

Annual Review Process:

Peak Load Window for the 2024/2025 Capability Year

Christina Duong

Manager, Capacity Accreditation

ICAP/MIWG/PRLWG

Friday February 2, 2024

Agenda

Today's Purpose:

- Provide an overview of the annual Peak Load Window (PLW) review process
- Introduce the established PLW
- Background
- Process Overview
- Established PLW
- Next Steps



Background: Peak Load Windows

- The NYISO developed the Peak Load Windows (PLWs) as part of the 2019 Expanding Capacity Eligibility project.
 - The PLWs were established to capture the hours of the day with the highest probability of experiencing a loss of load event.
 - The static PLWs were established based on analysis and an evaluation based on 2018 IRM models.
 - 6-hour Peak Load Window
 - Summer Capability Period: HB 13 through HB 18
 - Winter Capability Period: HB 16 through HB 21
 - 8-hour Peak Load Window
 - Summer Capability Period: HB 12 through HB 19
 - Winter Capability Period: HB 14 through HB 21
- The Peak Load Window is used to determine the bidding requirements for Resources with Energy Duration Limitations for the indicated Capability Year and the UCAP percentages for intermittent and limited control run of river resources.



Background: Annual Review of PLWs

- As part of the 2022 Improving Capacity Accreditation project, the NYISO established the rules for the annual review and modification of the PLWs, allowable EDL elections, and related bidding requirements that will become effective for the 2024-2025 Capability Year.
 - In developing the proposal for the annual PLW review, the NYISO evaluated the hourly Loss of Load Expectation from the Final Base Cases of the 2018-2022 IRM studies.
- Starting with the Capability Year that begins on May 1, 2024, the Peak Load Windows for the Summer and Winter Capability Periods will be determined through the annual review processes in accordance with Section 5.12.14.3 of the NYISO <u>Services Tariff</u> and Section 7.3 of the <u>ICAP Manual</u>.
 - The effective PLWs will be publicly posted by March 1st for the upcoming Capability Year.



Annual Review Process

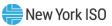


©COPYRIGHT NYISO 2024. ALL RIGHTS RESERVED

DRAFT – FOR DISCUSSION PURPOSES ONLY

Summer Peak Load Window

- The Peak Load Window was established in accordance with Section 7.3.1 and Section 7.3.2 of the <u>ICAP Manual</u>
- NYISO calculated the percentage of total hourly loss of load expectation (LOLE) during the Summer Capability Period that occurs in each hour by utilizing the Locational Minimum Installed Capacity Requirement study model ("LCR model") used to calculate the Locational Minimum Installed Capacity Requirements for the upcoming Capability Year, as approved by the NYISO Operating Committee.
 - The 2024 LCR model was approved by the OC on January 18, 2024.



Winter Peak Load Window

 The Peak Load Window for the Winter Capability Period will be HB 16 through HB 21, subject to ISO review, until updated winter modeling approaches and assumptions are incorporated into the LCR model.



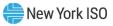
ISO Review

- The Peak Load Windows established by Section 7.3.1 and Section 7.3.2 of the <u>ICAP Manual</u> may be reviewed by the NYISO for consistency with the expected hours of reliability risk based on operating experience and/or expected grid conditions for the upcoming Capability Year.
 - If the NYISO determines the Peak Load Window is <u>inconsistent</u> with the expected hours of reliability risk identified by the NYISO based on any of these factors, the NYISO may propose a new Peak Load Window(s) to be used for the Capability Period(s).



ISO Reviews may propose new PLW(s)

- Proposed new PLW(s) as a result of the ISO Review will require the approval of the NYISO OC.
 - The NYISO would then advise the NYISO Business Committee and the NYISO Operating Committee it has determined a new Peak Load Window(s) must be set and would seek stakeholder input on such window(s) through its stakeholder processes, as time permits.
- Peak Load Windows that differ from the prior year's PLWs, established consistent with the annual review process will not require the approval of the NYISO OC.



Peak Load Window for Summer 2024



Establishing a Peak Load Window for the Summer 2024 Capability Period

- NYISO determined the prior 2023 Summer PLW does not capture at least 90% of the hourly LOLE occurring in the Summer Capability Period in the 2024 LCR model.
- PLW for Summer 2024: HB 13 through HB 20
 - Start with two consecutive hours with the highest percentage of hourly LOLE
 - Consecutive hours are added until at least 90% of the total hourly LOLE is captured

(92% LOLE Distribution) 🖨 New York IS																								
2024 LC	R 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	6%	5%	10%	18%	22%	13%	8%	10%	5%	0%	0%
	HB00	HB01	HB02	HB03	HB04	HB05	HB06	HB07	HB08	HB09	HB10	HB11	HB12	HB13	HB14	HB15	HB16	HB17	HB18	HB19	HB20	HB21	HB22	HB23

ISO Review of Summer 2024 PLW

- The established Summer 2024 Peak Load Window (HB 13 through HB 20) was reviewed by the NYISO for consistency with the expected hours of reliability risk based on operating experience and/or expected grid conditions for the upcoming Capability Year.
 - The NYISO determined the Peak Load Window for the Summer 2024 Capability Period is consistent with the expected hours of reliability risk.



Peak Load Window for Winter 2024/2025



ISO Review of Winter 2024/2025 PLW

- The Peak Load Window for the Winter Capability Period will be HB 16 through HB 21
- The Winter 2024/2025 Peak Load Window was reviewed by the NYISO for consistency with the expected hours of reliability risk based on operating experience and/or expected grid conditions for the upcoming Capability Year.
 - The NYISO determined the Peak Load Window for the Winter 2024/2025 Capability Period is consistent with the expected hours of reliability risk.



Next Steps



Next Steps

NYISO has established the PLWs the upcoming Capability Year.

Summer 2024 Peak Load Window	Winter 2024/2025 Peak Load Window						
HB 13 through HB 20	HB 16 through HB 21						

• The effective PLWs are posted by March 1st for the upcoming Capability Year on the <u>Capability Accreditation</u> web page.

 As this is the first year of the annual review process for establishing the PLWs, NYISO will present a similar presentation to the BIC and OC for awareness.

- Overview of Process presentation at 2/14 BIC Meeting
- Overview of Process presentation at 2/15 OC Meeting



Questions?

Email: accreditation@nyiso.com



Our Mission & Vision

 \checkmark

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