

CRIS Expiration Evaluation

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Agenda

- **Background**
- **Implementation details**
 - CRIS retention
 - CRIS modeling in deliverability studies
 - Same location CRIS transfers
 - Partial CRIS expiration for internal facilities
 - Partial CRIS expiration for UDRs and EDRs
- **Next steps**

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 Status:** NYISO continues stakeholder discussions to further develop the implementation details for the market proposals within the CRIS expiration evaluation project

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: https://www.nyiso.com/documents/20142/21044421/CRIS%20Expiration%2004292021_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, 2022	ICAPWG	Kick-off MDC project, recap 2021 discussions, and introduce open items: https://www.nyiso.com/documents/20142/28897222/CRISExpirationEvaluation_ICAPWG_03032022.pdf
March 31, 2022	ICAPWG	Reorganize market proposals and start discussion on implementation details https://www.nyiso.com/documents/20142/29607069/4%20CRISExpirationEvaluation_ICAPWG_03312022.pdf

Implementation Details

Market Design Concept Proposal

- 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 refined its proposals to better differentiate them into the following categories:
 - CRIS retention
 - CRIS modeling in deliverability studies
 - Same location CRIS transfers
 - Partial CRIS expiration for internal facilities
 - Partial CRIS expiration for UDRs and EDRs
- The NYISO plans to further discuss and develop the implementation details with stakeholders toward a Q3 MDC

Proposed Revisions to the Rules for CRIS Retention

Market Design Concept Proposal

- **Proposal:** The NYISO proposes modifying the existing rules to include an option and process for deactivated facilities with unexpired CRIS rights to voluntarily relinquish their CRIS
- **Application:** Deactivated facilities
- **Under the proposal, if a deactivated facility wishes to relinquish its CRIS, it can do so by notifying the NYISO at any point during the calendar year**
 - Deactivated facilities electing to relinquish their CRIS must notify the NYISO by submitting the corresponding standardized form.
 - CRIS could only be relinquished in full (*i.e.*, the facility may not elect to relinquish a portion of its CRIS)
 - NYISO will notify the deactivated facility its CRIS has expired upon receipt of the notification form and confirmation of the CRIS level and deactivation status of the facility
 - The effective date of the CRIS expiration would be the date the NYISO notifies the facility that its request has been confirmed and processed
 - After a confirmation notification has been sent to the facility, the NYISO will cease to model the corresponding CRIS rights in the applicable deliverability studies that commence after the effective date of the expiration of the CRIS
 - The NYISO will make the information about CRIS expiration publicly available on the Generator Status Update Report
- **Unless a deactivated facility relinquishes its CRIS under this new rule, the NYISO would continue to model the CRIS rights in the applicable deliverability studies unless the CRIS is scheduled to expire during the applicable deliverability study**
- **The information about deactivated facilities with unexpired CRIS rights will continue to be available in the Gold Book**

Notification Form

- **The standardized notification form will be known as the “CRIS Relinquishment Request”**
- **The form would require, for example:**
 1. Submitting Entity’s Information
 - Submitting entity’s interest in and relationship with Generator(s)
 - Contact information
 2. Identity of Generator(s)
 3. Acknowledgments
 - The submitting entity will be required to acknowledge:
 - The request is binding, meaning the submitting entity cannot rescind this notice once submitted.
 - The request, if granted, will result in the full expiration of the facility’s CRIS rights.
 - Upon acceptance of the relinquishment request, the CRIS expiration and its effective date will be made public
 4. Signed Certification
 - The requestor will be required to attest to the accuracy of the information and to certify that the signatory is authorized to bind the submitting entity
- **The standardized form will be included as an attachment to the Transmission Expansion and Interconnection Manual**
- **The specific language of this proposal will be discussed as part of the proposed tariff and manual revisions**

Relinquishment of External CRIS Rights

- **During the presentation of this proposal on the March 31st ICAPWG, there was a stakeholder request to extend this option further to allow for the voluntary relinquishment of External CRIS Rights**
 - The NYISO does not support the expansion of this project to include relinquishment of External CRIS:
 - Expands the scope of the proposal beyond what was initially targeted and would require an entirely new process and additional discussions would be necessary on the implications of including External CRIS in the proposal
 - Contrary to External CRIS rights, deactivated facilities are subject to a generator deactivation process that studies both the potential impacts on system reliability and resource adequacy levels

Proposed Revisions to the Rules for Modeling CRIS in Deliverability Studies

Market Design Concept Proposal

- **Proposal:** The NYISO proposes modifying the existing rules to require deactivated facilities to inform the NYISO, prior to the start of a Class Year, whether the facility intends to transfer its CRIS rights prior to the scheduled completion of the study
- **Application:** Deactivated facilities
- **The proposal formalizes the existing rule that removes CRIS from the applicable deliverability study base case if such CRIS will expire prior to the scheduled completion of the deliverability study**
 - If the CRIS of the deactivated facility would expire prior to the scheduled completion of the Class Year study (12 months), the deactivated facility, prior to the start of the CY study, must notify the NYISO and submit documentation regarding a proposed or potential CRIS transfer
 - Deactivated facilities must notify the NYISO by submitting the corresponding standardized form
 - The notification for CRIS transfer could be for either full or part of the existing CRIS rights
 - Upon receipt of the notification form and confirmation of information, the NYISO will notify the facility, confirming that it will continue to model the corresponding CRIS rights on the applicable deliverability studies
 - Proposed transfers will be processed in accordance with applicable rules for same location or different location CRIS transfers (e.g., different location transfers must be evaluated for deliverability in a Class Year Study)
 - Failure to submit documentation regarding a proposed or potential CRIS transfer will result in the CRIS of the deactivated facility ceasing to be modeled in the applicable deliverability studies if its CRIS will expire prior to the scheduled completion of the applicable CY study
- **Note: Current tariff rules for when the CRIS expires, or a transfer becomes effective will remain the same**

Notification Form

- **The standardized notification form will be known as the “Deactivated Facility CRIS Transfer Notice”**
- **Note: Any deactivated facility could make use of this form to request either a same location or a different location CRIS transfer**
- **The form would require, for example:**
 1. Submitting Entity’s Information
 2. Receiving Entity’s Information
 3. Type of transfer
 - Partial transfer of deliverability rights/Full transfer of deliverability rights
 - Proposed Same Location CRIS transfer/Potential Same Location CRIS transfer/Proposed Different Location CRIS transfer
 4. Identity of Generator(s)
 5. Acknowledgments
 6. Signed Certification
- **The standardized form would be included as an attachment to the Transmission Expansion and Interconnection Manual**
- **The specific language of this proposal will be discussed as part of the proposed tariff and manual revisions**

Proposed Revisions to the Rules for Same Location CRIS Transfers

Market Design Concept Proposal

- **Proposal:** The NYISO proposes modifying the existing rules to allow for same location CRIS transfers to have the same flexibility as different location CRIS transfers regarding deactivation requirements
- **Application:** Standalone facilities, multi-unit single technology resources, and CSRs
- 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)
- **Timeline for a same location transfer request:**
 - If the facility is deactivated, it would be able to request a same location CRIS transfer at any point during the calendar year (consistent with current rules)
 - If the facility elects to remain active, it would be able to request a same location CRIS transfer prior to August 1st of the year preceding the next capability year
 - Active facility will be required to submit a binding transfer notification form to the NYISO, informing about the change in their existing CRIS rights and the corresponding election of participation for the next capability year
 - If a transfer occurs in an MCZ, the facility receiving the CRIS rights would be required to participate in any of the concurrent EDS or CY studies and obtain a BSM examination before the transaction can be deemed final and effective at the start of the next capability year
 - Active facilities will be able to request for a same location CRIS transfer as frequently as once a year

Market Design Concept Proposal

- **In the case of CSRs, resources could transfer part or all of their CRIS rights to resources 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) the individual resources within the facility**
 - 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
- **Note: This market design concept does not propose changes to current tariff rules limiting the maximum CRIS that can be requested for this type of facility**
 - Section 25.8.1 of Attachment S: *Initial level of CRIS requested by the facility cannot exceed the minimum of the following: (a) the expected maximum injection capability of all co-located Generators sharing the same injection limit, (b) the nameplate capacity of the collective injection capability of all units within the facility, (c) the sum of the facility's requested and existing ERIS*

Open items

- **The NYISO will return to a future ICAPWG to discuss:**
 - **whether any additional evaluations are necessary before the transaction could be deemed final, and**
 - **the content of the proposed notification form required for an active facility/resource transferring CRIS**

Rules for Partial CRIS Expiration for Internal Facilities

Market Design Concept Proposal

- **Proposal:** The NYISO proposes modifying the existing rules to include a condition to expire partial CRIS rights based upon utilization criteria
- **Application:** all internal generators
- **Proposal would expire a portion of a facility's CRIS if the ratio of the unit's CRIS and utilization/capability consistently falls below 90% of its CRIS value**
 - The proposed changes would be effective on a rolling 3-year moving forward basis, using the offer value within that 3-year period
 - 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
- **After the NYISO confirms a facility is subject to partial CRIS expiration, it will notify the facility about the partial expiration of its CRIS and will confirm the facility's new MW level of CRIS**
 - The NYISO will make the information about partial CRIS expirations publicly available on the Generator Status Update Report
- **After notification of partial CRIS expiration, the expired CRIS will cease to be modeled in deliverability studies**
- **Note: For units in an ICAP Ineligible Forced Outage (IIFO) or Mothballed, the partial expiration rule would not be applicable, as they have already begun their 3-year CRIS expiration clock and could return to the system at full capacity**
- **The specific language of this proposal will be discussed as part of the proposed tariff and manual revisions**

Rules for Partial CRIS Expiration for UDRs and EDRs

Market Design Concept Proposal

- **Proposal:** The NYISO proposes to expire partial CRIS rights for facilities physically limited from utilizing their full CRIS due to physical limitations in neighboring control area systems
- **Application:** UDRs and EDRs
- **If a UDR or EDR does not solve the physical limitations that prevent them from being fully deliverable at their existing CRIS (*e.g.*, because it does not proceed with system upgrades required to physically do so), the NYISO will expire their unutilized CRIS rights after 3 years of such underutilization**
 - Three years after the UDR or EDR first starts in service, the NYISO will evaluate whether the unit has been able to solve the physical limitations to be fully deliverable at its existing CRIS level
 - If the unit failed to solve the physical limitations before the three-year expiration clock, the unit's CRIS level would be reset to the withdraw capacity ability level in the neighboring control area system
 - If the unit demonstrates to have solved the physical limitations before the three-year expiration clock, the NYISO will confirm that the facility is fully deliverable at its existing CRIS level, and no partial expiration rule will be applied
- **Once the NYISO confirms a facility is subject to the application of the partial CRIS expiration rule, it will notify the facility about the partial expiration of its CRIS and confirm the facility's new MW level of CRIS**
 - The NYISO will make the information about partial CRIS expirations publicly available on the Generator Status Update Report
- **Note: The NYISO is proposing to exempt UDRs and EDRs entirely from the application of the partial CRIS expiration rule for economic decisions on their election and offers (Example in the Appendix)**
- **The specific language of this proposal will be discussed as part of the proposed tariff and manual revisions.**

Next Steps

Next Steps

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

Appendix

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

Current Rules

■ Current tariff rules for different location CRIS transfers:

- 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 same location CRIS transfers:

- 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)

Example of Partial CRIS Expiration – Internal generators

■ 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
 - In this example, 5 MW would be expired

Market Design Concept Proposal for Partial CRIS for UDRs and EDRs

- In August 2021, LIPA and PSEG Long Island provided comments regarding 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
- Based on LIPA/PSEG comments and stakeholder feedback at the March 31, 2022, ICAPWG, 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

Partial CRIS expiration UDRs and EDRs

■ Example: a UDR obtained 500 MW CRIS rights

- 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 withdrawal capability in a neighboring control area for only 300 MW and is not able to deliver the incremental MWs 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 unutilized CRIS rights (200 MW) after 3 years of underutilization of the CRIS

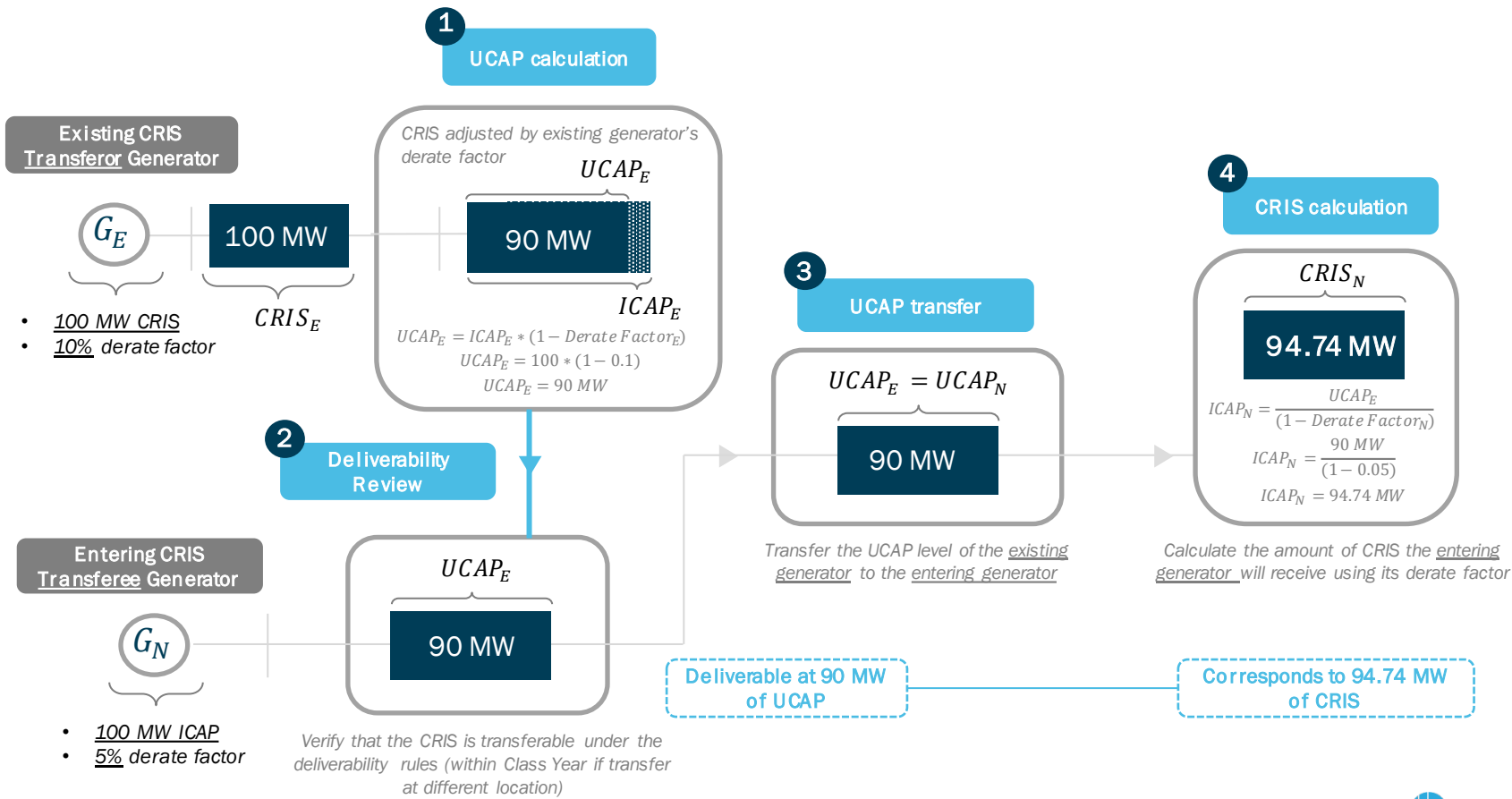
CRIS transfer UCAP/ICAP calculation

- 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

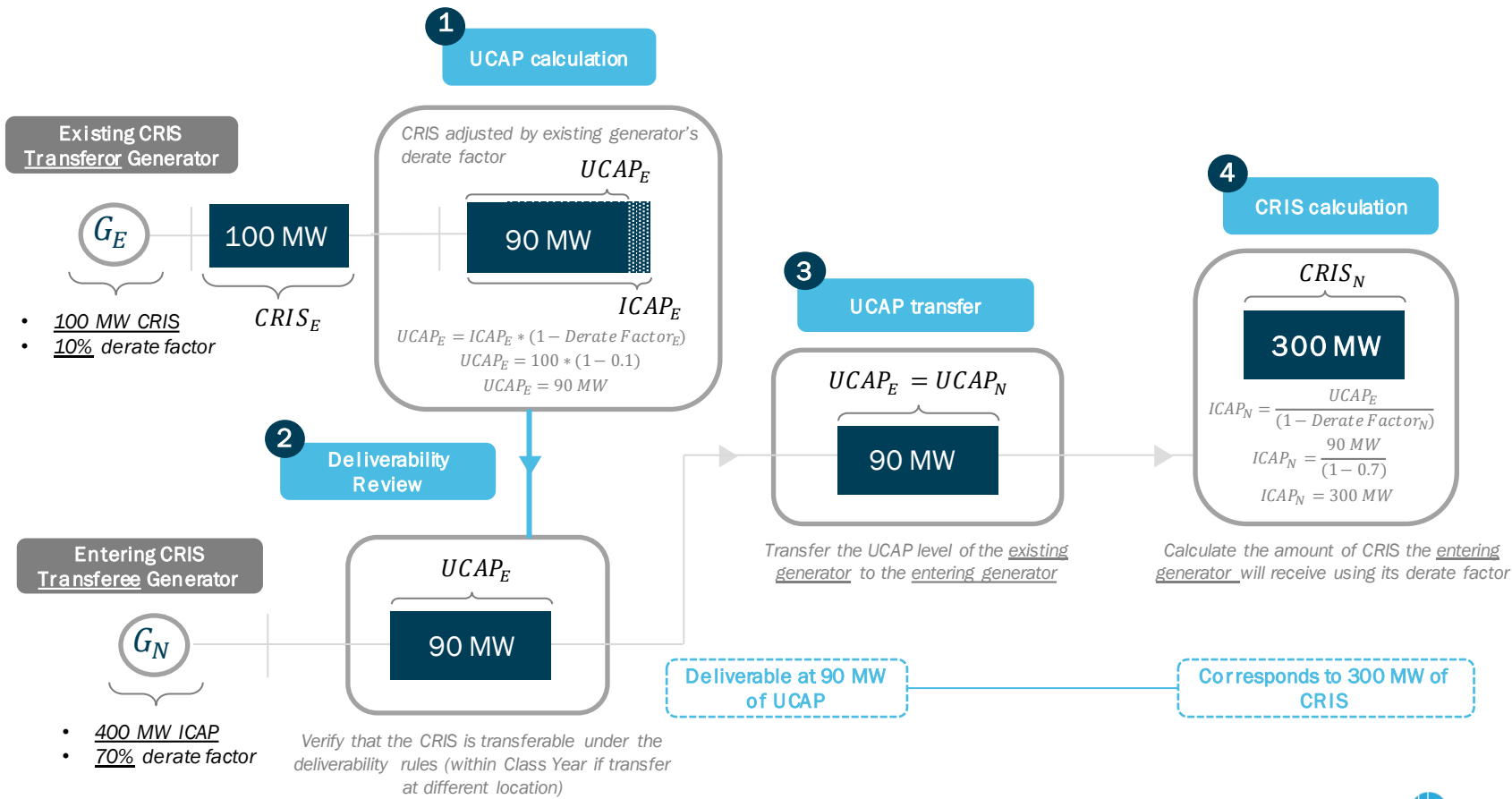
CRIS transfer UCAP/ICAP calculation steps

- 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

Example 1 – from higher to lower derate factor



Example 2 – from lower to higher derate factor



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

Questions?