its participation in the ISO markets (*i.e.*, a resulting new or amended interconnection agreement would be required)
- These outcomes are consistent with those for resources subject to the ISO Interconnection Procedures that are retired/deactivated

Overview of FERC Jurisdiction

- The Federal Power Act assigns the Federal Energy Regulatory Commission (FERC) authority over facilities that support the interstate wholesale commerce of electricity
  - This includes distribution facilities used by resources to support wholesale transactions, including for purposes of interconnection (FERC Order No. 2006 P7)
  - Under *pro forma* FERC rules, any request to interconnect to a distribution facility that already hosts wholesale transactions for a facility that also intends to participate in wholesale markets (including any increase or modification to a resource) must go through the FERC process, resulting in a three-party interconnection agreement
    - This was the approach used in New England for many years

Overview of FERC Jurisdiction (cont'd)

- In June 2022, the ISO proposed modifications to Schedule 23 of the Tariff to provide that, going forward, all requests to interconnect to the distribution system would go through the state interconnection process
  - The primary reason was that implementing two different process on neighboring feeders was becoming unmanageable, and similarly situated resources were subject to inconsistent treatment
  - Regional consistency and ISO oversight would be assured through reviews under the Tariff Section I.3.9 process
  - FERC accepted these modification in August of 2022
- The ISO did not ask, nor did FERC agree, to surrender FERC's jurisdiction over the feeders that host wholesale transactions, including for purposes of interconnection
  - Rather, FERC and the ISO are delegating interconnection administration to the state interconnection process for manageability and to ensure consistent treatment of distribution connected resources

Additional Considerations

- The ISO proposes to also include the following items related to the time-out provision of Section III.13.2.5.2.5.3.(d) of the Tariff:
  - Extend the "repowering"/Material Modification carve-out and related requirements (*i.e.*, demonstration of a valid interconnection request to materially modify the resource) to resources not subject to the ISO-Interconnection Procedures
  - Address how this time out provision applies in the case where a resource requires replacement of equipment with a lead time greater than three calendar years, but does not otherwise result in a Material Modification
    - Tariff changes for this item will need to consider concepts such as implementability, consistency of treatment, clarity of requirements, and impacts to others (*e.g.*, other Interconnection Customers, Market Participants, end users, *etc*.)
  - The resulting changes would also apply to this provision as modified and moved by CAR-PD

CONCLUSION AND NEXT STEPS

Conclusion

- The ISO is proposing changes to the Tariff to formalize the concept of equivalent CNRC and address how equivalent CNRC is established, managed, and reduced
  - Continued assignment and management of a capacity deliverability value for all resource types allows the ISO to properly perform deliverability analyses and account for assigned deliverability capabilities (*e.g.*, in capacity market qualification)
- These changes are first needed to support qualification determinations for the 2026 interim RA qualification process (*i.e.*, Q3 2026)
  - The changes will be compatible with both the current rules and the rules proposed for CAR-PD
    - May need some adjustment based on the developed CAR-SA rules

Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
Reliability/Transmission Committee July 15-16, 2025	Initial concepts presentation
Transmission Committee October 28, 2025	Introduction to proposal
Transmission Committee November 20, 2025	Introduction to proposed Tariff revisions
Transmission Committee December 18, 2025	Continued discussion on proposed Tariff revisions
Transmission Committee January 21, 2025	Vote on proposed Tariff revisions
Participants Committee February 5, 2026	Vote on proposed Tariff revisions

Questions

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