Large SRIS Cluster Study Versus the Use of Mini-Clusters:

Two Competing Alternative Solutions

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Summary

ACE NY believes that two mutually exclusive alternatives should be studied by the NYISO and stakeholders for addressing the problems that currently beset the SRIS phase of the NYISO’s interconnection process. One is the use of a cluster process for the SRIS phase, along the lines of that proposed in the FERC’s 2022 Generator Interconnection Process Notice of Proposed Rulemaking (NOPR). The second is a less comprehensive change in which mini-clusters of nearby projects, where appropriate, are incorporated into the SRIS phase of the interconnection process.

Concerns About the Current SRIS Process

Among the concerns about the SRIS phase of the NYISO’s current interconnection process are the following:

* SRIS studies take too long to complete. This is a problem simply for project cost and progress, which became a bigger problem when the New York State Energy Research and Development Authority (NYSERDA) required and rewarded progress in the interconnection process in their procurement evaluations.
* NYISO expends significant resources in the administrative work associated with individual results, individual reports, and individual presentations at TPAS and Operating Committee meetings. Efficiency gains in administration should be achievable though the use of clustering.
* SRIS studies, in some instances, fail to provide the developer with a substantial amount of valuable information. This is, in part, because the SRIS study approach looks at each project in isolation and therefore fails to incorporate nearby cohort projects in its analysis in instances where the Points of Interconnection (POIs) of several projects are at the same POI or at POIs that are near each other.
* SRIS studies sometimes get completed without identifying a POI that is physically feasible. This is sometimes due to the failure to consider nearby projects in the physical feasibility evaluations by the Transmission Owners. The inclusion of sensitivity analysis in the current scope sometimes fails to capture the physical feasibility challenges. In some instances, a single project may also be proposing to interconnect at an infeasible station as deemed by the Connecting Transmission Owner and these issues are not fully addressed in the SRIS phase. By entering the Class Year Study without feasible POIs, the Class Year Study is burdened with difficult POI work that lengthens it.

Alternative 1 – SRIS Cluster Study

One alternative that should be studied in detail is the SRIS cluster study.

**Basic design features of an SRIS cluster study that can be used as a starting point for analysis**

**Pre-Interconnection Request (IR) Information** – sufficient information is made available to developers that have not yet chosen a site or submitted an IR. Types of such information shjould include:

* Developers can request that the Transmission Owner do a Feasibility Study, more or less along the lines of what is done now. This is optional and is not a prerequisite to enter a cluster.
* The NYISO makes available a data base that includes models used in the interconnection studies for use by developers to do exploratory analyses.

**Start of Cluster and Frequency of Cluster** – Clusters are established based on date of IR. A new cluster window is opened once a year. As an alternative, the start/end of the SRIS cluster studies could be timed in coordination with timing of Class Year Studies.

**Geographic Size of Cluster** – One cluster is established for all of New York State. No “mini-clusters” are separated out, with some possible exceptions akin to the NYISO’s current Additional SDU Studies process. The NYISO should reassess whether doing two separate geographic clusters – one for Upstate and one for Downstate - is preferable to doing a single statewide cluster.

**Use Multi-Phase Cluster Study for SRIS Study** – use Midcontinental Independent System Operator’s (MISO) model as a starting point for designing a NYISO model. Technical studies that are typically repeated in the Class Year process can be skipped in the SRIS phase, such as the Interface Degradation Analysis.

**Use NYISO’s Class Year Study (Cluster) for Facilities Study** – this includes retaining the NYISO’s end-of-study requirement that security be posted in an amount that equals 100% of the cost allocation. Projects without a defined POI during the preliminary data review for the Class Year Study should not be allowed to proceed into the Class Year Study.

**Positive Aspects of a SRIS Cluster Study Approach**

1. This approach captures interactions among projects
2. By establishing a well-defined cohort, the process would handle restudies in an orderly and predictable manner
3. Sets a schedule for the SRIS cluster that adds certainty to the process
4. Given the schedule and its visibility, creates pressure for expeditious completion of SRIS phase
5. Identifies POI solutions before entering the Class Year Study phase.

**Negative Aspects of a SRIS Cluster Approach**

1. Completion of the SRIS cluster can be slowed by the slowest moving project or set of projects. However, the change will speed up the Class Year Study phase.
2. Effort on joint impacts of the cluster at the SRIS phase can be duplicative of the same effort that is done in the Class Year Study, causing a lengthening of the overall interconnection process.
3. The NYISO has a unique approach – its Minimum Interconnection Standard (MIS). While the cluster approach has been used for other RTOs/ISOs, they do not have the MIS approach in their studies. Does the MIS present special difficulties for a cluster approach?

Alternative 2 – Mini-Clusters

This approach makes incremental improvements to the current NYISO SRIS approach, especially regarding the use of mini-clusters for nearby projects and a prerequisite of physically feasible POIs before projects can enter the Class Year Study.

**Basic design features of a mini-clusters approach that can be used as a starting point for analysis**

**Pre-Interconnection Request information** would be along the lines described above for the SRIS cluster approach.

**Mini-Cluster Composition** - Projects that are at the SRIS phase are put into mini-clusters, where appropriate, based on geography and expected electrical interactions, especially regarding the identification of physically feasible POIs. ISO-New England has a similar process and criteria to trigger an equivalent of a mini-cluster.

**Rules for a new project entering a cluster** - Rules would need to be established to protect projects being studied as mini-clusters from being disrupted by new arrivals of IRs from additional nearby projects.

**Feasible POI Requirement** - A prerequisite for a project entering the Class Year Study is the identification of a feasible POI. This should be discussed in the scoping meeting to make the developers aware of the interconnection issues considering the feasibility of the POI.

**Positive Aspects of a SRIS Mini-Cluster Approach**

1. It captures interactions among projects, but only studies these interactions where deemed necessary.
2. Identifies POI solutions before entering the Class Year Study phase.
3. Being only an incremental change, it poses less of a risk of unexpected problems than does a more major change in process redesign.

**Negative Aspects of a SRIS Mini-Cluster Approach**

1. Setting rules/deadlines for prohibiting new entries to mature mini-clusters may prove to be challenging and controversial
2. Retains the problem in which projects that just miss the deadline for entering a Class Year Study have to wait a potentially long time for the start of the subsequent Class Year Study.
3. Retains the practice of scores of SRIS studies being done simultaneously with no coordination of the start and end dates for most of them.
4. Projects whose SRIS studies last a very long time have little recourse to seek greater speed