

America (US), L.P. (“Shell”);⁸ (v) Advanced Energy United, the American Clean Power Association and the Solar Energy Industries Association (collectively, “the Clean Energy Associations”);⁹ (vi) BlueWave Public Benefit Corp. (“BlueWave”);¹⁰ and (vii) Natural Resources Defense Council (“NRDC”).¹¹

The Compliance Filing should be accepted as filed. The submissions in this proceeding, including the limited protests, express broad support for the NYISO’s Compliance Filing and the NYISO’s immediate transition to the new requirements in its proposed Transition Cluster Study Process. The compliance proposal was the product of an extensive stakeholder process.¹² No New York State entity has protested the Compliance Filing. In addition, none of the submissions in this docket, including the limited protests, challenge or request changes to the core structure and the fundamental elements of the NYISO’s proposed new Cluster Study Process in its new Standard Interconnection Procedures located in Attachment HH to its Open Access Transmission Tariff (“OATT”).

The Commission should reject the small number of limited protests. As described in the Compliance Filing and as further detailed below, the NYISO’s compliance proposal complies with the directives of Order No. 2023 and provides clear, detailed, and more than sufficient

⁸ *New York Independent System Operator, Inc.*, Comments and Limited Protest of Shell Energy North America (US), L.P., Docket Nos. ER24-1915-000, -001 (June 12, 2024) (“Shell Comments and Protest”).

⁹ *New York Independent System Operator, Inc.*, Comments in Support and Partial Protest of the Clean Energy Associations, Docket Nos. ER24-1915-000 (June 12, 2024) (“Clean Energy Associations Comments and Protest”).

¹⁰ *New York Independent System Operator, Inc.*, Comments of BlueWave Public Benefit Corp., Docket Nos. ER24-1915-000, -001 (June 12, 2024) (“BlueWave Comments”).

¹¹ *New York Independent System Operator, Inc.*, Motion for Leave to File Out of Time and Limited Protest of Natural Resources Defense Council, Docket Nos. ER24-1915-000, -001 (June 13, 2024) (“NRDC Protest”).

¹² The NYISO held over a dozen, lengthy stakeholder meetings concerning its compliance proposal and made significant modifications to its proposal to address stakeholder and developer input. The NYISO notes that certain submitters do not appear to have participated in this process and are now raising certain concerns that should have properly been raised in the stakeholder process to enable the NYISO to evaluate and address such concerns with all stakeholders and developers as part of the development of the carefully-crafted process, rather than as one off issues.

justifications for all of the NYISO’s requested independent entity variations.¹³ The NYISO’s compliance proposal represents a carefully crafted approach for addressing the directives and goals of Order No. 2023 within the NYISO’s unique market and planning framework and New York-specific system conditions and circumstances. The resulting tariff provisions represent a reasonable balance and compromise among a wide-range of competing interests to ensure that Interconnection Customers are able to interconnect to the transmission system in a reliable, efficient, transparent, and timely manner, preventing undue discrimination, reducing interconnection queue backlogs, and providing greater certainty during the interconnection process. By contrast, the unilateral attempts by certain protestors to modify the NYISO’s compliance proposals neglect these considerations and are often based on misunderstandings of New York-specific conditions or are outside the scope of this compliance proceeding.

I. REQUEST FOR LEAVE TO ANSWER

The NYISO may answer pleadings that are styled as comments as a matter of right.¹⁴ The Commission has discretion to accept answers to protests when they help to clarify complex issues, provide additional information, or are otherwise helpful in the development of the record in a proceeding.¹⁵ This Answer satisfies those standards as it addresses inaccuracies and provides clarification and additional information that should be considered along with the Compliance Filing. The Answer will help the Commission to fairly evaluate the

¹³ In the interest of limiting the scope of this Answer, the NYISO does not address all issues raised in comments and protests submitted in response to the Compliance Filing. The fact that the NYISO is not responding to all issues raised by parties should not be construed as agreement therewith.

¹⁴ See 18 C.F.R. 385.213(a)(3).

¹⁵ See, e.g., *S. Cal. Edison Co.*, 135 FERC ¶ 61,093 at P 16 (2011) (accepting answers to protests “because those answers provided information that assisted [the Commission] in [its] decision-making process”); *N.Y. Indep. Sys. Operator, Inc.*, 134 FERC ¶ 61,058 at P 24 (2011) (accepting the answers to protests and answers because they provided information that aided the Commission in better understanding the matters at issue in the proceeding); *PJM Interconnection, L.L.C.*, 132 FERC ¶ 61,207 at P 44 (2010) (accepting answers to answers and protests because they assisted in the Commission’s decision-making process).

arguments raised in the protests. The NYISO, therefore, respectfully requests that the Commission accept this Answer.

II. ANSWER

A. The NYISO’s Proposed Approach for Minimizing the Need for Upgrades for Energy Storage Resources Is a Fully Justified Independent Entity Variation within the NYISO’s Market and Planning Framework and Is Just, Reasonable, and Not Unduly Discriminatory

In the Compliance Filing, the NYISO provided a detailed justification for its requested independent entity variation not to adopt the Order No. 2023 rules that a transmission provider, at the request of an Interconnection Customer, must use operating assumptions in interconnection studies that reflect the charging behavior of the resource.¹⁶ The NYISO proposed an alternative reform developed in coordination with developers and other stakeholders to achieve the Commission’s objectives in a manner that is carefully tailored to the NYISO’s unique market and planning framework.

The NYISO’s Minimum Interconnection Standard already achieves the Commission’s objectives for many projects, including Energy Storage Resources (“ESRs”), interconnecting to the portion of the New York State Transmission System secured by the NYISO by minimizing the need for upgrades for proposed interconnections. In particular, under this standard, the NYISO only requires upgrades if adverse reliability impacts cannot be mitigated through normal operating procedures, including the redispatch of resources to address identified reliability impacts.

The NYISO is able to implement this approach, including the use of redispatch, only to interconnections to transmission facilities that are secured in the NYISO’s market models – its Business Management System (“BMS”). The NYISO worked with its stakeholders and

¹⁶ See Compliance Filing at 119-125.

developers to develop for the Compliance Filing enhancements to its tariffs and procedures to expand the NYISO's ability to apply this approach to additional transmission facilities operated at 100 kV or above that are not currently secured by the NYISO or Transmission Owners for planning study purposes. The NYISO detailed in its Compliance Filing why this approach could not be further extended to interconnections to transmission facilities below 100 kV and why it was unreasonable to apply the Order No. 2023 operating assumption rules to interconnections below 100 kV.

Both commentators and protestors express broad support for the NYISO's proposed use of the NYISO's Minimum Interconnection Standard and normal operating procedures, including the use of redispatch, as a superior approach in New York to the Order No. 2023 operating assumption rules for minimizing the need for upgrades.¹⁷ Certain entities, however, protest the NYISO's inability to extend the application of its operating procedures, including redispatch, or to apply the operating assumption requirements to interconnections below 100 kV and to certain limited interconnections at or above 100 kV.¹⁸ The Commission should reject these protests for the reasons explained in the Compliance Filing, the affidavit included with the Compliance Filing of Jon Sawyer, Director of Grid Operations for the NYISO ("Sawyer Affidavit"), and as further set forth below.

First, the NYISO clarifies that it can apply its proposed approach of using its normal operating procedures, including redispatch, in interconnection studies when assessing impacts to

¹⁷ ACE NY Comments at 30, BlueWave Comments at 4, NY-BEST Comments and Protest at 3-4, NRDC Protest at 10-11, Clean Energy Associations Comments and Protest at 7-9.

¹⁸ ACE NY Comments at 30, BlueWave Comments at 4-6, NY-BEST Comments and Protest at 4-8, Shell Comments and Protest at 15-16, NRDC Protest at 11-12, Clean Energy Associations Comments and Protest at 28-30.

any of the transmission facilities that it secures in its BMS.¹⁹ While transmission facilities above 100 kV represent a good approximation of the lines the NYISO secures in most cases, the NYISO does secure a small number of transmission facilities below 100 kV that would therefore be eligible for its proposed approach.²⁰

Second, protestors assert that the NYISO should be required to extend the application of its normal operating procedures, including redispatch, to all transmission facilities below 100 kV, and to the limited set of facilities at or above 100 kV that the NYISO is not able to secure in its BMS.²¹ Clean Energy Associations and BlueWave also assert that the NYISO's inability to apply its proposed approach to sub-100 kV transmission facilities or to adopt the Order No. 2023 operating assumption rules is discriminatory.²² The Commission should reject these protests. While the NYISO's requirements will apply to interconnections differently based on the voltage level at an ESR's proposed Point of Interconnection, such differences are justified. They are not unduly discriminatory or unreasonable.

As detailed in the Compliance Filing and the Sawyer Affidavit, the NYISO's requested independent entity variation is necessary to account for its limited visibility into the sub-transmission portion of the power grid. With limited exception, the NYISO does not currently have capability to monitor or perform contingency analysis on transmission facilities below 100 kV, so it does not have the capability to apply its operating procedures, including redispatch, to

¹⁹ A number of protests raise particular concerns with interconnections to the 69 kV transmission system on Long Island. The NYISO clarifies that it currently secures certain, but not all, 69 kV transmission facilities on Long Island in its BMS. Accordingly, for proposed interconnections to those secured facilities, the NYISO is able to use its normal operating procedures and redispatch such facilities to avoid reliability impacts.

²⁰ See NYISO's Outage Scheduling Manual, Version 7.0 (effective April 16, 2024), Attachment A, which attachment is available at: <https://www.nyiso.com/documents/20142/32280631/OSM-Attachment-A-June2024.xlsx/5d629be1-8a33-00ef-bfd9-4068338c7074>. This attachment details the transmission facilities that the NYISO secures, which includes certain facilities below 100 kV.

²¹ Paragraph 15 of the Sawyer Affidavit explains why it is not possible to secure all of the transmission facilities that operate at or above 100 kV via coordinated redispatch.

²² Clean Energy Associations Comments and Protest at 28-30; BlueWave Comments at 4-6.

interconnections affecting such facilities. This restricts the NYISO's ability to address through operating procedures the reliability concerns that could arise in real-time operations related to thermal overloads that could not be managed through the NYISO's BMS system. Treating facilities that are secured in the NYISO's dispatch differently from facilities that are not secured is appropriate because the NYISO will redispatch the secured facilities to address contingencies in its Day-Ahead Market or Real-Time Market. The NYISO cannot do the same for facilities that it does not and is not able to secure. The risks to reliability are very different in the two cases. The NYISO's ability to adequately monitor and perform contingency analysis on a particular set of facilities is critical to maintaining reliability and necessitates treating the evaluation of thermal overloads differently based on the voltage level at the Point of Interconnection.

The transmission facilities below 100kV include facilities that the Commission stated it does not expect independent system operators ("ISOs") or regional transmission organizations ("RTOs") to secure.²³ Requiring the NYISO to secure and exercise operational control over all of the transmission facilities in the New York Control Area is far outside of the scope of Order No. 2023. Such a change would constitute a massive expansion of the NYISO's operational responsibilities beyond what is currently required by the Commission and could not be achieved without significant additional expenditure and operational changes because the infrastructure does not currently exist to monitor such facilities in the manner that would be required, and contingency analysis is not, and cannot be, performed. To have the NYISO secure all (or even most) transmission facilities below 100 kV would require (i) a massive infrastructure buildout,

²³ See, e.g., Order No. 773, 141 FERC ¶ 61,236 (2012) (modifying the definition of "bulk electric system" to establish a bright line threshold of all facilities operated at or above 100 kV with certain specified inclusions and exclusions).

including infrastructure replacements for outdated transmission facilities for which metering and telemetry updates cannot be made; (ii) significant expansion of the NYISO's computational capability to enable it to secure the additional facilities in its market model; and (iii) the allocation of substantial improvement costs to New York ratepayers to allow the NYISO and the NYTOs to perform the necessary actions. It would require years to complete the necessary upgrades and, even then, the possible performance impacts of securing the additional facilities and associated potential constraints might adversely affect the NYISO's ability to timely post schedules and dispatch instructions.

Third, NY-BEST requests that if the NYISO is unable to extend its operational control to apply its proposed procedures for ESRs interconnecting below 100 kV, the Commission should direct the NYISO to develop a market-based solution using optional time constraints on charging. NY-BEST states that the NYISO's capacity rules require ESRs to bid/schedule/notify to discharge during the peak load window; they therefore should not need to charge during peak load times.²⁴ While ESRs with a duration limitation are not obligated to offer to withdraw on peak in the Day-Ahead Market ("DAM") under the rules that apply to ICAP Suppliers, they still may be required to do so to help protect reliability, or be financially incentivized to do so in the markets.

The reliability impacts of the potential withdrawals need to be evaluated. All Installed Capacity ("ICAP") Suppliers must respond to a Supplemental Resource Evaluation ("SRE"), which the NYISO uses to issue post-DAM commitments needed for reliability.²⁵ To fulfill its obligation to respond to an SRE, an ESR may need to charge during peak load times. When an ESR responds to an SRE, its obligation is "to be available in real-time and capable of injecting

²⁴ NY-BEST Comments and Protest at 7-8.

²⁵ See NYISO Services Tariff § 5.12.1.10.

Energy at its full capability for all of the SRE commitment hours it receives.”²⁶ In order to prepare for the start of an upcoming SRE commitment, an ESR may have to withdraw Energy during on-peak hours in order to have sufficient charge to meet its obligation.

NY-BEST requests that if operational control cannot be sufficiently extended to address interconnections below 100 kV, then the Commission should direct the NYISO to develop a market-based solution utilizing optional time constraints on charging.²⁷ If the Commission were to direct NYISO to develop market rules such as those contemplated by NY-BEST, that would allow some ESRs that are ICAP Suppliers to elect not to have the ability to withdraw Energy on-peak. This would be treating those resources differently from other ICAP Suppliers, including other ESRs that are ICAP Suppliers. Moreover, a rule that prevents ESRs from charging at times when intermittent output may be greatest (*i.e.*, solar intermittent power resources produce most of their Energy mid-day) will be detrimental to system reliability. Instead, the Commission should accept the rules that the NYISO developed with its stakeholders and filed in the Compliance Filing as a just-and-reasonable balancing of the relevant interests that treats interconnecting ESRs fairly and avoids compromising system reliability.

Fourth, while NY-BEST and ACE NY request further stakeholder discussions on this topic, the NYISO has held nearly one year of discussions with stakeholders and developers on this topic as part of the NYISO’s compliance approach to Order No. 2023, with numerous stakeholder discussions focusing at length on this issue. The approach the NYISO was able to accommodate without significantly degrading reliability or impracticably expanding the range of

²⁶ See NYISO Services Tariff § 2.19.

²⁷ NY-BEST Comments and Protest at 7-8.

facilities over which it has operational control is the maximum NYISO can reasonably achieve in this regard.

The NYISO agrees with protestors that if the Commission were to direct the NYISO to modify its proposed approach concerning the interconnection of ESRs, it should not require that such changes be applied to the Transition Cluster Study, which would create substantial delays in the study, adversely impacting all study participants. Rather, the Commission should direct any such changes be applied to subsequent Cluster Studies.

B. The NYISO’s Modification Requirements Are Necessary to Ensure the Timely Performance of the Cluster Study

The NYISO’s proposed Cluster Study Process prohibits Interconnection Customers from modifying their project proposal until the completion of the Cluster Study with limited exceptions.²⁸ Certain protestors request that the Commission direct the NYISO to provide additional flexibility for Interconnection Customers to modify their projects during the Cluster Study Process.²⁹ In particular, protestors request that the NYISO be required to consider during the Cluster Study Process potential equipment changes to projects (e.g., inverter, transformer, grounding configuration) and system size changes.

The Commission should reject these protests. In line with the directives of Order No. 2023, the NYISO’s proposed Cluster Study Process represents a significant shortening of its overall interconnection study process and timeframe. Protestors requesting additional flexibility to make project modifications have simultaneously advocated for a shorter interconnection study process. For example, Clean Energy Associations separately stated in its comments: “The longer an interconnection customer is waiting on the completion of a study, the more uncertainty the

²⁸ OATT Attach. HH § 40.6.3.

²⁹ Clean Energy Associations Comments and Protest at 19-22, Shell Comments and Protest at 10-11, NY-BEST Comments and Protest at 8-9, BlueWave Comments at 8.

project faces, adding cost and potentially forcing a promising generation project to be removed from the queue.”³⁰ Achieving shortened study timeframes, however, requires certain tradeoffs, including limits on the flexibility for project modifications during the study process.

Allowing Interconnection Customers to modify project proposals during the Cluster Study Process will delay the overall process for both that project and all other projects participating in the clustered study. The Interconnection Customer’s proposed modification requires changes to its project’s facility models, which can require the NYISO or Connecting and Affected Transmission Owners to have to then re-perform the development of study models or study work. This is true even for what may seem like minor modifications, including downsizing a proposed project.

For example, an Interconnection Customer that proposes to change the inverter type for its generating facility or to decrease the size of its facility must provide the NYISO with updated models that reflect the updated facility and its proposed interconnection (e.g., steady-state model, stability model, and short circuit models). These facility models are consolidated into the base cases that the NYISO and Transmission Owners use for the interconnection study work.

The Phase 1 Study includes performing a design and engineering study to identify Connecting Transmission Owner’s Attachment Facilities (“CTOAFs”), Distribution Upgrades, and Local System Upgrade Facilities (“SUFs”) where the design of such facilities depend on the finalized Cluster Project Assessment (“CPA”) short-circuit base case. Modifications to a project trigger the need to update the modified facility’s models, which then trigger the need to (1) rebuild the CPA short-circuit base case, (2) potentially redesign and re-engineer the CTOAF, Distribution Upgrades, and Local SUFs identified using the prior CPA base case, (3) re-perform

³⁰ Clean Energy Associations Comments and Protest at 10.

the cost estimation of the total cost of the required CTOAFs, Distribution Upgrades and Local SUFs, and (4) re-calculate the allocation of those costs among the impacted Interconnection Customers.

In addition, the Phase 2 Study includes applicable analyses to ensure projects can reliably interconnect to the system and, if projects request Capacity Resource Interconnection Service, that they are deliverable. As with the Phase 1 Study, an update to a facility's project and its modeling would trigger the NYISO's need to update the CPA base cases (e.g., steady-state, short circuit, stability, deliverability) and to re-perform applicable analyses to determine whether pre-modified identified non-Local SUFs and System Deliverability Upgrades ("SDUs") are still acceptable or not. If not, new non-Local SUFs and SDUs must be redesigned, re-engineered, re-cost estimated, and re-cost allocated. Accordingly, if modifications are allowed during the Cluster Study Process, then the set of CPA base cases, which could amount to more than a dozen cases, would need to be rebuilt to perform applicable analyses and could result in (1) potentially redesigning and re-engineering CTOAFs, Distribution Upgrades, SUFs and SDUs, (2) re-performing the cost estimation of CTOAFs, Distribution Upgrades, SUFs and SDUs, and (3) re-calculating the Project Cost Allocations. Similar impacts would apply for any proposed project modifications, not just inverter change or downsized facilities.

For this reason, the NYISO's modification rules do not permit modifications during the Cluster Study Process with limited, carefully prescribed exceptions.³¹ Interconnection Customers can continue to request modifications to their projects following the completion of the

³¹ The NYISO's proposed modification rules for its Cluster Study Process are consistent with its current modification rules for its Class Year Study process, which do not permit modification during such process for the same reasons described in this Answer.

Cluster Study.³² If the NYISO were required to evaluate and make adjustments due to project modifications within its Cluster Study Process, it will have to review and likely extend the timeframes for performing the elements of the Cluster Study Process to account for the additional time that could be required to perform updates and restudy work as a result of such modifications.

Certain protestors reference the Commission's *pro forma* rules that permit Interconnection Customers to propose certain prescribed modifications during certain phases of the interconnection study process.³³ The NYISO's study structure, however, differs from both the Commission's *pro forma* structure and the NYISO's prior study structure, which previously included individual feasibility and system impact studies. The NYISO's proposed Cluster Study is a single, consolidated cluster study and no longer includes time periods between individual studies that could enable developers to change their project before they participated in the final cluster study. In addition, as the NYISO indicated in the Compliance Filing, to achieve its proposed timeframes, the NYISO will need to commence constructing base cases and performing study work as soon as the Customer Engagement Window and will be performing preparatory work for the Phase 2 Study in parallel with work performed during the Phase 1 Study. Therefore, even modification requests early in the process can delay the overall performance of the study for all participants.³⁴

³² BlueWave requested that the NYISO specify when Interconnection Customers can request approval for permissible technological advancements. BlueWave Comments at 7. The NYISO clarifies that these modifications can be requested in the same timeframe as any other requested modification following the completion of the Cluster Study.

³³ See Clean Energy Associations Comments and Protest at 20.

³⁴ While the NYISO's Cluster Study is composed of two phases, the NYISO will be performing work for both phases during the Phase 1 Study in order to achieve its proposed study timeframes. Accordingly, any changes to projects during the decision period between the Phase 1 Study and the Phase 2 Study would require the NYISO to review and update the preparatory Phase 2 Study work it performed.

Certain protestors assert that the NYISO has not clearly defined what changes are acceptable without being determined to be Material Modifications.³⁵ The NYISO did not propose to change in the Compliance Filing how it determines whether an Interconnection Customer's proposed modification to its project constitutes a Material Modification. Specifically, except in limited cases in which certain modifications are explicitly permitted by the tariff,³⁶ the NYISO will continue to assess each requested modification on a case-by-case basis to determine whether the requested change meets the tariff definition of a Material Modification—*i.e.*, whether it has an impact on the cost or schedule of another Cluster Study Project (in the current or a prior Cluster Study). The NYISO maintains on its website and regularly presents to its stakeholder Transmission Planning Advisory Subcommittee a complete history of the modifications for Large Generating Facilities that it has determined are not material which provides guidance to Interconnection Customers concerning the types of modifications determined to be non-material.

C. The NYISO's Timeframe for Performing its Cluster Study Is Reasonable and Fully Justified for the Scope of the NYISO's Consolidated Cluster Study

Clean Energy Associations and BlueWave argue that the NYISO has not justified its proposed timeframe for performing the Cluster Study.³⁷ The Commission should reject the protests and accept the NYISO's proposed timeframe.

³⁵ A history of the NYISO's modification reviews is updated and maintained on its website in the document labeled Project Facility Changes Determined to be Non-Material, which is located under Planning - Interconnection Process - Additional Request Forms & Other Forms.

³⁶ The NYISO removed in the Compliance Filing the tariff provisions concerning certain modifications that were expressly permitted during the feasibility and system impact study phases, as those prerequisite studies are no longer required and Interconnection Customers proceed directly to the single clustered study. The NYISO proposed to establish that a developer can modify its Point of Interconnection within five business days of the NYISO's issuance of the Cluster Study Project List in the Customer Engagement Window. OATT Attach. HH § 40.6.3.1. The NYISO also proposed revisions to its requirements by which a developer can extend its Commercial Operation Date without such extension being a Material Modification. OATT Attach. HH § 40.6.3.5.

³⁷ Clean Energy Associations Comments and Protest at 9-12; BlueWave Comments at 8-9.

First, Clean Energy Associations and BlueWave compare apples to oranges in assessing how the NYISO's proposed study timeframes compare to the Commission's *pro forma* requirements. They reference the 150-day time period established in the Commission's *pro forma* requirements for performing a "cluster study" and argue that the NYISO's 460-day period for performing its Cluster Study is substantially longer than this time period. However, the NYISO's Cluster Study, while sharing a name with the Commission's *pro forma* clustered system impact study, is instead the NYISO's sole, consolidated interconnection study and includes the system impact, facility study, and re-study study work that is addressed across all three of the Commission's *pro forma* studies.

The NYISO's proposed study timeframes for its Cluster Study are consistent with the Commission's timeframes for the performance of the equivalent study work. In particular, the NYISO's two study components for its Cluster Study total 460 days, which are divided between the Phase 1 Study (190 days) and the Phase 2 Study (270 days). The Commission's *pro forma* rules require that the interconnection study work be performed over a similar time range between 390 and 480 days, which is divided between a cluster study (150 days), cluster re-study (150 days), and an individual facilities study (90 or 180 days). In addition, the Commission's *pro forma* timeframe can be extended by further restudies, each of which can take up to 150 days and substantially increase the overall timeframe of the *pro forma* process. Accordingly, the NYISO's proposed study timeframes are consistent with the *pro forma* timeframes and reasonable in light of the study work being performed.

Second, the Commission has clearly acknowledged that the 150-day period for the cluster system impact study concerned the *pro forma* process and expressly clarified that different regions could require different timeframes and could propose alternative, supported tariff-

prescribed study timeframes with their compliance filings.³⁸ As described in the Compliance Filing, the NYISO established the study timeframes following a detailed review of the process steps required for it and the NYTOs to perform the required study work, identifying process enhancements and eliminating where possible unneeded or duplicative study work. The key study timeframes were shared with stakeholders in the NYISO's extensive stakeholder process, and the NYISO included in Attachment HH to the OATT the key steps and handoffs for the study work, including the time periods for the NYISO's and NYTOs' performance of key process steps and for developers' review of study results. The NYISO submitted with its Compliance Filing the affidavit of Thinh Nguyen, Sr. Manager, Interconnection Projects for the NYISO ("Nguyen Affidavit") that further detailed the tasks that have to be completed with the Cluster Study.

Neither Clean Energy Associations or BlueWave nor any of the other commentators have challenged the NYISO's overall Cluster Study structure, the specific study work that is required for the performance of the interconnection studies, or the timeframes set forth in the tariffs for these individual process steps. Nor have they raised in the NYISO's stakeholder process or in this proceeding any process steps they believe are unnecessary or require too much time or the means for further expediting such study work, except for a broad statement by BlueWave that study timeframes could be expedited through automation and modern computer resources. Rather, Clean Energy Associations and BlueWave solely referenced the generic, *pro forma* timeframes established by Order No. 2023 for the cluster system impact study and for its re-study, which, as described above, are not comparable to the scope of the NYISO's Cluster

³⁸ Order No. 2003-A at PP 156 (clarifying that the order did "not preempt transmission providers from proposing tariff-defined study deadlines that may differ from the *pro forma* LGIP's 150-day schedule"), 324, 330 ("The question before the Commission in establishing the deadlines for the *pro forma* study process set forth in Order No. 2023 is whether those deadlines are reasonable as applied to that process.")

Study.³⁹ The NYISO's Cluster Study process was designed to managing the complex combination of New York's Climate Leadership and Community Protection Act ("CLCPA") mandates and the resulting increase of proposed generation with the unique challenges and critical importance of preserving reliability in New York State, including the most populous city in the country – New York City. While, of course, the NYISO employs cutting-edge software and computing technology and automation, this complexity translates into more stringent interconnection study criteria that are unique to New York⁴⁰ and requires a different scope and structure of interconnection studies than the *pro forma* procedures. The NYISO's approach is not just different than the *pro forma* approach but is necessary to achieve the ultimate goal of reliable interconnection of new generation.

D. The NYISO Will Continue to Use Third-Party Contractors to Accomplish Its Tariff Timeframes

Clean Energy Associations request that the Commission deny the NYISO's removal of the requirement that an Interconnection Customer can compel the NYISO to use a third-party consultant to conduct an interconnection study.⁴¹ The Commission should reject this protest which appears largely based on a misunderstanding.

The NYISO's proposed revisions do not eliminate the NYISO's, Transmission Owners', and Affected System Operators' ability to use third-party consultants to perform interconnection

³⁹ The NYISO disagrees with Clean Energy Associations that the Commission cannot consider the reasonableness of its study timeframe in the context of the substantial decrease that such timeframe and the new process represents from the NYISO's existing procedures.

⁴⁰ Among the Applicable Reliability Standards the NYISO and TOs must consider in interconnections studies are requirements of the New York State Reliability Council which has the authority to create reliability rules that may be more stringent than those created by the North American Electric Reliability Corporation and the Northeast Power Coordinating Council, Inc.

⁴¹ Clean Energy Associations Comments and Protest at 12-14.

study work.⁴² The NYISO currently uses consultants to supplement its resources in performing interconnection studies and expects to continue to do so going forward.

The NYISO, however, proposed revisions to eliminate the requirement that an Interconnection Customer may compel the NYISO to use consultants and enter into agreements with the third-party contractors as the limited instances in which this rule was applicable under the NYISO's tariff no longer apply in the NYISO's new process. In particular, the NYISO deleted the requirement that the Interconnection Customer may request that the NYISO use a third-party consultant to perform an interconnection study if:

- (i) at the time that ISO provides a good faith estimate of the time to complete or at the time of the signing of an Interconnection Facilities Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Developer receives notice pursuant to Sections 30.6.3, 30.7.4 or 30.8.3 that the ISO will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) the Developer receives neither the Interconnection Study nor a notice under Sections 30.6.3, 30.7.4 or 30.8.3 within the applicable timeframe for such Interconnection Study.⁴³

These process steps are not a part of the NYISO's new process. The NYISO's new Attachment HH establishes specific Cluster Study timeframes by which the NYISO or NYTO must perform interconnection studies, where study delays may result in penalties. These Cluster Study deadlines replace the prior tariff requirements by which the NYISO was required to provide good faith estimates of individual study timeframes and then to conduct such studies using reasonable efforts. The NYISO and Transmission Owners are instead responsible for meeting new stringent timing requirements in the NYISO OATT, including determining how to

⁴² See OATT Attach. HH § 40.24.4.

⁴³ See OATT Attach. X § 30.13.4. The referenced Sections 30.6.3, 30.7.4, and 30.8.3 of Attachment X to the OATT concern the prior tariff rules by which the NYISO would notify the Interconnection Customer of delays in the completion of the feasibility, system impact, and facilities studies.

allocate their resources and make use of consultants as needed to achieve these tariff requirements.

E. The NYISO’s Procedures for the Use of Surety Bonds Are Reasonable and Regularly Used by NYISO Market Participants

As required in Order No. 2023, the NYISO proposed in its Compliance Filing that an Interconnection Customer may use a surety bond to satisfy the deposit requirements in the NYISO’s Standard Interconnection Procedures.⁴⁴ Clean Energy Associations argue that the NYISO’s implementation of the surety bond requirement in its procedures—*i.e.*, the requirement in the NYISO’s standard form for surety bonds that the bond have a one-day turn around for delivery – unduly restricts their use, making their use unreasonable and unworkable as a practical matter.⁴⁵ Clean Energy Associations further assert that surety bonds are backed by insurance companies that cannot meet immediate payout demands.⁴⁶

The Commission should reject Clean Energy Associations’ protest. Contrary to Clean Energy Associations’ assertions, the NYISO’s implementation rules for the use of surety bonds are reasonable, workable, and consistent with the NYISO’s existing practices regularly used by its market participants.⁴⁷

The NYISO’s tariff requirements and its standard form for Interconnection Customers’ use of letters of credit and surety bonds are the same requirements currently applicable to all

⁴⁴ See Order No. 2023-A at P 185.

⁴⁵ Clean Energy Associations Comments and Protest at pp 14-16. Clean Energy Associations also mention a separate tariff requirement that the Interconnection Customer must provide a sufficient deposit 50 days prior to the termination of the surety bond, but then do not include further arguments on this requirement. This requirement is also consistent with existing rule for NYISO market participants that are included in the NYISO’s standard form for surety bonds used regularly by the NYISO’s market participants.

⁴⁶ Clean Energy Associations Comments and Protest at p 16.

⁴⁷ The NYISO’s proposed requirements address Interconnection Customers’ use of surety bonds to satisfy the deposit requirements in the Standard Interconnection Procedures. These requirements do not apply to Interconnection Customers’ separate requirements to post Security to the Connecting Transmission Owner or Affected Transmission Owner for the costs of the attachment facilities and upgrades for their projects identified in the Cluster Study. See Compliance Filing at 72.

market participants under the NYISO's tariffs.⁴⁸ The NYISO's market participants regularly make use of surety bonds in accordance with the requirements for such bonds that Clean Energy Associations assert are unworkable. As detailed in the attached Affidavit of Sheri L. Prevratil, Manager, Counterparty & Credit Risk Management for the NYISO ("Prevratil Affidavit"), the NYISO currently holds numerous surety bonds that are subject to the terms of its standard form, including the single-day turn-around requirements. In particular, as of the date of this Answer, the NYISO holds 71 surety bonds that cover 53 different market participants from 13 different surety companies totaling \$268M.

The one-day payment requirement is necessary to ensure that the NYISO can timely pay the obligations it incurs on behalf of Interconnection Customers. The NYISO is permitted to recover unpaid costs from an Interconnection Customer's deposit only after the customer has failed to pay the NYISO within the 30-day timeframe in Section 40.24.3.4.2 of Attachment HH and the 10-business day cure period in Section 40.6.4 elapses. The NYISO must pay its third-party vendors and Transmission Owners and Affected System Owners for study costs on a timely basis and needs funds from Interconnection Customers to do so. The one-day payment requirement improves the NYISO's ability to pay its obligations timely in the event of an Interconnection Customer's default.

Finally, these requirements provide fair treatment to all Interconnection Customers and do not discriminate against those Interconnection Customers that post cash or letters of credit for

⁴⁸ See OATT Attach. HH § 40.2.4.2.3; Services Tariff Attach. K § 26.6.1.3. The NYISO made minor, non-material changes to its standard surety bond form to clarify its application to Interconnection Customers proposing to interconnect their projects. The NYISO's standard surety bond form is available at: <https://www.nyiso.com/documents/20142/2261039/NYISO-Standard-Surety-Bond.doc/b44c61b0-6b71-35d2-0495-44f6e7b8ee03>.

security, as cash is subject to be drawn on immediately and letters of credit include the same one-business day payment requirement.

F. The NYISO’s Independent Entity Variations for its Withdrawal Penalty Rules Are Fully Justified and Should be Accepted by the Commission

Clean Energy Associations and Shell argue that certain of the NYISO’s requested independent entity variations concerning the application and distribution of Withdrawal Penalties will over-penalize Interconnection Customers or are not sufficiently justified.⁴⁹ The Commission should reject these protests and accept the NYISO’s proposed independent entity variations as described below.

1. Withdrawn Projects Harm the Efficiency and Timeframe of the Cluster Study Process Which Is a Reasonable Basis for Subjecting Them to a Withdrawal Penalty

Clean Energy Associations argue that the NYISO has not sufficiently justified its requested variation not to apply a materiality or harms test included in the Commission’s *pro forma* requirements for purposes of determining a material impact of a project’s withdrawal prior to applying a Withdrawal Penalty. In particular, Clean Energy Associations assert that the NYISO has not detailed how such test will constitute an administrative burden.

The Commission should accept the NYISO’s requested variation. A project’s withdrawal creates broad-based harms to the NYISO’s interconnection process, including process delays and inefficiencies, that adversely impacts the other projects participating in the cluster, which harm is a reasonable basis for applying a Withdrawal Penalty. Requiring the NYISO to perform a materiality or harms test to quantify specific harms would create further inefficiencies and delays in its process that would harm viable projects seeking to timely progress and would diminish the

⁴⁹ Clean Energy Associations Comments and Protest at 16-19.

objective of the Withdrawal Penalties to disincentivize speculative projects from entering the queue and creating delays.

The Commission has recently accepted in the Midcontinent Independent System Operator's interconnection procedures an automatic withdrawal penalty approach that did not require a materiality or harms determination, finding that the general harms resulting from withdrawing projects broadly impact the remaining projects, regardless of whether there is a quantifiable harm such as increases in upgrade costs.⁵⁰ The Commission should similarly accept the NYISO's proposed application of its penalty process without a harms or materiality test as a reasonable means for addressing the general harm to the interconnection process and other projects created by a project's withdrawal.

The NYISO expects that a substantial volume of projects will be participating in its Cluster Study – even greater than the 80 projects participating in its current Class Year 2023. With the addition of decision periods with increasing Readiness Deposits and Withdrawal Penalties in the new process, the NYISO also expects that an increasing number of projects are likely to withdraw during the process, rather than to wait until the final decision period. Accordingly, if the NYISO were required to conduct a materiality or harms test, the NYISO would be required to perform a substantial number of materiality determinations based on the specific projects withdrawing and when in the process they withdraw. This could create inefficiencies by requiring considerable work to be done in parallel with the Cluster Study Process. The NYISO's proposed approach to withdrawal penalties is better aligned with the goal of its Cluster Study Process to expedite the overall process.

⁵⁰ See *Midcontinent Indep. Sys. Operator, Inc.*, 186 FERC ¶ 61,054, at PP 70-72 (2024).

These determinations to attempt to quantify the exact impact of each project's withdrawal on the cost or timing of other projects, including delays in other projects or increases in the cost of network upgrades, would require substantial additional study work and would not alter the general adverse impacts associated with such withdrawals. As an example of such general harms resulting from withdrawing projects, the NYISO must update system base cases to account for withdrawn projects, which can necessitate having to reperform study work within the Cluster Study Process. This supplemental study work takes away resources that would otherwise be dedicated to the interconnection studies for advancing those projects that are still progressing in the NYISO's interconnection process and thereby endangers the remaining project's ability to timely progress, creating delays and uncertainty.

2. The NYISO's Proposed Threshold for Exempting a Project from a Withdrawal Penalty Is Reasonable in Light of its Different Study Structure

In Order No. 2023, the Commission established in its *pro forma* procedures exemptions for Penalty Withdrawals when upgrade costs increase by 25% between a cluster study and cluster study report and by 100% between the cluster study report and individual facilities study report.⁵¹

In the Compliance Filing, the NYISO proposed to establish as an independent entity variation an exemption to address substantial increases in upgrade costs that align with the decision periods for the NYISO's proposed Cluster Study. In particular, the NYISO proposed not to apply a Withdrawal Penalty of an Interconnection Customer's Readiness Deposit 2 for a project that withdraws at the conclusion of the Phase 2 Study when: (i) its total Connecting Transmission Owner's Attachment Facility and System Upgrade Facilities costs identified for its project at the conclusion of the Phase 2 Study is greater than 50% higher of (ii) the amount

⁵¹ See Order No. 2023 at P 786.

determined in the Phase 1 Study for the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required for its project.⁵²

In its protest, Clean Energy Associations argue that NYISO has proposed “to set a higher 50% cost threshold for cost increases between cluster study phases, and does not include a cost threshold for withdrawals after receipt of the individual facilities study report.”⁵³ This argument reflects a misunderstanding of the NYISO's Cluster Study Process and how it differs from the Commission's *pro forma* process.

The NYISO's process does not include a cluster system impact study or re-study, or an individual facilities study. Rather, the system impact study and facility study elements are incorporated into the NYISO's single Cluster Study, which is divided into two phases – the Phase 1 Study primarily addresses identifying the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and Local System Upgrade Facilities required for the reliable interconnection of a project, while the Phase 2 Study primarily focuses on identifying non-local System Upgrade Facilities required for the project. Accordingly, the NYISO could not apply the *pro forma* penalty exemptions concerning significant cost increases for upgrades as these exemptions are based on changes across studies not included in the NYISO's process. For example, as the NYISO does not perform a cluster system impact study followed by a cluster re-study, the NYISO does not have a baseline to determine a 25% increase in costs between such stages.

Notwithstanding the different process stages, the NYISO agrees that there should be an exemption from applying penalties to those projects that elected to proceed from the Phase 1

⁵² See OATT Attach. HH § 40.15.5.1. Absent this exemption, the Interconnection Customer is responsible for a Withdrawal Penalty amount equal to 20% of its Readiness Deposit 2. *Id.*

⁵³ Clean Energy Associations Comments and Protest at 17.

Study to the Phase 2 Study on the basis of their estimated attachment facility and local upgrade costs, but then receive a substantial cost estimate in the Phase 2 Study for their system wide upgrade costs. While there is not an exact comparison in the Commission's *pro forma* rules for addressing the costs increases that are identified in the NYISO's Phase 1 Study versus its Phase 2 Study, the NYISO's proposed 50% threshold reasonably falls within the overall cost increase ranges in the Commission's *pro forma* exemption rules and is more generous to Interconnection Customers than the 100% threshold included in the Commission's *pro forma* for increased costs between the cluster study and facilities study phase.

3. The NYISO's Proposed Rules for Distributing Penalty Funds Are Reasonable Variations to Account for Differences in the NYISO's Process

Clean Energy Associations argue that the NYISO should be required to distribute collected withdrawal penalty funds in accordance with the Commission's *pro forma* requirements. Shell also argues that the NYISO should be required to refund any withdrawal penalty funds not applied in its first two distribution steps back to the projects in the cluster that were subject to the penalties.⁵⁴ The Commission should accept the NYISO's proposed independent entity variations concerning the distribution of withdrawal penalty funds as detailed in the Compliance Filing and further justified below.

First, the second step of the *pro forma* distribution rules, which uses withdrawal penalty funds not applied to study costs to offset network upgrade costs, does not function in the NYISO's process. As detailed in the Compliance Filing, under the NYISO's process, a project does not become responsible for the costs of any attachment facilities or upgrades identified for its project until such time as it accepts its cost allocation and posts security at the conclusion of the study. Only at this point can other projects rely on those facilities, and, if such project

⁵⁴ Shell Comments and Protest at 16-17.

subsequently withdraws, the project's security is subject to forfeiture to address the impacts of its withdrawal. The NYISO does not perform stand-alone re-studies to account for project withdrawals, but rather accounts for such withdrawals within its study and decision period processes. Each Interconnection Customer that remains in the final decision period makes its determination as to whether to proceed based on the specific cost allocation determined for its project without reference to other projects.

For this reason, the NYISO proposed a reasonable alternative that furthers the goals of Order No. 2023 and encourages projects to complete the post-study interconnection process to ultimately achieve commercial operation. This is accomplished through an incentive payment that provides a benefit to those projects that proceed through the interconnection process and successfully achieve commercial operation.

The NYISO disagrees with Clean Energy Associations that the incentive payment is unreasonable because it cannot be quantitatively demonstrated to be fully aligned with the harm the progressing project suffered as a consequence of other projects' withdrawal. The progressing projects are harmed by overall study inefficiencies and delays caused by the withdrawals of other projects. As described above, the Commission has expressly determined that projects suffer general harms as a result of other projects' withdrawal – such as process delays and inefficient queue processes – even if such harms cannot be quantified to specific network upgrade cost increases. For example, a project that must proceed through a longer interconnection process as a result of delays caused by project withdrawals may find that the costs of its required attachment facilities and upgrades have increased due to the passage of time and supply chain issues or inflation that may not have otherwise impacted the project if not for the process delay. The

NYISO's proposed incentive payment approach is a reasonable means of allocating penalty funds to projects that have suffered such harms but continued on to complete their projects.

Second, the Commission should accept the NYISO's proposed third step of the distribution process to retain for its administrative costs any remaining funds not used to offset study costs or to make incentive payments. The purpose of the Withdrawal Penalties is to dissuade speculative projects and to reduce interconnection queue backlogs. The NYISO believes that refunding the collected Withdrawal Penalty funds back to the withdrawing projects undercuts this purpose. Moreover, refunding such funds could create a significant administrative burden for the NYISO as many project companies created for the sole purpose of submitting project proposals may cease to exist following their withdrawal from the interconnection queue, creating uncertainty concerning whether the NYISO could, at a later date, identify and refund to the appropriate entities any remaining funds. The NYISO's proposed approach to retain the remaining funds is consistent with the penalty distribution mechanisms in other ISO/RTO regions.⁵⁵

G. The NYISO's Proposed Variations Concerning Affected System Requirements Are Reasonable and Justified

1. The NYISO's Proposed Time Period for Performing Affected System Studies Is Reasonable Based on the Required Scope of Work for the Study

In its Compliance Filing, the NYISO requested an independent entity variation for a 300-day period to perform an Affected System Study, along with the option to extend this period by 60 days when one of the projects subject to the study withdraws. Clean Energy Associations argue that the NYISO's requested time period is unreasonable.⁵⁶

⁵⁵ See Southwest Power Pool OATT Attach V § 13.3 ("Any remaining study funds will be used to reduce fees associated with SPP's tariff administrative services.").

⁵⁶ Clean Energy Associations Comments and Protest at 22-24.

The Commission should reject Clean Energy Associations' protest. Clean Energy Associations assert that the Affected System Study must be performed on a faster timeframe based on the Commission's generic *pro forma* timeframe. However, Clean Energy Associations do not address the particular analysis that the NYISO must perform for this study and the resulting required timeframes, nor do they provide any explanation detailing how such studies can practicably be performed on a faster timeframe.

As described in the Compliance Filing, the NYISO's proposed 300-day time period is required to enable the NYISO to perform the different study elements necessary for an Affected System Study. In particular, the Affected System Study includes two components.

First, the NYISO must perform analysis in line with a system impact study to determine whether the project or projects interconnecting in a neighboring region will have an impact in New York that necessitates upgrades on the New York State Transmission System. The NYISO expects the impact analysis to require at least 120 days.

Second, if the NYISO identifies an impact on the New York State Transmission System, the NYISO must then perform analysis in line with a facilities study to identify the required upgrades to address the issue and to determine the cost estimate for these upgrades. The NYISO expects the upgrade analysis to require at least 180 days.

The analysis that the NYISO must perform for the Affected System Study is consistent with the analysis that it or the NYTOs will perform in the NYISO's Cluster Study and the related timeframes required for such study work. The NYISO calculated these timeframes based on its long-standing experience performing such study work as adjusted to account for the process improvements it has developed to eliminate unnecessary or duplicative analysis.

Finally, the NYISO proposed a 60-day extension in the event one or more projects participating in an Affected System Study withdraw during the study. This period is necessary to account for the impacts of the withdrawing projects. The NYISO's models used in the study and its analysis are based on the specific projects included in the study. If one or more of such projects withdraw, the NYISO must perform substantial work updating models and re-running analysis. The NYISO's proposed 60-day period is consistent with the *pro forma* 60-day re-study period for addressing the impacts of withdrawn projects. However, in the NYISO's process, such re-study work is incorporated into the initial Affected System Study.

2. The NYISO Applies Participant Funding for Affected System Network Upgrades Consistent with the Funding Requirements for Upgrades in New York

Shell requests that the NYISO clarify how Interconnection Customers that pay for Affected System Network Upgrades be reimbursed for such costs.⁵⁷ In particular, Shell requested that the NYISO indicate how its upgrade funding and security approaches comply with Order No. 2023's reimbursement requirements for Affected System Network Upgrades.⁵⁸

The NYISO clarifies that its interconnection procedures use the "but for" funding approach – the participant funding approach authorized by the Commission by which Interconnection Customers are responsible for the costs of the upgrades, including Affected System Network Upgrades, that would not be required "but for" their projects.

In Order No. 2003, the Commission established a crediting policy by which non-independent transmission providers were required to reimburse to Interconnection Customers the cost of upgrades, which requirements are reflected in the Commission's *pro forma* procedures and agreements. The Commission, however, provided that independent transmission providers

⁵⁷ Shell Comments and Protest at 7-10.

⁵⁸ Shell Comments and Protest at 10.

(i.e., ISOs and RTOs) could instead continue to use a participant funding approach by which an Interconnection Customer is responsible for upgrade costs resulting from its project in place of the crediting approach.⁵⁹

The NYISO's initial upgrade cost allocation rules adopted in 2001 used such a participant funding approach, and the Commission approved the NYISO's continued use of participant funding for upgrades in response to Order No. 2003.⁶⁰ The NYISO is not proposing in its Compliance Filing any changes to its longstanding approach or rules for the use of participant funding for upgrades identified in its procedures, including for Affected System Network Upgrades. The NYISO's tariffs establish the same requirements for Affected System Upgrade Facilities as other System Upgrade Facilities identified in the NYISO's procedures. In addition, the Commission rejected as out of the scope of Order No. 2023 requests to revisit upgrade cost allocation policies, including changes to the participant funding regime to limit the use of such funding.⁶¹

Accordingly, the Commission should accept the NYISO's continued use of participant funding for upgrades identified in its procedures.

3. The NYISO's Rules Already Account for Affected System Costs in Determining Penalty For Withdrawals

Shell asserts that the NYISO's tariff does not account for the costs of upgrades on Affected Systems when calculating the total upgrade costs used to determine whether a project can withdraw without being subject to a penalty for its commercial readiness deposit.⁶²

⁵⁹ Order No. 2003 at PP 695, 698.

⁶⁰ *New York Independent System Operator, Inc.*, 108 FERC ¶ 61,159 at PP 57-59 (2004).

⁶¹ Order No. 2023 at P 467.

⁶² Shell Comments and Protest at 15.

However, as explained below, the NYISO’s proposed Cluster Study rules do account for such upgrade costs when making this penalty determination.

The NYISO assesses as part of its Cluster Study the impacts of projects proposing to interconnect in New York on Affected Systems located within the New York Control Area.⁶³ The NYISO or the applicable Affected Transmission Owner or Affected System Owner identify any required System Upgrade Facilities on an Affected System and a cost estimate of the upgrade. The costs of such System Upgrade Facilities are then included in the total cost allocation determined at the conclusion of the Phase 2 Study for all of the attachment facilities and upgrades required for the project (the “CTOAF and SUF Project Cost Allocation”).⁶⁴

The Interconnection Customer must accept and post security for this total CTOAF and SUF Project Cost Allocation amount in the Final Decision Period at the conclusion of the Cluster Study in order to proceed with its project. This total CTOAF And SUF Project Cost Allocation amount is the amount that the NYISO uses for purposes of assessing the percentage change in attachment facilities and upgrade costs between the conclusion of the Phase 1 Study and Phase 2 Study for purposes of determining whether an Interconnection Customer is eligible to withdraw without being subject to a penalty on its readiness deposit.⁶⁵ Accordingly, the Affected System upgrade costs are factored into the determination as to whether a penalty will apply.

If Shell is instead requesting that the NYISO must include as part of the penalty determination the costs of any upgrades identified in an External Affected System (e.g., a

⁶³ See, e.g., OATT Attach. HH § 40.11.4.

⁶⁴ See OATT Attach. HH § 40.15.1.

⁶⁵ OATT Attach. HH § 40.15.5 (establishing that “(D) if the CTOAF and SUF Project Cost Allocation amount is greater than 50% higher than the amount determined in Phase 1 for the Connecting Transmission Owner’s Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required for the Cluster Study Project, then the Cluster Study Project shall only pay a Withdrawal Penalty in the amount of one hundred percent (100%) of its initial Study Deposit amount and shall not pay a Withdrawal Penalty based on any of its Readiness Deposit 2.”)

neighboring system such as PJM Interconnection or ISO-New England),⁶⁶ the Commission should reject such request, which is beyond the scope of Order No. 2023.

It would be unreasonable for the NYISO to have to account for these neighboring upgrade studies and costs in the decision period of its Cluster Study Process. An Interconnection Customer must accept and post security for the CTOAF and SUF Cost Allocation amount identified in the NYISO's Cluster Study during the decision process at the conclusion of this study. If the NYISO were required in its process to account for the costs for projects identified in neighboring systems, its Cluster Study Process could be delayed for uncertain and substantial periods of time while awaiting the results of Affected System Studies in neighboring regions.⁶⁷ The Commission should not permit neighboring regions' Affected System Study processes to hold up the completion of the NYISO's Cluster Study (and the ability to progress with subsequent Cluster Studies) or the implementation of the NYISO's tariff requirements, which would adversely impact and delay the vast majority of projects that do not have affected system impacts.⁶⁸

H. The NYISO's Proposed Study Delay Penalty Timeframe Appropriately Reflects its Cluster Study Structure and Is a Justified Independent Entity Variation

Order No. 2023 directed transmission providers to eliminate the "reasonable efforts" standard and to replace it with specific deadlines for completing interconnection studies with

⁶⁶ The NYISO's proposed tariff revisions differentiate between Affected Systems located in the New York Control Area (e.g., New York Transmission Owner's systems impacted by interconnections to neighboring New York Transmission Owner's systems), which impacts are studied in the NYISO's Cluster Study Process, and External Affected Systems (e.g. neighboring ISO/RTO systems), which impacts are studied through the neighboring system's Affected System Study process.

⁶⁷ The Commission acknowledged that such delays are likely to occur by establishing rules in Order No. 2023 by which an Interconnection Customer can delay executing an interconnection agreement in its host region until a neighboring region's Affected System Study concerning its project is completed.

⁶⁸ Interconnection Customers will be aware during the decision period for the NYISO's Cluster Study whether their projects are being assessed for Affected System impacts in neighboring regions. They can factor the potential costs of upgrades required in other regions, including the potential uncertainty concerning such costs, in determining whether to accept their cost allocation in the NYISO's process or to withdraw.

penalties for missed deadlines.⁶⁹ The NYISO proposed independent entity variations that are necessary to conform Order No. 2023's penalty regime to its Cluster Study Process structure and timeframe.⁷⁰ In particular, the NYISO proposed that study deadline penalties will trigger if a Cluster Study is not completed within the 460-day timeframe for the study. The Compliance Filing explained why this variation was justified at a level of detail consistent with other variations that NYISO sought in the Compliance Filing⁷¹ and in prior proceedings.

Clean Energy Associations contend that the NYISO has not justified applying penalties only at the end of Cluster Study Process instead of at intermediate steps in the process and that the NYISO's rules do not instill the appropriate urgency.⁷² The Commission should reject these protests because they are devoid of merit as a matter of fact and law.⁷³

Clean Energy Associations appear to misunderstand important components of the Compliance Filing. As detailed in Section II.C of this Answer, Clean Energy Associations have ignored that the Cluster Study is a single, consolidated interconnection study in place of the Commission's three, stand-alone *pro forma* studies. This error also undermines Clean Energy Associations' penalty-related protests. Their claims that the NYISO has not justified modifying

⁶⁹ See Order No. 2023 at P 962.

⁷⁰ The NYISO continues to object to Order No. 2023's and 2023-A's study penalty regime and, along with multiple other parties, is pursuing its petition for review challenging the imposition of penalties before the United States Court of Appeals for the District of Columbia Circuit. Nothing in this Answer should be construed as any form of agreement, waiver, concession, or other change of position by the NYISO pertaining to its pending petition for review in *Adv. Energy United, et al. v FERC*, D.C. Cir. Nos. 23-1282, *et al.*

⁷¹ See Compliance Filing at 112-115.

⁷² Clean Energy Associations Comments and Protest at 25.

⁷³ No other commenter has raised any issue regarding the timing of study deadline penalties. This includes the New York State entities that are responsible for meeting the goals of New York's Climate Leadership and Climate Protection Act and all other New York market participants and New York stakeholder organizations. The absence of any concerns from New York entities with the NYISO's proposal highlights the fact that Clean Energy Associations are seeking to enforce generic requirements that were not developed with the NYISO's proposal in mind and without regard for Commission's determination that the NYISO may justify departing from them.

the *pro forma* deadlines fail because they are based on a faulty understanding of the Cluster Study Process.

The Cluster Study is a single interconnection study that includes consolidated system impact study, facilities study, and re-study analyses that are directed towards the identification of, and the determination of the cost estimate for, all of the required attachment facilities and upgrades needed for the interconnection of a project. The Cluster Study concludes with the identification of this total Project Cost Allocation for each Interconnection Customer's project at the conclusion of the Phase 2 Study and the Interconnection Customer's determination whether to proceed with its project by accepting this cost allocation and posting the related security.

The NYISO's process is structured towards completing the Cluster Study within the overall 460-day timeframe. The Phase 1 Study and Phase 2 Study are intertwined study components that feed into the Cluster Study results.⁷⁴ The Phase 1 Study component primarily focuses on required attachment facilities and local upgrades, while the Phase 2 Study component primarily focuses on system-wide upgrades. However, both elements are required for the completion of the study, and the study work is overlapping and ongoing throughout the entire Cluster Study. In particular, to achieve the NYISO's proposed expedited study timeframes, the NYISO commences preparatory work for its Phase 2 Study analyses early in the Cluster Study Process in parallel with the Customer Engagement Window and Phase 1 Study phases of the

⁷⁴ Interconnection Customers will obtain cost estimates for their attachment facilities and local upgrades at the conclusion of the Phase 1 Study component of the Cluster Study; however, the Interconnection Customer is only required to accept their cost allocation and post security at the conclusion of the Cluster Study as the interim Phase 1 Study results remain subject to change to address the impacts of projects that withdraw throughout the Cluster Process.

process, and the NYISO and NYTOs perform updates to the Phase 1 Study results during the Phase 2 Study to account for withdrawn projects.

The NYISO's penalty framework for study delays appropriately and reasonably reflects this Cluster Study structure. The Cluster Study results are not final, and an Interconnection Customer cannot proceed with its project, until the completion of the full Cluster Study.⁷⁵ Requiring that the NYISO or NYTOs be subject to a penalty for a delay in an intermediate component of the Cluster Study would create a highly inefficient process that would interfere with the NYISO's and Transmission Owners' ability to timely complete the entire Cluster Study. The NYISO and Transmission Owners would have to reallocate limited resources mid-study to administer the penalty process in place of completing necessary study work.⁷⁶ This contrasts with the NYISO's proposed approach that benefits Interconnection Customers by providing the NYISO and Transmission Owners with flexibility to make adjustments during the study to achieve the overall timeframe notwithstanding any delays in intermediate process steps. In fact, Clean Energy Associations' notion that the NYISO should be subject to penalties before the completion of the Cluster Study would be unjustifiably harsher than the *pro forma* rules which do not subject transmission providers to penalties until studies are finished.

Clean Energy Associations also attempt to hold the NYISO to a more stringent burden of proof than the independent entity variation standard actually requires. Clean Energy Associations complain that the NYISO's proposed variation is unjustified because it does not

⁷⁵ An Interconnection Customer may request that the NYISO tender a draft interconnection agreement at the conclusion of the Phase 1 Study component of the Cluster Study, but entering that agreement is contingent on the Interconnection Customer agreeing to accept its Project Cost Allocation and post the related security at the conclusion of the Cluster Study.

⁷⁶ As detailed in the Compliance Filing, the NYISO proposes certain additional process steps to address the allocation of penalties for study delays among the NYISO and Transmission Owners, which both have certain prescribed study requirements in the NYISO's OATT. *See* Compliance Filing at 113-114.

strike a balance between transmission providers and Interconnection Customers.⁷⁷ But the NYISO is not required to demonstrate that any proposed independent entity variation has a symmetrical benefit for Interconnection Customers. The NYISO need only justify each variation on its individual merit to address the unique circumstances of its region. Clean Energy Associations’ attempt to narrow the availability of independent entity variations is impermissible and would make variations harder to obtain than Order No. 2023 requires.

Finally, it is inaccurate for Clean Energy Associations to suggest that the NYISO’s proposed penalty structure will fail to result in the “accountability” that Order No. 2023 requires.⁷⁸ Moreover, the NYISO has not proposed an “amorphous procedure”⁷⁹ that will somehow create uncertainty or impede Interconnection Customers’ ability to manage their own obligations.⁸⁰ The NYISO’s proposal does not give the NYISO “leeway” to engage in “procedural maneuvering”⁸¹ to supposedly evade accountability. Clean Energy Associations’ suggestions that linking penalties to the end of the NYISO’s proposed Cluster Study, instead of to interim steps within it, will somehow cause delays are wholly speculative. The practical reality is that the threat of potentially unrecoverable financial penalties has such severe

⁷⁷ Clean Energy Associations Comments and Protest at 26-27 (arguing that subjecting the NYISO to penalties at the end of each phase of the Cluster Study Process is necessary to “balance” the requirements imposed on transmission providers with those applicable to interconnection customers.).

⁷⁸ *Id.* at P 26,

⁷⁹ *Id.* at 26.

⁸⁰ *Id.* at 27.

⁸¹ *Id.* at 27.

consequences for not-for-profit entities like the NYISO that the requirement to impose the penalties at the conclusion of the Cluster Study in no way diminishes their impact.⁸²

I. The NYISO Will Evaluate Alternative Transmission Technologies in its Cluster Study Process

Clean Energy Associations assert that the NYISO has failed to provide for the evaluation of alternative transmission technologies in the Cluster Baseline Assessment (“CBA”) and Cluster Project Assessment (“CPA”), which Clean Energy Associations describe as the critical steps of the study process that precede, and are foundational components of, the Cluster Study Report.⁸³

Clean Energy Associations requests that the Commission require the NYISO to expressly require in its tariff that it will evaluate alternative transmission technologies in the CBA and CPA.⁸⁴

As required by Order No. 2023, the NYISO has expressly incorporated into its tariff the requirement that it consider in its Phase 2 Study the enumerated transmission technologies identified in Order No. 2023 and will detail in its Cluster Study Report at the conclusion of the Phase 2 Study an explanation of its evaluation of these technologies.⁸⁵ Clean Energy Associations appear to misunderstand the role of the CBA and CPA in the Cluster Study.

The CBA and CPA are not separate steps, apart from the Phase 2 Study. Rather, they are an integral part of the Phase 2 Study. The CBA consists of the pre-project base cases that the NYISO uses as the baseline for the analyses performed in the Phase 2 Study (e.g., fault duty,

⁸² The fact that study delay penalties could present an existential risk to the NYISO is one reason why it has petitioned for judicial review of the Order No. 2023 penalty regime.

⁸³ Clean Energy Associations Comments and Protest at 30-31.

⁸⁴ Clean Energy Associations Comments and Protest at 31.

⁸⁵ See OATT Attach. HH § 40.11.5.1 (“40.11.5.1 The Phase 2 Study shall evaluate the use of static synchronous compensators, static VAR compensators, advanced power flow control devices, transmission switching, synchronous condensers, voltage source converters, advanced conductors, and tower lifting. The ISO shall evaluate each identified alternative transmission technology and determine whether the above technologies should be used, consistent with Good Utility Practice, Applicable Reliability Requirements, and Applicable Laws and Regulations. The ISO shall include an explanation of the results of the ISO’s evaluation for each technology in the Cluster Study Report.”)

steady state (thermal and voltage) and stability analyses). The CPA is the post-project case that includes the Cluster Study Projects, the impact of which is evaluated based on the comparison of the CPA to the CBA. The NYISO uses the CBA cases to perform short-circuit, thermal, voltage and stability analyses to determine whether there are reliability issues in the pre-project base case. The NYISO uses the CPA cases to determine whether the Cluster Study Projects have any incremental adverse reliability impacts.

If, as part of these analyses, the NYISO identifies the need for an upgrade on the New York State Transmission System, the NYISO will then evaluate and identify System Upgrade Facilities to address the need, including evaluating the enumerated alternative technologies as potential upgrades. This requirement is covered by the NYISO's proposed tariff language in Section 40.11.5.1 that establishes that the NYISO will evaluate the enumerated technology types as part of the Phase 2 Study.⁸⁶ Accordingly, the NYISO disagrees that further tariff revisions are required to establish that the NYISO will evaluate the enumerated transmission technologies in its Cluster Study.

J. The Commission Should Renew the NYISO's Independent Entity Variation that Surplus Interconnection Service Does Not Apply In New York

In the Compliance Filing, the NYISO requested an independent entity variation not to incorporate the new surplus interconnection service rules adopted in Order No. 2023 as the NYISO's interconnection process does not provide for the use of "surplus" interconnection service.⁸⁷ Shell argues that NYISO's failed to provide any justification demonstrating that its continued use of its Minimum Interconnection Standard without surplus interconnection service is just and reasonable and accomplishes the goals of Order No. 2023 and requests that the

⁸⁶ *Id.*

⁸⁷ Compliance Filing at 118-119.

Commission direct the NYISO to submit a compliance filing implementing surplus interconnection service. Shell further argues that developers should have the right to determine whether or not their facility should be studied with re-dispatch.

The Commission should reject Shell's request, which is a collateral attack on the Commission's prior determination that surplus interconnection service does not apply in New York.⁸⁸

Order No. 2023 only required transmission providers to seek approval for previously approved variations where the provisions have been modified by Order No. 2023.⁸⁹ The Commission established the surplus interconnection services rules in Order No. 845. In the NYISO's Order No. 845 compliance proceeding, the Commission accepted the NYISO's independent entity variation that the NYISO is not required to provide such service. Order No. 2023 did not change the core requirements concerning a transmission provider's provision of surplus interconnection service, but only revised certain rules regarding the application and timing of this service if provided. Accordingly, the NYISO is not required to re-justify its variation from the core concept of providing surplus interconnection service.

If, however, the Commission were to determine that the NYISO is required to re-justify this variation, the NYISO reiterates that the concept of surplus interconnection service does not apply in New York. The NYISO's process does not establish such "surplus" service. As detailed in the Compliance Filing, the NYISO's interconnection process, including the NYISO Minimum Interconnection Standard, accomplishes the stated purposes of surplus interconnection service by increasing the utilization of existing interconnection facilities and network upgrades rather than requiring new ones. Under the NYISO's Minimum Interconnection Standard, the

⁸⁸ See *New York Independent System Operator, Inc.*, 170 FERC ¶ 61,117 at PP 98-101 (2020)

⁸⁹ Order No. 2023-A at P 77.

NYISO first looks to see if reliability impacts that can be mitigated by re-dispatching the facility (*i.e.*, both the studied project and existing generators in the case) in interconnection studies to less than the facility's full capacity. If they can, such reliability impacts do not require system upgrades. In addition, even if an interconnection study did not require re-dispatch, a facility is never guaranteed that it can operate at its full capacity in normal operations due to various system conditions and subsequent new project entry. The NYISO's process remains consistent with Order No. 2023's goals by minimizing the number of upgrades required for interconnecting facilities.

The Commission should also reject Shell's request that it provide Interconnection Customers with the option as to whether its project should be studied with re-dispatch. Requiring that the NYISO create different forms of interconnection service to apply at Interconnection Customer's option is far outside the scope of Order No. 2023. In addition, permitting developers to elect whether or not the NYISO should re-dispatch individual projects in interconnection studies would create significant study complexities and could harm other developers. For example, a developer could be harmed if multiple projects trigger a reliability need that could be mitigated through re-dispatch, but only certain of the contributing projects elect to be studied with re-dispatch.

III. DOCUMENTS SUBMITTED

The NYISO submits the following document with this Answer:

1. An Affidavit of Sheri L. Prevratil (Attachment I).

IV. CONCLUSION

WHEREFORE, the New York Independent System Operator, Inc. respectfully requests that the Commission accept this Answer and accept the Compliance Filing in this docket without requiring any modifications.

Respectfully submitted,

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June 27, 2024

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 27th day of June 2024.

/s/ Alexander Morse

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