

Capacity Accreditation Timeline

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ICAP/MIWG/PRLWG Meeting

March 31, 2023

Background and Today's Purpose

- **Implementation details and administrative rules and procedures were accepted by the BIC in December 2022 for NYISO's marginal capacity accreditation market design**
 - New team at NYISO: Capacity Accreditation within Capacity Market Operations department
- **This presentation is meant to provide an overall timeline for Capacity Accreditation, applicable for each Capability Year beginning with the 2024/2025 Capability Year**
 - 2023-specific details can be found at the end of the presentation

Agenda

- **Timeline Overview**
- **Capacity Accreditation Components**
 - Peak Load Window
 - Capacity Accreditation Resource Classes
 - Capacity Accreditation Resource Class Assignments
 - Capacity Accreditation Factors
 - Capacity Accreditation Factor Assignments
- **Informational Capacity Accreditation Factors**

Reference Material

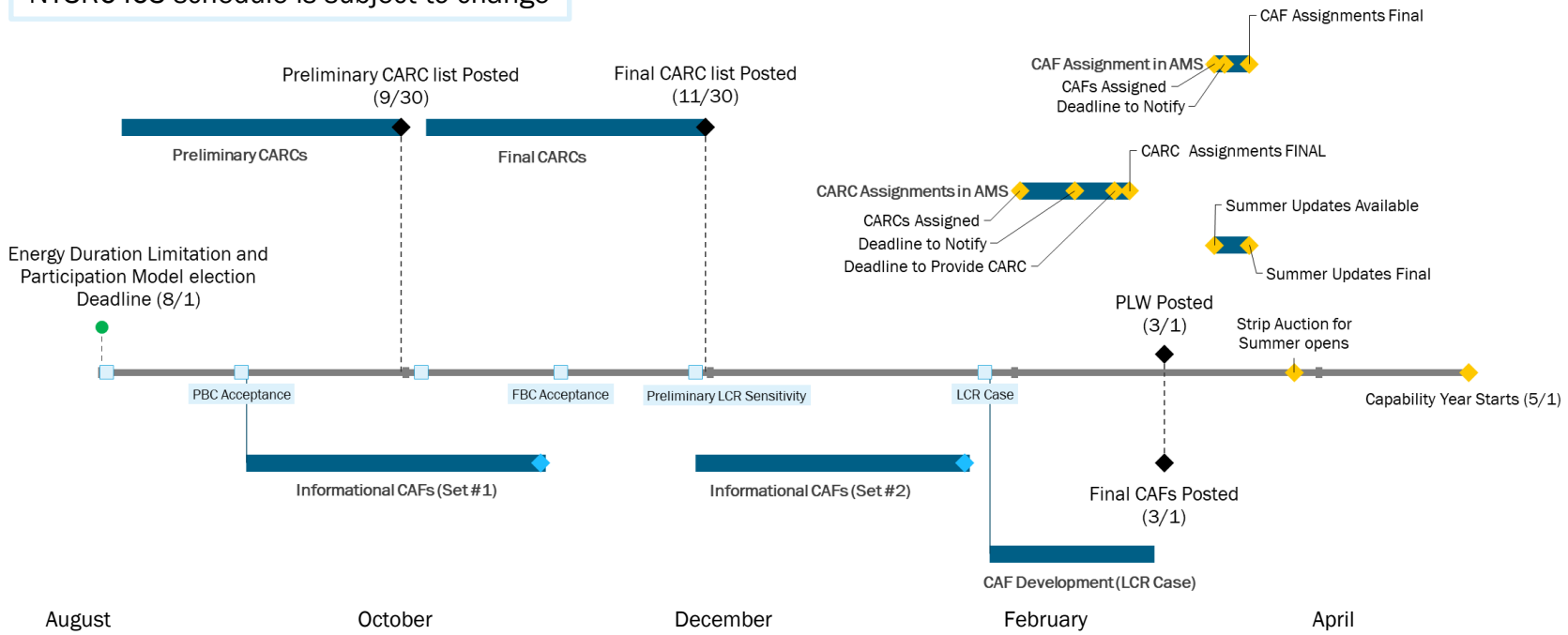
- Beginning with the Capability Period that begins on May 1, 2024, reference material, such as text or tables in the [Installed Capacity Manual](#), that are no longer applicable will be removed.
- Postings mentioned in this presentation will be on the NYISO [Capacity Accreditation](#) web page
 - The Installed Capacity Manual will be revised reflect this

Timeline Overview

Capacity Accreditation Timeline

NYSRC-ICS schedule is subject to change

◆ ICAPWG ◆ Postings ◆ ICAP Event Calendar □ NYSRC Schedule



*Approximate timeline for illustrative purposes, actual dates may change



ICAP Event Calendar Events

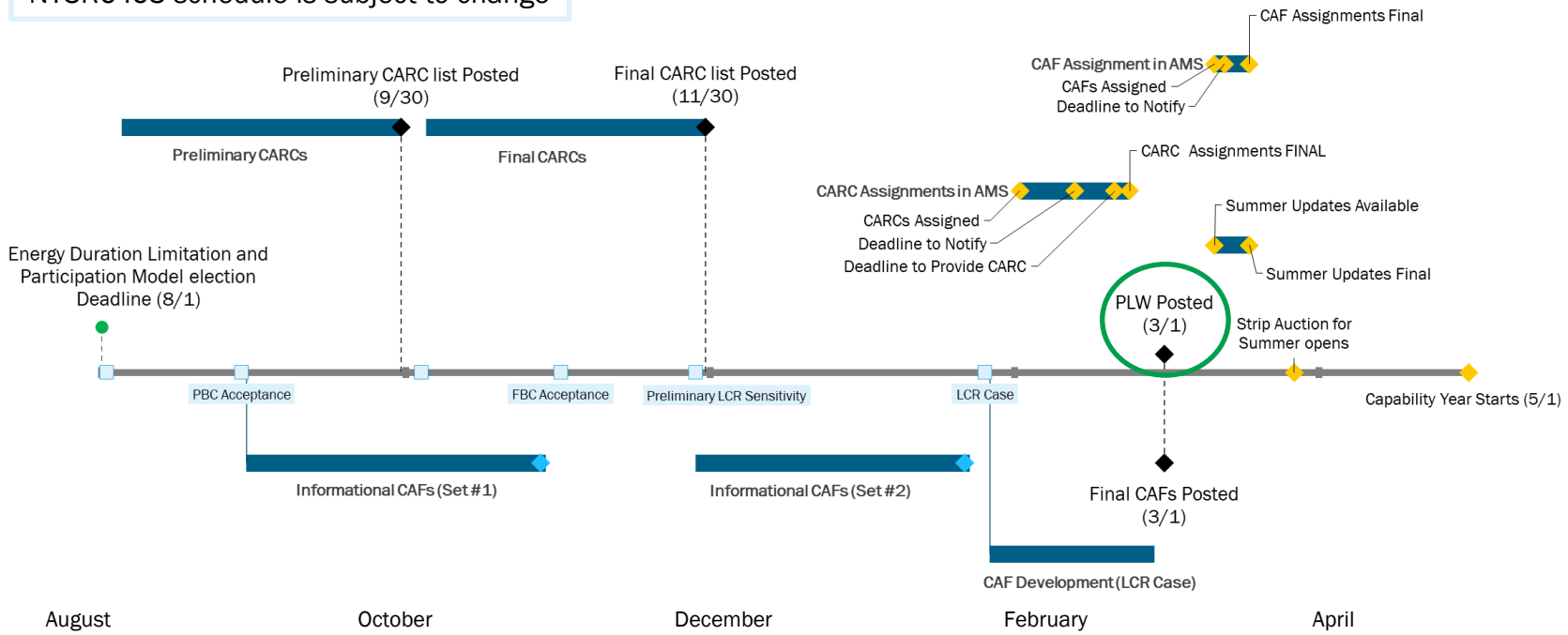
CAPACITY ACCREDITATION - Capacity Accreditation Resource Class Assignments Available
CAPACITY ACCREDITATION - Deadline to notify NYISO of incorrect Capacity Accreditation Resource Class Assignment
CAPACITY ACCREDITATION - Deadline to provide NYISO the Installed Capacity Supplier-provided Capacity Accreditation Resource Class Assignment
CAPACITY ACCREDITATION - Capacity Accreditation Resource Class Assignments considered Final
CAPACITY ACCREDITATION - Summer Capability Period Updates, including derating factors, Available
CAPACITY ACCREDITATION - Capacity Accreditation Factor for Available
CAPACITY ACCREDITATION - Deadline to notify NYISO of incorrect Capacity Accreditation Factor Assignment
CAPACITY ACCREDITATION - Capacity Accreditation Factor Assignments considered Final
CAPABILITY PERIOD - Summer Capability Period Updates, including derating factors, considered Final

Capacity Accreditation Components

Capacity Accreditation Timeline – PLW

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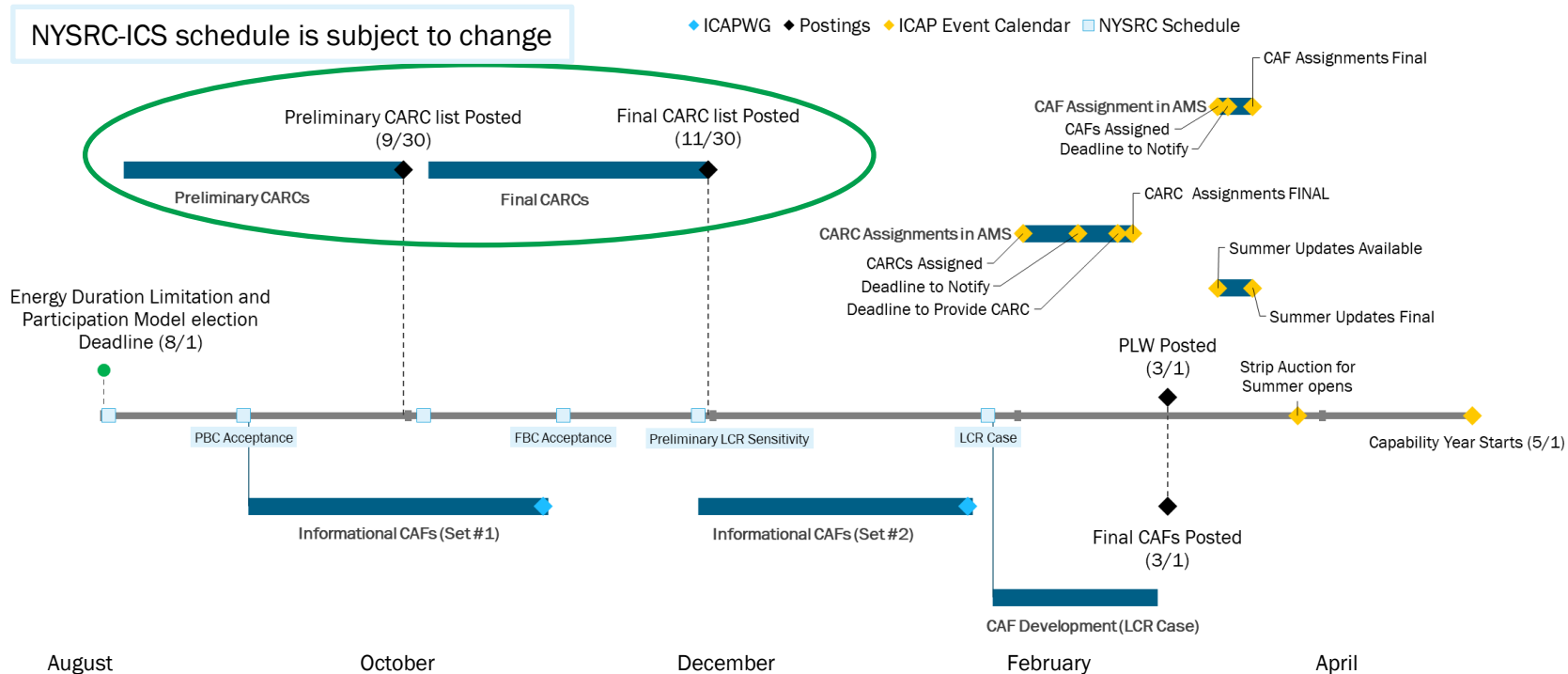
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Peak Load Window

- The Peak Load Window Annual Review Process will be conducted, as detailed in Section 7.3 of the [Installed Capacity Manual](#)
- Summer and Winter Peak Load Windows (PLWs) for the upcoming Capability Year will be posted by March 1st, immediately preceding the start of the Capability Year

Capacity Accreditation Timeline - CARC

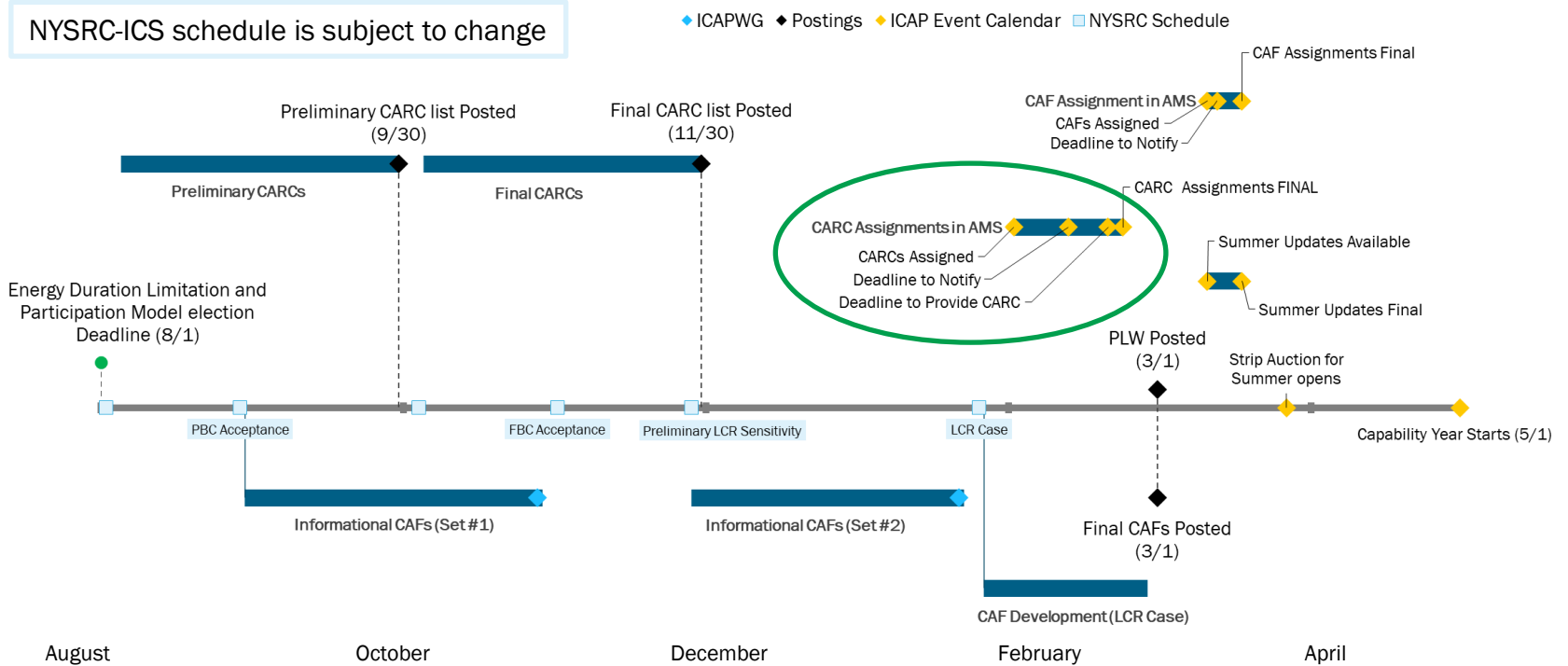


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Capacity Accreditation Resource Classes

- **NYISO will post the preliminary list of Capacity Accreditation Resource Classes (CARCs) for the upcoming Capability Year by September 30th, immediately preceding the start of the Capability Year**
- **After receiving stakeholder feedback on the preliminary list, NYISO will post the final list of CARCs for the upcoming Capability Year by November 30th, immediately preceding the start of the Capability Year**
 - The preliminary and final lists of CARCs will identify what combinations of participation models, Energy Duration Limitations, and resource characteristics would lead to the assignment of an Installed Capacity Supplier to each Capacity Accreditation Resource Class

Capacity Accreditation Timeline - CARC Assignments



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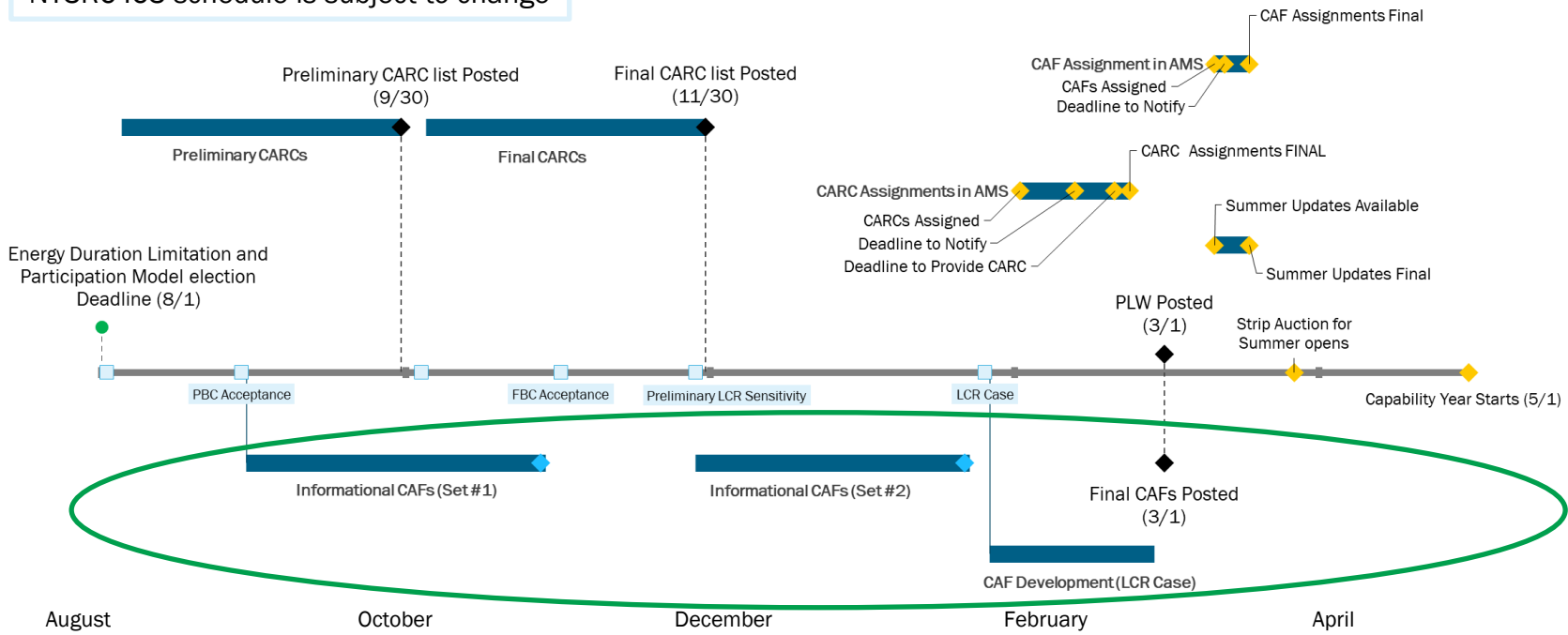
CARC Assignments

- **Following the posting of the final CARC list by November 30th, NYISO will assign each ICAP Supplier to the applicable CARC for the upcoming Capability Year**
 - CARC Assignments are based on each ICAP Supplier's elected Energy Duration Limitation, participation model, and resource characteristics for the upcoming Capability Year
 - CARC assignments will be available to ICAP Suppliers prior to the applicable deadline that will be identified in the ICAP Event Calendar
- **The annual procedure for CARC assignments includes an opportunity for ICAP Suppliers to review their CARC assignments before they are considered final**
 - Detail are in Section 7.1.1 of the [Installed Capacity Manual](#)
- **CARC assignments cannot be changed for the upcoming Capability Year at any point after the deadline identified in the ICAP Event Calendar for CARC assignments to be considered final**
 - The deadline identified in the ICAP Event Calendar for CARC assignments to be considered final will be set prior to the posting of the CAFs for the upcoming Capability Year

Capacity Accreditation Timeline - CAFs

NYSRC-ICS schedule is subject to change

◆ ICAPWG ◆ Postings ◆ ICAP Event Calendar □ NYSRC Schedule



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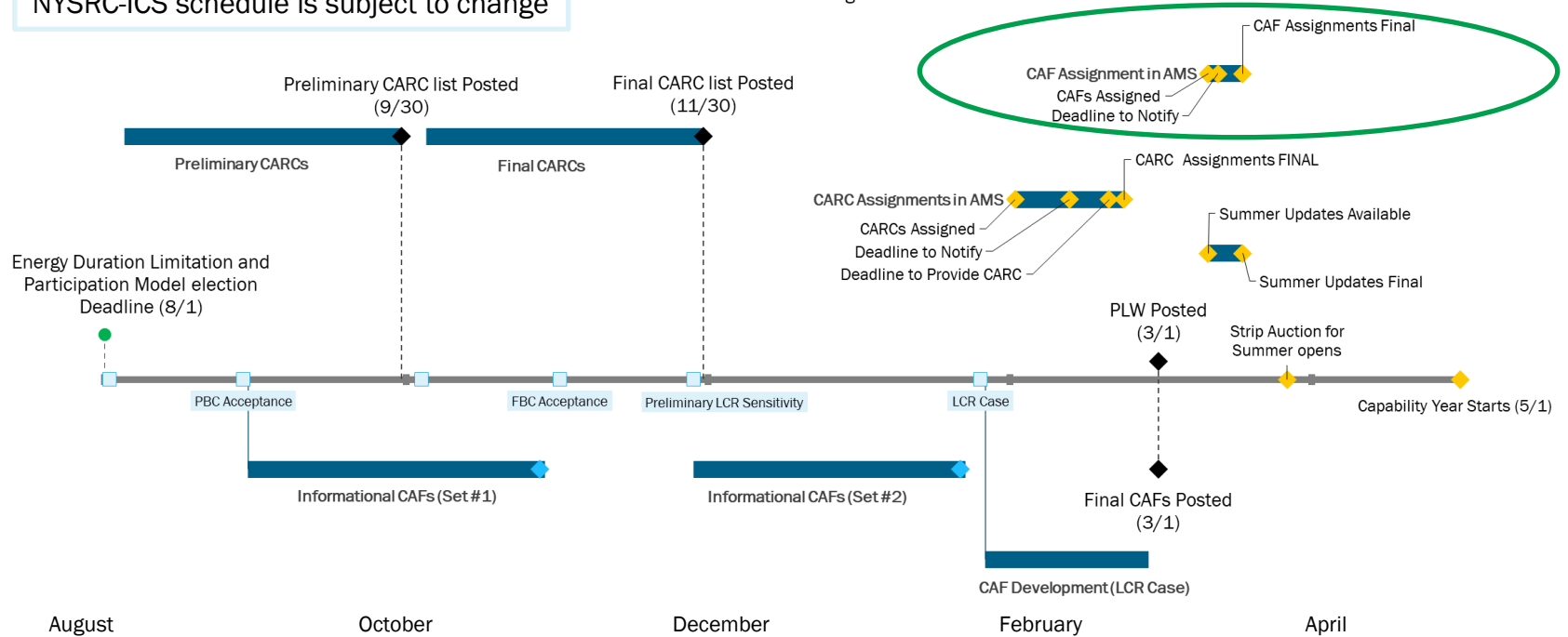
Capacity Accreditation Factors

- NYISO will present informational Capacity Accreditation Factors (CAFs) to the ICAPWG and post a summary of inputs to the [Capacity Accreditation](#) web page
 - Additional details are on later slides
- The final Capacity Accreditation Factors will be posted by March 1st, immediately preceding the start of the Capability Year

Capacity Accreditation Timeline – CAF Assignments

NYSRC-ICS schedule is subject to change

◆ ICAPWG ◆ Postings ◆ ICAP Event Calendar □ NYSRC Schedule



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CAF Assignments

- **ICAP Suppliers will be able to view their assigned CAF by the applicable deadline that will be identified in the ICAP Event Calendar**
 - If an ICAP Supplier believes it has been assigned the incorrect CAF based on its capacity zone and assigned CARC for the upcoming Capability Year, the ICAP Supplier must notify NYISO of the incorrect assignment prior to the applicable deadline that will be identified in the ICAP Event Calendar
- **CAF assignments cannot be changed for the upcoming Capability Year at any point after the deadline that will be identified in the ICAP Event Calendar for CAF assignments to be considered final**

Informational CAFs

CAFs Disclaimer

- **The informational CAFs and the input assumptions used in the GE MARS model to calculate these CAFs posted are being provided to inform NYISO stakeholders and market participants of the drivers that may impact the final CAF calculation process. These informational CAFs are not the final CAFs that will be used to determine the market revenue of ICAP Suppliers for the upcoming Capability Year. The final CAF results and the inputs to the GE MARS model may differ from this informational posting.**
- **All CAF value calculations will utilize the current up-to-date model assumptions at the time the calculations are performed**

Informational CAFs (Set #1)

- **NYISO will conduct informational calculations of CAFs using the NYSRC's approved Preliminary Base Case model developed at its Installed Capacity Subcommittee ("ICS") for the upcoming Capability Year**
 - These results would be expected in October/November

Informational CAFs (Set #2)

- **NYISO will consider calculating a second set of informational CAFs**
 - These CAFs may use inputs and assumptions that are relevant to the final CAFs based on information available in the early December timeframe
 - These results would be expected in January/February but may be deprioritized by production of effective final CAFs
 - Cases that will be considered include
 - NYSRC-ICS approved Final Base Case
 - Preliminary LCR case based on NYSRC-ICS approved Final Base Case
 - Preliminary LCR case based on NYSRC-ICS approved IRM

Additional Informational CAFs

- **NYISO may have on-going projects to explore and/or implement modeling and/or assumption improvements to the resource adequacy analysis – used to establish New York State installed reserve margins and used as the basis of determining Capacity Accreditation Factors**
- **Informational CAFs calculated as part these projects will be outside the annual process of the Capacity Accreditation team**

Feedback and Moving Forward...

- **NYISO welcomes feedback on the outlined timeline and would like to hear what stakeholders would find valuable to add or consider**

Questions?

Email: accreditation@nyiso.com

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

2023-Specific Additional Information

2023 Preparation

- NYISO has begun to update the market software needed to implement the marginal capacity accreditation design
- NYISO anticipates the testing of the application software to calculate CAFs will be completed in the second quarter of 2023

Peak Load Window for 2023/2024

- The Peak Load Windows for the 2023/2024 Capability Year are defined in Section 4.1.1 of the [Installed Capacity Manual](#)
- NYISO will post an informational document to provide stakeholders insight on the NYISO's annual review of the Peak Load Window, that will first apply for the Capability Year that begins May 1, 2024
 - NYISO will also post hourly weighting factors utilizing the Locational Minimum Installed Capacity Requirement study model (“LCR model”) used to calculate the Locational Minimum Installed Capacity Requirements for the 2023/2024 Capability Year as part of the informational document

Potential Preliminary List of CARCs

- 2-hour Energy Duration Limited¹
- 4-hour Energy Duration Limited^{1, 2}
- 6-hour Energy Duration Limited¹
- 8-hour Energy Duration Limited¹
- Landfill Gas
- Large Hydro³
- Limited Control Run-of-River Hydro
- Offshore Wind
- Onshore Wind (Land-based Wind)
- Solar
- Thermal
 - Unlimited Conventional Resource⁴
 - Conventional Resource with Non-Firm Fuel⁴
 - Startup Notification Limited Conventional Resource⁴
 - Startup Notification Limited Conventional Resource with Non-Firm Fuel⁴

1 Energy Duration Limited CARCs will apply to resources with Energy Duration Limitations, such as Energy Storage Resources, Energy Limited Resources, and dispatchable Distributed Energy Resources, that do not belong to another CARC

2 Special Case Resources (SCRs) will be assigned to the 4-hour Energy Duration Limited CARC for initial implementation of Capacity Accreditation. As modeling of SCRs in the IRM/LCR model changes to reflect the expected operations of SCRs in the NYISO market, a separate SCR CARC will be established

3 The Large Hydro CARC will apply to resources powered by hydraulic turbines that are not Limited Control Run-of-River Hydro or standalone pumped storage

4 Conventional resources will be separated into these classes as firm fuel and start-up notification requirement characteristics are incorporated into the IRM/LCR model. 2023's Modeling Improvements for Capacity Accreditation project will evaluate how to incorporate these characteristics into the IRM/LCR model and the criteria for assigning each conventional resource to the appropriate CARC based on its firm fuel status and start-up notification requirement characteristics