## Class Year/Interconnection Queue Redesign

#### Thinh Nguyen

Senior Manager, Interconnection Projects

Joint ICAP WG/Transmission Planning Advisory Subcommittee May 3, 2019

> NEW YORK INDEPENDENT SYSTEM OPERATOR

## Agenda

- Objective
- Feedback on Ideas for Process Improvements Discussed at 4/1/2019 Meeting
- NYISO's Preliminary Proposals
  - Deliverability Redesign
  - Class Year Study Efficiencies
- Next Steps



## **Objective**

- Address the following key areas for improvement identified by stakeholders:
  - Need to expedite the interconnection study process overall, particularly Class Year Study
  - Limit the possibility for unique issues related to a single or few projects to cause delays to numerous other projects

+++

Clarify interaction among interconnection and TIP procedures

#### • Maintain qualities of current process most important to stakeholders:

- Identification of SUFs for projects to reliably interconnect, including detailed design, engineering and construction estimates
- Binding, good faith cost estimates that provide reasonable closure on upgrade costs
- Equitable allocation of upgrade costs



Feedback on Ideas for Process Improvements Discussed at 4/1/2019 Meeting



## **Feedback on Potential Process Improvements**

# 1) Remove Additional SDU Studies from the rest of the Class Year

- <u>Considerable support</u> for this proposal
- 2) Separate evaluation of upstate and downstate projects
  - Limited support for this proposal outweighed by objections
    - Would prevent mitigation for reliability impacts seen on interfaces connecting Capacity Regions between upstate and downstate
    - Would prevent cost allocation of upgrades among upstate and downstate projects that collectively contribute to the same interface constraint

### **Feedback on Potential Process Improvements**

## **3) Require deliverability evaluation in the SRIS**

- <u>Considerable support</u> for this proposal to the extent it is not limited to large facilities
  - Objections to suggestion that this be required only for facilities over 250 MW
  - Facilities as small as 5 MW have triggered SDUs
- 4) Perform alternative or additional deliverability study outside the Class Year process for CRIS-only projects
  - <u>Considerable support</u> for this proposal subject to details regarding the study and which/how many resources may be eligible

## **Feedback on Potential Process Improvements**

### 5) Allow more "exit ramps" from a Class Year Study

- Limited support for this proposal outweighed by objections
  - Potential impact on delaying Class Year by requiring re-studies after each "exit ramp"
  - Assumes that as cost estimates are refined, they decrease, which is not always the case

### 6) Create more stringent CRIS expiration rules

<u>Considerable support</u> for this proposal subject to its scope



- 7) Allow provisional/interim CRIS for Small Generators prior to going through a Class Year Study
  - Limited support for this proposal outweighed by objections re: its application only to Small Generators
  - Other Concerns: Impacts to ICAP market rules, CRIS retention rules and BSM rules
- 8) Evaluate external interface SUFs and non-local elective SUFs in Part 1 Studies
  - No objections to this proposal



# 9) Develop agreements with PJM and ISO-NE governing schedules for performing affected system studies

- <u>No objections</u> to this proposal
- Subject of pending FERC proceeding in Docket AD18-8-00 (Reform of Affected System Coordination in the Generator Interconnection Process)

#### **10)** Identify the best vs. the least cost upgrade solution

- Limited support for this proposal outweighed by objections regarding the potential to shift upgrade costs from TOs to Developers
- NYISO is already required to use Good Utility Practice to identify the universe of upgrades to evaluate to determine the least cost solution

# 11) Provide non-binding vs. binding cost estimates for upgrade facilities

 Limited support outweighed by considerable objections as binding cost estimates are regarded as a key benefit of the current process

# 12) Limit analytical work to incremental "system and/or projects' interaction analysis"

- <u>No objections</u> to this proposal
- Proposal to expand this to include narrowing scope of SRIS analyses to avoid unnecessary duplication in SRIS and Class Year Study

### **13) Class Year Entry Requirements**

- Idea No. 1: Make Class Year eligibility requirements more stringent to limit the Class Year to projects with more certainty
  - Limited support for this proposal outweighed by objections
- Idea No. 2: Add additional regulatory milestone option for projects with Renewable Energy Credit (REC) contract with NYSERDA
  - Limited support for this proposal
  - <u>Concerns</u>:
    - This is not a permitting milestone akin to other regulatory milestones
    - Adding additional alternatives to satisfy Class Year eligibility requirements can slow down the Class Year Study

## **13) Class Year Entry Requirements (continued)**

- Idea No. 3: Adopt a multiphase process like MISO's involving several study stages, with increasing amounts of money put at stake at each successive phase and with an increasing amount of cost information provided at each phase
  - Limited support for this proposal

## 14) Adopt a PJM-like "queue window" approach

- No support for this proposal
- <u>Concerns</u>:
  - Restudies are required when a project within the queue window drops out, delaying the process overall
  - Lacks certainty for Developers on cost and timing because the upgrades and cost allocation are contingent



## 15) Increase MW size for Small Generator Interconnection Procedures from 20 to 25 MW

- Limited support for this proposal
- <u>Concerns</u>: Inconsistent with Order No. 2006 and DER market design

16) Require Developer to submit project data on Class Year Start Date vs. with the executed Class Year Study Agreement

<u>Considerable support for this proposal</u>



## NYISO's Preliminary Proposals



## **NYISO's Preliminary Proposals**

## I. Deliverability Redesign

- A. Remove Additional SDU Studies from Class Year Study
- B. Require Deliverability Evaluation in SRIS
- C. Mini Deliverability Study for CRIS-Only Projects
- D. More Stringent CRIS Expiration Rules

## II. Class Year Study Efficiencies

- A. Frontload Class Year Study Work into Part 1 Studies
- B. Eliminate Duplication in SRIS and Class Year
- C. Require Project Data Earlier in Class Year Process
- D. Revise Regulatory Milestones in relation to NYSERDA contracts and clarify milestones for Offshore Wind





**DRAFT – FOR DISCUSSION PURPOSES ONLY** 

© COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED.

## A. Remove Additional SDU Studies from the Rest of the Class Year Study

#### <u>Overview</u>

- At the point in the Class Year Study when the need for additional SDU studies is identified:
  - Allow the impacted Developers (i.e., for projects requiring these SDUs) to pursue such studies outside the normal Class Year process
  - Allow rest of Class Year to proceed to decision and settlement
  - Allow next Class Year to begin



#### A. Remove Additional SDU Study (continued)

#### **Benefits of this Proposal**

- Potential to shorten duration of Class Year Studies and expedite commencement of next Class Year Study (allowing for more frequent Class Year Studies)
- Could potentially apply to Class Year 2019
  - Largely dependent on status of Class Year 2019 when FERC issues an order
  - If FERC order predates the point at which projects must elect to proceed with additional SDU studies, this proposal may apply (but may require transition mechanisms)

#### A. Remove Additional SDU Study (continued)

#### For Further Consideration

- Point in Class Year when this separation will occur
- Base Case implications for next Class Year
  - How to incorporate project and its SDU into the next Class Year after additional SDU study is complete

- Whether project is deemed to satisfy deliverability evaluation in next Class Year (i.e., is project protected from being subject to additional deliverability upgrades in the Class Year it enters after additional SDU study is complete)
- Class Year cost allocation for the SDU if multiple projects
- Coordination among parallel interconnection studies
- Impact on BSM evaluations



#### **B. Require Deliverability Evaluation in the SRIS**

#### <u>Overview</u>

- For projects that the NYISO identifies as potentially requiring SDUs, require a deliverability evaluation in the SRIS
- If SDUs are identified in the SRIS that are not "new" SDUs (i.e., don't require additional SDUs), can begin evaluating them in the Part 1 Class Year Study

#### **Benefits of this Proposal**

• Potential to shorten the duration of Class Year Studies because deliverability evaluations in the SRIS provides information that can be used in the Class Year Study



**B. Require Deliverability Evaluation in the SRIS** (continued)

#### For Further Consideration

- Criteria for NYISO's determination of projects requiring deliverability analysis in SRIS
- Whether preliminary SDUs should be identified in SRIS
- Transition rule for projects in the queue



C. Perform "Mini Deliverability Study" Outside the Class Year Process for CRIS-only projects

#### <u>Overview</u>

- Perform "mini" deliverability analysis outside of Class Year for facilities seeking only CRIS:
  - Small and non-FERC jurisdictional generators not subject to Class Year Study for ERIS
  - Increased CRIS requests
- Only a determination of deliverable MW

#### **Benefits of this Proposal**

 Expedited deliverability analysis for facilities seeking only CRIS



#### C. Mini Deliverability Study (continued)

#### For Further Consideration

- Extent to which this proposal can be incorporated within or implemented in parallel with Proposal 1A
- Impact of multiple parallel processes for obtaining CRIS
- Study timing in relation to pending Class Year and how deliverability base cases will be "trued up"
- Whether to limit CRIS-only requests to facilities that already have or are requesting corresponding ERIS
- Whether to cap total MW amounts for each study
- Required revisions to BSM rules



#### **D. Create More Stringent CRIS Expiration Rules**

#### <u>Overview</u>

- Prevent retention of CRIS that is not being used
- Do not allow existing facilities to retain CRIS indefinitely if they do not enter the NYISO ICAP market

- Currently, the 3 year CRIS expiration "clock" does not commence until facility enters the ICAP market
- Terminate portion of CRIS for facilities that do not use their full CRIS for certain period of time
- Terminate CRIS in excess of ERIS

#### **Benefits of this Proposal**

 Increases deliverability "headroom" retained by facilities not using, using only a portion of their CRIS or that have not yet entered the ICAP market



#### **D. More stringent CRIS Expiration Rules (continued)**

#### For Further Consideration

- When "3-year CRIS clock" begins
- For units using only part of their CRIS:
  - Percentage of CRIS usage required to maintain CRIS
  - Manner in which unused CRIS will expire (e.g., if unit uses no more than 75% of CRIS for 3 years, will 25% of its CRIS expire?)

- CRIS-inactivity within multi-unit PTIDs (i.e., several units within the same PTID)
- For unit 2 MW or smaller that is permitted to participate in the capacity market without going through a deliverability study:
  - If it does not participate in the capacity market for 3 years, should it be precluded from further participation in the capacity market?
  - If its right to participate in the capacity market expires, should it be required to go through a deliverability study to receive the same 2 MW again?



#### **D. More stringent CRIS Expiration Rules (continued)**

#### For Further Consideration

- Tighten 2 MW increased CRIS rule
  - Current rule allows any unit with CRIS to request up to 2 MW of additional CRIS without going through a deliverability study

+++

- Consider tightening rule to allow such increase only to the extent the unit is using all of its existing CRIS
- Application of this rule to projects that go through a deliverability study for increased CRIS
- Application of revised rules to reduction of UDRs
- Application of revised rules to resources exporting capacity





**DRAFT – FOR DISCUSSION PURPOSES ONLY** 

© COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED.

27

#### A. Frontload Class Year Study Work in Part 1 Studies

#### <u>Overview</u>

- Evaluation of SUFs for projects on or near tie lines require additional time in the "Part 2" Class Year Study due to involvement of Affected Systems
- Frontload analyses to Part 1 Study
  - Evaluate non-local elective SUFs in Part 1 Studies
  - If a project's SRIS identifies potential transfer analysis and/or non-local SUF for an external interface, require the Part 1 for this project to include the potential SUF



#### A. Frontload Part 1 Study Analyses (continued)

#### **Benefits of this Proposal**

- Could shorten the duration of the Class Year
- Starts required analyses earlier in the Class Year process
- Could expedite analyses required in iterative decision process
  - For example, an SUF identified to mitigate impacts of 5 projects may need to be resized, or an alternative identified, to mitigate impact of only 2 of these projects if others decide to reject their costs
- Could provide "bookend" cost estimates earlier in the Class Year Process

NEW YORK INDEPENDENT SYSTEM OPERATOR

### A. Frontload Part 1 Study Analyses (continued)

#### For Further Consideration

- Manner/extent to which NYISO can leverage non-Local SUFs identified in SRIS in the Part 1 Studies
- Developer cost responsibility for non-Local SUF studies within the Part 1 Study
  - Currently, Developer is only allocated costs for Local SUF studies in the Part 1 analysis
- Potential need for alternative or larger non-Local SUFs as a result of the collective impact of Class Year projects identified in the Part 2 Study
- Coordination with Affected System with regard to external interface SUFs

# **B. Eliminate Duplication in SRIS and Class Year Studies**

#### <u>Overview</u>

- Focus Class Year analysis on incremental "system and/or projects' interaction analysis"
- Eliminate above analysis from the SRIS stage when project is unlikely to require SUFs
- Class Year can leverage applicable SRIS analysis for Class Year project's individual system impact
- If there is a significant change in the vicinity of a Class Year project compared to that of the SRIS stage, apply engineering judgment to determine scope of local analysis

# **B. Eliminate Duplication in SRIS and Class Year Studies (continued)**

#### **Benefits of this Proposal**

- Could shorten duration of Class Year Study
- Could expedite SRIS by avoiding detailed analyses in SRIS that are duplicated in the Class Year Study
- Can offset study time and costs for deliverability analysis in the SRIS

#### For Further Consideration

- Identify specific analyses to be eliminated from Class Year study based on SRIS results
- Identify specific analyses to be eliminated from scope of SRIS (e.g., transfer limit and N-1-1 analyses)

- C. Require Project Data Earlier in Class Year Process Overview
  - Currently, project data need not be submitted until the Developer submits its executed Class Year Study Agreement (30 days after the agreement is tendered)
  - Project data needs to be validated, and if deficient, additional information/clarification is required from the Developer
  - Require Developer to submit project data on the earlier of the Class Year Start Date or 30 days after the Class Year Study Agreement is tendered



# C. Require Project Data Earlier in Class Year Process (continued)

#### **Benefits of this Proposal**

• Potential to shorten duration of Class Year Study

#### **Further Considerations**

- Whether this should extend to other required data (e.g., TO-specific data requirements beyond data required by pro forma Class Year Study agreement)
- Consequence to Developer that fails to provide required data (e.g., withdrawal from the queue or one of the Developer's two Class Year "strikes")



#### D. Revise & Clarify Regulatory Milestone Requirements

#### <u>Overview</u>

- Permit a project with a Renewable Energy Credit (REC) contract with NYSERDA to enter a Class Year
  - But only in lieu of deposit in lieu of regulatory milestone
  - Not satisfaction of the regulatory milestone itself
- Clarify application of regulatory milestone for offshore wind

#### **Benefits of this Proposal**

 Adds additional milestone for renewable projects and adds clarity to required regulatory milestone

#### E. Revise & Clarify Regulatory Milestone Requirements (continued)

#### For Further Consideration

- Whether, as an alternative, projects with NYSERDA contracts should be deemed to have satisfied the regulatory milestone requirement
  - Whether such projects have achieved a milestone in project development akin to a project with a permitting milestone



## Next Steps



**DRAFT – FOR DISCUSSION PURPOSES ONLY** 

© COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED.

## **Next Steps**

- Anticipated Schedule Going Forward
  - May/June
    - Vet initial proposals with TPAS
  - July September
    - Refine proposals, and develop and vet tariff language
  - Q4 2019
    - Stakeholder and Board approvals
    - FERC filing
  - FERC order prior to Class Year 2019 Notice of Additional SDU Studies



## Feedback?

#### Email feedback to: InterconnectionSupport@nyiso.com



**DRAFT – FOR DISCUSSION PURPOSES ONLY** 

© COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED.

# The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system

#### www.nyiso.com



