

ICAP Manual: Revisions

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Business Issues Committee (BIC) Meeting

April 12, 2023

Background

- **Early 2021, the NYISO updated the initial Unforced Capacity percentage (“UCAP%”) for wind resources during the first year of operation in Section 4.5 of the ICAP Manual**
 - Only the land-based wind was updated using actual historical production data for all existing wind resources
 - For offshore wind, stakeholders agreed to wait for the updated NREL data to be released early 2021
 - In April 2021, NREL released an updated 20-year wind dataset (2000-2020). However, the new release only included the meteorology data, without power profiles
- **The NYISO engaged the consultant, DNV, in July 2022 to develop simulated historical offshore wind power profiles**
- **The NYISO posted the hourly offshore wind power profiles on the [NYISO website](#)**

Offshore Wind Initial UCAP%

Initial UCAP%

- As specified in Section 4.5 of the ICAP Manual, new wind resources are assigned an initial UCAP % during the first year of operation
- Off-Shore Wind values are currently “TBD”

Unforced Capacity Percentage – Land-Based Wind		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	16%	16%
Winter	34%	34%

Unforced Capacity Percentage – Off-shore Wind (Zone J and K)		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	TBD	TBD
Winter	TBD	TBD

Initial UCAP% for Offshore Wind

- **For land-based wind resources, the initial UCAP% was calculated using the most recent 5-year actual output from all existing land-based wind resources during the Peak Load Window (“PLW”) from 2015 to 2019**
 - However, there is no existing offshore wind on the NYISO system
- **For offshore wind resources, the NYISO proposes to update the initial UCAP% using simulated wind profiles from DNV and aligning with the calculations for land-based wind resources with the most recent data period**
 - The most recent 5-year period for the offshore wind initial UCAP% calculation would be Winter 2016-17 through Summer 2021
- **The NYISO applied the same methodology for land-based wind and establish the initial UCAP% for 6-Hour and 8-Hour PLW for Zone J and K**

Offshore Initial UCAP% with DNV Profiles

- Based on the average annual Unforced Capacity percentages between 2017 and 2021 of the DNV Profiles
- Same methodology as land-based initial UCAP% is used as specified in the ICAP Manual:

Unforced Capacity Percentage – Off-shore Wind (Zone J and K)		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	35%	35%
Winter	54%	53%

Proposed ICAP Manual Revisions

Proposed ICAP Manual Revisions (Section 4.5)

The Unforced Capacity percentages for off-shore wind resources set forth below are based on the average annual Unforced Capacity percentages between ~~2015 and 2019~~ Winter 2016-17 and Summer 2021, where the annual Unforced Capacity percentages are the weighted averages using the simulated off-shore wind historical production during the hours within the applicable Peak Load Windows, as well as the associated hourly weighting factors as specified in Section 3.4(c) in the *ICAP Manual Attachment J*. The simulated off-shore wind historical production is based on the off-shore wind profiles for ~~the mid-Atlantic region released by the National Renewable Energy Laboratory~~ proposed offshore wind development areas near New York state, available on the NYISO website.

Proposed ICAP Manual Revisions (Section 4.5)

Unforced Capacity Percentage – Land-Based Wind		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	16%	16%
Winter	34%	34%

Unforced Capacity Percentage – Off-shore Wind (Zone J and K)		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	TBD 35%	TBD 35%
Winter	TBD 54%	TBD 53%

*The specific Unforced Capacity Percentages are pending the National Renewable Energy Laboratory release of updated wind profiles, which is expected to be available early 2021.

ICAP Manual Excerpt (Section 4.5)

Starting with the Capability Period that begins May 1, 2024, initial Unforced Capacity values for new generating Resources will be based on the applicable Capacity Accreditation Factor for the generating Resource's Capacity Accreditation Resource Class and the 1-year NERC class average EFORd value for Resources of the same type. If no NERC class average exists, the NYISO will estimate a class average using EFORd values for at least three (3) Resources of the same type currently providing capacity in the NYISO market and have sufficient operational data; provided however, that for a new Limited Control Run-of-River Hydro Resource or Intermittent Power Resource, the initial Unforced Capacity value will be based on the applicable Capacity Accreditation Factor for the Resource's Capacity Accreditation Resource Class and a derating factor of zero. The initial Unforced Capacity value, whether based on the 1-year NERC class average EFORd or the NYISO estimate, is used for all applicable months in the Resource's derating factor calculation.

Next Steps

- Today's BIC vote
- **As a reminder, beginning with the Capability Period that begins on May 1, 2024, reference material, such as text or tables in the ICAP Manual, that are no longer applicable will be removed.**
 - Reference material, such as the offshore wind power profiles used in support of the Offshore Wind Initial UCAP%

Questions?

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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