New York ISO
Independent System Operator

CRIS Expiration Evaluation

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Agenda

- Background
- Recap 2021 MDCP and open items for the 2022 MDC
  - 3-Year CRIS Retention
  - CRIS Transfers
  - Partial CRIS Expiration
- Next Steps
- CRIS transfer UCAP/ICAP calculation examples

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Background

Project Objectives & Deliverable

- **The objective of this project is to develop modifications to CRIS Expiration rules as well as the rules surrounding CRIS Transfers.**
  - This project will seek to further enhance and provide additional clarification to the CRIS expiration rules.
  - Further enhancements to the CRIS expiration rules will more appropriately address the retention of CRIS by retired facilities and facilities no longer fully participating in the ICAP market.
- **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**
- **This project will build upon the work from the 2021 CRIS Expiration Evaluation MDCP project.**

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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%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

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Recap 2021 MDCP and open items for the 2022 MDC

Market Design Concept Proposals

- **As a part of the CRIS Expiration project, NYISO identified three potential sets of rule changes:**
  - Modifications to the 3-year retention of CRIS by certain Retired units
  - Modifications to allow more flexibility with respect to CRIS Transfers
  - Rules to provide for partial CRIS Expiration

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3-Year CRIS Retention

Market Design Concept Proposal for 3-Year CRIS Retention – As of last year

- **The NYISO proposes to modify the rules to require retired units to demonstrate, prior to each deliverability study whether a transfer is anticipated and feasible before the CRIS expires.**
  - The notice of transfer feasibility and whether a transfer is anticipated would be required for each retired facility before the start of each Class Year and Expedited Deliverability Study.
  - Timeline and examples of transfer scenarios, previously discussed in 2021, are available in the Appendix.

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Comments

- **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

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Market Design Concept Proposal for 3-Year CRIS Retention – Revised

- **Based on feedback received at the July 27th working group meeting, the NYISO has revised its proposal looking to simplify the process and obligations of retired units for CRIS retention and transfer purposes. The proposal contemplates that:**
  - If the CRIS of the retired facility would not expire before the end of the Class Year or Expedited Deliverability Study, the retired facility must elect, prior to the start of each Class Year or Expedited Deliverability Study, to either:
    1) Retain it's CRIS rights for possible transfer (in this case, the CRIS of the retired facility would continue to be modeled in the applicable deliverability base case)
    2) Return it's CRIS rights (in this case, the CRIS of the retired facility would expire and then would cease to be modeled in the applicable deliverability base case)
  - If the CRIS of the retired facility would expire before the end of the Class Year or Expedited Deliverability Study, the retired facility must either:
    1) Submit documentation regarding a potential or planned CRIS transfer:
       a) Identification of a facility that could be eligible for a same location CRIS transfer (in this case, the CRIS of the retired facility would continue to be modeled in the Class Year)
       b) A request for a different location CRIS transfer evaluation (can only be requested as part of a Class Year Study – not via an Expedited Deliverability Study) (in this case, it would then follow the modeling rules for different location CRIS transfers)
       – Failure to submit such documentation would result in the CRIS of the retired facility to cease to be modeled in the applicable deliverability study
    2) Return it's CRIS rights (in this case, the CRIS of the retired facility would cease to be modelled in the applicable deliverability base case)

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Open items

- **Additional details needed as part of the Market Design Complete:**
  - Notice process (i.e., notice responsibility, implications, timeline, etc.)

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CRIS Transfers

Market Design Concept Proposal for Same Location CRIS Transfers

- **Under the proposed changes:**
  - Units could transfer their CRIS while still in the process of shutting down or elect to continue operating as ERIS only
    - These units would still be able to receive energy payments through ERIS
  - Units can transfer unutilized CRIS while they are still active
- **The proposed changes would make the rules for same location CRIS transfers consistent with the rules for different location CRIS transfers with respect to deactivation requirements (*i.e.*, old unit need not be completely deactivated before transferring its CRIS)**

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Open items

- **Additional details needed as part of the Market Design Complete include:**
  - How the proposal would apply in the case of several units at a single facility
  - Transfer frequency permitted
  - Eligibility
  - Impacts on the IRM/LCR process

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Partial CRIS Expiration

Market Design Concept Proposal for Partial CRIS

- The NYISO currently sees value in limiting a portion of a unit's CRIS where its existing CRIS exceeds its utilization and capability
- 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
- In the analysis previously presented to stakeholders, the NYISO evaluated NYCA units over the past 10 years, comparing Summer CRIS levels to Summer DMNC/offer levels (see Appendix)

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Market Design Concept Proposal for Partial CRIS

- **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 generators as well as controllable lines**

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Open items

- **Additional details needed as part of the Market Design Complete:**
  - How the rule would apply to UDRs

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LIPA/PSEG comments on UDR expiration

- 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
- 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.
  - Communication included as part of today's ICAPWG materials
- LIPA and PSEG's proposal will be discussed in this committee as part of the Market Design Complete project.

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Next Steps

Next Steps

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

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CRIS transfer UCAP/ICAP calculation examples

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.

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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

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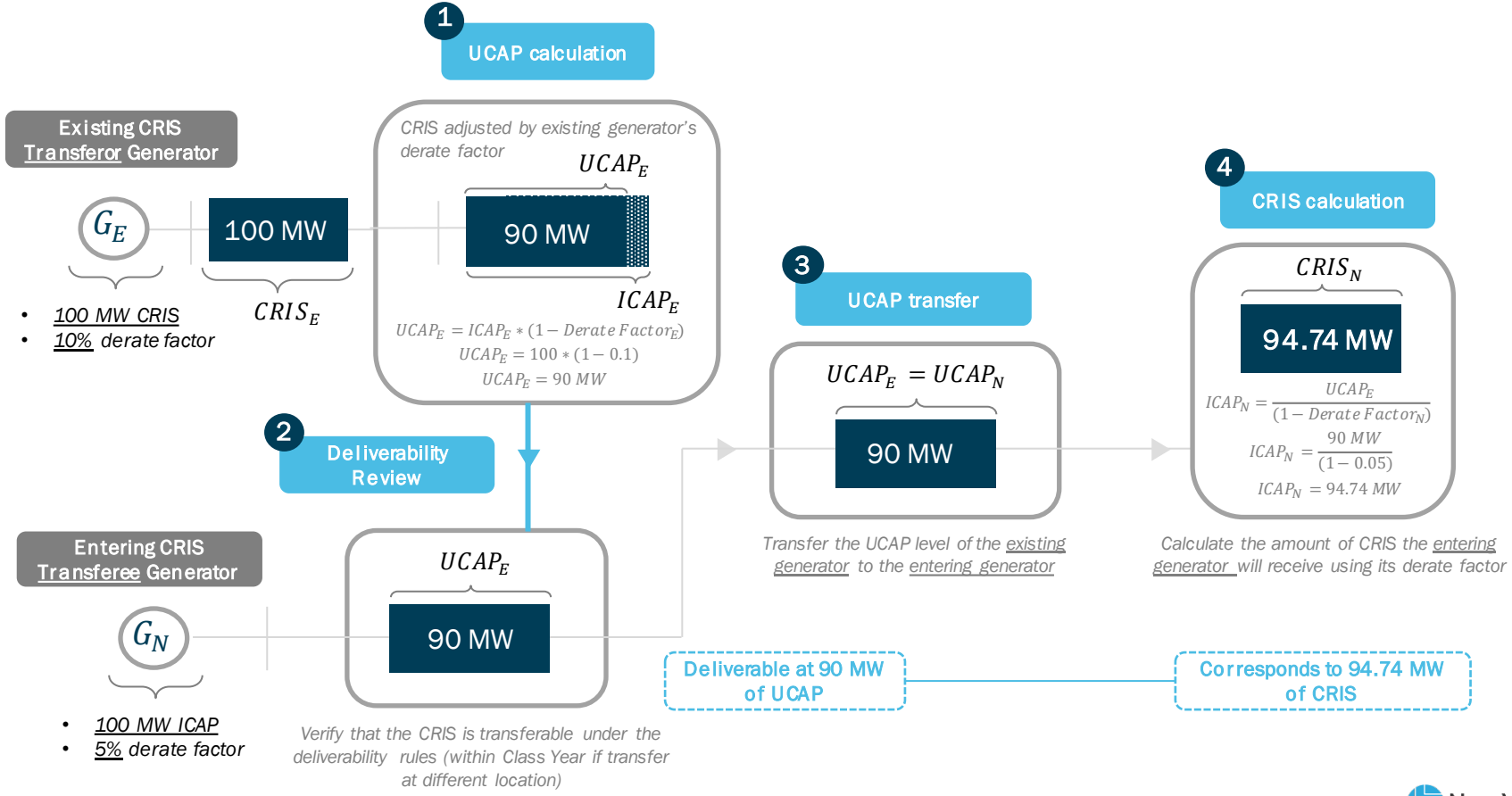
Example 1 – from higher to lower derate factor



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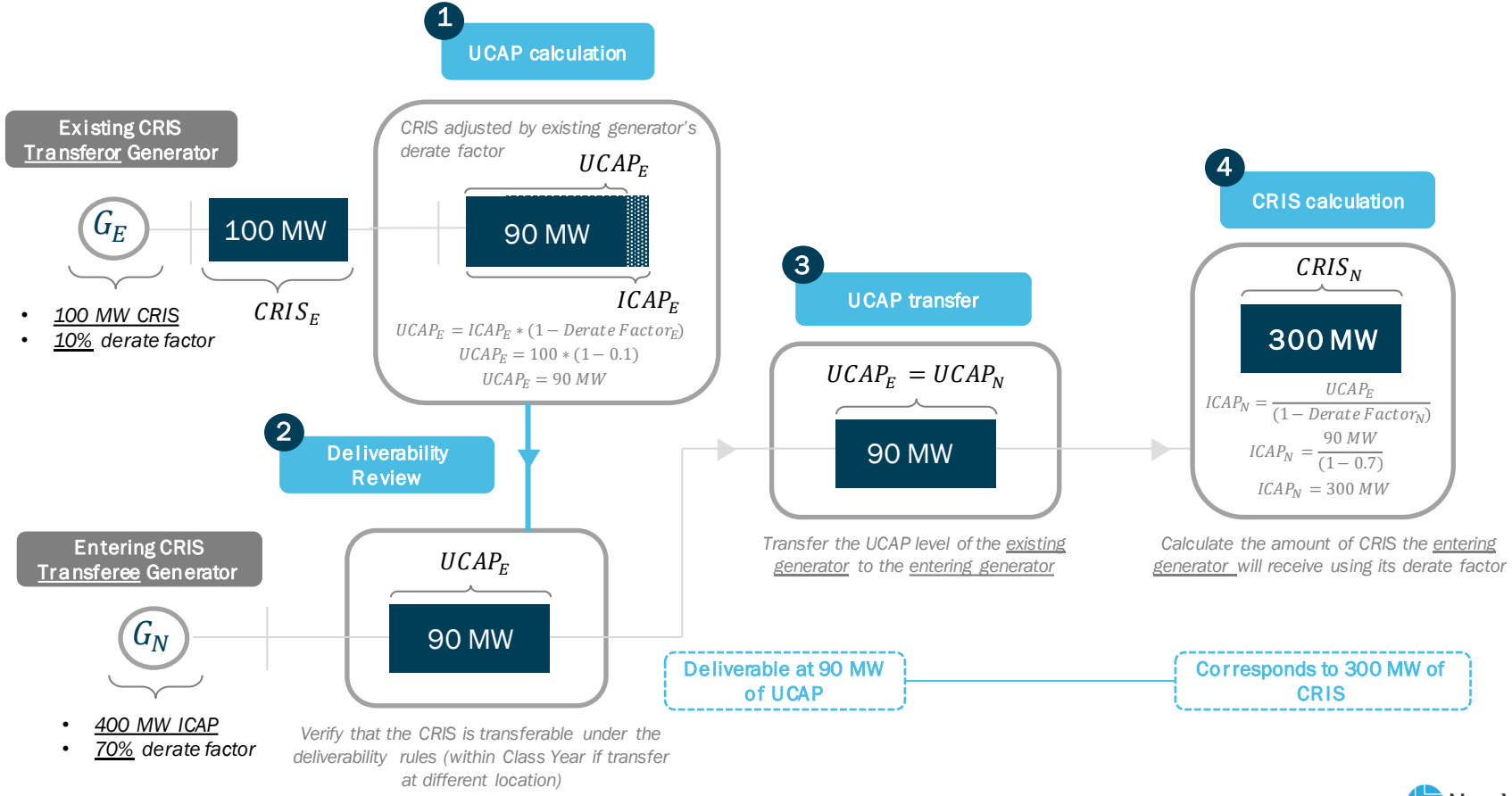
Example 1 – from lower to higher derate factor



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Appendix

Market Design Concept Proposal for 3-Year CRIS Retention

- **Examples of transfer scenarios that would be modeled in the upcoming deliverability study:**
  - Transfer is feasible and anticipated (*e.g.*, CRIS expires in 6 months and there is a facility at the same location that will go in-service prior to that time, with which the developer is in transfer negotiations)
  - Transfer feasible but not yet anticipated (e.g., CRIS expires in 6 months and there is a facility at the same location coming in-service prior to that time, but with which there is not yet a transfer transaction in progress)
- **Examples of transfer scenarios that would expire the CRIS and not be modeled in the upcoming deliverability study:**
  - Transfer feasible but no intention of transfer (e.g., the developer indicates it has no intention to transfer or wishes to "return" its CRIS)
  - Transfer not feasible (e.g., CRIS expires in 6 months and there is no same location facility that can come into service before then and no different location facility with which a transfer transaction can be completed before then)
- **The notice of transfer feasibility and whether transfer is anticipated would be required for each retired facility before the start of each Class Year and Expedited Deliverability Study**

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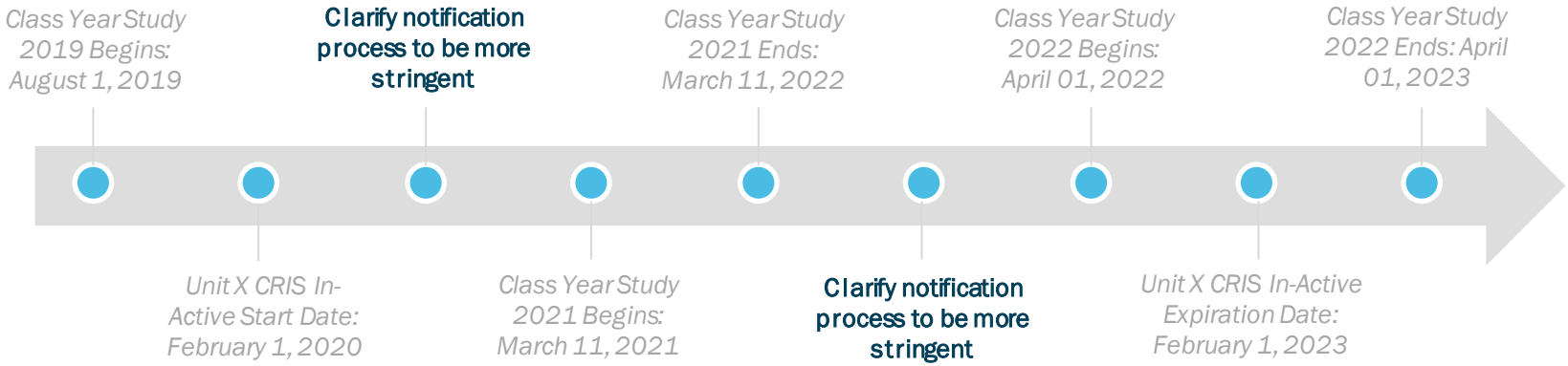
Timeline for Market Design Concept Proposal of 3-Year CRIS Retention

- The timeline below denotes when in the process the notification requirement would be clarified:



- Formalizing the language for the notification process for both types of transfers and requiring such notice before the Class Year Study/Expedited Deliverability Study Start Date will help expedite finalization of deliverability base cases.

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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)

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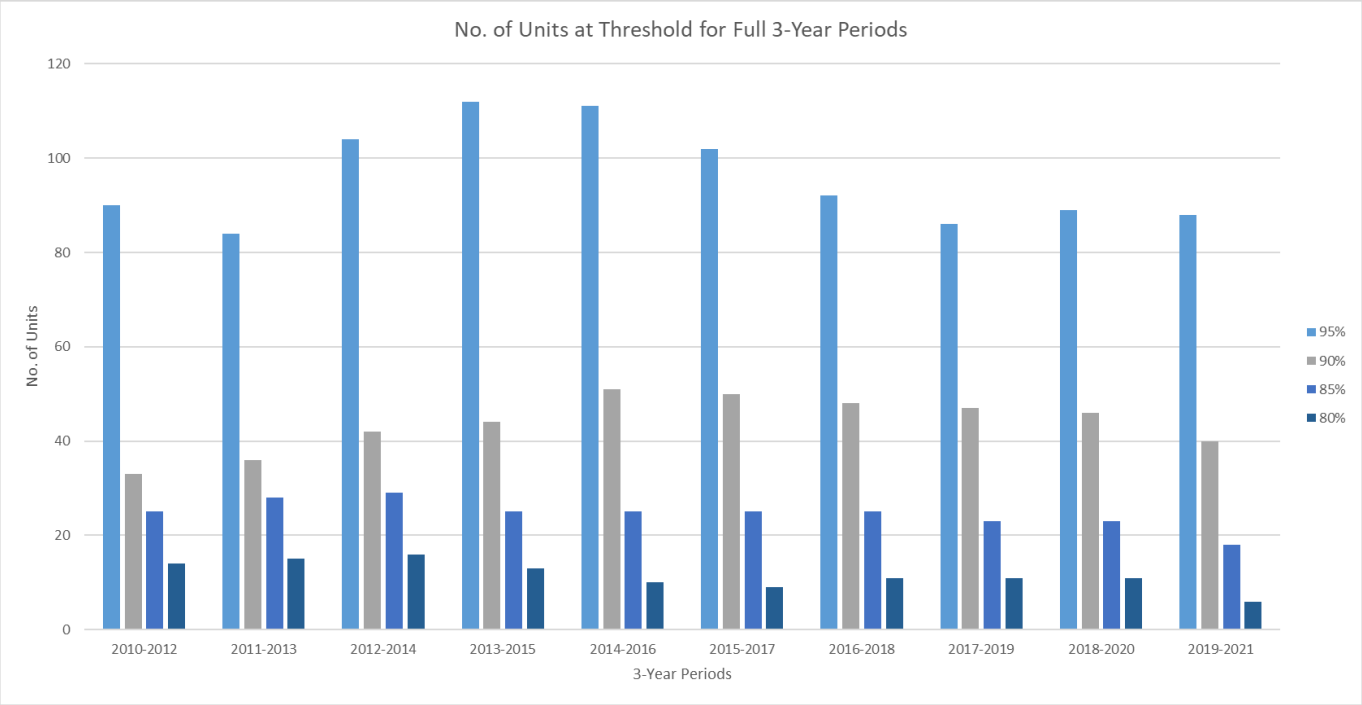
No. of Units not Utilizing Full CRIS



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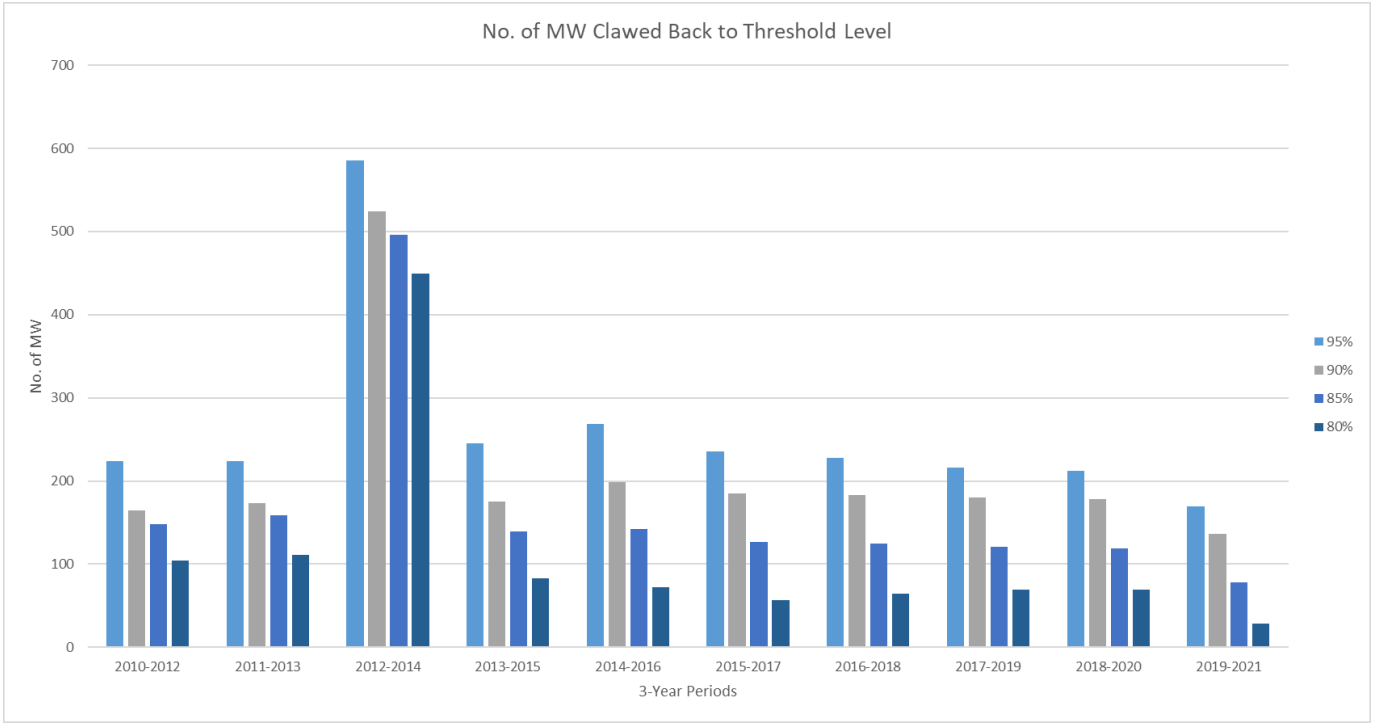
No. of MW Available for Expiration



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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

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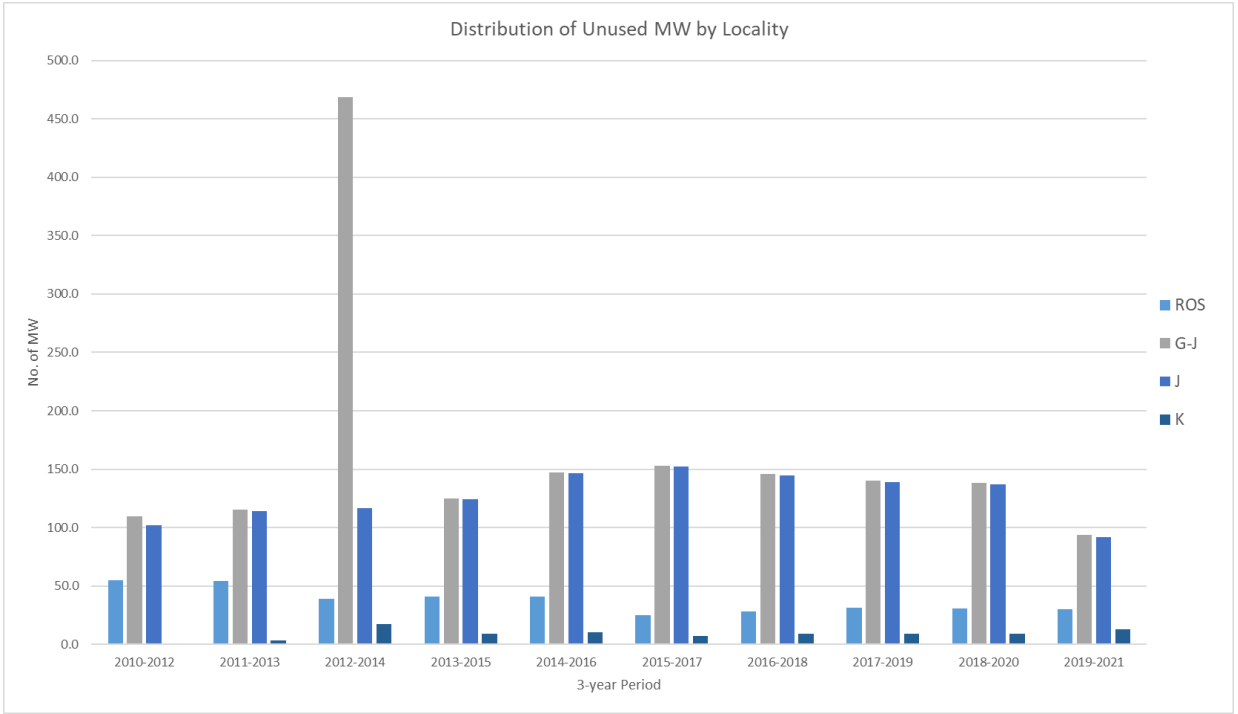
Distribution of Unutilized MW by Locality



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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

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Questions?