

DAY PITNEY LLP

MEMORANDUM

One Federal Street, 29th Floor
Boston, MA 02110
T: (617) 345-4735
F: (617) 206-9350

Boston Connecticut Florida New Jersey New York Providence Washington, DC

TO: NEPOOL Transmission Committee
FROM: Eric K. Runge, Margaret Czepiel and Dina A. Goldman (NEPOOL Counsel)
DATE: March 26, 2024 (Revised March 29, 2024)
RE: Summary of FERC Order No. 2023-A

On March 21, 2024, the Federal Energy Regulatory Commission (“FERC” or “the Commission”) issued Order No. 2023-A,¹ an Order on Rehearing and Clarification of Order No. 2023.² Order No. 2023 was issued on July 28, 2023, and set forth large reforms to the Commission’s *pro forma* Large and Small Generator Interconnection Procedures (“LGIP” and “SGIP,” respectively) and Agreements (“LGIA” and “SGIA,” respectively).³ In response to the Order No. 2023, the Commission received 32 timely filed requests for rehearing and/or clarification as well as two additional requests for clarification.⁴

Order No. 2023-A largely sustains the findings and reforms of Order No. 2023, but makes several clarifications and revisions to the *pro forma* interconnection provisions. None of these changes appear to materially impact the New England Order No. 2023 compliance proposal put forth by ISO New England, Inc. (“ISO-NE”) and supported by NEPOOL. The revisions, however, will need to be taken into account in the compliance proposal and the incremental changes to it will need additional NEPOOL votes at the April 25 Transmission Committee meeting and the May 2 Participants Committee meeting.

¹ *Improvements to Generator Interconnection Procedures and Agreements*, Order No. 2023-A, 186 FERC ¶ 61, 199 (2024) (“Order No. 2023-A”), available at <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=56CF9ABC-3FAE-C28D-969F-8E63A0D00000>.

² *Improvements to Generator Interconnection Procedures and Agreements*, Order No. 2023, 88 Fed. Reg. 61,014 (Sep. 6, 2023), 184 FERC ¶ 61,054 (2023) (“Order No. 2023”).

³ Please see summary of Order No. 2023 prepared by NEPOOL Counsel, https://www.iso-ne.com/static-assets/documents/2023/08/a03_2023_08_22_tc_nepool_counsel_memo_order_2023_summary.pdf.

⁴ Order No. 2023-A at 5. For a summary of the rehearing requests see NEPOOL Counsel summary, https://www.iso-ne.com/static-assets/documents/2023/09/2023_09_07_tc_nepool_counsel_memo_summary_on_requests_for_rehearing_order_2023.pdf.

In Order No. 2023-A, the Commission sustained its finding in Order No. 2023 that the existing *pro forma* generator interconnection procedures and agreements are unjust, unreasonable, and unduly discriminatory or preferential.⁵ The Commission reiterated its belief that the broad suite of reforms presented in Order No. 2023, as a whole, is necessary to ensure that interconnection customers are able to interconnect to the transmission system in a reliable, efficient, transparent, and timely manner, thereby ensuring that rates, terms, and conditions for Commission-jurisdictional services are just, reasonable, and not unduly discriminatory or preferential.⁶

Compliance filings in response to Order No. 2023 were previously due on April 3, 2024. In Order No. 2023-A, the Commission directs further compliance and directs that transmission providers are to submit compliance filings within thirty days of the publication of Order No. 2023-A in the *Federal Register*. As of the date of this summary, Order No. 2023-A has not been published in the *Federal Register*. Overall, the Commission grants rehearing, setting aside its findings in Order No. 2023 on four items and grants clarifications on thirteen topics, discussed more fully herein.

Requests for Rehearing Granted:

1. Where an interconnection customer is in the interconnection queue of a Transmission Provider that currently uses, or is transitioning to, a cluster study process and the Transmission Provider proposes on compliance to adopt new readiness requirements for its annual cluster study, the interconnection customer must comply with the transmission provider's new readiness requirements within 60 days of the Commission-approved effective date of the transmission provider's compliance filing, where such readiness requirements are applicable given the status of the individual interconnection customer in the queue;
2. A network upgrade that is required for multiple interconnection customers in a cluster may be considered a stand along network upgrade if all such interconnection customers mutually agree to exercise the option to build;
3. Transmission providers must complete their determination that an interconnection request is valid by the close of the cluster request window such that only interconnection customers with valid interconnection requests proceed to the customer engagement window; and
4. Acceptable forms of security for the Commercial Readiness Deposit and deposits prior to the Transitional Serial Study, Transitional Cluster Study, Cluster Restudy

⁵ *Id.* at P 35.

⁶ *Id.* at P 48 (citing Order No. 2023 at P 59).

and the Interconnection Facilities Study should include not only cash or an irrevocable letter of credit, but also surety bonds or other forms of financial security that are reasonably acceptable to the transmission provider.

Topics of Clarification Granted:

1. Conflicts with ongoing queue reform efforts;
2. Public interconnection information;
3. Cluster study process;
4. Allocation of cluster network upgrade costs;
5. Shared network upgrades;
6. Withdrawal penalties;
7. Study delay penalty and appeal structure;
8. Affected systems;
9. Revisions to the material modification process to require consideration of generating facility additions;
10. Availability of surplus interconnection service;
11. Operating assumptions for interconnection studies
12. Consideration of the enumerated alternative transmission technologies in interconnection studies; and
13. Ride-through requirements.

Overall, the Commission addressed arguments raised on rehearing and sustained the majority of its findings from Order No. 2023. This memorandum does not seek to re-summarize Order No. 2023, but explains where the Commission reversed or clarified its prior findings. If you have any questions about this memo or its subject matter, please contact Eric Runge, ekrunge@daypitney.com, 617-378-1284. This memorandum was updated on March 29, 2024 to reflect a clarification in Section III, p. 10, regarding the distribution of withdrawal penalties.

I. Arguments Regarding Conflicts with Ongoing Queue Reform Efforts and Evaluation of Variations on Compliance

The Commission received several requests for rehearing and clarification regarding ongoing efforts to implement cluster study processes and the compliance obligation for

transmission providers with existing cluster study processes. The Commission clarified that all transmission providers, including those with existing cluster study processes, have a compliance obligation to review and modify their current pro forma interconnection procedures and pro forma interconnection agreements to comply with Order No. 2023.⁷ However, those transmission providers that already adopted or are transitioning to a cluster study process are not required to implement the transition process laid out in Order No. 2023 or file the *pro forma* agreements and related appendices in their compliance filings.⁸

For those transmission providers currently conducting cluster study processes, the Commission clarified that such transmission providers must adopt the Order No. 2023 readiness requirements; those new readiness requirements are then to be applied based on the interconnection customer's progress in the queue as of 60 calendar days after the Commission-approved effective date of the transmission provider's compliance filing.⁹ The Commission also granted rehearing and set aside its findings in Order No. 2023, in part, adding a new Section 5.1.2 of the *pro forma* LGIP to reflect the fact that interconnection customers that must meet the transmission provider's new readiness requirements may withdraw within the 60 days after the Commission-approved effective date of the transmission provider's Order No. 2023 compliance filing without being subject to Order No. 2023 withdrawal penalties. If the interconnection customer chooses to withdraw outside this 60-day timeline, the interconnection customer will be subject to the new withdrawal penalties.¹⁰

⁷ *Id.* at P 73.

⁸ *Id.* The Commission clarified that these transmission providers are not prohibited from adopting the transition process outlined in Order No. 2023 and that where transmission providers propose variations to the Order No. 2023 transition process, the Commission will evaluate such proposals under the consistent with or superior to standard for non-RTO transmission providers and the independent entity variation standard for RTOs/ISOs. *Id.* at P 74.

⁹ *Id.* at P 75.

¹⁰ *Id.* at P 75. New *pro forma* LGIP section 5.1.2:

5.1.2 Transmission Providers with Existing Cluster Study Processes or Currently in Transition

If Transmission Provider is not conducting a transition process under Section 5.1.1, it will continue processing interconnection requests under its current Cluster Study Process. Within 60 calendar days of the Commission-approved effective date of Transmission Provider's Order No. 2023 compliance filing, Interconnection Customers that have not executed an LGIA or requested an LGIA to be filed unexecuted must meet the requirements of Sections 3.4.2, 7.5, or 8.1 of this LGIP, based on Interconnection Customer's Queue Position.

Any Interconnection Customer that fails to meet these requirements within 60 calendar days of the Commission-approved effective date of this LGIP shall have its Interconnection Request deemed withdrawn by Transmission Provider pursuant to Section 3.7 of this LGIP. In such case, Transmission Provider shall not assess the Interconnection Customer any Withdrawal Penalty.

FERC also clarified that the requirement to meet the new site control requirements also requires that a queued interconnection customer, whether in a current cluster study or with an executed facilities study agreement (but not an interconnection customer with an executed LGIA or that has requested an LGIA to be filed unexecuted with the Commission), that is facing regulatory limitations must also submit the applicable deposit and information regarding the specific limitation within 60 days after the Commission-approved effective date of the transmission provider’s compliance filing.¹¹

II. Reforms to Implement a First-Ready, First-Served Cluster Study Process

One of the biggest reforms of Order No. 2023 was the move to a first-ready, first-served cluster interconnection process from a first-come, first-served serial interconnection process. The Commission sustained the majority of its findings from Order No. 2023, subject to the clarifications and modifications discussed herein. The Commission also made several minor corrections to the *pro forma* LGIP and LGIA.¹²

Heatmaps. The Commission upheld its requirement that transmission providers maintain and make publicly available an interactive visual representation of available interconnection capacity to provide comparable information to interconnection customers prior to entering the queue (i.e., a “heatmap”).¹³ The Commission denied all requests for rehearing of the heatmap requirement, but clarified that transmission providers that do not conduct transition periods do not need to make their heatmap available until 360 calendar days after the Commission-approved effective date of the transmission provider’s Order No. 2023 compliance filing.¹⁴ Transmission providers are still required to approximate NRIS assumptions, but may also provide ERIIS assumptions.¹⁵

Cluster Study Process. As noted, the Commission largely upheld its previous findings on the cluster study process, with some clarifications, as noted herein.

Significantly, the Commission did grant rehearing and set aside the definition of “stand alone network upgrades” in the *pro forma* LGIP and LGIA to enable the interconnection customer option to build shared network upgrades. The Commission’s revisions to the definition of stand alone network upgrades and the addition to the option to build section in the *pro forma* LGIA

¹¹ *Id.* at P 76.

¹² *Id.* at PP 164-167.

¹³ *Id.* at PP 95-105 (finding that the purpose of the heatmap to provide comparable information to all interconnection customers will help ensure an efficient interconnection process).

¹⁴ *Id.* at P 102.

¹⁵ *Id.* at PP 95-106.

(article 5.1.3) are intended to allow interconnection customers to exercise the option to build whether the stand alone network upgrade is attributable to a single interconnection customer or a shared network upgrade shared by multiple interconnection customers.¹⁶

Modifications. The Commission denied requests to allow project size reductions in the cluster study process except as part of Sections 4.4.1, 4.4.2, and the Material Modification process and upholds its finding that a transmission provider can assess project modifications under LGIP Section 4.4 where the transmission provider would be able to assess whether modifications to project size (e.g., up to a 60 percent reduction) would have a material impact on the cost or timing of any interconnection requests with an equal or later queue position.¹⁷ The Commission makes additional clarifications regarding material modification review in the context of adding additional generating facilities *infra* Section IV.

¹⁶ *Id.* at P 143. The new definition of Stand Alone Network Upgrades is: Stand Alone Network Upgrades shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction [and the following conditions are met: (1) a Substation Network Upgrade must only be required for a single Interconnection Customer in the Cluster and no other Interconnection Customer in that Cluster is required to interconnect to the same Substation Network Upgrades, and (2) a System Network Upgrade must only be required for a single Interconnection Customer in the Cluster, as indicated under the Transmission Provider's Proportional Impact Method]. Both Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, Transmission Provider must provide Interconnection Customer a written technical explanation outlining why Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination. *Id.* at P 141.

The Commission also modified the Option to Build section of the LGIA, which now states (new material in italics): *Individual or Multiple* Interconnection Customers shall have the option to assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2, *if the requirements of this Article 5.1.3 are met. When multiple Interconnection Customers exercise this option, multiple Interconnection Customers may agree to exercise this option provided (1) all Transmission Provider's Interconnection Facilities and Stand Alone Network upgrades constructed under this option are only required for Interconnection Customers in a single Cluster and (2) all impacted Interconnection Customers execute and provide to Transmission Provider an agreement regarding responsibilities, and payment for, the construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades planned to be built under this option.* Transmission Provider and *the individual Interconnection Customer or each of the multiple* Interconnection Customers must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option. *Id.* at P 142.

¹⁷ *Id.* at P 144.

Customer Engagement Window, Scoping Meetings. The Commission rejected arguments that the Customer Engagement Window is too short and declined to require that transmission owners attend scoping meetings. However, the Commission noted that transmission providers can always seek independent entity variations to propose to require attendance for any entities they feel are necessary.¹⁸

Feasibility Studies. The Commission explained that transmission providers can continue performing feasibility studies if they explain and justify such deviation under the independent entity variation standard.¹⁹ However, the Commission reiterated its findings that the move from a serial interconnection process to the new cluster study process, coupled with the Commission’s heatmap requirements, render the feasibility study redundant and an unnecessary burden on transmission provider resources.

Restudies. The Commission clarified that transmission providers have 150 days from the point that they inform interconnection customers of the restudy to complete each restudy, which must occur within 30 calendar days after the cluster study report meeting.²⁰

Point of Interconnection. The Commission reiterated that interconnection customers must select a definitive point of interconnection (“POI”) to be studied when executing the cluster study agreement. According to the Commission, allowing multiple POIs (whether they are “electrically proximate” or not) to be studied before the interconnection customer is required to select the definitive point of interconnection, fails to take into account the fact that, if an interconnection customer changes the definitive point of interconnection after the cluster study, it may impact the study results of the other interconnection customers in the cluster and could lead to restudies and delays.²¹ The Commission further clarified that requested changes to the POI early in the cluster study process are not necessarily material modifications. While not allowing for multiple points of interconnection the Commission recognizes and allows for the case that an “electrically proximate” point of interconnection location can be effectively implemented within a study process without materially impacting a study process.²²

Cluster Study Deadlines. The Commission maintains the 150-day cluster study deadline but granted requests for clarification that Order No. 2023 does not preempt transmission providers

¹⁸ *Id.* at PP 145, 147.

¹⁹ *Id.* at P 149.

²⁰ *Id.* at P 151.

²¹ *Id.* at P 153.

²² *Id.* at P 155.

from proposing tariff-defined study deadlines that may differ from the 150-day schedule.²³ Longer deadlines will require significant justification based on the lengthy discussion later in Order No. 2023-A regarding elimination of the Reasonable Efforts standard, study schedules and delay penalties.²⁴

The Commission further clarified that during the 45-day cluster request window, interconnection customers are not limited to one 10-business day opportunity to cure a deficiency in their applications and may receive as many cure periods as needed as long as the end of such cure periods fall prior to the last day of the 45-day cluster request window.²⁵ The Commission specifically clarified that the allowance in Section 3.4.4 for time to remedy issues with technical data is *not* meant to extend the period of by which an interconnection customer must address deficiencies for the transmission provider's acceptance of a valid interconnection request, but is instead intended to permit the transmission provider and interconnection customer to address any issues that may be discovered in the interconnection process, subject to applicable deadlines.²⁶

The Commission granted rehearing and set aside P 234 of Order No. 2023 clarifying that an interconnection customer's cure period ends at the close of the cluster request window at the latest. The Commission accordingly modified Section 3.4.5 of the *pro forma* LGIP to clarify that all items in *pro forma* LGIP Section 3.4.2 must be received during a cluster request window.²⁷

Facilities Study Agreement. The Commission agreed with arguments regarding the difficulty of overlapping timelines for the notice of restudy and the execution of the facilities study agreement. The Commission therefore modified sections 7.3 and 8.1 of the *pro forma* LGIP to remove the requirement for transmission providers to tender an interconnection facilities study agreement simultaneously with issuance of a cluster study (or restudy) report.²⁸ The Commission also modified Section 8.1 of the *pro forma* LGIP to clarify that transmission providers shall tender the interconnection facilities study agreement within 5 business days after the transmission provider notifies interconnection customers that no further restudies are required.²⁹

²³ *Id.* at P 156.

²⁴ *See Id.* at PP 264-465

²⁵ *Id.* at P 157.

²⁶ *Id.* at P 158.

²⁷ *Id.* at P 160.

²⁸ *Id.* at P 163.

²⁹ *Id.*

Correction of Errors. The Commission revised several sections of the *pro forma* LGIP to address errors and add minor clarifying edits.³⁰

Allocation of Cluster Network Upgrade Costs. The Commission clarified that, consistent with the rule of reason, it will consider details of the transmission provider's proposed proportional impact method and whether those details should be in the Tariff in individual compliance filings. For substation network upgrade cost allocation, the Commission clarified that the cost allocation is based on the number of interconnection facilities connecting to the substation located at the point of interconnection. Accordingly, to allocate such costs per capita to each generating facility in accordance with section 4.2.1.1.a of the *pro forma* LGIP, the transmission provider must first allocate the costs of substation network upgrades on a per capita basis for each interconnection facility connecting to the substation, and then allocate those costs on a per capita basis between each generating facility using the interconnection facility.³¹ The Commission clarified that substation network upgrades are at distinct voltage levels and modified Section 4.2.1.1.a of the *pro forma* LGIP accordingly.

Shared Network Upgrades. The Commission clarified that Order No. 2023 does not require transmission providers to eliminate, change, or re-justify existing tariff mechanisms regarding cost sharing of network upgrades between earlier-in-time and later-in-time clusters because such provisions are not impacted by the requirements of Order No. 2023.³²

Increased Financial Commitments and Readiness Requirements. The Commission issued several clarifications on the financial and readiness requirements, including site control and penalties.

Financial Security. The Commission granted rehearing and found that acceptable forms of security for the commercial readiness deposit and deposits prior to the transitional serial study, transitional cluster study, cluster restudy and the interconnection facilities study should include not only cash or an irrevocable letter of credit, but also surety bonds or other forms of financial security that are reasonably acceptable to the transmission provider. Accordingly, sections 3.4.2, 5.1.1.1, 5.1.1.2, 7.5, and 8.1 of the *pro forma* LGIP were modified to reflect this finding.³³

³⁰ *Id.* at P 167.

³¹ *Id.* at P 177.

³² *Id.* at P 181.

³³ *Id.* at P 185. The Commission was not persuaded by the request that, if the interconnection customer submits its required deposit or security in the form of a letter of credit or surety bond, the interconnection customer should be given the option to pay any amount drawn by the transmission provider in cash rather than drawing on the letter of credit or surety bond. However, the Commission clarified that

Study Deposits. The Commission modified Sections 3.1.1.1 and 13.3 of the *pro forma* LGIP to clarify that the \$5,000 application fee is non-refundable and that the study deposit structure includes an initial study deposit at the beginning of the process, rather than separate deposits before each phase of the study.³⁴

Demonstration of Site Control. The Commission largely sustained its findings from Order No. 2023 on the requirements for site control. The Commission denied the request to extend site control demonstration beyond the land needed for the generating facility.³⁵ It did, however, clarify that in the event a new regulatory limitation requires a change to the point of interconnection that cannot be accommodated and results in an interconnection request being withdrawn, the Commission granted the request for clarification and clarify that any deposits submitted by the interconnection customer in lieu of site control must be refundable.³⁶

Withdrawal Penalties. The Commission affirmed the withdrawal penalty structure adopted in Order No. 2023, but granted a request for clarification to note that withdrawal penalties used to fund (1) cluster studies for the same cluster and (2) network upgrades for interconnection customers in the same cluster cannot exceed the dollar amount collected from interconnection customers that have withdrawn from the interconnection study process secured by transmission providers.³⁷ Put otherwise, the Commission affirmed that transmission providers shall only use the funds collected from withdrawn interconnection providers to fund cluster studies and network upgrades and need not “hunt down or enter into litigation” with withdrawn customers to obtain withdrawal penalties. The Commission upheld that the thresholds for penalty-free withdrawal provide sufficient room for cost estimates to change as the interconnection process progresses given the harm from late-stage withdrawals. The Commission also clarified that LGIP Section 3.7.1.2.1 requires the transmission provider to use the collected withdrawal penalties first to fund

transmission providers are not precluded from allowing interconnection customers to pay cash in lieu of drawing on a previously submitted letter of credit or surety bond.

³⁴ *Id.* at P 189.

³⁵ *Id.* at P 197.

³⁶ *Id.* at P 200.

³⁷ *Id.* at P 231. This clarification is in response to a request from the New York Independent System Operator (NYISO) that requested the Commission “clearly establish that withdrawal penalties cannot exceed the dollar amount secured by transmission providers. NYISO asserts that transmission providers cannot be responsible for and should not have to incur the administrative resource and expense of having to hunt down or to enter into litigation with withdrawn interconnection customers to obtain any withdrawal penalties that they fail to pay, and should not be required to pass on any gaps in uncollected penalty amounts to their market participants.” *Id.* at P 218.

all the interconnection studies conducted for interconnection customers in the cluster, including cluster restudies and the interconnection facilities study.³⁸

The Commission clarified to distinguish the transitional process withdrawal penalty (9 times study cost) from the withdrawal penalty assessed under the normal process (calculated pursuant to LGIP Section 3.7.1). The Commission accordingly modified Sections 5.1.1, 5.1.1.1 and 5.1.1.2 of the *pro forma* LGIP.³⁹ The Commission further clarified that study costs include *all* costs incurred by the interconnection customer in the transmission provider's existing interconnection study process prior to the Commission-approved effective date of the transmission provider's Order No. 2023 compliance filing.⁴⁰

Transition Process. The Commission upheld its decision to set the eligibility cut-off date as 30 days after the filing date of the transmission provider's initial compliance filing.⁴¹ The Commission also upheld its findings on the withdrawal penalty amount during the transition process.⁴²

III. Reforms to Increase the Speed of Interconnection Queue Processing

In this section, the Commission largely upheld its finding that the reasonable efforts standard is no longer just and reasonable and that the imposition study deadlines and a late study penalty was an appropriate replacement for the reasonable efforts standard. The Commission makes some clarifications, but upholds the late penalty structure. The Commission also made several modifications to its previous findings on the affected system process and corresponding revisions to the LGIP and LGIA.

Elimination of the Reasonable Efforts Standard and Implementation of a Replacement Regime. As noted, the Commission received numerous requests for rehearing regarding the removal of the reasonable efforts standard and the late study penalty scheme. These rehearing requests focused on: (1) the decision being unsupported by substantial evidence; (2) the burden the penalties and timeframes place on transmission providers; (3) the penalty structure violates due process, imposes a strict liability regime and/or is unconstitutional; and (4) the study deadlines and penalty structure are outside the Commission's statutory authority and contrary to Commission

³⁸ *Id.* at P 237.

³⁹ *Id.* at P 240.

⁴⁰ *Id.* at P 241. The Commission also made minor, clarifying edits to LGIP Sections 3.7.1 and 3.7.1.1(a).

⁴¹ *Id.* at P 260.

⁴² *Id.* at P 259.

precedent.⁴³ The Commission considers and rejects all arguments on rehearing, finding that the elimination of the reasonable efforts standard and its replacement with firm study deadlines is warranted under Federal Power Act (“FPA”) Section 206 in order to address the unjust and unreasonable rates resulting from interconnection queue delays and backlogs.⁴⁴

Further, the Commission was unpersuaded by attempts to minimize the responsibility transmission providers have for – and the ways in which they can effectuate – the timely completion of interconnection studies and overall found that the entity that is most responsible for the timing of the study is the transmission provider.⁴⁵ The Commission upholds Order No. 2023’s penalty structure as a component of a *comprehensive package of reforms* to remedy the problem of severe interconnection queue delays and backlogs.⁴⁶

RTO/ISO Issues. While the Commission agrees that there are differences between RTOs/ISOs and non-RTO transmission providers, it concludes that the penalty regime adopted in Order No. 2023 sufficiently accounts for the differences.⁴⁷ First, in RTOs/ISOs, where an interconnection study is performed by a transmission-owning member of the RTO/ISO (as is often the case for facilities studies), under Order No. 2023 the penalty for missing a study deadline is incurred by that transmission-owning member, not the RTO/ISO. Second, as to penalties that are incurred directly by the RTO/ISO, the RTO/ISO is permitted to seek cost recovery of penalty costs from their transmission-owning members or other market participants, whereas non-RTO/ISO transmission providers are not. In light of these avenues for an RTO/ISO to avoid or reduce the prospect that it is responsible for payment of a penalty, the Commission continues to find that any residual uncertainty as to an RTO/ISO’s ability to recover penalty costs is outweighed by the critical need for all transmission providers, including RTOs/ISOs, to process interconnection studies in a timely manner.⁴⁸ The Commission also upholds its finding that it is appropriate to address cost recovery issues in individual proceedings that can take into account the variations in tariffs in each RTO/ISO region.⁴⁹

⁴³ *Id.* at PP 400-416.

⁴⁴ *Id.* at PP 283; 359-369.

⁴⁵ *Id.* at P 284. The Commission also stated that “to the extent that transmission providers suggest that it is generically infeasible to allocate additional resources to ensure the timely completion of interconnection studies because that will require them to bear increased study costs, we are not persuaded by these concerns.” *Id.* at P 302.

⁴⁶ *Id.* at P 308.

⁴⁷ *Id.* at P 401.

⁴⁸ *Id.*

⁴⁹ *Id.* at P 407.

Distribution of Study Delay Penalties. While the Commission in Order No. 2023 stated that disbursement of interconnection study delay penalties would be on a “pro rata” (i.e., proportionate) basis per interconnection request, it did not further specify how penalties would be distributed. The Commission clarifies that study delay penalties must be distributed on a pro rata basis proportionate to the final study costs paid by each interconnection customer in the relevant study. This approach ensures that the distribution of the penalty (i.e., the amount of the “offset” each interconnection customer receives) is related to the costs paid by the interconnection customer for the relevant study.⁵⁰

Requests for Clarification on Study Delay Penalties. The Commission specifically addressed several requests for clarification on the study delay penalties and granted the following:

- The study delay penalties will not incur interest prior to distribution of the penalty funds and that the entity conducting the study (i.e., transmission provider or transmission owner) will have no obligation to pay interest on study delay penalties.⁵¹
- All penalties for delayed studies will apply on a per-study basis, per business day that the study is delayed past the tariff-specific deadline, rather than per interconnection customer.⁵²
- Order No. 2023 did not require adoption of any specific RTO/ISO penalty recovery mechanism.⁵³
- Transmission providers are not required to collect or earmark any late study penalty prior to concluding the appeals process under section 3.9(3) of the *pro forma* LGIP.⁵⁴

Affected Systems. The Commission clarified several timing-related items in the affected system study process and made corresponding changes to the Affected System Study Agreements and LGIP.

Affected System Study Process. The Commission clarified that pursuant to *pro forma* LGIP section 9.2, the affected system transmission provider is required to respond in writing within 20 business days of receipt of the initial notification from the host transmission provider that interconnection requests may impact the affected system transmission provider’s transmission system. From the point of written notification of the intention to conduct the affected system

⁵⁰ *Id.* at P 439.

⁵¹ *Id.* at P 452.

⁵² *Id.* at P 454.

⁵³ *Id.* at P 455.

⁵⁴ *Id.* at P 461.

study, the affected system transmission provider then has 15 business days to share a non-binding good faith estimate of the cost and schedule to complete the affected system study.⁵⁵

The Commission also clarifies that an affected system transmission provider may pause an affected system study that is planned or in progress if the host transmission provider decides to conduct a cluster restudy. FERC also clarified that, if a host transmission provider decides to conduct a cluster restudy, then the affected system transmission provider may delay the affected system study until after the completion of the cluster restudy, following which the host transmission provider will notify the affected system transmission provider that the cluster restudy is complete and of any possible affected system impacts.⁵⁶

To account for these changes, the Commission created or made revisions to *pro forma* LGIP Sections 3.6.2, 3.6.3, 9.2.1, 9.2.2 and 9.5. For brevity's sake we have not here described all of those revisions.

Affected System Agreements. The Commission reiterated that the affected system network upgrade reimbursement provisions in the *pro forma* affected system facilities construction agreements are a codification of existing Commission policy and are not a new policy proposal. The Commission removed from the *pro forma* affected system facilities construction agreements sections 3.1.2.2 (Recommencing of Work) and 3.1.2.3 (Right to Suspend Due to Default) finding that they are inconsistent with the *pro forma* LGIA and therefore, unnecessary.

IV. Reforms to Incorporate Technological Advancements to the Interconnection Process

Co-Located Generating Facilities Behind One POI. The Commission sustained its findings in Order No. 2023 that transmission providers must allow more than one generating facility to co-locate on a shared site behind a single point of interconnection and share a single interconnection request, and that such co-located generating facilities can be owned by a single interconnection customer with multiple generating facilities sharing a site, or by multiple interconnection customers that have a contract or other agreement that allows for shared land use.⁵⁷

Revisions to the Modification Process to Require Consideration of Generating Facility Additions. FERC clarified that interconnection customers may continue to request changes to proposed generating facilities at any time in the interconnection process; however, transmission providers are only required to evaluate whether a request to add a generating facility to an existing

⁵⁵ *Id.* at P 492.

⁵⁶ *Id.* at P 497.

⁵⁷ *Id.* at P 545.

interconnection request is material if the request is submitted before the interconnection customer returns the executed facilities study agreement to the transmission provider.⁵⁸

In Order No. 2023, the Commission established a procedural requirement for transmission providers to evaluate the proposed addition of a generating facility at the same point of interconnection prior to deeming such an addition a material modification, if the addition does not change the originally requested interconnection service level. The Commission did not require any particular substantive outcome following this evaluation; rather, transmission providers may still find that a proposed modification involving the proposed addition of a generating facility at the same point of interconnection would have a material impact on the cost or timing of any interconnection request with an equal or later queue position, and therefore constitutes a material modification.⁵⁹

The Commission clarified that the allowable decrease of up to 60% of a generating facility's electrical output may occur during the customer engagement window (i.e., prior to the return of the cluster study agreement from the transmission provider to the interconnection customer). It also noted that interconnection customers have an additional opportunity to propose a decrease in the output of the generation facility after the cluster study report: per *pro forma* LGIP section 4.4.2, prior to the return of the executed interconnection facilities study, an additional 15% decrease of electrical output of the proposed project must not be considered a material modification if the change occurred either through a decrease in plant size (MW) or a decrease in interconnection service level accomplished by applying transmission provider-approved injection-limiting equipment.⁶⁰

Surplus Interconnection Service. The Commission granted a request for clarification that Order No. 2023 requires transmission providers to allow interconnection customers to *apply for* surplus interconnection service once the underlying LGIA is executed or filed unexecuted, not that transmission providers must allow interconnection customers to begin receiving surplus interconnection service at that point.⁶¹

Operating Assumptions for Storage. The Commission found in Order No. 2023 and sustains in Order No. 2023-A that electric storage resources have operating parameters that differ from traditional types of generating facilities for which the generator interconnection process was originally designed, namely their ability to both inject power and withdraw power. The reforms are specifically and exclusively directed at how transmission providers study the withdrawal of

⁵⁸ *Id.* at P 549.

⁵⁹ *Id.* at P 554.

⁶⁰ *Id.* at P 555.

⁶¹ *Id.* at P 562.

power from electric storage resources (i.e., the unique feature of electric storage resources compared to other types of generating facilities) within the generator interconnection process.⁶²

The Commission clarified that its reforms do not require transmission providers to develop new base cases for each interconnecting electric storage resource to reflect when that resource intends to charge. Rather, the reform requires transmission providers to reflect whether an electric storage resource will or will not charge in any studies of peak load conditions in the interconnection process.⁶³ If an interconnection customer fails to operate its electric storage resource in accordance with the operating assumptions memorialized in the interconnection customer's LGIA (absent instructions from the transmission provider to the contrary), the transmission provider may consider the electric storage resource to be in breach and may pursue termination of the LGIA pursuant to article 17 of the LGIA.⁶⁴

The Commission reiterated that, for purposes of determining any network upgrades necessary to accommodate the reliable interconnection of electric storage resources, the charging of electric storage resources should not be modeled equivalently to firm customer end-use load in interconnection studies if the interconnection customer agrees to memorialize its operating assumptions in the LGIA and installs control technologies, if required by the transmission provider, to limit its operations as specified.⁶⁵ However, the Commission still found situations in which it would be acceptable and in which Order No. 2023 allows, for a transmission provider to continue to model an electric storage resource in interconnection studies as charging during peak load conditions, for example: (1) if the interconnection customer does not request during the interconnection process that the transmission provider study the electric storage resource as not charging during peak load conditions; (2) if the interconnection customer declines the transmission provider's request to install or demonstrate that it has installed control technologies sufficient to prevent it from charging during peak load conditions unless otherwise directed by the transmission provider; or (3) if the interconnection customer declines the transmission provider's request to memorialize the requested operating assumptions in its LGIA.⁶⁶

Consideration of Enumerated Alternative Transmission Technologies in Interconnection Studies Upon the Request of the Interconnection Customer. The Commission sustained the discretion that Order No. 2023 affords transmission providers in determining whether to use an alternative transmission technology for several reasons. First, the Commission continues to find that this level of discretion is justified because (1) the transmission provider is responsible for

⁶² *Id.* at P 575.

⁶³ *Id.* at P 577.

⁶⁴ *Id.* at P 579.

⁶⁵ *Id.* at P 587.

⁶⁶ *Id.*

determining whether using any of the enumerated alternative transmission technologies is an appropriate and reliable network upgrade that allows the interconnection customer to flow the output of its generating facility onto the transmission provider's transmission system in a safe and reliable manner; (2) the requirement to make such a determination before allowing for the use of the enumerated alternative transmission technologies addresses concerns that their use may impinge on reliability, delay network upgrades instead of reducing the need for them or obviating the need for them altogether, or fail to address all transmission system issues that a traditional network upgrade would address; and (3) there is a need to avoid time-consuming delays and costly disputes or litigation over interconnection costs that could arise as a result of this reform.⁶⁷

However, Order No. 2023 does not give transmission providers unfettered discretion to disregard alternative transmission technologies. In spite of the discretion provided to transmission providers, they must explain their evaluation of the enumerated alternative transmission technologies for feasibility, cost, and time savings as an alternative to a traditional network upgrade in their applicable study report(s), and their use determinations must be consistent with good utility practice, applicable reliability standards, and applicable laws and regulations.⁶⁸ The order sustains the application of specific performance standards to evaluate alternative transmission technologies and revises *pro forma* LGIP Sections 7.3, 3.3.6 and 3.4.10 to account for the use of such standards.⁶⁹

The Commission makes a few revisions to the LGIP and SGIP to capture definitions of “Applicable Reliability Standards” and “applicable laws and regulations” which are defined terms in the *pro forma* LGIP. The Commission also modifies LGIP Section 7.2 to account for its findings discussed herein.

Specific Technology. The Commission addresses requests for rehearings on specific enumerated alternative transmission technologies (“ATTs”) and makes the following findings:

- Not persuaded to reconsider inclusion of transmission switching in the list of enumerated ATTs.⁷⁰

⁶⁷ *Id.* at P 618.

⁶⁸ *Id.* at P 619. An interconnection customer may challenge a transmission provider’s evaluation of the enumerated alternative transmission technologies and its determination about whether to use alternative transmission technologies as it can challenge other conduct in the *pro forma* LGIP and *pro forma* SGIP that is allegedly inconsistent with the performance standards. *Id.* at P 628.

⁶⁹ PP 621-627

⁷⁰ *Id.* at P 630.

- There are a range of permissible present and future advanced conductor technologies that fall within this class of technologies that transmission providers are required to evaluate pursuant to Order No. 2023.⁷¹
- Sustains the decision in Order No. 2023 not to include dynamic line ratings in the list of enumerated ATTs for several reasons, including the limited record evidence that dynamic line ratings are well-suited to meet reliability goals of interconnection studies and the fact that dynamic line ratings are dependent on weather conditions to reliably deliver energy.
- Not persuaded that energy storage serving as a transmission asset should be included in the list of ATTs.⁷²

Modeling and Ride-Through Requirements for Non-Synchronous Generating Facilities. The Commission sustains its modeling requirements for non-synchronous generating facilities put forth in Order No. 2023. With respect to reactive power, the Commission provides two clarifications. First, it clarifies that a generating facility’s inability to prioritize reactive power without a reduction in active power is considered one of the “physical limitations of the generating facility” that provides an exception, albeit limited, to the requirement that the generating facility continue active power production during disturbance and post disturbance periods at pre-disturbance levels.⁷³ Second, the Commission revises Section 9.7.3 of the *pro forma* LGIA and Article 1.5.7 of the *pro forma* SGIA to provide clarity on the use of reactive power mode for non-synchronous generating facilities.⁷⁴

V. Compliance Procedures

In order to incorporate the changes of Order No. 2023-A, the Commission extended the deadline for compliance filings until 30 days after Order No. 2023-A is published in the *Federal Register*, which as of the date of this summary, has not yet occurred. The Commission clarified that transmission providers may propose effective dates in their compliance filings that align with their existing queue processing dates, such as the start of a new processing window. FERC also

⁷¹ *Id.* at P 631.

⁷² *Id.* at P 640.

⁷³ *Id.* at P 660.

⁷⁴ Specifically, these sections state that a non-synchronous generating facility must ensure that, within any physical limitations of the generating facility:

. . . its control and protection settings are configured or set to (1) continue active power production during disturbance and post disturbance periods at pre-disturbance levels, *unless reactive power priority mode is enabled* or unless providing primary frequency response or fast frequency response. . .

clarified that it will consider, and may grant, requests from transmission providers for effective dates that predate the Commission's order on compliance filings, on a case-by-case basis.⁷⁵

⁷⁵ *Id.* at P 669.