ALLIANCE FOR CLEAN ENERGY NEW YORK, INC.

To: NYISO Interconnection Team

(stakeholder_services_ipsupport@nyiso.com)

December 23, 2025

Feedback on the 2026 Cluster Study Enhancements

ACE NY appreciates NYISO's continued efforts to improve the interconnection process and acknowledges the significant work involved in implementing the transition cluster study and related enhancements. These steps represent progress toward addressing stakeholder concerns and improving efficiency.

On December 3, 2025, at the Transmission Planning Advisor Subcommittee (TPAS)/Electric System Planning Working Group (ESPWG) meeting, NYISO shared some potential Cluster process improvements for stakeholder consideration. NYISO encouraged stakeholders to provide comments in response to the initially proposed improvements. ACE NY is pleased to share the feedback below from its members for NYISO's consideration.

Please note that ACE NY had submitted initial "lessons learned" comments in May 2025. The comments below reiterate some of the comments that were previously submitted as those are still of major importance to ACE NY members.

- **Conditional Phase 1 Entry for Physically Infeasible Projects**
    - In the submission of lessons learned last May, ACE NY suggested that NYISO enable a dynamic re-ranking if some projects withdraw during the customer engagement window.
    - ACE supports this conditional Phase 1 entry proposal and believes that allowing lower priority projects to proceed where higher priority projects elect to withdraw would ensure effective utilization of available POI positions.

- **Increased Training for Interconnection Customers**
    - ACE believes that this NYISO's proposed improvement could cover a few of the suggestions previously submitted by ACE NY stakeholders. Some of those include:
        i. Provide additional clarity on Interconnection Readiness Deposits and Refundability
        ii. Provide complete dynamic test files
        iii. Define criteria for viable subdivisions (Site Control, lease area sufficiency, etc.) and submission timelines.

Additional Comments for Consideration

1. **Process Improvement to Address Physical Infeasibility**
    a. The NYISO should consider allowing a process or mechanism for the IC, in consultation and agreement with the CTO, to make the necessary changes to the IR that resolve what might be determined as physical infeasibility.

2. **Improved Coordination between TO's and developers**
    a. Implementation of a more transparent communication process between developers and TOs where TOs are accountable and required to respond within a defined timeframe. This will enhance TOs' responsiveness and allow developers to make informed decisions during or before each decision point period. While recognizing this may be challenging, NYISO may consider inclusion/notification of possible physical infeasibility determination as advisory earlier in the customer engagement window to allow for possible expanding timelines for developer/TO resolution if infeasibility determination is found.
    b. Ensuring responsiveness and documentation throughout the study process – Implement a shared, transparent and standardized communication log accessible by NYISO, TOs, and developers to track all queue related inquiries, responses, follow-ups along with dates and times.

3. **Early sharing of NYISO's modeling data will improve customers response pace in decision periods and after receiving deficiencies notices**
    a. Share preliminary base case data with developers prior to study initiation to identify and resolve issues.
    b. Improve transparency and traceability by publishing study assumptions, base case inputs, and preliminary results prior to the close of the Customer Engagement Window.
    c. Publish PAR settings and associated constraints at the start of each Cluster Study.

4. **NYISO should take steps to reduce the percentage of, or entirely exclude, the SASUF and CTOAF values from the readiness deposit calculation where the developer shows a desire to leverage the Option to Build.** In the past, deposits were not required for CTOAF, and we strongly believe that SASUF should follow similar reasoning. There were instances of developers being unable to move good projects forward purely due to a lack of LC (Letter of Credit) capacity largely driven by scopes of work that the IC intends to build under their option.
    a. Requiring developers to post readiness deposits on scopes of work that would not be performed by the utility adds unnecessary financial burden due to:
        i. The mobilization of an undue amount of the Developer's Letter of Credit capacity to post the RD2
        ii. Unnecessary costs from interest - to be paid by the Developer on this Letter of Credit
        iii. An unnecessary risk of withdrawal penalties since WP3 is based on the RD2 amount (20%) which itself is based on the Phase 1 cost estimate.
    b. Developers are often certain that they will be leveraging the Option to Build early in the process.
        i. ICs can support their intention to exercise their option to build with documented due diligence and fulfillment of CTO requirements.

5. **NYISO should work to harmonize the Phase 1 cost estimate methodology employed by the various TOs to create more fair and consistent cost estimations.** The cost estimates in Phase 1 are directly related to the amount of RD2/WP3 and therefore created an unfair bias within the same Cluster even when the underlying scope of CTOAF and SUF were relatively the same. In some instances, the utility assumptions ballooned costs more than 111% beyond the base cost estimate once contingency, escalation, and overheads/oversight were applied. Our understanding is that the utilities purport to leverage the same cost estimation strategy for their own internal projects (which is not our concern), but compared to utilities in other parts of the US the NY utilities have drastically higher cost estimates for developers for similar scopes of work within the study process. For example, the Total Interconnection Facilities for a 3-breaker ring bus in Illinois (MISO) at 138 kV was estimated to cost $11M in phase 1, whereas the average SUF for 115kV in the Phase 1 cluster study was over $25 million across all TOs. Yet at any individual POI, the 3-breaker ring bus forms the bulk of the cost and equipment being installed, and recent actual constructed costs for 3-breaker ring buses in NY procured by private developers have averaged $14 million. So, the average SUF of >$25m indicates that either the utilities estimate a $14 million piece of infrastructure to be much more expensive than it is, or they are significantly overestimating what the rest of the attachment facilities will cost. Thus, it can be seen that these inconsistencies create a much higher barrier of entry to enter phase 2 studies and expose developers to significantly more financial risk.
    a. The TOs used varying values for percentage of contingency
    b. Escalation was not calculated consistently, and in some instances not at all (assumed present day

dollars), also there were varying assumptions on assumed duration (i.e. 2027 dollars versus 2029 dollars).

c. Assumptions surrounding overheads and/or oversight were also inconsistent.
    i. Some TOs included values upwards of 48%, where others assumed no overhead cost at all.
d. NYISO should consider publishing exploratory, high-level benchmarking guidance for common interconnection upgrades, including indicative cost ranges and typical timing assumptions, similar to other regions (e.g. MISO).

6. **NYISO should ensure that the TOs apply consistent assumptions surrounding availability of fiber in cost estimates, considering the absence of the time necessary for a deep engineering analysis, and changes to the fiber buildout over time.** It would be preferred for the TOs to include the fiber line section distances that may be needed without including it in the cost estimate if that is available.
    a. In the absence of definitive need, some TOs identified the risk that additional fiber costs may appear in the later phases but did not include it in the phase 1 cost (our preferred method), whereas other TOs assumed new fiber would need to be built, yet acknowledged it may not be necessary and required deeper investigation; for one project this added $18M to the cost estimate.
    b. Additionally, there were inconsistencies in whether TOs provided fiber line distances in the report oftentimes developers had to dig through underlying cost estimate assumptions or review single-line diagrams to find these values or request them from the TO during the comment period.

7. **TOs should ensure that their cost estimate methodology is consistent with how their consultants wrote the report.** There were instances where the report stated one assumption, whereas the cost estimate assumption documentation stated something different.
    a. For example, there were instances where the TO report stated that a SASUF substation would need to be built to BPS standards for a substation below 100 kV, but the cost estimate assumptions did not include the multiple redundancies associated with that standard for protection, backup batteries, fiber, etc. This added confusion and ultimately lead to unnecessary exchange of comments and in some cases disputes.

8. **TOs should not assume that substations below 100 kV, or even radial substations, will have to be built to BPS standards unless explicitly listed in their standards.**
    a. BPS is determined by performing the NPCC A10 test, which would not be performed during the interconnection process. A more logical approach would be preferred, leveraging engineering judgement where a subject matter expert has a reasonable expectation of it becoming BPS. Alternatively, apply a consistent assumption in phase 1 (e.g. adjacent substations are already designated as BPS. We acknowledge that the TO is unable to share this confidential information, but it is an example of something they might apply internally.

9. **NYISO continue efforts to present anticipated Phase II SUFs and their responsible parties as early as possible to all cluster participants and notify them once the full list of expected upgrades has been identified.**
    a. Enable Developers to assess potential upgrade needs before the SUF Facility Study, allowing earlier negotiations of E&P or LGIA while minimizing the risk. This will significantly accelerate development and COD timeline. Transparency will allow better insight into upgrade magnitude and be more comfortable with an early exit ramp by minimizing risk, also benefiting the NYISO by spreading out individual IA negotiations.

10. **Allow Developers to complete the Interconnection Request forms in the project portal prior to the application window opening and submit pre-filled forms once the window begins.**
    a. This will reduce errors in the initial application filings while maintaining the queue positioning rules, currently some developers are incentivized to prioritize speed of filing over accuracy in their IR Submittal, especially in downstate. Prefill would allow for more complete and accurate submittals as soon as the window opens.

11. **Improve Interconnection Request data input interface**

a. Allow creating a draft Interconnection Request on the NYISO Interconnections Projects Community portal at any time with the option to save drafts.
b. Prevent that an IR can be submitted unless all mandatory data fields have been completed (see above).

12. **Clearly communicate and document what data inputs are mandatory vs. optional.**
    a. Focus on data that is absolutely necessary for the purpose of the initial stage of the process only.
    b. Additional information can be submitted as part of future decisions to progress to the next phase. For example, review relevance of "Protocol for control system or PLC" or "PLC or control at Attachment Facilities" for Customer Engagement and / or Phase 1.

13. **Offer validation of model packages as a service, independent of cluster application window**
    a. Similar to pre-application process, allow developers to submit a modeling package outside of the cluster application to obtain feedback and ensure submitting a compliant version with the IR

14. **Minimize, as much as possible, redundant data inputs. Some examples:**
    a. Automize creation of a "Project Description" based on the data fields, while allowing for review and edits.
    b. "Bus Length" and "Line Length" have to be entered into the IR, and have to be shown on the SLD and Site Map
    c. Some CTOs, e.g. National Grid, request the same data that is already included in the IR to be submitted in a different format after the NYISO has validated an IR, https://www.nationalgridus.com/media/pdfs/microsites/wholesale-interconnections/ngrid_fs_study_data_request_sept_2024.docx

15. **Provide a definition of each required IR field to avoid unnecessary deficiencies:**
    a. Probably provide illustrative example such as Unit Ratings MVA (total plant or individual inverter), leading/lagging reactive power, Unit Ratings Voltage (specify whether this inverter voltage or collector voltage).

16. **Improve consistency:**
    a. TO reports should be delivered in a consistent format with a consistent and comprehensive set of results.
    b. The Phase 1 reports are not structured in a standardized, comparable format across TOs; a uniform template would be helpful.