

NYISO's Standard Interconnection Procedures

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Topics of Discussion

- **Introduction to NYISO's Standard Interconnection Procedures (SIP)**
 - Key aspects of SIP
 - Process and Timeline
- **Pre-Application Process**
- **Submitting an Interconnection Request/CRIS-Only Request**
 - Application Window
 - Application Requirements
 - Submitting an IR Application through the Interconnection Projects Portal

Topics of Discussion (cont.)

- Customer Engagement Window
- Phase 1 Entry Decision Period (“Decision Period 1”)
- Phase 1 Study
- Phase 2 Entry Decision Period (“Decision Period 2”)
- Phase 2 Study
- Final Decision Period
- Study Deposits, Readiness Deposits and Withdrawal Penalties
- Post Phase 2 Study Requirements
- Additional Resources

Disclaimer

Highlighted text across the presentation are pending proposed Tariff revisions with the Federal Energy Regulatory Commission (the “Commission” or “FERC”). An updated version of this presentation will be posted on the NYISO website following the Commission’s determination on the proposed Tariff revisions.

Introduction to NYISO's Standard Interconnection Procedures

NYISO's Interconnection Process

- Purpose of NYISO's interconnection process: To evaluate the impacts of proposed generation, transmission, and load projects on the New York Transmission System or Distribution System (as applicable) and to identify and cost allocate attachment facilities and upgrades required to meet reliability requirements
 - Three types of Interconnection Requests analyzed by NYISO:
 - Generator and transmission additions intended to increase the amount of supply available to the grid,
 - Transmission Projects intended to provide consumers greater access to supply across the grid, and
 - Certain substantial load interconnections, such as manufacturing facilities, data centers, or other large loads that will add significant demand to the grid
- This presentation focuses on interconnection procedures for Generating Facilities and Cluster Study Transmission Projects subject to the Standard Interconnection Procedures outlined in [Attachment HH of the NYISO OATT](#)

Key Aspects of the NYISO's Standard Interconnection Procedure

- **Optional Pre-Application Process**, to provide Interconnection Customers an opportunity to obtain information on potential POIs prior to submission of their Interconnection Requests
- **Submission requirements**, such as Study Deposits, Readiness Deposits, technical data, and Site Control requirements, and strict deadlines to cure deficiencies within the Application Window
- **Customer Engagement Window** that includes a Physical Infeasibility Screening to identify Physically Infeasible Projects
- **A two-phase Cluster Study** that incorporates SRIS-type analyses and Class Year analyses (including POI upgrades)

Key Aspects of Standard Interconnection Procedure (cont.)

- Decision periods within the Cluster Study Process that include Readiness Deposits and Withdrawal Penalties, along with a mechanism for distributing any collected Withdrawal Penalty Funds
- Limited Project modifications during the Cluster Study Process and provision of additional mechanisms for requesting extensions to a Project's Commercial Operation Date
- Penalty framework for study delays in the performance of the Cluster Study or an Affected System Study
- Increased financial commitments, including Study Deposits and Readiness Deposits
- Inclusion of Small Generating Facilities into the SIP
- Affected System requirements

Types of Interconnection Service

- **Two types of interconnection service may be requested under the Standard Interconnection Procedures:**
 - **Energy Resource Interconnection Service (ERIS) :** Basic interconnection service allowing an Interconnection Customer to interconnect its Generating Facility or Cluster Study Transmission Project to the New York State Transmission System or Distribution System in accordance with NYISO Minimum Interconnection Standard
 - **Allows for Energy market participation to enable wholesale grid to receive electric energy from the resource**
 - **Capacity Resource Interconnection Service (CRIS):** Service provided by NYISO to Interconnection Customers that satisfy the NYISO Deliverability Interconnection Standard or are otherwise eligible to receive CRIS
 - **CRIS is one of the eligibility requirements allowing an Interconnection Customer to participate as an Installed Capacity Supplier**

[OATT 40 ATT HH, Section 40.5.6](#)

Entities Involved in NYISO's Standard Interconnection Procedures

- **Interconnection Customer (IC)**
 - Entity that submits an Interconnection Request or CRIS-Only Request that is subject to the application of the Standard Interconnection Procedures as set forth in Section 40.2.3 of this Attachment HH
- **Connecting Transmission Owner (CTO)**
 - TO that owns, leases or otherwise possesses interest in a portion of NYS Transmission System or Distribution System at the POI of the interconnecting facility; is a party to the Standard Interconnection Agreement
- **Affected Systems**
 - **Affected TO (ATO):** TO other than the CTO that owns, leases or otherwise possesses interest in a portion of the NYS Transmission System where System Deliverability Upgrades, System Upgrade Facilities, Affected Network Upgrade Facilities, or Network Upgrade Facilities are or will be installed; may be party to the Standard Interconnection Agreement
 - **Affected System Operators:** Entity that operates an electric system within the New York Control Area other than the transmission system owned, controlled or operated by the Connecting Transmission Owner that may be affected by the proposed interconnection (includes ATO but can include non-TOs)
 - **External Affected System Operator:** Entity that operates an electric system outside of the New York Control Area that may be affected by the proposed interconnection (e.g., PJM or ISO-NE)
- **NYISO**

Roles of the Entities Involved in the Interconnection Process

Interconnection Customer (IC)

- Submits an Interconnection Request or CRIS-Only Request during the Application Window
- Provides technical data and ensures all application requirements for the request are met during the Application Window and throughout the Cluster Study Process
- Is financially responsible for the Study Costs, Readiness Deposits, and Security associated with the Cluster Study Process and required upgrades
- Participates in studies and discussions with the NYISO and/or the TO(s)/ASO
- Works with the NYISO and the TO(s)/ASO to develop and execute the Interconnection Agreement and any construction agreements
- Main entity involved in construction of its owned interconnection facilities

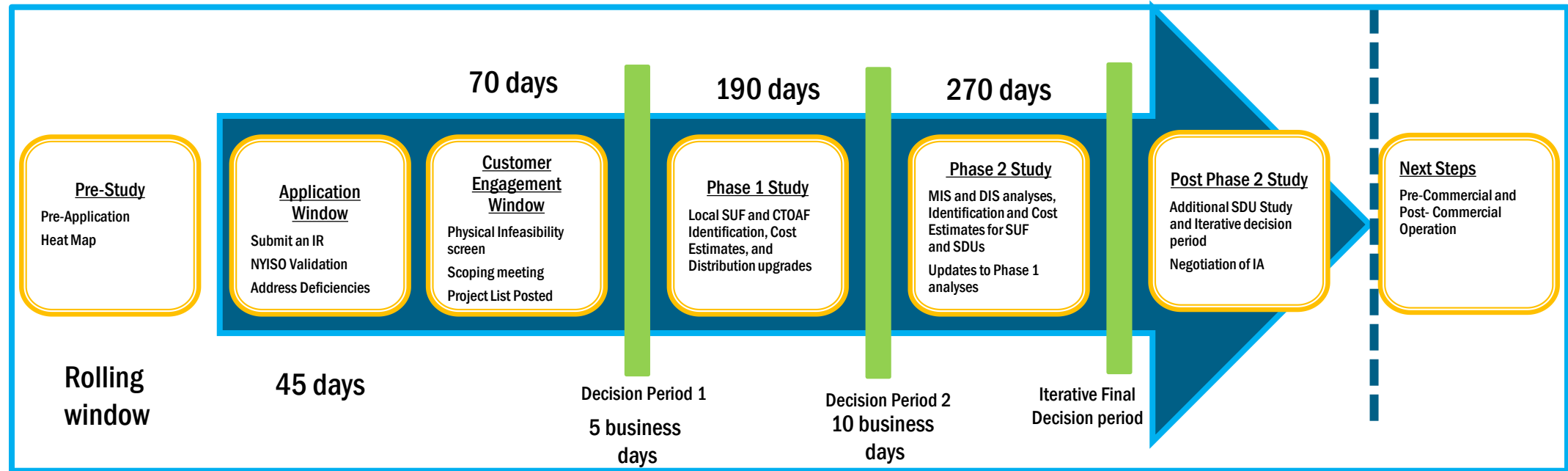
NYISO

- Coordinates the interconnection process
- Conducts and coordinates the Cluster Study, coordinates the stakeholder process (Operating Committees and working groups)
- Works with the IC and TO(s) to develop and execute the Interconnection Agreement and any construction agreements
- Files the agreements with FERC if required

Transmission Owner (TO)/Affected System Operators (ASO)

- Participates in Cluster Study to assist in and/or perform Cluster Study analyses and to ensure proposed projects meet all Applicable Reliability Requirements
- Involved in construction of the interconnection facilities
- Works with the IC and NYISO to develop the Interconnection Agreement and/or construction agreements, as applicable

Timeline and Process – Stages of the NYISO’s Standard Interconnection Procedures and Transition Cluster

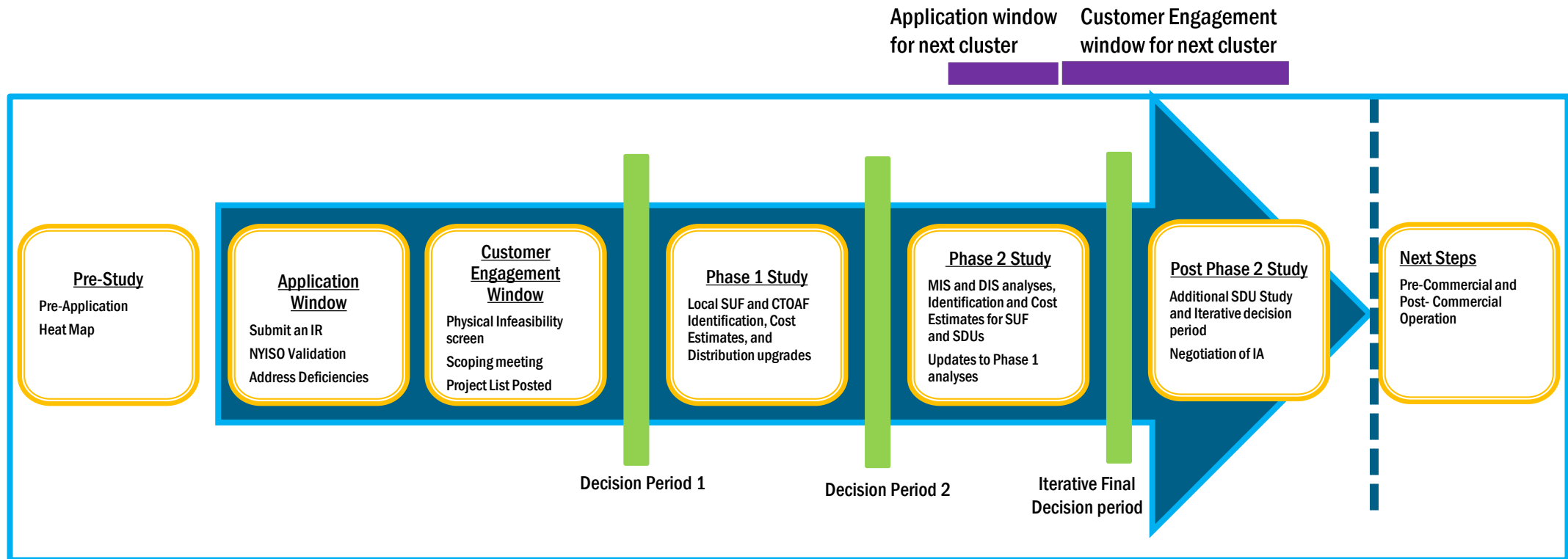


Total timeline: 590 days (1.6 years)

Application Window for Cluster Study 2026 will open on July 31, 2026

Sequencing of Cluster Studies

- Clusters could begin approximately every 18 months with slight overlap
- Overlap will not cause rework or inefficiencies
- The following cluster's Application Window will overlap with the present cluster's Phase 2 Study



Pre-Application Process

Pre-Application Process

- The Pre-Application process is an optional process available to all prospective Interconnection Customers subject to Attachment HH
- Provides greater information access to potential Interconnection Customer before submitting an Interconnection Request
- Pre-Application Requests can be submitted on a rolling basis at any time except during the timeframe just before and through the Application Window:
 - No pre-application requests may be submitted 45-calendar days before a Cluster Application Window begins through the end of the Application Window (90 days)
 - This pause will enable the NYISO/NYTOs to focus on completing pending Pre-Application Requests and timely validating Interconnection Requests in the Application Window
- Any requester (whether in the interconnection queue or not) can submit a request using the Pre-Application Request form on the NYISO Interconnection Projects Portal
 - **(pending proposed Tariff revisions with FERC) Maximum of 1 POI per Pre-Application Request**
 - Maximum of 2 POIs per Pre-Application Request
 - \$5,000 per Point of Interconnection
 - 25% allocated to NYISO
 - 75% allocated to Connecting TO

OATT 40 ATT HH, Section 40.4.2

Pre-Application Request Form : OATT 40 ATT HH, Appendix 2

Pre-Application Process (cont.)

- **NYISO will route the Pre-Application Request to the applicable Connecting Transmission Owner**
 - Upon the Transmission Owner confirmation that it is the Connecting Transmission Owner, it will proceed to a scoping meeting
 - Connecting Transmission Owner will complete the Pre-Application Report within 25 Business Days after the Pre-Application scoping meeting
- **Information available in a Pre-Application Report (to the extent readily available data exists)**
 - POI line/substation name, ID, bus numbers and circuit IDs, voltage, ratings (normal, LTE and STE), terminal end stations
 - For sub-transmission and distribution POIs, circuit loading, peak and minimum load, existing generation MW and proposed generation MW
 - Additional Information (*e.g.*, description of potential new substation bus configuration (not a conceptual one-line diagram), transmission constraints, planned transmission upgrades, parallel lines, breaker rating, available breaker positions, existing/known constraints known physical feasibility issues)

Submitting an Interconnection Request or a CRIS-Only Request

Submitting an Interconnection Request or a CRIS-Only Request - Application Window

- Interconnection Requests (and CRIS-Only requests) can be entered any time during the 45-day Application Window through the Interconnection Projects Portal
- Single POI per Interconnection Request unless:
 - Project is a Cluster Study Transmission Project
 - Project is a Generating Facility interconnecting via two or more gen tie lines in the same Capacity Region
- Projects that are alternatives cannot be evaluated in the same Cluster Study
 - Uprate Projects must be selected as “A material modification to a proposed or existing facility” when submitting the IR under Project Type field
- CRIS-Only projects must submit a CRIS-Only Request during the Application Window

IR Application Requirements

Interconnection Request Requirements

- Non-refundable Application Fee \$10,000 (cash only) for an Interconnection Request : 75% allocated to NYISO and 25% to Connecting TO(s)
 - Study Deposit (Cash, Letter of Credit and/or Surety Bond) for an Interconnection Request:

Size of proposed Generating Facility associated with Interconnection Request	Amount of Deposit
< 80 MW	\$100,000
≥ 80 MW < 200 MW	\$150,000
≥ 200 MW	\$250,000

- Non-refundable Application Fee \$5,000 (cash only) for a CRIS-Only Request
 - Study Deposit for a CRIS-Only Request is \$50,000
- Completed Interconnection Request via NYISO Interconnection Projects Portal

OATT 40 ATT HH, Section 40.5.5

Interconnection Request Requirements (cont.)

- Conceptual one-line diagram that includes:
 - The Project name, and the Interconnection Customer name on the diagram
 - The Facility address (specific location – coordinates or closest street address)
 - The number of inverters or generator units (type, nameplate rating MW and MVA), and configuration of the Facility
 - The Facility's electrical components (*i.e.*, generation, transformers (GSU, PSU, current transformer, and potential transformers), breakers, switches, cables/lines/feeders, compensation, FACTs, auxiliary load, buses, etc. as described in the modeling data form
 - (Pending proposed Tariff revisions with FERC) The Facility's electrical characteristics such as nameplate ratings, impedances, winding configurations, line lengths, equipment ratings etc.
 - The capability and voltage levels of the electrical components, their connection to each other and to the New York State Transmission System or Distribution System
 - The Point of Interconnection (name of the substation name (specify the bus) or transmission/distribution line name and number along with voltage level)
 - References to other diagram sheets if there is more than one diagram sheet (*i.e.*, use references to indicate how the diagrams are interconnected)
 - Acronyms used in the conceptual breaker one-line diagram should follow ANSI Standard Device Numbers & Common Acronyms

Interconnection Request Requirements (cont.)

- Completed Interconnection Request must also include a project layout that shows general project layout and location of project in relation to proposed POI, including specific POI
 - Must indicate voltage level, address, coordinates, location in relation to Facility
 - Interconnection Customer does not need to specify breaker position in a substation
- Workable individual project models (*e.g.*, short circuit, steady-state, and stability)
 - (Pending proposed Tariff revisions with FERC) To the extent modeling data is inconsistent with information in the validated Interconnection Request (including the one-line diagram), the data in the Interconnection Request will be considered the data of record
- Attestations (for Generating Facilities greater than 20 MW) required by the final, approved NYSRC Reliability Rule B.5 (currently RR 151) establishing minimum interconnection standards for Inverter Based Resource (IBR) Generating Facilities based on IEEE Standard 2800-2022
- Demonstration of Site Control

Interconnection Request Request - Required Modeling Data for Generating Facilities Joining Cluster Study

- Required modeling types and applicable data formats for all projects joining the Cluster Study:
 - Steady State (aka power-flow) modeling data – a PSS/e in either .RAW or .SAV format and .IDEV format
 - The Specific PSS/e version is specified in the latest version of the Modeling Guideline for NYISO Interconnection Data
 - Short circuit modeling data – Aspen in .OLR format and .CHF format
 - The Specific Aspen version is specified in the latest version of the Modeling Guideline for NYISO Interconnection Data
 - Dynamics (aka stability) modeling data – a PSS/e DYR format
 - The Specific PSS/e version is specified in the latest version of the Modeling Guideline for NYISO Interconnection Data
 - For use in the Cluster Study, all projects must provide a workable standard library model
 - A completed copy of the "NYISO Modeling Data Summary for Interconnection Projects"
- The models must adhere to the guidelines provided in the ["NYISO Modeling Guideline for Interconnection Projects"](#) document
- The models must pass the usability test laid out in the ["NYISO Dynamic Models Usability Test Methodology for Interconnection Projects"](#) document

Interconnection Request Requirements- Required Modeling Data for Generating Facility Joining Cluster Study (cont.)

- To the extent possible, a Generating Facility will be modeled using an equivalent representation with same type devices combined to represent the aggregate units in each collection network
- A Generating Facility comprised of more than a single inverter (e.g., battery, flywheel, solar, wind) and other similar technology should have similar equivalent model representation
- The equivalent representation should include:
 - Equivalent generator step-up transformer,
 - Collector system equivalent,
 - Station transformer, and
 - Interconnection generator lead
- Reactive compensation and power factor correcting devices should also be included, as appropriate

Interconnection Request Requirements – Site Control

- **Demonstration of full Site Control for Facility (Generating Facility or Cluster Study Transmission Project) with Interconnection Request**
 - Site Control must cover a period of at least 10 years from date of the submission of the IR
 - Interconnection Customer must promptly inform the NYISO of any material change to Site Control
 - If no longer sufficient, the project is subject to withdrawal
 - Interconnection Customer must re-confirm full Site Control before execution of the Standard Interconnection Agreement
 - Interconnection Customer is not required to demonstrate Site Control for generator tie line or POI facilities

OATT 40 ATT HH, Section 40.5.5.1.5

Technical Bulletin: Site Control in the Interconnection Cluster Study Process

Interconnection Request Requirements– Site Control

■ Definition of Site Control:

- The necessary land right sufficient to develop, construct, operate, and maintain the Facility over a term of at least ten (10) years from the date of the submission of the Interconnection Request
- Site Control may be demonstrated by documentation establishing:
 - Ownership of, a leasehold interest in, or a right to develop a site of sufficient size to construct and operate the Facility;
 - Option to purchase or acquire a leasehold site of sufficient size to construct and operate the Facility; or
 - Other documentation that clearly demonstrates the right of Interconnection Customer to occupy a site of sufficient size to construct and operate the Facility
- The term “necessary land right” restricts the use of the site for mutually exclusive projects, but does not restrict multi-use applications of the site in addition to its use for the Facility, such as agriculture, ranching, etc.

OATT 40 ATT HH, Section 40.5.5.1.5

Technical Bulletin: Site Control in the Interconnection Cluster Study Process

Interconnection Request Requirements– Site Control

- All Interconnection Customers must demonstrate full Site Control at the time of their Interconnection Request and submit the following:
 - Legally binding instrument that demonstrates Interconnection Customer has the rights to develop specific fuel source and clearly sets forth the acreage to accommodate the Facility,
 - **“Accepted Site Control Document Types”**
 - A legally binding instrument, fully executed, that demonstrates the following:
 - » The Interconnection Customer has the right to develop specific fuel source
 - » Statement of exclusivity
 - » Permission to use the site
 - » Clearly identifies acreage of parcel
 - » Term of at least 10 years from the date of submission of the Interconnection Request
 - A signed attestation from an officer of the company; and
 - A detailed site plan and equipment layout detailing the conceptual design of the proposed facility

Interconnection Request Requirements– Site Control

- **Accepted Site Control document types:**
 - Title, Deed, or Tax Bill
 - Lease Agreement (includes BOEM lease for offshore wind projects)
 - Option to Lease or Option to Purchase (underlying lease term combined with the option term must add up to at least 10 years)
 - Easement/Option for Easement
 - Right of Way
- **If document is not from the NYISO's accepted list, language in the document must demonstrate Interconnection Customer has the rights described on previous slide**

Interconnection Request Requirements– Site Control

■ Attestation

- The Interconnection Customer must submit one of two attestation forms with their Interconnection Request, depending on if their project meets the NYISO’s technology-specific acreage requirements
 - Both Attestation Forms are attached to the Site Control Technical Bulletin
- Projects that Meet NYISO’s Technology-specific Acreage Requirements
 - The Interconnection Customer must select the attestation that notes “Use this form for projects that meet the Site Control minimum acreage requirements as set forth in ISO Procedures”
 - On this attestation, the Interconnection Customer must indicate:
 - 1) Amount of acreage covered by the provided Site Control materials;
 - 2) Project meets the Site Control requirements set forth in NYISO OATT and ISO Procedures (*i.e.*, NYISO manuals and technical bulletins); and
 - 3) Acreage provided in the attestation that covers the Site Control for the Project is consistent with the acreage and other Site Control parameters for the Project’s technology type set forth in ISO Procedures

Interconnection Request Requirements– Site Control

■ Attestation (cont.)

- Projects that Do Not Meet the Minimum Acreage or are Technologies Not Specified in NYISO’s Minimum Acreage Requirements (this includes Cluster Study Transmission Projects)
 - Interconnection Customer must select the attestation that notes “Use this form for projects that do not meet the minimum acreage requirements, or the project is a technology type with acreage not specified in ISO Procedures”
 - Interconnection Customer must provide a detailed narrative that explains:
 - 1) Special circumstances of the Project which permits a different acreage amount for Site Control than the requirements in the ISO procedures; or
 - 2) Description of the Project’s technology type and how the land can accommodate the Project and meet Site Control requirements
 - Additionally, Interconnection Customer must submit, with the Attestation, a Site plan and equipment layout (including any known limitations on the site - wetlands, unusable land, spacing, setbacks, etc.) signed and stamped by a licensed electrical or civil professional engineer (PE)

Interconnection Request Requirements– Site Control

- **Site Plan and equipment layout should include the following details:**
 - Project Boundaries
 - Boundaries of Parcel(s) and/or total lease area
 - POI
 - Proposed Tie-Line and Collector Routes
 - Interconnection Customer’s Attachment Facilities
 - Any known site limitations such as wetlands, unusable land, spacing, setbacks, etc. for the purposes of determining any restrictions to the amount of acreage available for the project
- **Specific site plan requirements for certain technologies:**
 - Energy Storage projects – indicate whether it is an indoor or outdoor facility
 - Solar projects - include the calculation of the percentage of land available for all equipment/facilities and the direct area occupied by the PV arrays
 - Offshore wind projects - include wind turbine layouts and spacing of rotor diameter, shipping lanes, marine cables, and no surface occupancy (portions of bight not suitable for construction)

Interconnection Request Requirements– Site Control

■ Cluster Study Transmission Projects

- An Interconnection Customer must demonstrate Site Control for only the portion of the Facility and accompanying equipment that is located on land, such as the converter station(s)
- An Interconnection Customer must provide documentation that meets the criteria described in the “Accepted Site Control Document Types” section of the Site Control Technical Bulletin
- Site Control is not required for the transmission line itself, its path, or the right of way
- An Interconnection Customer must provide the following for all types of Cluster Study Transmission Projects:
 1. **Attestation which provides a detailed narrative explaining how the site can accommodate the land-based portions of the transmission project; and**
 2. **Site Plan and equipment layout**
 - Details dependent upon the type of transmission project, for the land-based portions of the transmission project, signed and stamped by a licensed professional engineer
 - For all types of transmission projects, the site plan should include any known limitations on the site such as wetlands, unusable land, spacing, setbacks, etc., and other technology-specific requirements

Interconnection Request Requirements– Site Control

- **Site Plan for Cluster Study Transmission Projects**
 - Specific site plan requirements for Cluster Study Transmission Projects should include the following:
 - **HVDC Cluster Study Transmission Project:** Provide a site plan and footprint of converter stations at each end of the transmission line
 - **Other Cluster Study Transmission Projects:** Provide a detailed description of the transmission project including site plan and footprint of any land-based portions of the project other than the transmission path

Interconnection Request Requirements – Site Control

- **Technology-specific Acreage Requirements**

- Interconnection Customer must demonstrate that the acreage covered by the Site Control materials can reasonably accommodate the development of the proposed Facility, and is consistent with the acreage and other parameters for the Facility’s technology type set forth in the Table below

Technology Type	Acres/MW
Solar	2.8 acres/MWdc for fixed tilt PV plants 4.2 acres/MWdc for tracking plants
Wind (Land Based)	15 acres/MWac
Offshore Wind	50 acres/MWac
Battery Energy Storage	0.01 acre/MWhac

Interconnection Request Requirements– Site Control

- **The party's name listed on the documentation to demonstrate site control should match the name of the Interconnection Customer on the Interconnection Request form or revised Interconnection Request form, if approved by the NYISO**
 - In situations where the name differs, the Interconnection Customer is responsible for providing additional documentation explaining the corporate relationship such as an SEC filing, a document on file with the applicable secretary of state, other official corporate document, or a purchase sale agreement
- **If the same Site Control is being used for facilities under different Interconnection Requests:**
 - Interconnection Customers must also explain how all proposed facilities will be situated within the area (mutually exclusive alternatives are not permitted)
- **Interconnection Customer cannot submit duplicate land rights for multiple Interconnection Requests, unless the site is large enough to host multiple Facilities**
- **For multi-unit Facilities on the same site and behind the same Point of Interconnection:**
 - Interconnection Customer must demonstrate via one of the "Accepted Site Control Document Types" shared land use for all co-located Facilities that meet the Site Control definition

Interconnection Request Requirements– Site Control

- An Interconnection Customer may submit a Site Control Deposit in lieu of Site Control at the time of their Interconnection Request submission
 - If they have a demonstrated Regulatory Limitation, from a federal, state, local, or Tribal law other than permitting or siting requirements, which makes it infeasible to obtain site control prior to submission of its Interconnection Request
 - For example, a Regulatory Limitation could be a federal, state, local and/or Tribal law that requires a validated NYISO Interconnection Request before an Interconnection Customer may obtain necessary land rights to demonstrate Site Control
- To demonstrate a Regulatory Limitation, Interconnection Customer must submit:
 - 1) Signed affidavit from an officer of the company indicating that Site Control is unobtainable due to Regulatory Limitations as the term is defined by the NYISO; and
 - 2) Documentation sufficiently describing and explaining the source and effects of such Regulatory Limitations, including a description of any condition that must be met to satisfy the Regulatory Limitations and the anticipated time by which the Interconnection Customer expects to satisfy the regulatory restrictions

Interconnection Request Requirements– Site Control

- **Site Control Deposit for an Interconnection Customer with a demonstrated Regulatory Limitation**
 - \$10,000 per MW, subject to a floor of \$500,000 and a ceiling of \$2 million, as established in Order No. 2023
 - Deposit must be submitted at the same time as submission of the Interconnection Request
 - Deposit will be held by the NYISO until the Interconnection Customer can demonstrate full Site Control prior to entering the Cluster Study Phase 2 Study, unless Interconnection Customer provides documentation that demonstrates they are taking identifiable steps to secure the necessary regulatory approvals
 - The deposit is refundable but cannot be applied toward study costs in the Cluster Study Process or Withdrawal Penalties
- **Such Interconnection Customer must demonstrate full Site Control within 180 calendar days of the effective date of the Standard Interconnection Agreement**

Contingent Cluster Study Projects

- Interconnection Customer may submit an Interconnection Request for an active Cluster Study Project as a Contingent Project during the Application Window for the next Cluster Study
- This enables the Project to enter the next Cluster Study with its own, new Queue Position if it does not accept its Project Cost Allocation in the Transition Cluster Study Final Decision Period
 - Such Projects must satisfy the same application requirements during the Application Window as all other projects including but not limited to, satisfying the non-refundable Application Fee, Study Deposit, and Site Control requirements
 - (Pending proposed Tariff revisions with FERC) Re-submission of technical and modeling data for the Contingent Project's IR is NOT required
 - Must be the same Project as the Pending Project in the ongoing Cluster Study
- If the Interconnection Customer of a Contingent Project accepts its Project Cost Allocation in the Final Decision Period in the ongoing Cluster Study, then it will be removed from the next Cluster Study without a Withdrawal Penalty

Interconnection Request Validation

- NYISO will validate Interconnection Requests submitted within the Application Window on a rolling basis
- Within 10 Business Days of receipt of Interconnection Request
 - NYISO reviews Interconnection Request to identify the Connecting TO and Affected TOs
 - NYISO notifies Connecting TO and Affected TOs via Interconnection Portal
 - Connecting TO confirms (via portal) it is the Connecting TO and confirms Affected TOs
 - NYISO confirms receipt of payment of Application Fee and Study Deposit
 - NYISO performs review of the requested Point of Interconnection and technical review of data and equipment
 - NYISO acknowledges receipt of the facility model
 - NYISO notifies Interconnection Customer that Interconnection Request is valid or identify deficiencies

OATT 40 ATT HH, Section 40.5.7

Interconnection Request - Deficiencies

- **An Interconnection Customer must cure Interconnection Request deficiencies within 10 Business Days of its receipt of a deficiency notice from the NYISO, but no later than the end of the Application Window, via the NYISO Interconnection Projects Portal**
 - Interconnection Requests submitted with less than 10 Business Days prior to the end of the Application Window may not have the opportunity to cure deficiencies as NYISO is afforded 10 Business Days to validate Interconnection Requests
- **Interconnection Customers can continue to cure deficiencies throughout the duration of the Application Window if there is a deficiency that the Interconnection Customer has not yet responded to**
- **NYISO will identify deficiencies in its first review of the application, and Interconnection Customer must address all identified deficiencies in their response**
 - Only one response is allowed via the portal for each deficiency, once a response is submitted no further information can be submitted to address the identified deficiency(ies)
- **The Interconnection Customer must also satisfy the requirements for submitting and addressing deficiencies for the Facility model and any TO-specific technical information**

OATT 40 ATT HH, Section 40.5.7.2

Interconnection Request – IC Deficiency Response

- NYISO will review the submitted information to cure the identified deficiencies within 10 Business Days and notify the Interconnection Customer of any remaining deficiencies
- This review and cure process will continue until the close of the Application Window
 - Interconnection Customer may have more than one cure opportunity, depending on the timing within the Application Window
- NYISO will continue its validation process into the start of the Customer Engagement Window for applications submitted late in the Application Window
- Projects submitted with 10 Business Days or less left in the Application Window may not have an opportunity to cure any deficiencies
- Interconnection Customers must satisfy subsequent requests for additional information needed to address incomplete data, errors, or additional information required for the NYISO's or Transmission Owners' performance of their responsibilities in Attachment HH within 10 Business Days

Subsequent Information Request and TO Specific Data

Subsequent Information Requests

- If NYISO, CTO or ATO finds technical data including models is incomplete, contains errors, or requires further information after the IR validation, the party will send a Subsequent Information Request
 - The Interconnection Customer will have 10 Business days to submit the information, but no later than the Scoping Meeting in the Customer Engagement Window

Additional Information Requests for TO-specific Technical Information

- After IR validation, the CTO or ATO may request technical information from the Interconnection Customer for purposes of CTO's and/or ATO's performance of the Phase 1 Study that the Interconnection Customer has not already provided as part of its Interconnection Request
 - The Interconnection Customer will have 10 Business days from receipt of CTO's/ATO's request to submit the requested information to the CTO/ATO, but no later than the Scoping Meeting in the Customer Engagement Window

Customer Engagement Window

Customer Engagement Window

- Commences immediately after completion of the Application Window
- Customer Engagement Window will be a 70-Calendar Day period
- NYISO will publish the list of the projects in the cluster with associated priority
 - List is publicly posted within 10 Business Days after commencement of the Customer Engagement Window
 - Priority within the Cluster is assigned based on Interconnection Request submission date/time in Application Window
 - Project may withdraw without penalty within 5 Business Days after publication of list
- Physical Infeasibility Screen
 - Performed by the Connecting TO and Affected TOs

Customer Engagement Window

- Physical Infeasibility Screening

- A Project deemed Physically Infeasible will not be permitted to proceed to the next Cluster Study phase
 - If Physical Infeasibility is identified in Customer Engagement Window's Physical Infeasibility Screening, the Project will be withdrawn
 - (pending Tariff revisions with FERC) However, the Interconnection Customer may conditionally request entry in the Phase 1 Study if the Project is the next Queue Position in priority for the POI where there is only one Interconnection Request holding a Queue Position with a higher designated priority that passed the Physical Infeasibility Screening
 - If Physical Infeasibility is identified in the Phase 1 Study, the Project cannot proceed to the Phase 2 Study
 - If Physical Infeasibility is identified in the Phase 2 Study, the Project cannot proceed to the Final Decision Period phase at the conclusion of the Phase 2 Study

Customer Engagement Window

- Physical Infeasibility Screening

- A Project may be deemed Physically Infeasible if:
 - 1) The substation for the selected Point of Interconnection (POI) does not have any available bus positions and
 - a) is not expandable electrically or within the existing substation footprint, or
 - b) adjacent usable vacant land is not available, or
 - c) Proposals by Interconnection Customer are inconsistent with Good Utility Practice or Applicable Reliability Standards; or
 - 2) A viable tie line cable route cannot be established from either the Point of Change of Ownership to the Point of Interconnection or, where those points are the same, a viable route within or from the fence line; or
 - 3) The project capacity exceeds the ratings of equipment at the substation selected for the POI, and replacement equipment that would be adequately rated for the project capacity is not commercially available from an approved supplier and within applicable specifications set by the Transmission Owner, and an alternative upgrade is not physically feasible (e.g., higher voltage POI substation)

Customer Engagement Window

- Physical Infeasibility Screening

NYISO proposed revisions to clarify the Physical Infeasibility definition which are currently pending with FERC. Those changes to the definition are highlighted below

- A Project may be deemed Physically Infeasible if:
 - 1) The substation for the selected Point of Interconnection (POI) does not have any available bus positions and
 - a) is not expandable electrically or within the existing substation footprint, **and**
 - b) **the Transmission Owner has determined that** adjacent usable vacant land is not available, or
 - 2) Proposals by Interconnection Customer are inconsistent with Good Utility Practice or Applicable Reliability Standards; or
 - 3) A viable tie line cable route cannot be established from either the Point of Change of Ownership to the Point of Interconnection or, where those points are the same, a viable route within or from the fence line; or
 - 4) The project capacity exceeds the ratings of equipment at the substation selected for the POI, and replacement equipment that would be adequately rated for the project capacity is not commercially available from an approved supplier and within applicable specifications set by the Transmission Owner, and an alternative upgrade is not physically feasible (e.g., higher voltage POI substation); **or**
 - 5) **An Attachment Facility, System Upgrade Facility or Distribution Upgrade required for the Project to reliably interconnect is Physically Infeasible**

Customer Engagement Window – Scoping Meeting

- NYISO coordinates a clustered Scoping Meeting for all projects in the Cluster Study
 - Discuss the study scope, schedule, and work plan
 - Discuss results of the Physical Infeasibility screen
 - Alert Interconnection Customers to potential Physical Infeasibility issues
- Scoping meeting NDA must be executed prior to the scoping meeting

Decision Period 1

- Starts on first Business Day after end of Customer Engagement Window and extends for a 5-Business Day period
- A Cluster Study Project/CRIS only Project will be included in the Phase 1 Study if, during the Decision Period 1, the Interconnection Customer for the Cluster Study Project:
 - Notifies the NYISO of its election for its Cluster Study Project to proceed to the Phase 1 Study via the NYISO Interconnection Projects Portal – Failure to notify the NYISO of its election by the deadline will be deemed as the Project elects not to proceed to the Phase 1 Study and the Project will be withdrawn from the Queue;
 - Submits to the NYISO an updated proposed Initial Backfeed Date, an updated proposed Synchronization Date, and an updated proposed Commercial Operation Date; and
 - Provides the NYISO with the Readiness Deposit 1 for its Cluster Study Project, not applicable to CRIS only Projects
- The Readiness Deposit 1 is \$4,000/MW (not applicable for CRIS-Only Projects)
- If a Project withdraws during the Customer Engagement Window or at the Decision Period 1, or if NYISO withdraws the Project due to non-satisfaction of requirements during this time
 - Withdrawal Penalty 1 – Interconnection Customer forfeits 25% of the Study Deposit
 - Not applicable to Projects withdrawn due to Physical Infeasibility or withdrawal of a Contingent Project

OATT 40 ATT HH, Section 40.7.5

Project Modifications – Limited POI Change

- **Modifications during Cluster Study Process only permitted in limited instances**
 - Interconnection Customers may propose a POI modification (not modifications to electrical parameters) within 5 Business Days after the NYISO posts the Cluster list in the Customer Engagement Window
 - Contingent Projects may not change their POI during this time period
 - If a Contingent Project has withdrawn from its ongoing study or that study is completed prior to this 5 BD period, such project may propose a POI modification during this period
 - The request must contain no deficiencies for such change to be approved, if a request contains deficiencies the request will be denied and the Project will retain the original POI
 - For approved changes to POI, a new Queue number will be provided based on the time/date of the request for change in POI, to reflect the updated drop in priority

Modifications – Technological Change

- **A technological change may be requested during the Customer Engagement Window**
 - Must be complete and deficiency free:
 - Appendix 5
 - Study Deposit
 - Models, including all that were included in IR submission following the Modeling Guidelines
 - Conceptual one-line diagram
 - Project layout diagram
 - Meet site control acreage requirements, as no changes to site control can be made
 - Must be submitted to the NYISO no later than 10 Business Days prior to the close of the Customer Engagement Window
- **Interconnection Customers cannot make other modifications within Cluster Study Process**
 - They can propose such modifications for NYISO materiality review following the later of the Final Decision Period or Additional SDU Study Decision Period in which the Cluster Study Project is participating
 - Interconnection Customer may withdraw from the Application Window and resubmit a modified project during that Application Window or in a subsequent Cluster Study Application Window, subject to the timing and submission requirements for a new Interconnection Request

Phase 1 Study

Phase 1 Study

- **Phase 1 Study :Comparable to Class Year Part 1 Study**
 - Commences first business day after 5-Business Day Decision Period 1
 - Runs for 190 days
 - Concludes with NYISO's Operating Committee approval of Phase 1 Cost Estimates Summary Report
- **Design and engineering studies performed by Connecting Transmission Owners and Affected Transmission Owners to identify requirements to reliably interconnect the Cluster Study Project with the New York State Transmission System or Distribution System in accordance with Applicable Reliability requirements**
- **Will provide Interconnection Customers with Project Cost Estimates for:**
 - Local System Upgrade Facilities (SUFs),
 - CTO Attachment Facilities (CTOAFs), and
 - Distribution Upgrades
- **These cost estimates are subject to change in Phase 2 Study based on Project rejections in Decision Period 1**

OATT 40 ATT HH, Section 40.9, 40.10

Phase 1 Study (cont.)

- Phase 1 Study requirements and the NYISO's and CTO/ATOs' respective responsibilities concerning key Phase 1 Study process steps are included in Att. HH, Section 40.10
- To proceed to the Phase 2 Study (all Projects including CRIS only Projects), the Interconnection Customer must, in the Decision Period 2:
 - Elect to enter the Phase 2 Study via the NYISO Interconnection Projects Portal– Failure to notify the NYISO of its decision by the deadline will be deemed as electing to not enter Phase 2 and the Project will be withdrawn from the Queue; and
 - Satisfy the Readiness Deposit 2 requirements if applicable (not applicable to CRIS only)
- The Readiness Deposit 2 is calculated as the greater of (i) the Readiness Deposit 1, and (ii) 20% of the cost estimate determined in the Phase 1 Study
 - To satisfy this requirement, Interconnection Customer must provide to the NYISO the incremental difference, if any, between the Readiness Deposit 1 amount that it previously submitted to enter the Phase 1 Study and the Readiness Deposit 2 amount
- A Cluster Study Project that withdraws from the Queue or has been withdrawn by the NYISO for not fulfilling requirements may be subject to a Withdrawal Penalty
 - 50% of the Study Deposit and 10% of the Readiness Deposit 1, except if withdrawal is due to Physical Infeasibility

Phase 2 Study

Phase 2 Study

- **Phase 2 Study: Comparable to Class Year Part 2 Study**
 - Commences first business day after 10-Business Day Decision Period 2
 - Runs for 270 days
 - Concludes with NYISO's Operating Committee approval of Cluster Study Report
- **A revisit to the Phase 1 Study will be completed if a Project's withdrawal impacts the completed Phase 1 Study for an active Project**
- **NYISO will identify the System Upgrade Facilities, System Deliverability Upgrades and Distribution Upgrades required for:**
 - Reliable interconnection of Cluster Study Projects to the New York State Transmission System or to the Distribution System in compliance with the NYISO Minimum Interconnection Standard and,
 - For Cluster Study Projects requesting CRIS, any System Deliverability Upgrades for their requested CRIS in compliance with the NYISO Deliverability Interconnection Standard
- **As applicable, the Phase 2 Study will provide Interconnection Customers with Project cost estimate for:**
 - Non-Local System Upgrade Facilities (SUFs) and updated Local SUFs,
 - System Deliverability Upgrades (SDUs),
 - Updated Connecting Transmission Owner's Attachment Facilities, and
 - Updated Distribution Upgrades

Phase 2 Study (cont.)

- **The Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator will determine:**
 - Cost estimates for, and a preliminary schedule to construct the upgrade facilities, and
 - Updating, as needed, the identification of, and cost estimates of the upgrade facilities identified in the Phase 1 Study
- **Phase 2 Study requirements and the NYISO's, CTO's and ATO's respective responsibilities concerning key Phase 2 Study process steps are included in ATT. HH Section 40.11, 4.12 and 4.13**
- **Interconnection Customer must accept or reject its cost allocation(s) in the iterative Final Decision Period**

OATT 40 ATT HH, Section 40.11, 40.12, 40.13

Additional SDU Studies

- The NYISO will perform, if applicable, an Additional SDU Study as set forth in Section 40.14 of Attachment HH to the NYISO OATT
- Interconnection Customer may elect to pursue Additional SDU studies, based on NYISO's Notice of SDUs requiring additional studies
 - If the Cluster Study Deliverability Study identifies the need for a new System Deliverability Upgrade
- Interconnection Customer indicates one of multiple System Deliverability Upgrade alternatives identified by the NYISO
 - The option Interconnection Customer elects will be evaluated in the Additional SDU Study
- If the Additional SDU Study is not completed (including Security posting) by 10 BDs prior to the scheduled next Cluster Study Phase 1 Study start date, the Additional SDU Study will be terminated
- If the Interconnection Customer does not elect to pursue an Additional SDU Study for required System Deliverability Upgrades, or if the NYISO does not receive the Interconnection Customer's election by the deadline:
 - The Interconnection Customer may only accept or reject its Deliverable MW, if any, in the Cluster Study

Iterative Final Decision Period

- **At the conclusion of the Phase 2 Study, the NYISO will commence the Final Decision Period**
 - Each Interconnection Customer will elect through iterative decision rounds whether to accept its Project Cost Allocation via the NYISO Interconnection Projects Portal and pay cash or post Security to the applicable Transmission Owner for:
 - the Connecting Transmission Owner's Attachment Facilities,
 - Distribution Upgrades,
 - System Upgrade Facilities, and/or
 - System Deliverability Upgrades
- **An Interconnection Customer that accepts its Project Cost Allocation and pays cash or posts Security in the allocated amount for its Cluster Study Project will proceed to the negotiation process for a Standard Interconnection Agreement and any required construction agreements for that project**
 - Upon acceptance, Interconnection Customer must post with the applicable CTO/ATO 100% of costs estimate of SUFs, SDUs, and CTOAFs (and Distribution Upgrades as applicable) identified in the Cluster Study Report

OATT 40 ATT HH, Section 40.15

Iterative Final Decision Period (cont.)

- If an Interconnection Customer does not accept its Project Cost Allocation, or does not pay cash or post Security in the allocated amount for its Cluster Study Project
 - The Cluster Study Project will be withdrawn from the Queue and may be subject to a Withdrawal Penalty
 - Withdrawal Penalty 3 - If a Project withdraws during Phase 2 Study or at the Final Decision Period, it forfeits an amount equal to 100% of the Study Deposit and 20% of the Readiness Deposit 2 except if withdrawal is due to Physical Infeasibility
 - If there has a 50% cost increase between Phase 1 and Phase 2 (non-SDU) costs, it only forfeits an amount equal to 100% of its Study Deposit
 - Security Forfeiture - If a project accepts its project cost allocation and pays cash or posts Security, and later withdraws, it may forfeit up to 100% of this deposit if other projects are relying on the CTOAFs or upgrades
- An Interconnection Customer that accepts a CTOAF and SUF Project Cost Allocation and/or SDU Project Cost Allocation will not be provided with the option to accept Revised Project Cost Allocation following a Subsequent Decision Round Period
 - Unless the Revised Project Cost Allocation is:
 - An increase of greater than ten percent (10%) in the CTO and SUF Project Cost Allocation or the SDU Project Cost Allocation; or
 - (pending Tariff revisions with FERC) An increase of greater than ten percent (10%) in the CTO and SUF Project Cost Allocation or the SDU Project Cost Allocation is measured against the last Project Cost Allocation accepted by the Interconnection Customer
 - A decrease in the Interconnection Customer's Deliverable MW

Study Deposits, Readiness Deposits and Withdrawal Penalties

Study Deposits and Fees (cont.)

- The NYISO will invoice Interconnection Customer's actual study costs on a monthly basis
 - Failure to timely pay a monthly invoice will result in withdrawal of the project from the Queue
 - (pending Tariff revisions with FERC) Additionally, the Interconnection Customer will be assessed interest on any unpaid invoiced amounts calculated in accordance with section 35.19a(a)(2) of FERC's regulations
 - NYISO may use the Study Deposit to cover any invoiced but unpaid study costs
 - If a project withdraws prior to the start of the Customer Engagement Window, the Project is responsible for the NYISO's costs of processing its Interconnection Request/CRIS-Only Request
- Applicable Study Deposit and Readiness Deposit will remain in place for duration of the Cluster Study Process
 - Will be subject to Withdrawal Penalties
- At the completion of the Final Decision Period, if Interconnection Customer accepts its cost allocation and posts Security:
 - NYISO will refund the full amount of both the Study Deposit and Readiness Deposit (after final invoicing and payment of study costs)

Total Fees and Deposits

To submit an Interconnection Request	<p>\$10,000 non-refundable Application Fee for an Interconnection Request <u>plus</u> Study Deposit:</p> <table border="1"> <thead> <tr> <th>Size of Proposed facility Associated with Interconnection Request</th> <th>Amount of Deposit</th> </tr> </thead> <tbody> <tr> <td>< 80 MW</td> <td>\$100,000</td> </tr> <tr> <td>≥ 80 MW < 200 MW</td> <td>\$150,000</td> </tr> <tr> <td>≥ 200 MW</td> <td>\$250,000</td> </tr> </tbody> </table>	Size of Proposed facility Associated with Interconnection Request	Amount of Deposit	< 80 MW	\$100,000	≥ 80 MW < 200 MW	\$150,000	≥ 200 MW	\$250,000
Size of Proposed facility Associated with Interconnection Request	Amount of Deposit								
< 80 MW	\$100,000								
≥ 80 MW < 200 MW	\$150,000								
≥ 200 MW	\$250,000								
To submit CRIS Only Request	<p>\$5,000 non-refundable Application Fee for a CRIS-Only Request <u>plus</u> \$50,000 Study Deposit</p>								
To enter Phase 1 (Readiness Deposit 1)	<p>\$4,000/MW (not applicable for CRIS-Only projects)</p>								
To enter Phase 2 (Readiness Deposit 2)	<p>The greater of (i) Readiness Deposit 1, and (ii) 20% of cost estimate determined in the Phase 1 study (cost estimates include: Local SUF and CTOAF) (not applicable for CRIS-Only projects)</p>								
At conclusion of Final Decision Period (pay cash and/or post Security)	<p>100% of costs estimate of SUFs, SDUs, and CTOAFs identified in Cluster Study Report</p>								

Credit Instruments

- **Interconnection Customers may provide a Letter of Credit (“LOC”) or Surety Bond to cover all, or a portion of, certain deposits, including but not limited to:**
 - Study Deposit
 - Readiness Deposit 1
 - Readiness Deposit 2
 - Site Control Deposit
- **The Counterparty & Credit Risk Management Department has standard LOC and Surety Bond language that must be used when a bank or surety company issues a new LOC or Surety Bond to the NYISO**
- **The NYISO’s standard LOC and standard Surety Bond cannot be changed and must conform to one of the NYISO’s standard templates available on the NYISO Credit website:**
 - NYISO Standard Letter of Credit
 - NYISO Standard Letter of Credit - On Behalf Of
 - NYISO Standard Confirming Letter of Credit
 - NYISO Standard Surety Bond
 - NYISO Standard Surety Bond – For the Benefit Of

Credit Instruments

- **Specific requirements must be met for a financial institution to issue a LOC to the NYISO:**
 - A letter of credit must be issued or guaranteed by:
 - Approved U.S. or Canadian commercial bank, or
 - Approved U.S. or Canadian branch of a foreign bank
 - Issuer must have a minimum “A” rating from Standard & Poor’s, Fitch, Moody’s, or Dominion.
 - Any issuer that does not satisfy the minimum ratings requirement may have the letter of credit confirmed by another commercial bank or financial institution that meets the ratings requirement
- **Specific requirements must be met for a surety company to issue a Surety Bond to the NYISO:**
 - A Surety Bond must be issued by a U.S. Treasury-listed surety with a minimum "A" rating from A.M. Best

Credit Instruments

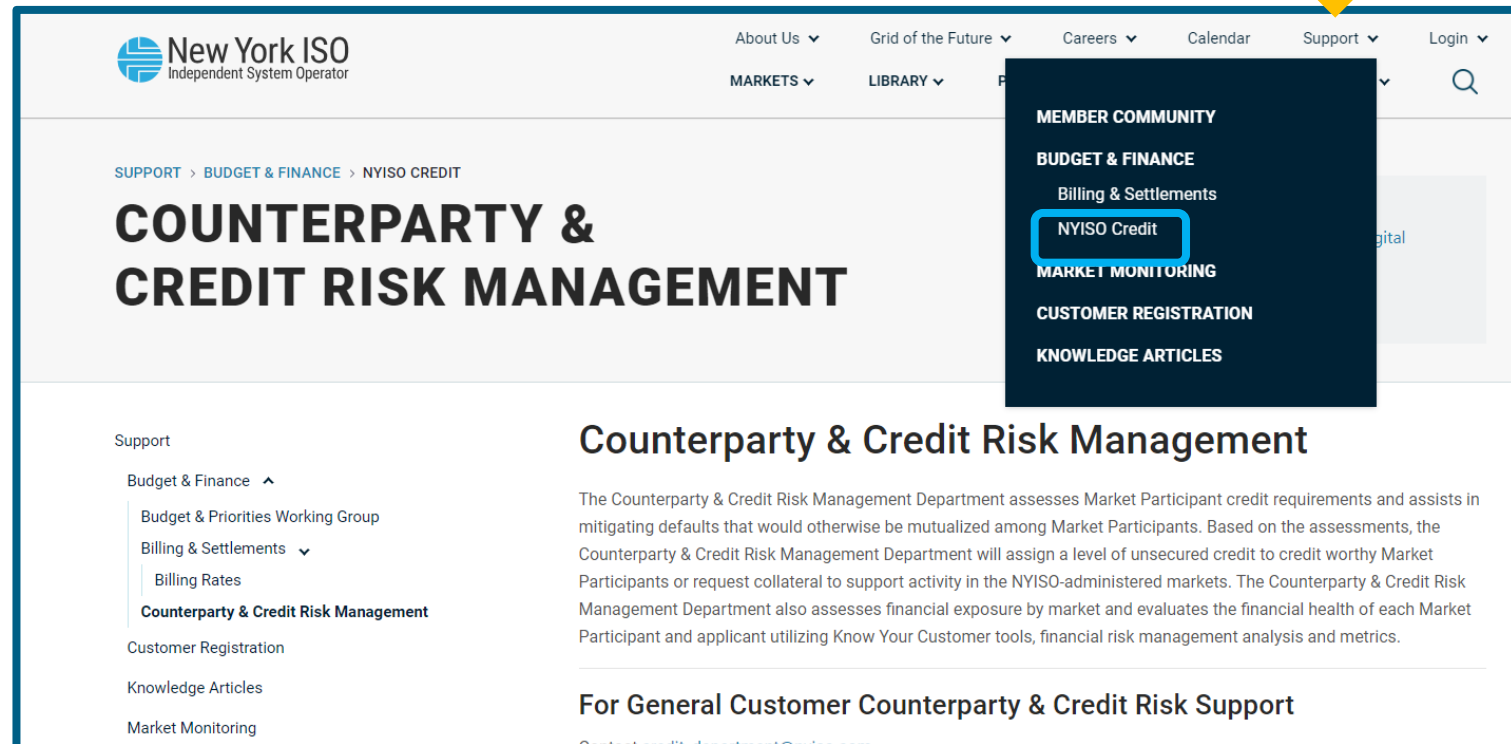
- **The NYISO will require the following for each credit instrument:**
 - **One LOC or Surety Bond per project per Interconnection Customer**
 - **The original initial instrument must be received and verified prior to acceptance to meet deposit requirements**
 - **Project name must be included on the credit instrument**
 - **An amendment/rider will need to be issued in the event of a change in any of the following:**
 - **Deposit amount**
 - **Interconnection Customer name or**
 - **Project name**

Credit Instruments

- **The process for issuing a new LOC or Surety Bond can be very time intensive**
 - If an Interconnection Customer is planning to use a LOC or Surety Bond for their deposits, the NYISO recommends that process begin as soon as possible
 - The NYISO recommends emailing a draft copy to the Counterparty & Credit Risk Management team to ensure it is acceptable prior to the financial institution or surety company issuing the original LOC or Surety Bond
 - Once confirmed, the NYISO requires the original LOC or Surety Bond to be mailed to, and reviewed by, the NYISO to ensure no changes have been made prior to its acceptance

Credit Instruments

- The Interconnection Customer may reach out to the Counterparty & Credit Risk Management Department directly to verify if a financial institution or surety company meets the minimum issuer requirements
 - The Counterparty & Credit Risk Management team can be reached directly at credit_department@nyiso.com for any questions and assistance with using a LOC or Surety Bond to cover its deposits

The screenshot shows the New York ISO website interface. At the top, there is a navigation bar with the New York ISO logo and several menu items: 'About Us', 'Grid of the Future', 'Careers', 'Calendar', 'Support', and 'Login'. Below the navigation bar, the breadcrumb trail reads 'SUPPORT > BUDGET & FINANCE > NYISO CREDIT'. The main heading is 'COUNTERPARTY & CREDIT RISK MANAGEMENT'. A 'Support' dropdown menu is open, showing a list of categories: 'MEMBER COMMUNITY', 'BUDGET & FINANCE', 'MARKET MONITORING', 'CUSTOMER REGISTRATION', and 'KNOWLEDGE ARTICLES'. Under 'BUDGET & FINANCE', the sub-items are 'Billing & Settlements' and 'NYISO Credit', which is highlighted with a red box. Below the main heading, there is a section titled 'Counterparty & Credit Risk Management' with a descriptive paragraph. At the bottom, there is a section titled 'For General Customer Counterparty & Credit Risk Support' with a contact email address: credit_department@nyiso.com.

Withdrawal Penalties

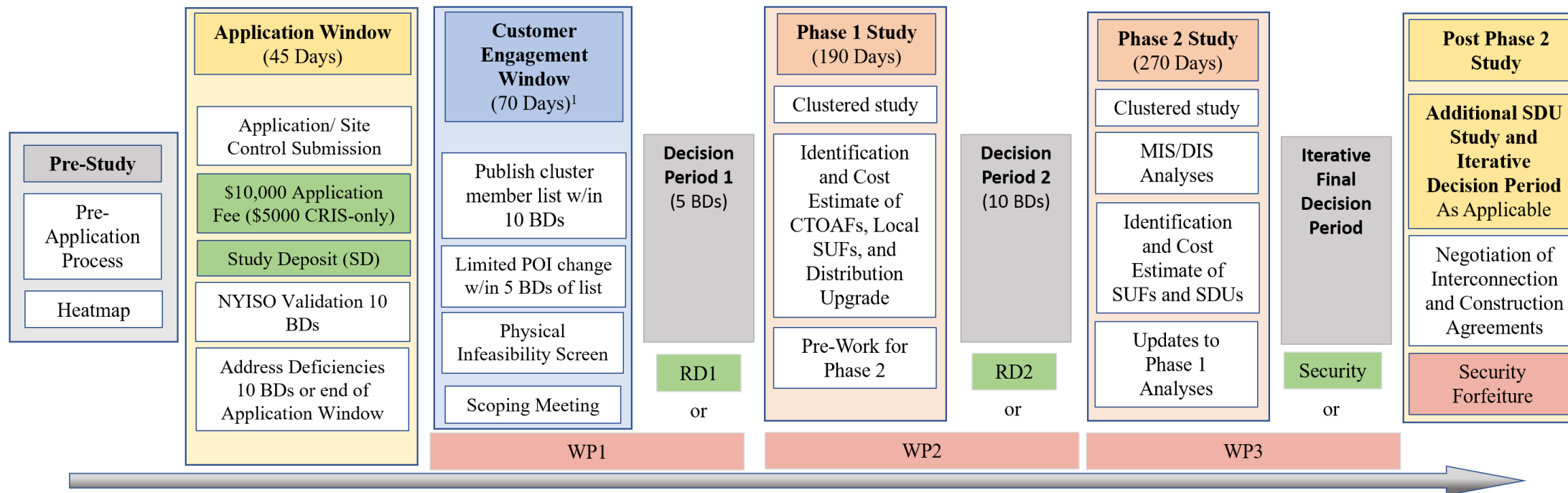
- If a project withdraws during the Application Window or up to 5 Business Days of the NYISO publishing the cluster member list in the Customer Engagement Window, there is no Withdrawal Penalty

Penalty	Amount	Timeline
WP1	25% of SD, except if withdrawal is of a contingent project or due to Physical Infeasibility	During Customer Engagement Window up to end of Decision Period 1
WP2	50% of SD + 10% of RD1, except if withdrawal is due to Physical Infeasibility	During Phase 1 Study up to end of Decision Period 2
WP3	100% of SD +20% of RD2, except if withdrawal is due to Physical Infeasibility or if there has been a 50% cost increase between Phase 1 Study and Phase 2 Study (non SDU) costs - only forfeits an amount equal to 100% of its Study Deposit	During Phase 2 Study up to end of Iterative Final Decision Period
Security Forfeiture	Up to 100% of Security subject to forfeiture if other projects relying on the upgrades identified for its project	During Post Final Decision Period

Withdrawal Penalties

- **Withdrawal Penalties are in addition to any outstanding amounts owed for study costs**
- **In the event the Interconnection Customer does not pay its study cost invoice(s) and/or Withdrawal Penalty invoice(s), the NYISO may use the cash deposit, letter of credit, or surety bond to cover the outstanding balance(s)**
- **Withdrawals for Physical Infeasibility issues will not be subject to Withdrawal Penalties**

NYISO Proposed Cluster Study Process Overview



Study Deposit (SD) Amounts

Size	Amount
< 80 MW	\$100,000
≥ 80 < 200 MW	\$150,000
≥ 200 MW	\$250,000
CRIS Only	\$50,000

Readiness Deposits (RD) /Security Amounts

Deposit	Amount
RD1*	\$4,000/MW
RD2*	The greater of (i) RD1, and (ii) 20% of cost estimate determined in Phase 1 for Local SUF and CTOAF
Security	100% of cost estimate of SUFs, SDUs, and CTOAFs identified in Phase 1 and Phase 2

* N/A to CRIS only projects

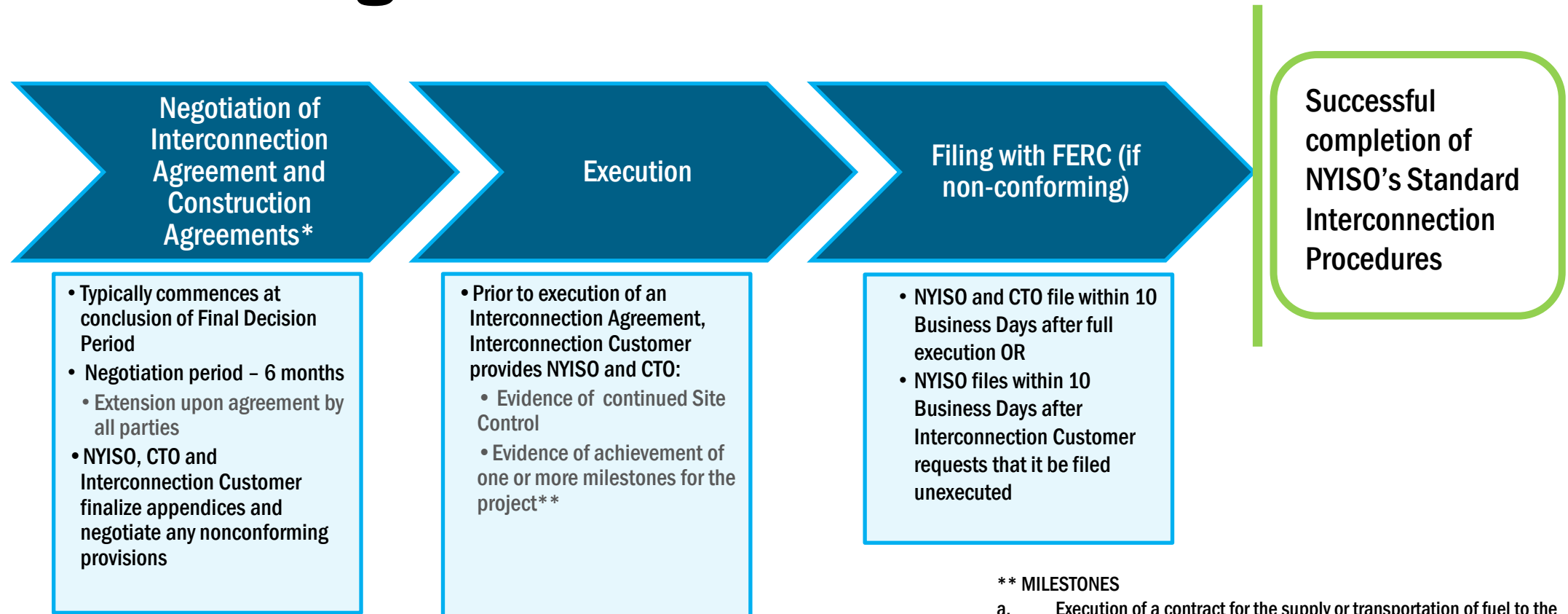
Withdrawal Penalty (WP) Amounts

Penalty	Amount
	If a project withdraws during the Application Window or up to within 5 Business Days of the NYISO publishing the cluster member list in the Customer Engagement Window, there is no withdrawal penalty. Also, no withdrawal penalty for contingent projects and projects that withdraw due to physical infeasibility
WP1	25% of SD, except if withdrawal is of a contingent project or due to physical infeasibility
WP2	50% of SD + 10% of RD1, except if withdrawal is due to physical infeasibility
WP3	100% of SD + 20% of RD2, except if withdrawal is due to physical infeasibility or if there has been a 50% cost increase between Phase 1 and Phase 2 (non SDU) costs.
Security Forfeiture	Up to 100% of Security subject to forfeiture if other projects relying on the upgrades identified for its project

Note: (1) Customer Engagement Window period could be extended by the number of additional days required to complete the prior Cluster Study.

Next Steps after Completion of a Cluster Study

Execution of Interconnection Agreement and Construction Agreements



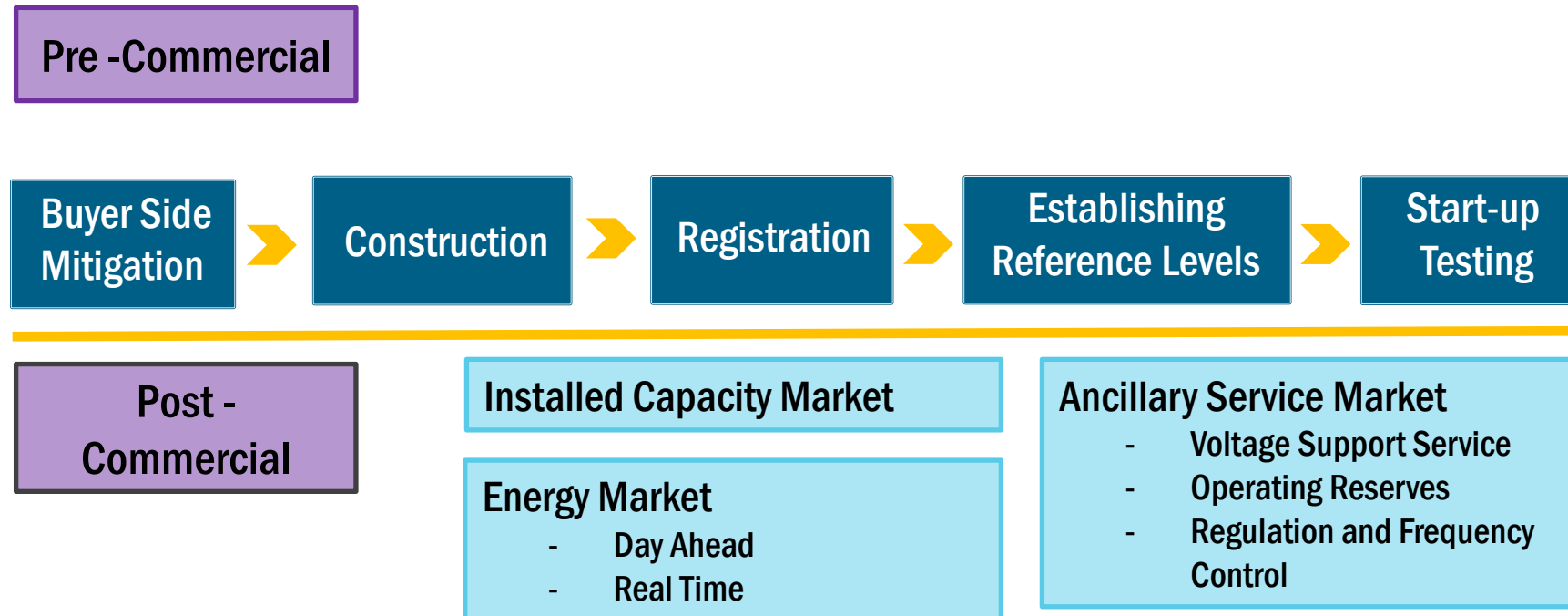
** Construction Agreements are required for upgrades on Affected Systems

** MILESTONES

- Execution of a contract for the supply or transportation of fuel to the Generating Facility;
- Execution of a contract for the supply of cooling water to the Generating Facility
- Execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility;
- Execution of a contract for the sale of electric energy or capacity from the Generating Facility; or
- Application for an air, water or land use permit

OATT 40 ATT HH, Sections 40.8.3.11 and 40.21.3

Supplier Next Steps



Additional Resources

- NYISO Tariff: OATT 40 Attachment HH – Standard Interconnection Procedures
- Manuals: Transmission Expansion and Interconnection Manual – revisions in development
- Guide: Transmission Expansion and Interconnection Guide – revisions in development
- User Guides: Interconnection projects Portal User Guide
- Technical Bulletins: TB-260 Site Control in the Interconnection Cluster Study Process, Tb-263 Commercial Operation Date (COD) Extension requests in the Standard Interconnection Process
- **Additional References**
 - <https://www.nyiso.com/interconnections> > Interconnection Projects > Additional Request Forms and Other Forms
 - Modeling Guideline for NYISO Interconnection Data
 - Modeling Data Summary of NYISO Interconnection Projects
 - Interconnection Request Guidelines *(In development)*
- **Market Training Resources**
 - <https://www.nyiso.com/course-materials> > Training Course Materials > MT- Interconnection Process
 - NYISO Standard Interconnection Procedures (pdf)
 - NYISO's Points of Interconnection (POI) Analysis Heatmap: Getting Started (pdf)
- **Committee meeting materials**
 - Transmission Planning Advisory Subcommittee (TPAS) meeting materials
 - Interconnection Issues task Force (IITF) meeting materials
 - Interconnection Project Facilities Study Working Group (IPFSWG) meeting materials
 - Operating Committee (OC) meeting materials

Questions?

For any future assistance, please contact the IP Support team of
NYISO Stakeholder Services at
stakeholder_services_ipsupport@nyiso.com