New York ISO
Independent System Operator

CRIS Expiration Evaluation

Zach T. Smith

Manager, Capacity Market Design

ICAPWG/MIWG/PRLWG

March 31, 2022

Agenda

- **Background**
- **Rules and open items towards an MDC**
  - CRIS retention
  - CRIS modeling in the CY process
  - Same location CRIS transfers
  - Partial CRIS expiration for internal facilities
  - Partial CRIS expiration for UDRs and EDRs
- **Next steps**

New York ISO

Background

Background

- Objective: develop modifications to further enhance CRIS expiration rules as well as the rules surrounding CRIS transfers.
- Stated Goal: increase capacity deliverability headroom and potentially lower the cost of market entry to future facilities seeking to participate in the ICAP market.
- 2022 Project Deliverable: Q3 Market Design Complete.
- Current State: NYISO has begun stakeholder discussions to develop and revise the implementation details for the current market proposals within the CRIS expiration evaluation project.

New York ISO

Previous Discussions

Date	Working Group	Discussion Points and Links to Materials
March 11, 2021	ICAPWG	Current rulesets related to CRIS retention, expiration and transfer: https://www.nyiso.com/documents/20142/19871290/CRIS%20Expiration_ICAPWG_03112021.pdf
April 29, 2021	ICAPWG	Initial thoughts on proposals to be evaluated: https://www.nyiso.com/documents/20142/21044421/CRIS%20Expiration%20042920021_v10.pdf
June 25, 2021	ICAPWG	Proposed rule changes: https://www.nyiso.com/documents/20142/22568342/CRIS%20Expiration%20for%20ICAPWG%2006252021_v5.pdf
July 27, 2021	ICAPWG	Revised proposals for discussion: https://www.nyiso.com/documents/20142/23319404/CRIS%20Expiration%20for%20ICAPWG%2007272021.pdf
March 03, 2021	ICAPWG	Kick-off MDC project, recap 2021 discussions, and introduce open items: https://www.nyiso.com/documents/20142/28897222/CRISExpirationEvaluation_ICAPWG_03032022.pdf

New York ISO

Rules and open items towards an MDC

Market Design Concept Proposals

- As a part of the CRIS Expiration project, NYISO identified three potential sets of rule changes, including 1) modifications to the 3-year retention of CRIS by deactivated facilities, 2) modifications to allow more flexibility with respect to same location CRIS transfers, and 3) rules to provide for partial CRIS Expiration.
- Based on stakeholder feedback and discussions, the NYISO revised its proposals looking to better differentiate them based on their intended purposes, as rules for:
  - CRIS retention
  - CRIS modeling in the CY process
  - Same location CRIS transfers
  - Partial CRIS expiration for internal facilities
  - Partial CRIS expiration for UDRs and EDRs

New York ISO

Rules for CRIS Retention

Market Design Concept for CRIS Retention

- The NYISO proposes modifying the rules to include a process for deactivated facilities to return their CRIS rights voluntarily

New York ISO

Market Design Concept for CRIS Retention

- **Based on stakeholder feedback, the NYISO revised its proposal to include additional options for deactivated facilities regarding retention of its CRIS rights.**
- **The revised proposal considers including a voluntary option for deactivated facilities to return CRIS rights:**
  - If a deactivated facility wishes to anticipatedly and voluntarily return its CRIS rights, it would be able to do so by notifying the NYISO of that decision at any point during the calendar year.
    - Facilities would be able to notify the NYISO by submitting the corresponding form
    - NYISO will work to develop the notification form that would include: 1) identity of the CRIS right holder requesting the return, 2) contact information, 3) acknowledgment of implications, 4) signed certification.
      - The return of the CRIS rights would only be full, not in part.
    - Upon submission of the notification and confirmation of the information, the NYISO will post a public notice informing that it would cease to model the corresponding CRIS rights in the applicable deliverability studies. NYISO will also notify the submitting entity about the full expiration of its CRIS rights.
      - The NYISO would not include this information on ongoing deliverability studies.
  - Unless a deactivated facility notified the NYISO of a voluntary return of its CRIS rights, the NYISO would continue to model the CRIS rights in the applicable deliverability studies (subject to the CRIS rights not expiring within a year after the start of the upcoming Class Year Study).

New York ISO

Market Design Concept for CRIS Retention (Cont.)

- **The CRIS expiration status of deactivated facilities will continue to be available for consultation in the Gold Book**
  - NYISO will post a public notice for when a deactivated facility voluntarily returns its CRIS rights (as referenced before), but it would not post anything beyond what is already available in the Gold Book for other deactivated facilities.
  - Note: NYISO's Gold Book currently includes information regarding the deactivation dates of facilities with unexpired CRIS rights

- **The NYISO will return to a future ICAPWG to discuss the exact language of the proposed notification form, the deadlines for the NYISO to respond to such notification, and details on the internal submission process.**

New York ISO

Rules for CRIS modeling in the CY process

Market Design Concept for CRIS modeling in the CY process

- The NYISO proposes modifying the rules to require deactivated facilities to inform, ahead of the upcoming Class Year, their intention to transfer their CRIS rights for purposes of continue being considered and modeled on the corresponding deliverability studies

New York ISO

Market Design Concept for CRIS modeling in the CY process (cont.)

- **Based on stakeholder feedback, the NYISO revised its proposal to simplify the process and obligations of deactivated facilities for CRIS transfer purposes.**
- **The revised proposal contemplates a formal process on how the NYISO will treat the CRIS for facilities for which their CRIS rights would expire within the Class Year**
  - If the CRIS of the deactivated facility would expire within a year after the start of the upcoming Class Year Study, then the deactivated facility, prior to the start of each Class Year, must notify the NYISO and submit documentation regarding a potential or planned CRIS transfer.
- **Notification process for a same location transfer**
  - Facilities would be able to notify the NYISO of a potential or planned same location CRIS transfer by submitting the corresponding form at any point prior to the start of the upcoming Class Year.
    - NYISO will work to develop the notification form that would include: 1) identity of the CRIS rights holder requesting the transfer, 2) identity of the facility to whom the CRIS rights will potentially be transferred, 3) confirmation that the facilities are located at the same electrical location, 4) megawatt amount of CRIS rights to be transferred, 5) contact information, 4) signed certification.
    - The notification could include a potential or planned same location CRIS transfer for either full or part of the existing CRIS rights
  - Upon submission of the notification and confirmation of the information, the NYISO will notify the submitting entity, confirming that it would continue to model the corresponding CRIS rights on the applicable deliverability studies.
    - The NYISO would not include this information on ongoing deliverability studies.
  - Note: Current tariff rules for when the CRIS transfer becomes effective will remain the same.
  - Note: Current tariff rules for when the CRIS rights expire will remain the same.

New York ISO

Market Design Concept for CRIS modeling in the CY process (cont.)

- **Based on stakeholder feedback, the NYISO revised its proposal to simplify the process and obligations of deactivated facilities for CRIS transfer purposes.**
- **The revised proposal contemplates a formal process on how the NYISO will treat the CRIS for facilities for which their CRIS rights would expire within the Class Year**
  - If the CRIS of the deactivated facility would expire within a year after the start of the upcoming Class Year Study, then the deactivated facility, prior to the start of each Class Year, must notify the NYISO and submit documentation regarding a potential or planned CRIS transfer.
- **Notification process for a different location transfer**
  - Facilities would be able to notify the NYISO of a potential or planned different location CRIS transfer by submitting the corresponding form at any point prior to the start of the upcoming Class Year.
    - NYISO will work to develop the notification form that would include: 1) Request for evaluation of deliverability, 2) identity of the CRIS rights holder requesting the evaluation, 3) identity of the facility to whom the CRIS rights will potentially be transferred, 4) megawatt amount of CRIS rights to be transferred, 5) contact information, 6) signed certification.
    - The notification could include a potential or planned different location CRIS transfer for either full or part of the existing CRIS rights.
  - Upon submission of the notification and confirmation of the information, the NYISO will notify the submitting entity, confirming that it would continue to model the corresponding CRIS rights on the applicable deliverability studies. It would then follow the existing tariff process and the modeling rules for different location CRIS transfers.
    - The NYISO would not include this information on ongoing deliverability studies.
  - Note: Current tariff rules for when the CRIS transfer becomes effective will remain the same.
  - Note: Current tariff rules for when the CRIS rights expire will remain the same.

New York ISO

Market Design Concept for CRIS modeling in the CY process (cont.)

- Based on stakeholder feedback, the NYISO revised its proposal to simplify the process and obligations of deactivated facilities for CRIS transfer purposes.
- The revised proposal contemplates a formal process on how the NYISO will treat the CRIS for facilities for which their CRIS rights would expire within the Class Year
  - If the CRIS of the deactivated facility would expire within a year after the start of the upcoming Class Year Study, then the deactivated facility, prior to the start of each Class Year, must notify the NYISO and submit documentation regarding a potential or planned CRIS transfer.
- Failure to submit a notification
  - Failure to submit documentation regarding a potential or planned CRIS transfer would result in the CRIS of the deactivated facility ceasing to be modeled in the applicable deliverability studies, and in the automatic and full return of its CRIS rights at the three-year clock period.

- The NYISO will return to a future ICAPWG to discuss the exact language of the proposed notification forms, the deadlines for the NYISO to respond to such notifications, and details on the internal submission process.

New York ISO

Rules for same location CRIS transfers

Same location interpretation

- **During the March 03rd ICAPWG, there was a stakeholder request to further detail the definition of electrical location in the context of same location CRIS transfers.**
- **Current tariff rules for same location CRIS transfers state that:**
  - *"(…) If a facility deactivates an existing facility within the NYCA and commissions a new one at the same electrical location, the CRIS status of the deactivated facility and its deliverable capacity level may be transferred to that same electrical location"* (Section 25.9.4 of Attachment S of the OATT)
- **Electrical location:**
  - Interconnected to the same transmission bus at the same KV level

New York ISO

Current Rulesets

- **Current tariff rules for <u>different location</u> transfer state that:**
  - The transferor must request a different location CRIS transfer as part of the CY study process
    - Transferor can transfer all or a part of its assigned CRIS rights.
    - Transferor is not required to deactivate or change any other part of its participation (it has the alternative also to assume either ERIS-only or partial CRIS status) for the transfer to become effective.
  - The transferee acquires these rights if it meets the deliverability conditions (detailed in Section 25.9.5 of Attachment S).
    - Until the transfer transaction is deemed final, the transferor maintains its CRIS rights and its ability to participate in capacity sales up to that level. When the transaction is final, the transferor is restricted for participation in future capacity sales up to levels consistent with the CRIS rights transferred.

- **Current tariff rules for <u>same location</u> transfer state that:**
  - The transferor is not required to request a same location CRIS transfer as part of the CY study process, meaning it can request the transfer at any point in time
    - Transferor can transfer its assigned CRIS rights upon deactivation.
    - Transferor is required to deactivate for the transfer to become effective.
  - The transferee acquires these rights if the existing facility is deactivating, and the new facility is online before the CRIS expires
    - Until the transfer transaction is deemed final, the transferor maintains its CRIS rights, but not its ability to participate in capacity sales (deactivated facility)

New York ISO

Market Design Concept Proposal for Same Location CRIS Transfers

- **The NYISO intends to allow for same location CRIS transfers to have the same flexibility as different location CRIS transfers regarding deactivation requirements.**
- **Under the proposed change:**
  - Facilities could transfer part or all of their CRIS rights to a facility located at the same electrical location while still in the process of shutting down (deactivate) or electing to remain active (ERIS-only or partial CRIS status)
  - Considering that same location CRIS transfers are not required to go through a deliverability test within a CY study, additional rules in terms of timing and notification will be necessary as part of this proposal, as well as considerations about the implications on the BSM analysis process.

New York ISO

Market Design Concept Proposal for Same Location CRIS Transfers (cont.)

- **The NYISO proposes to include standalone facilities, multi-unit single technology resources, and CSRs as the group of facilities for which the rule would apply**
  - In the case of co-located generators sharing the same injection limit, such as multi-unit single technology resources and CSRs, their CRIS rights are requested at the facility level but allocated (if requested) at the resource level. The separation of CRIS at the resource level will allow for transfers between resources located at the same electrical location.
  - In the case of co-located generators sharing the same injection limit, such as entire Distributed Energy Resource (DERs), their CRIS rights are requested and awarded at the facility or entire DER level, not the individual asset level. For that reason, the NYISO proposes to restrict the rule for same location CRIS transfers to DERs.

- **Per current tariff rules stated in Section 25.9.4 of Attachment S, "(…) a facility comprised of multiple Generators may only transfer CRIS under this Section 25.9.4 if all the individual Generators within the facility deactivate"**
  - In line with the proposal, the NYISO intends to also modify these rules to allow for a facility comprised of multiple Generators to transfer part or all of its CRIS rights to a facility located at the same electrical location while still in the process of deactivating or remaining active all the other individual Generators.

New York ISO

Market Design Concept Proposal for Same Location CRIS Transfers (cont.)

- The NYISO will return to a future ICAPWG to discuss the frequency of the transfers, the content of a binding transfer notification and timeline, and the responsibilities and implications derived from the application of this proposal.

New York ISO

Rules for partial CRIS expiration for internal facilities

Market Design Concept for partial CRIS expiration

- The NYISO is proposing to include a condition to expire partial CRIS rights based upon utilization criteria
- The NYISO is currently looking to separate the proposed rules on partial CRIS expiration for internal units from the ones for UDRs and EDRs

New York ISO

Market Design Concept Proposal for Partial CRIS expiration for internal facilities

- The NYISO currently sees value in limiting a portion of a unit's CRIS based upon utilization criteria
- If the ratio of the units CRIS and utilization or capability consistently fall below the specified threshold, a portion of the CRIS could be expired, potentially increasing Deliverability headroom
  - For example, if a unit is consistently testing below 90% of its CRIS value, CRIS could be expired
  - For this proposal, "consistently" means for a consecutive 3-year period to align with the 3-year process used today
- For units that are in a ICAP Ineligible Forced Outage (IIFO) or Mothballed, the partial expiration rule would not be applicable, as they are have already began their 3-year clock and could return to the system at full capacity

New York ISO

Market Design Concept Proposal for Partial CRIS expiration for internal facilities

- For the threshold level, the NYISO currently proposes to set it to 90%
  - The 90% threshold is established in an effort to remain consistent with trends of historic degradation levels
- If a unit falls at or below the threshold, the unit's CRIS level would be reset to the max offer value within the 3-year period plus 5% of the unit's original CRIS
  - A 5% value gives units flexibility for recoverable losses and maintenance repairs
- The proposed changes would be effective on a rolling 3-year moving forward basis, using the offer value within that 3-year period, and would be applicable to all internal generators, excluding controllable lines.

New York ISO

Rules for partial CRIS expiration for UDRs and EDRs

Market Design Concept Proposal for Partial CRIS for UDRs and EDRs

- In August 2021, LIPA and PSEG Long Island provided comments about the implication of NYISO's proposal due to application of the partial CRIS expiration rule on controllable lines with UDRs and requested the NYISO to exclude UDRs from the proposed rule to partially expire CRIS based on low utilization
- In January 2022, LIPA and PSEG Long Island provided additional comments, proposing a longer time-frame (6 years) of permissible CRIS inactivity for controllable lines with UDRs vs. 3-years for generators with CRIS
  - The NYISO brought the proposals for discussion to the March 3rd ICAPWG and received stakeholder feedback.
- Based on LIPA/PSEG comments and stakeholder feedback, the NYISO proposal is not to extend the duration to six years and only to expire CRIS of UDRs and EDRs for physical limitations in neighboring control area systems

New York ISO

Application in the case of UDRs

- **Example: a UDR obtained NYCA CRIS rights for 500 MW**
  - Economic election scenario: the UDR elects to participate for the upcoming capability year with 300 MW
    - The NYISO is proposing to exempt UDRs entirely from the application of the partial CRIS expiration rule for economic decisions on their election and offers
    - For example, if the UDR based upon its election decides to offer 270 MW of capacity or below (90% utilization threshold), the NYISO will not partially expire or reduce its existing CRIS rights (500 MW)
  - Physical limitations scenario: the UDR obtained withdraw capacity ability in a neighboring control area system for only 300 MW and is not able to flow the incremental MWs to be fully deliverable at its existing CRIS levels of 500 MW
    - The NYISO is proposing to apply a partial CRIS expiration rule for UDRs if they are unable to solve the physical limitations that prevent them from being fully deliverable at their existing CRIS rights levels within the current 3-year CRIS expiration clock
    - For example, in this case, the NYISO will expire the incremental unutilized CRIS rights (200 MW) at the three-year clock period

New York ISO

Next Steps

Next Steps

- The NYISO is seeking stakeholder feedback on today's presentation and will return to a working group meeting in April 2022 to continue the discussions.

New York ISO

Appendix

Feedback Received - Proposal for 3-Year CRIS Retention

- **Stakeholders requested information regarding extent to which a new unit can retain CRIS before going in-service**
- **For new projects that are awarded CRIS through the Class Year Study, they have 4 years from the completion of the CY Study (or, for Small Gens, 4 years after tender of its interconnection agreement) to go into service or make reasonable progress toward development of the project (OATT Attachment X, Section 30.4.4.5.1 and OATT Attachment Z, Section 32.1.3.2)**
  - To obtain an extension beyond the 4-year period, the developer must demonstrate that it has made reasonable progress against milestones set forth in the Interconnection Agreement (*e.g.*, completion of engineering design, major equipment orders, commencement and continuation of construction of the and associated System Upgrade Facilities)
  - Failure to meet this requirement results in withdrawal from the Interconnection Queue
  - Upon withdrawal of a project from the Interconnection Queue, its CRIS terminates (OATT Attachment S, 25.5.9.1)

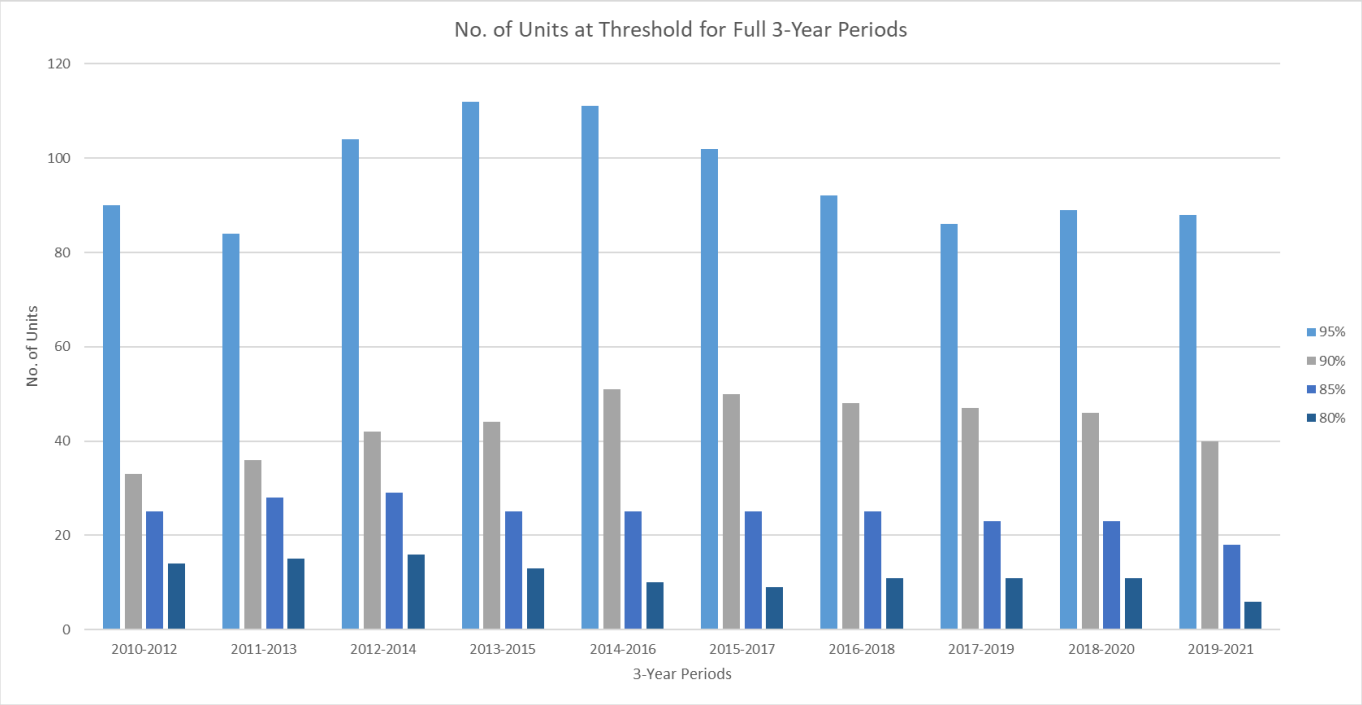
New York ISO

Feedback Received - Proposal for 3-Year CRIS Retention

- **During the presentation of this proposal on June 25th there was a stakeholder request to further revise CRIS retention rules for retiring units**
  - The proposal brought forth by a stakeholder would expire CRIS rights immediately upon retirement if the resource obtains CRIS in or after Class Year 2019 and obtained such CRIS without investing in deliverability upgrades (*i.e.*, did not pay for SDUs or headroom on SDUs).
  - As discussed at the July 27th working group meeting, the NYISO does not support additional these changes to the set of reforms proposed as part of this project.
    - This additional proposal would create different classes of CRIS rather than treating all CRIS equally
    - This could also result in disparate treatment among resources based on when and how they obtained CRIS
    - It is unclear how, under such proposal, CRIS transfers could be effectuated in cases of CRIS obtained without SDU investment
    - The current construct was designed to facilitate efficient retirements and repowering
      - Limiting a developer's ability to sell their CRIS rights may have the reverse effect by incentivizing resources to defer their retirement to retain their CRIS rights for longer and stay in service when a new entry would be economic
      - This flexibility is important whether the unit paid for an SDU

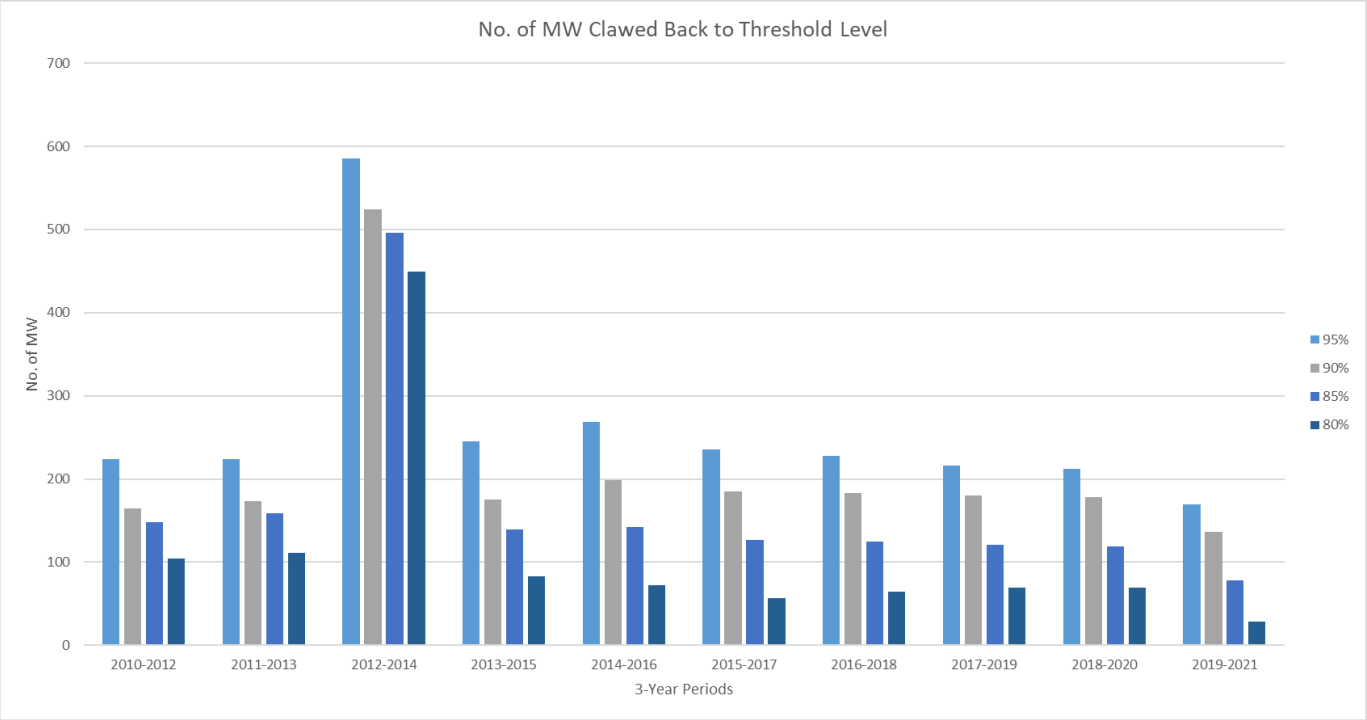
New York ISO

No. of Units not Utilizing Full CRIS



New York ISO

No. of MW Available for Expiration



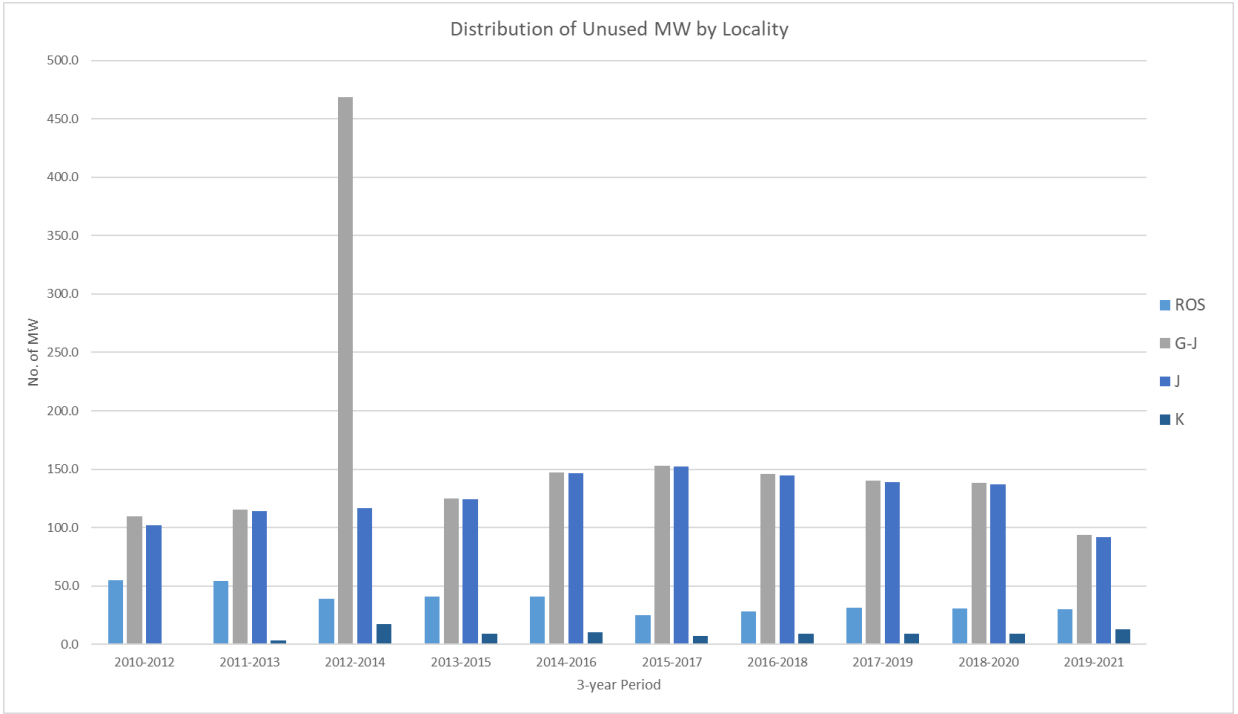
New York ISO

Example of Partial CRIS

- **For Example:**
  - A 100 CRIS MW unit with a max test and/or offers of 90 MW within three consecutive years
    - The ratio between the CRIS level and actual capability and/or utilization is 90%
  - If using 90% as the specified threshold:
    - Because the unit falls at or below the threshold level, 5% of it's CRIS would be expired and added back to the system
    - For this example, 5 MW would be expired and added back to the system

New York ISO

Distribution of Unutilized MW by Locality



New York ISO

CRIS transfer UCAP/ICAP calculation

- CRIS Transfer is evaluated on a UCAP basis.
- Per Sections 25.9.4 and 25.9.5.1 of Attachment S, for transfers between different resource types, the MW of Installed Capacity being transferred will be adjusted by the derate factor applicable to the existing facility before the transfer, and following the transfer, will be readjusted to MW of Installed Capacity in accordance with the derate factor applicable to the new project.

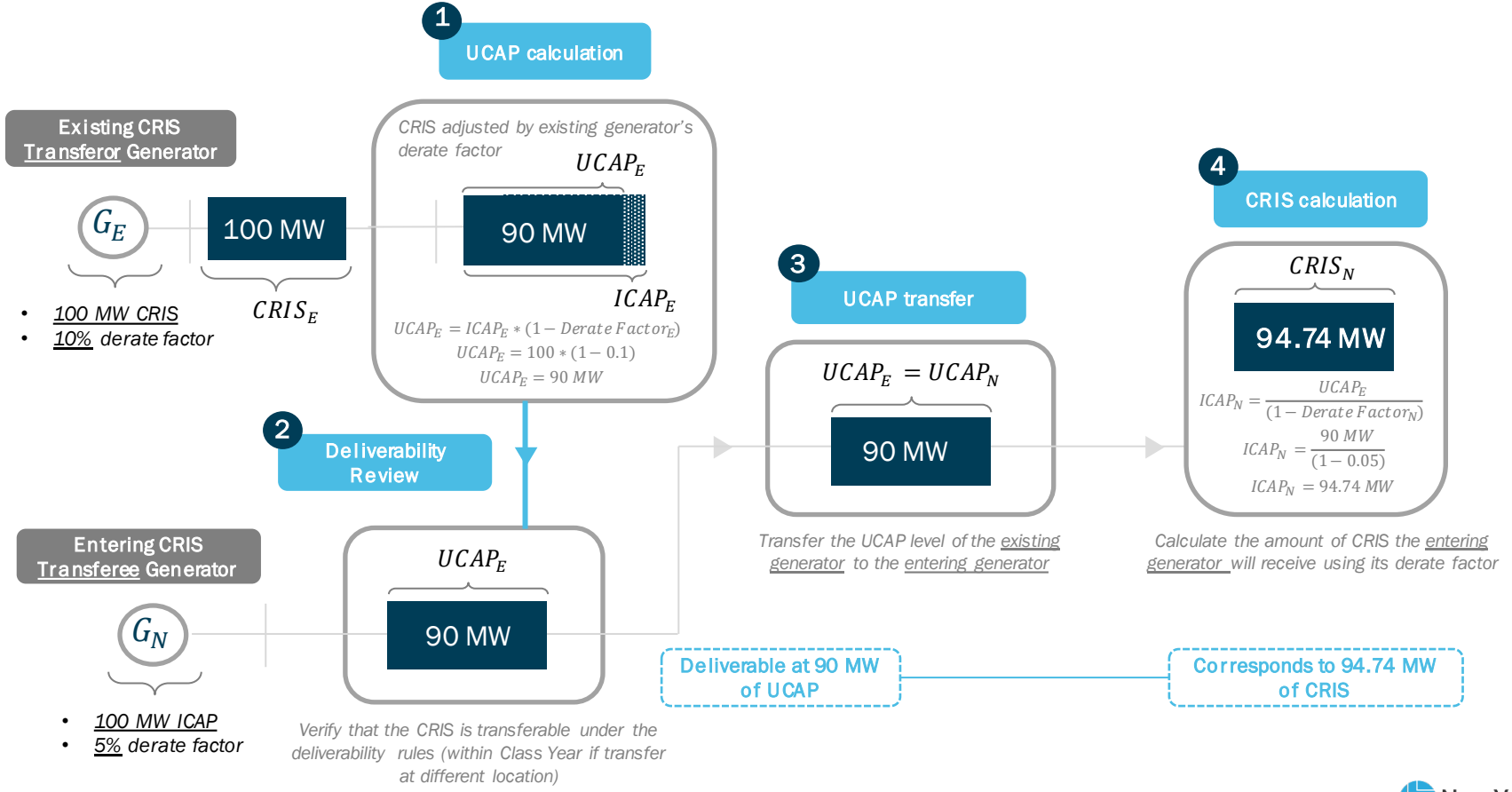
New York ISO

CRIS transfer UCAP/ICAP calculation steps

1) Calculate the UCAP level of the existing generator by using its derate factor and CRIS(ICAP) level.
2) Determine whether the CRIS(ICAP) is transferable under the deliverability rules (using that UCAP level). Transfers to different locations must be evaluated as part of a Class Year.
3) Transfer the UCAP level of the existing generator to the entering generator.
4) Adjust the UCAP value to the CRIS(ICAP) value for the entering generator using its derate factor

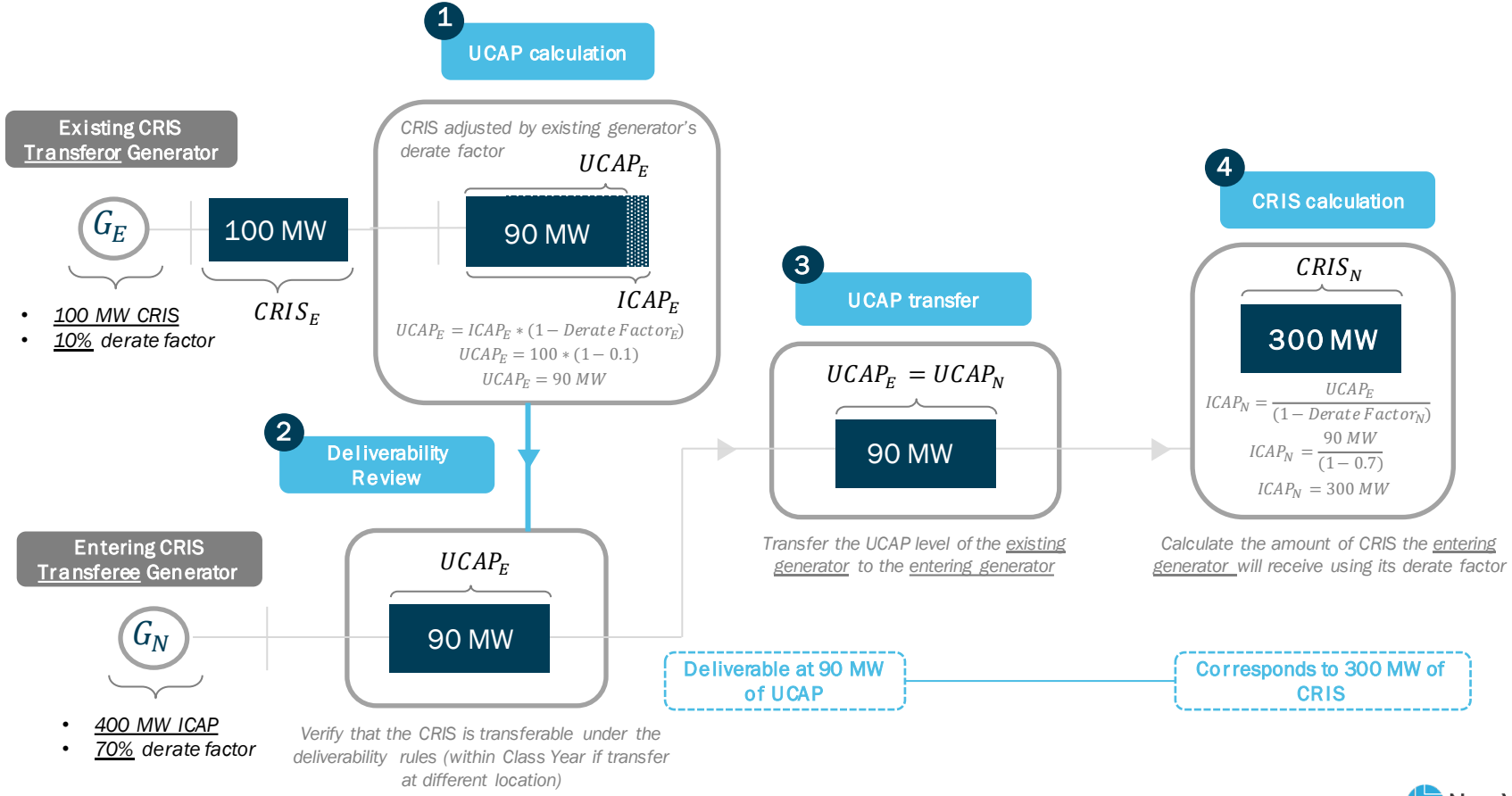
New York ISO

Example 1 – from higher to lower derate factor



New York ISO

Example 1 – from lower to higher derate factor



New York ISO

Our Mission & Vision

Mission

Ensure power system reliability and competitive markets for New York in a clean energy future

Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

New York ISO

Questions?