

Order 2023 - Improvements to Generator Interconnection Procedures and Agreements

Summary of Tariff Redline Design Details

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Presentation Overview

- ISO has <u>posted</u> the initial draft of all Tariff redlines associated with Order No. 2023 compliance
- This presentation summarizes the key components of the compliance design and responds to several Stakeholder comments and questions
- Focus on Large Generator Interconnection Procedures (LGIP) in Schedule 22 of the Open Access Transmission Tariff (OATT)
 - The Small Generator Interconnection Procedures (SGIP) in Schedule 23 of the OATT have been overhauled to mirror the LGIP
 - The pre-application process has been maintained in the SGIP
 - The Elective Transmission Upgrade Interconnection Procedures (ETUIP) in Schedule 25 of the OATT also closely match the LGIP

ACCEPTABLE FORM OF READINESS DEPOSITS

Tariff Redlines – Letter of Credit for the Commercial Readiness Deposit

Tariff Section	Tariff Change	Reason for Change
LGIP 3.1	Commercial Readiness Deposits that must be submitted to the System Operator under this LGIP must be delivered to the System Operator's bank account by electronic transfer or through the provision and maintenance of a Letter of Credit in a form and from a financial institution acceptable to System Operator, as described on the System Operator's public website. All other deposits that must be submitted to the System Operator under this LGIP must be paid in cash and delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account or, in the case of a Letter of Credit provided as a Commercial Readiness Deposit, the Letter of Credit is accepted by System Operator. Deposits that must be submitted to the Interconnecting Transmission Owner may be submitted in a form acceptable to the Interconnecting Transmission Owner.	Incorporating Order No. 2023 proposal to allow Letter of Credit for Commercial Readiness Deposits Still require cash for study deposits

Tariff Redlines – Letter of Credit for the Commercial Readiness Deposit, cont.

Tariff Section	Tariff Change	Reason for Change
LGIP 3.4.2	(vi) a Commercial Readiness Deposit equal to two times the study deposit described in Section 3.1.1.1 of this LGIP in the form of an irrevocable letter of credit in a form and from a financial institution acceptable to System Operator, as described on the System Operator's public website, or cash where cash deposits shall be treated according to Section 3.7 of this LGIP. The letter of credit must specify the name of the Interconnection Customer to which the Commercial Readiness Deposit corresponds. This Commercial Readiness Deposit is refunded to Interconnection Customer according to Section 3.7 of this LGIP,	Incorporating Order No. 2023 proposal to allow Letter of Credit for Commercial Readiness Deposits

Tariff Redlines – Letter of Credit for the Commercial Readiness Deposit, cont.

Tariff Section	Tariff Change	Reason for Change
LGIP 5.1.1.1 & 5.1.1.2	in the form of an irrevocable letter of credit in a form and from a financial institution acceptable to System Operator, as described on the System Operator's public website, or cash where cash deposits shall be treated according to Section 3.7 of this LGIP. The letter of credit must specify the Interconnection Request to which the Commercial Readiness Deposit corresponds.	Incorporating Order No. 2023 proposal to allow Letter of Credit for Commercial Readiness Deposits

TRANSITION RELATED UPDATES

Transition Process Dates and Milestones*

- "Effective Date"
 - ISO is proposing an Effective Date of May 31, 2024
 - Execution of Transitional Serial Interconnection Facilities or Transitional Cluster Study Agreement is due no later than 60 Calendar Days (CD) from the Effective Date and study would commence thereafter
- "Eligibility Date"
 - Consistent with Order 2023, an April 1 compliance filing date results in an Eligibility Date of May 1, 2024. This means that Interconnection Customers with a valid IR as of May 1, 2024 will be eligible to elect to proceed with a transition study or elect to withdraw from the interconnection queue without penalties.
 - On May 31, the ISO will issue a Transitional Serial Interconnection Facilities Study Agreement or a Transitional Cluster Study Agreement to Interconnection Customers with eligible IRs
- Interconnection Requests that are not valid and have not been assigned Queue Position as of the Eligibility Date will be withdrawn by the ISO without further opportunity to cure any deficiencies (withdrawal penalties will not apply)
 - The ISO will not accept any Interconnection Requests submitted after the Eligibility Date until the first Cluster Entry Window Opens in 2025
 - Ongoing study work for IRs for which an SIS is underway as of the Eligibility Date will continue through the Effective Date
 - Results of those studies will be provided for information purposes only and will not effect a project's eligibility status with respect to the Transitional Cluster Study

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Allowing for Requests to Pause On-going Studies Before Transition

- Stakeholders at the TC and offline have requested that the ISO consider a process whereby ICs can request that the ISO cease the study process for projects that are actively being studied or about to begin if they have not yet started
- The ISO has reviewed this request and identified the following applicable language in Section 2.5 of the LGIP
 - Parties that must perform a specific obligation under a provision of the Standard Large Generator Interconnection Procedure or Standard Large Generator Interconnection Agreement within a specified time period shall use Reasonable Efforts to complete such obligation within the applicable time period. A Party may, in the exercise of reasonable discretion and within the time period set forth by the applicable procedure or agreement, request that the relevant Party consent to a mutually agreeable alternative time schedule, such consent not to be unreasonably withheld.

Pausing On-going Studies Before Transition

- Existing functionality in the Interconnection Request Tracking Tool (IRTT) allows the IC to see:
 - the expected completion date of an on-going study
 - when a study is expected to start if it has not yet started
- The ISO is proposing to allow an IC to voluntarily request that the ISO cease study work, i.e. "consent to a mutually agreeable alternative time schedule"
- The option would only be provided to those IRs where the ISO has determined that the interconnection study will not be completed by the May 1, 2024 Eligibility Date under Order 2023
 - Where the ISO is forecasting that the study will be completed by the eligibility deadline, the ISO will continue the study work
 - The ISO will also continue study work for those IRs that decline the option to have the study work paused

Pausing On-going Studies Before Transition Next Steps

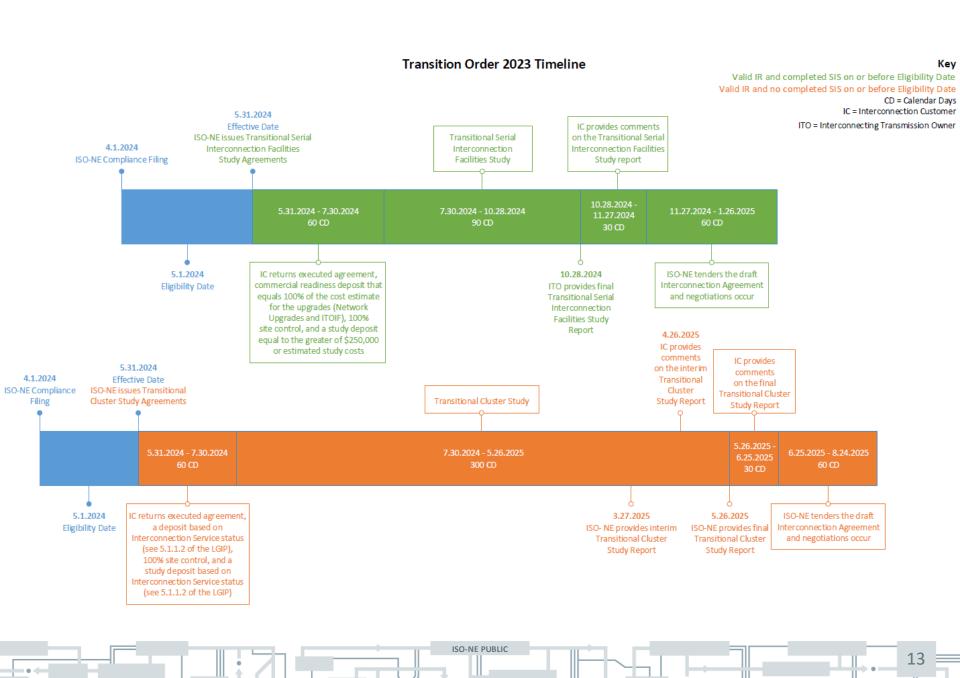
- ISO requests feedback from the TC on this proposal to <u>IRTT</u> <u>Customer Support</u>
- ISO will complete review of this proposal
- A final decision would take place in early January and, if we decide to proceed, ISO would communicate with the relevant ICs during the week of January 8

Transition Process – Schedule of Deposits

	Transition Clu	uster Study (TCS)	Transitional	Serial Facilities Study	Interconnection Agreement	Withdrawal Penalty
	Study Deposit ¹	Readiness Deposit	Study Deposit ¹	Readiness Deposit	Readiness Deposit	
	Cash -	Cash or LOC -	Cash -	Cash or LOC -	Submitted to Transmission	Drawdown of Cash or LOC
	Submitted to ISO	Submitted to ISO	Submitted to ISO	Submitted to ISO	Owner	
LGIP	\$ 250,000	\$ 5,000,000	Greater of \$250,000 or study cost estimate	100% Network Upgrade Estimate	20% Network Upgrade Estimate	9x study cost since entering queue
LGIP CETU Designated ²	\$ 250,000	5% Network Upgrade Assignment - Cash Only	ISO's existing CETU process rules	ISO's existing CETU process rules	ISO's existing CETU process rules	ISO's existing CETU process rules
LGIP CNRIS-Only ³	\$ 100,000	\$ 1,000,000	N/A	N/A	20% Network Upgrade Estimate	9x study cost since entering queue
SGIP	\$ 100,000	\$ 500,000	Greater of \$100,000 or study cost estimate	100% Network Upgrade Estimate	20% Network Upgrade Estimate	9x study cost since entering queue
SGIP CETU Designated ²	\$ 100,000	5% Network Upgrade Assignment - Cash Only	ISO's existing CETU process rules	ISO's existing CETU process rules	ISO's existing CETU process rules	ISO's existing CETU process rules
SGIP CNRIS-Only ³	\$ 50,000	\$ 250,000	N/A	N/A	20% Network Upgrade Estimate	9x study cost since entering queue

- 1. Any on-hand deposit associated with an IR that is eligible for the transition can be applied to transition studies. Total deposit must be trued-up by the Transition Cluster Study Agreement deadline.
- 2. "Cluster Enabling Transmission Upgrade" Would apply to the 3rd Maine Cluster and the Cape Cod Cluster
- 3. A request to change from NR Interconnection Service to CNR Interconnection Service.

The ETUIP deposit structure is similar to the LGIP structure



Tariff Redlines – One-time COD Extension under Transition

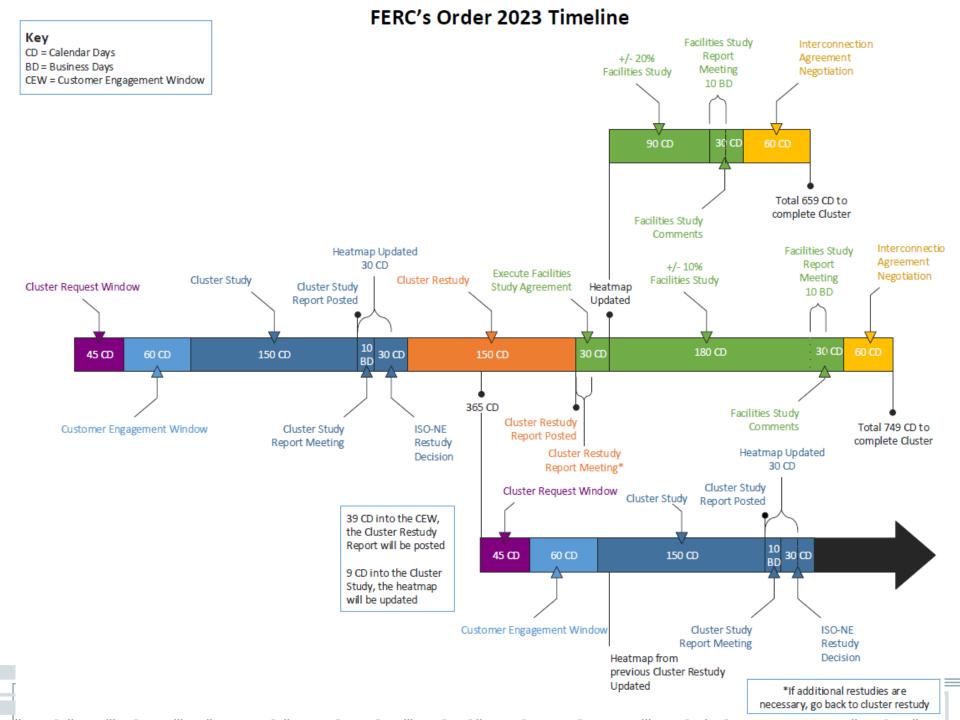
Tariff Section	Tariff Change	Reason for Change
LGIP 5.1.1.2	Notwithstanding any other provision, an Interconnection Customer with a valid Queue Position prior to May 1, 2024 that includes a Commercial Operation Date earlier than March 31, 2028, may make a one-time extension to its requested Commercial Operation Date upon entry into the Transitional Cluster Study, where any such extension shall not result in a Commercial Operation Date later than March 31, 2028.	ISO-NE is proposing to adjust the Commercial Operation Date extension that is allowed under Transition to account for the additional 120 days that were granted for compliance with Order No. 2023

ONGOING CLUSTER PROCESS DESIGN

Cluster Process Timelines – Order 2023 Design

- Order 2023 calls for the Cluster Study to be completed in 150 Calendar Days and the Cluster Restudy to be completed in 150 Calendar Days
 - The Order also suggests that the cluster process would be initiated annually
- However, the ISO reviewed the Order's proposed timelines in detail and identified that an annual approach would result in the outputs of the previous cycle not being available until after the beginning of the next cycle
 - E.g. the post-Cluster Restudy Heatmap for the previous cycle would not be updated until after the Cluster Request Window and Cluster Engagement Window for the next cycle had passed and the next cycle's Cluster Study was already underway

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Cluster Process Timelines – ISO Proposal

- 270 Calendar Days for the Cluster Study timeline
- 90 Calendar Days for the Cluster Restudy timeline
 - Anticipating efficiencies in the restudy based on the findings and learning from the Cluster Study
- The subsequent cycle will begin when the previous cycle is resolved

ISO-NE Order 2023 Timeline

Key

CD = Calendar Days

BD = Business Days FS = Facilities Study IA = Interconnection Agreement +/- 20% Facilities Study IA Negotiation Facilities Study Comments Cluster Restudy Report Cluster Heatmap Meeting Total 762 CD to complete Cluster with +/-20% FS Request Facilities Study Updated Window Cluster Study Report Meeting Cluster Study Cluster Restudy Heatmap IA Negotiation 10 BD Facilities Study Report Posted Report Posted Updated Comments 10 30 45 CD 270 CD BD CD +/- 20% Facilities Study IA Negotiation Facilities Study Comments Cluster Restudy +/- 10% Total 852 CD to complete Cluster with +/-10% FS Facilities Study Facilities Study Cluster Study Report Meeting Customer ISO-NE Execute ISO-NE Report Meeting 10 BD **Engagement Window** Restudy Facilities Restudy Cluster Decision* Study Decision Restudy Agreement Cluster Report Heatmap Meeting Request Cluster Study Updated Facilities Study IA Negotiation Window Report Meeting Cluster Study Cluster Restudy Heatmap Facilities Study 10 BD Report Posted Report Posted Updated Comments 30 270 CD 45 CD BD CD Cluster Restudy +/- 10% Facilities Study Facilities Study The next Cluster starts 582 CD after the previous Quster started. Execute Cluster Study Report Meeting Customer ISO-NE

Facilities

Study

Agreement

Restudy

Decision*

ISO-NE

Restudy

Decision

Report Meeting

10 BD

Engagement Window

^{*}If additional restudies are necessary, go back to Cluster Restudy.

Tariff Redlines – Cluster Request Window

Tariff Section	Tariff Change	Reason for Change
LGIP 3.4.1	System Operator shall accept Interconnection Requests during a forty-five (45) Calendar Day period (the Cluster Request Window). The initial Cluster Request Window shall open for Interconnection Requests beginning sixty (60) Calendar Days after conclusion of the three hundred sixty (360) Day transition process set out in Section 5.1 of this LGIP and successive Cluster Request Windows shall open thereafter thirty (30) Calendar days after System Operator issues Facility Study Agreements under Section 8.1 of this LGIP below and System Operator shall provide thirty (30) Calendar Days notice via posting on its public website when each respective Cluster Request Window will open.	The Cluster Request Window for the subsequent cycle will open after the previous cycle has completed

Cluster Studies – Schedule of Deposits

				Cluster Study	Facilities Study	Interconnection	
	С	luster Request Wind	ow	Report	Agreement	Agreement	Withdrawal Penalty
	Application Fee Cash -	Study Deposit Cash -	Readiness Deposit Cash or LOC -	Readiness Deposit Cash or LOC -	Readiness Deposit Cash or LOC -	Readiness Deposit Submitted to	Drawdown of Cash or LOC
	Submitted to ISO	Submitted to ISO	Submitted to ISO	Submitted to ISO	Submitted to ISO	Transmission Owner	
LGIP	\$ 50,000	\$ 250,000	\$ 500,000	5% Network Upgrade Assignment	10% Network Upgrade Assignment	20% Network Upgrade Estimate	Section 3.7.1 of LGIP
LGIP CETU Designated	\$ 50,000	\$ 250,000	5% Network Upgrade Assignment - Cash	N/A	10% Network Upgrade Assignment	20% Network Upgrade Estimate	Section 3.7.1 of LGIP
LGIP CNRIS-Only	\$ 50,000	\$ 100,000	\$ 200,000	5% Network Upgrade Assignment	10% Network Upgrade Assignment	20% Network Upgrade Estimate	Section 3.7.1 of LGIP
SGIP	\$ 15,000	\$ 100,000	\$ 200,000	5% Network Upgrade Assignment	10% Network Upgrade Assignment	20% Network Upgrade Estimate	Section 3.7.1 of SGIP
SGIP CETU Designated	\$ 15,000	\$ 100,000	5% Network Upgrade Assignment - Cash	N/A	10% Network Upgrade Assignment	20% Network Upgrade Estimate	Section 3.7.1 of SGIP
SGIP CNRIS-Only	\$ 15,000	\$ 50,000	\$ 100,000	5% Network Upgrade Assignment	10% Network Upgrade Assignment	20% Network Upgrade Estimate	Section 3.7.1 of SGIP

The ETUIP deposit structure is similar to the LGIP structure

Tariff Redlines – Cluster Study Cost Allocation

Tariff Section	Tariff Change	Reason for Change
LGIP 7.2	Costs of Cluster Studies shall be allocated to all Interconnection Customers on a 50% per capita, and 50% per MW basis.	Proposed approach to study cost allocation

Tariff Redlines – Waiving the Facilities Study

Tariff Section	Tariff Change	Reason for Change
LGIP 7.5	Within twenty ten (2010) Calendar Business Days following the Cluster Study Results Meeting, or Cluster Restudy Results Meeting (as appropriate), the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Where more than one Interconnection Customer is responsible for the same Network Upgrades resulting from a Cluster Study or Cluster Restudy, all such Interconnection Customers must agree in writing to waiver the Interconnection Facilities Study.	Where there is shared responsibility for Network Upgrades, the Facilities Study may be waived if all such ICs agree

Tariff Redlines – Facilities Study Agreement Timing

Tariff Section	Tariff Change	Reason for Change
LGIP 8.1	The System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP simultaneously thirty (30) Calendar Days after the Cluster Study Report Meeting, unless System Operator determines that Cluster Restudy is required, in which case, System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement within thirty (30) Calendar Days of the or with the delivery of the Cluster Study Report or Cluster ResStudy Report Meeting.	Timing of the provision of the Facilities Study Agreement

Tariff Redlines – Upgrade Cost Allocation

Tariff Section	Tariff Change	Reason for Change
OATT Schedule 11 Section 5(ii)	(ii) Non-CETU Upgrades (1) For non-CETU Network Upgrades identified in a Cluster Study, or Cluster Restudy, the share of costs to be paid by each Generator Owner or ETU IC with an Interconnection Request included in the Cluster shall be as follows: (a) Substation Network Upgrades, including switching stations, shall be allocated per capita to each Generating Facility or ETU that has a Point of Interconnection located at the same substation.	Upgrade cost allocation provisions consistent with Order No. 2023

Tariff Redlines – Upgrade Cost Allocation, cont.

Tariff Section	Tariff Change	Reason for Change
OATT Schedule 11 Section 5(ii)	allocated based on the proportional impact of each individual Generating Facility or ETU in the Cluster Study on the need for a specific Network Upgrade. System Network Upgrades comprising new or upgrades to transmission lines shall be allocated based on the distribution factor methodology described in Section 5(i) of this Schedule 11 to the OATT where the distribution impact is five percent ("5%") or higher under N minus zero ("N-0") conditions, as detailed in the ISO New England Planning Procedures. System Network Upgrades comprising reactive devices or any substation additions beyond the Point of Interconnection shall be allocated based on a proportional impact method and threshold under N-0 conditions, as detailed in the ISO New England Planning Procedures.	Upgrade cost allocation provisions consistent with Order No. 2023

INCORPORATING THE CLUSTER ENABLING TRANSMISSION UPGRADE (CETU) PROCESS

Incorporating CETUs

- The CETU Regional Planning Study (CRPS) construct will be maintained in Attachment K of the OATT
- The triggers for initiating a CRPS will be adjusted to account for the Order No. 2023 construct
- The CRPS will be used to inform entry into clusters
 - The Commercial Readiness Deposit will be a CETU Participation
 Deposit, in cash, equal to equal to 5% of the Interconnection
 Customer's cost allocation responsibility for the CETU and associated
 system upgrades to be determined based on the cost estimates
 provided in the final CRPS report
- CETU cost allocation will follow the existing rules
 - Late-comer provision is removed

Tariff Redlines – Triggers for CRPS

Tariff Section	Tariff Change	Reason for Change
LGIP 4.2.1	The System Operator, at its discretion, may initiate a CRPS pursuant to Section 15 of Attachment K, Section II of the Tariff, when it identifies any of the following interconnection circumstances: (1) the withdrawal from a Cluster Study of two (2) or more Interconnection Requests in the same electrical part of the New England Control Area; or (2) where procurements are underway for resources in the same electrical part of the New England Control Area based on the requested Point of Interconnection; and, none of the resources described in (1) or (2) above will be able to interconnect to the Administered Transmission System without the use of common significant new transmission line infrastructure rated at or above 115 kV AC or HVDC. System Operator may also initiate a CRPS in an electrical part of the New England Control Area where System Operator previously identified the need for a CETU to interconnect new resources.	Adjusted triggers for CRPS

Tariff Redlines – CETU Filling & Oversubscription

Tariff Section	Tariff Change	Reason for Change
LGIP 4.2.1	For purposes of the Transitional Cluster Study, the CETU shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area that the System Operator previously identified as needing the CETU identified in the final CRPS report and that met the Transitional Cluster Study entry requirements by the Cluster Request Window up to the approximate megawatt quantity identified in the final CRPS report as potentially enabled by the CETU. The Interconnection Requests will be included Transitional Cluster Study in queue order, based on the Queue Positions assigned in accordance with Section 4.1 of this LGIP, relative to other eligible Interconnection Requests. In the event that the CETU is filled and lower queued Interconnection Requests remain, such requests shall be withdrawn by System Operator, any remaining deposits will be refunded, and System Operator may initiate a new CRPS under Attachment K in the same electrical area of the system.	Transitional Cluster filling

Tariff Redlines – CETU Filling & Oversubscription, cont.

Tariff Section	Tariff Change	Reason for Change
LGIP 4.2.3.3	For Cluster Studies, the CETU shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area submitted during the next Cluster Request Window following the publication of the final CRPS report that the System Operator determines need the CETU identified in the final CRPS report and meet the Cluster Study entry requirements by close of the Cluster Entry Window up to the approximate megawatt quantity identified in the final CRPS as potentially enabled by the CETU.	Cluster filling

Tariff Redlines – CETU Filling & Oversubscription, cont.

Tariff Section	Tariff Change	Reason for Change
LGIP 4.2.3.3	If the Interconnection Requests identified by the System Operator as needing the CETU identified in the final CRPS report that elect to enter the Transitional Cluster Study or the Cluster Study, as applicable exceed the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report, the System Operator shall fill the CETU first with Interconnection Requests for Generating Facilities that have been selected in, or are contractually bound by, a state-sponsored request for proposal. In the event that the CETU is filled and additional Interconnection Requests are not able to be included, such requests will not proceed into the Cluster Study, all deposits will be refunded, System Operator may initiate a new CRPS under Attachment K in the same electrical area of the system.	Cluster filling

OPERATING ASSUMPTIONS FOR STORAGE

Operating Assumptions for Storage

Order No. 2023 Requirements

ISO's Proposed Approach

- At the request of the IC, the ISO would be required to use certain operating assumptions in study processes that reflect the proposed charging behavior of an electric storage resource
- Allow ICs to resubmit their operating assumptions if the ISO finds the originally proposed operating assumptions are in conflict with good utility practice
- The operating assumptions must be submitted as part of the initial IR
- Require the IC to install additional control technologies (software and/or hardware)

- ISO-NE is <u>proposing an alternative</u> <u>approach</u> (independent entity variation)
 - No longer study storage resources charging at peak-load conditions
 - Avoid incorporating additional control technologies

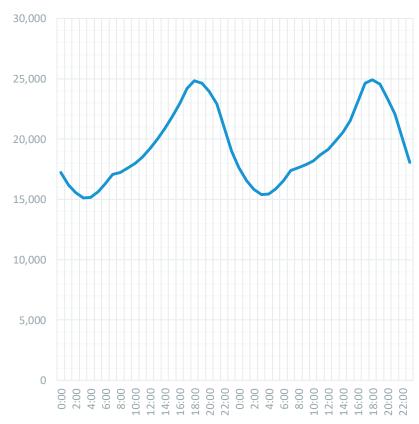
Summary of ISO's Proposed Approach

- Study proposed storage resources charging at a lower "shoulder" load level
 - No longer study proposed storage resources charging at peak load
- Rely on security constrained economic dispatch to govern the charging behavior in operations
 - Ensures reliable management to prevent overloads
 - Accounts for different operating configurations
 - Allows for competitive energy market bidding to determine which storage resources can charge
- Do not require the proposed storage to install the additional limiting control technology
 - The "control technology" will be the security constrained economic dispatch

What Level of System Load to Study Charging?

- During summer-peak conditions, load levels remain relatively high, even overnight
- Mid-day summer load levels should continue to reduce (duckcurve effect of additional PV)
- Consider addition of large quantities of storage resources
 - This will raise load levels during charging
- ISO is proposing to study the charging mode at a <u>net shoulder</u> <u>system load of 18,000 MW</u>
 - This will be documented in ISO-NE Planning Procedures

NE Hourly Net Load (MW)
Consecutive Summer Peak Days
2027 Forecast



Net of energy efficiency & behind-the-meter PV

Tariff Redlines – Storage Operating Assumptions

Tariff Section	Tariff Change	Reason for Change
LGIP 3.1 & 7.3	System Operator shall study Generating Facilities that include at least one electric storage resource, when studying the charging mode of the electric storage resource(s), using net shoulder system load as defined in ISO New England Planning Procedures. These requests for Interconnection Service also may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by Interconnection Customer.	Storage resources will be studied in the charging mode at net shoulder system load

DATA AND MODEL REQUIREMENTS

Tariff Redlines – Data & Model Requirements

Tariff Section	Tariff Change	Reason for Change
LGIP Attachment A	1. an appropriately parameterized library RMS positive sequence dynamics model, including model block diagram of the inverter control and plant control systems, that corresponds to Interconnection Customer's Small Generating Facility, and, 2. a validated user-defined model where one exists for the equipment (i.e. where the manufacturer attests that a library model may fully capture the behavior of the equipment). The user model will only be used for the fuller understanding of equipment behavior and will not be used to finalize the upgrade requirements in the Cluster Study and will not be added to base cases going forward. 3. A validated electromagnetic transient model Interconnection Customer must also demonstrate that the model is validated by providing evidence that the equipment behavior is consistent with the model behavior (e.g., an attestation from Interconnection Customer that the model accurately represents the entire Large Generating Facility; attestations from each equipment manufacturer that the user defined model accurately represents the component of the Small Generating Facility: or test data).	ISO adoption of Order No. 2023 requirements User-defined models will be accepted, but will only be used for the fuller understanding of equipment behavior and will not be used to finalize the upgrade requirements in the Cluster Study and will not be added to base cases going forward.

AFFECTED SYSTEM OPERATOR (ASO) STUDY COORDINATION

Coordination with ASO Studies Pre-Transition

- TOs can continue to conduct ASO studies as they are today
 - As long as the ASO studies are within 90 days of achieving I.3.9 approval (and all modeling information is provided) by the beginning of the Transitional Cluster Study (i.e. by August 1, 2024)*, the ASO studies can complete
 - They would not have to respect the Transitional Cluster Study they would be included in the base case for the Transitional Cluster Study

Coordination with ASO Studies Transition Cluster Study

- At the beginning of the (Transitional) Cluster Study phase the study case for ISO-queued projects is established
 - All ISO-queued modeling information has been provided by Interconnection Customers
 - No new ISO Interconnection Requests can be added to the study case until the beginning of the next Cluster Study
- ISO will make the study case and modeling information available to Transmission Owners (TOs) to conduct ASO studies
- TOs can conduct the ASO studies in parallel with the Transitional Cluster Study
 - As long as the ASO studies are within 90 days of achieving I.3.9 approval (and all modeling information is provided) by the beginning of the next ISO Cluster Study, the ASO studies can complete
 - They would not have to respect the next Cluster Study they would be included in the base case for the next Cluster Study
 - ASO studies can complete when they have sufficiently represented relevant projects in the ISO Cluster Study that is nearing completion
 - ASO studies do not have to wait for ISO projects to be sufficiently completed when those projects are not relevant to the ASO studies

Coordination with ASO Studies Post-Transition Cluster Study

- Same as the Transitional Cluster Study coordination
- The first post-transition Cluster Study is expected to begin in 2025
- The first Cluster Restudy, if one is needed, will not take place until 2026

RESPONSES TO STAKEHOLDER FEEDBACK

ISO Responses to Stakeholder Feedback

- Stakeholder Feedback: Continue to advance studies for late-stage projects in the interim, before transitional studies begin (also request for ISO-NE to estimate how many projects would be included in this group)
 - ISO Response: ISO has developed an initial proposal to pause studies that will not complete before transition
 - Ongoing study work for IRs for which an SIS is underway as of the Eligibility Date will continue through the Effective Date
 - Results of those studies will be provided for information purposes only and will not effect a project's eligibility status with respect to the Transitional Cluster Study
 - ISO will provide statistics on the expected completed studies at the January TC
- Stakeholder Feedback: Calculate withdrawal penalty for all projects in the transitional cluster study based on the cost of the transitional cluster study
 - ISO Response: ISO does not agree that this would be consistent with the Order No.
 2023 transition design
- Stakeholder Feedback: Modify study deposits to reflect SGIP v. LGIP / NRIS v. CNRIS
 - ISO Response: ISO has proposed a schedule of deposits that considers these categories

ISO Responses to Stakeholder Feedback, cont.

- Stakeholder Feedback: Transmission Owner technical staff to attend Customer Engagement Window Scoping Calls
 - ISO Response: ISO agrees with Transmission Owner technical staff attending
- Stakeholder Feedback: Alternative path to CNRIS for projects that have completed NRIS studies
 - ISO Response: ISO does not believe that this is possible
- Stakeholder Feedback: Improve transparency regarding cluster and/or subgroup study methodologies, as well as cost allocation methodologies
 - ISO Response: ISO has published the initial draft of the proposed Tariff language for cost allocation

ISO Responses to Stakeholder Feedback, cont.

- Stakeholder Feedback: Alternative Transmission Technology Transparency
 - ISO Response: ISO will incorporate the pro forma Tariff language and will provide details in the Planning Procedures
 - ISO does not agree that Dynamic Line Ratings should be considered in the Interconnection Process
- Stakeholder Feedback: Allow electrically proximate alternative POI selection to be listed in the cluster study agreement
 - ISO Response: ISO believes this in inconsistent with the design and intent of the Order
- Stakeholder Feedback: Align with the LGIP Pro Forma Language Regarding Acceptable Form of Deposit
 - ISO Response: ISO has included a proposal to accept Letters of Credit

ISO Responses to Stakeholder Feedback, cont.

- Stakeholder Feedback: Consider Cluster Cycle Dependencies
 - ISO Response: ISO's proposal considers cluster cycle dependencies
- Stakeholder Feedback: Extend Site Control to Interconnection Facilities
 - ISO Response: ISO believes this goes beyond the design and intent of the Order and would not solve the stated problem

STAKEHOLDER SCHEDULE

Transmission Committee Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
Transmission Committee <u>August 22, 2023</u>	NEPOOL Counsel's Overview Presentation
Transmission Committee September 27, 2023	ISO-NE Overview on Order 2023, Discussion of Capacity Interconnection Service Considerations, and Discussion of Transition Process
Transmission Committee October 17, 2023	ISO-NE Presentation & Initial Review of Tariff Redlines Stakeholder Conceptual Amendments
Transmission Committee November 9, 2023	ISO-NE Updates Filing Plans, Delivers additional detail on Transition Timeline as it Relates to FCA 19 Delay Stakeholder Conceptual Amendments
Transmission Committee <u>December 21, 2023</u>	ISO-NE Redline Review of Compliance Stakeholder Amendments (time permitting)

Transmission Committee Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
Transmission Committee January 4, 2024	Stakeholder Amendments
Transmission Committee January 23, 2024	ISO-NE Continues Discussion on Compliance and 205 Proposal, Reviews Substantive Incremental Redlines, Responds to Stakeholder Questions Stakeholder Amendment Discussions
Transmission Committee February 15, 2024	Review of Incremental Updates to Compliance and 205 Filing Language, Respond to Stakeholder questions, Vote Stakeholder Amendments & Votes
Participants Committee March 7, 2024	Vote
April 1, 2024	File Compliance and 205 Filings

Anticipated Other NEPOOL Committee Stakeholder Schedules*

Stakeholder Committee and Date	Scheduled Project Milestone
Markets Committee December 12-14, 2023	Introduction to conforming changes in III.13
Markets Committee January 9-11, 2024	Review Conforming Redlines
Markets Committee February 6-8, 2024	Vote
Participants Committee March 7, 2024	Vote

^{*} PTO AC and Budget and Finance may be included, as necessary, in future updates

Planning Procedure Changes – Scope and Schedule

- Currently, ISO anticipates changes will be required to:
 - PP5-6 Interconnection Planning Procedure for Generation and Elective Transmission Upgrades
 - Changes likely needed throughout to account for new cluster study construct; modeling requirements
 - Changes will build on those currently being <u>presented to the Reliability</u> <u>Committee</u>
 - Changes will include details on ASO study coordination
 - PP10 Planning Procedure to Support the Forward Capacity Market
 - Changes needed throughout to account for CNRIS studies taking place via Cluster Study
- Introduce proposed changes to the RC in Q1/early Q2 2024 to allow changes to be effective in time for transition studies

Questions



