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Independent System Operator

Final CAFs for the 2024/2025 Capability Year

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Final Capacity Accreditation Factors

- Today's presentation is to provide an opportunity to ask questions and/or gain additional clarification on the final Capacity Accreditation Factors (CAFs) for the 2024/2025 Capability Year.
- These CAFs were calculated for Capacity Accreditation Resource Classes (CARCs) on the Final List of Capacity Accreditation Resource Classes for the 2024/2025 Capability Year and are the final values that will be applicable for the Capability Year that begins on May 1, 2024.
  - These CAF values are final and appliable for the entirety of the 2024/2025 Capability Year.

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Background: CARCs and CAFs

- Installed Capacity Supplier Resources with similar technologies and/or operating characteristics that are expected to have similar marginal reliability contributions toward meeting New York State Reliability Council (NYSRC) resource adequacy requirements are assigned to CARCs.
- The CAFs are calculated using the marginal reliability improvement (MRI) technique, by comparing the loss of load expectation (LOLE) improvement of the Locational Minimum Installed Capacity Requirement study model ("LCR model") with the addition of a 100 MW representative unit and the addition of 100 MW of perfect capacity to the modeling zone that corresponds to capacity zone for a resource.

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Final
Capacity Accreditation Resource Classes

CARC	Characteristics: Participation Election, Fuel Type, and other attributes	Rest of State	GHI	NYC Locality	LI Locality
2-Hour Energy Duration Limited	2-Hour Energy Duration Limit	✓	✓	✓	✓
4-Hour Energy Duration Limited	4-Hour Energy Duration Limit, or Special Case Resource (SCR)	✓	✓	✓	✓
6-Hour Energy Duration Limited	6-Hour Energy Duration Limit	✓	✓	✓	✓
8-Hour Energy Duration Limited	8-Hour Energy Duration Limit	✓	✓	✓	✓
Landfill Gas	Intermittent Power Resource (IPR) – Fuel Type: Methane (Bio Gas) or Single Resource Type Aggregation – Landfill Gas	✓			
Solar	IPR – Fuel Type: Sunlight or Single Resource Type Aggregation – Solar	✓	✓	✓	✓
Offshore Wind	IPR – Fuel Type: Wind or Single Resource Type Aggregation – Wind				✓
Land-based Wind	IPR – Fuel Type: Wind or Single Resource Type Aggregation – Wind	✓			
Limited Control Run of River	Limited Control Run-of-River Hydro (LCRoR)	✓	✓		
Large Hydro	Generator – Fuel Type: Water and greater than 100 MW nameplate	✓			
Large Hydro with partial Pump Storage	Generator – Fuel Type: Water, greater than 100 MW nameplate, and Gen Type: Partial Pump Storage	✓			
Generator	Generator, Behind-the-Meter Net Generation Resource (BTM:NG), Distributed Energy Resource (DER) Aggregation, Single Resource Type Aggregation – Generator, or Control Area System Resource	✓	✓	✓	✓

Capacity Accreditation Factor

$$CAF_{ca} = \frac{LOLE_i - LOLE_{mca}}{LOLE_i - LOLE_{pa}}$$

Where:

- CAF_{ca} = the Capacity Accreditation Factor for the upcoming Capability Year for the capacity zone a of the evaluated Capacity Accreditation Resource Class c
- $LOLE_i$ = the starting loss of load expectation of the LCR model
- $LOLE_{mca}$ = the loss of load expectation of the LCR model with the addition of a 100 MW representative unit of the evaluated Capacity Accreditation Resource Class c to the modeling zone that corresponds to capacity zone a
- $LOLE_{pa}$ = the loss of load expectation of the LCR model with the addition of 100 MWs of perfect capacity to the modeling zone that corresponds to capacity zone a

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Final CAFs for the 2024/2025 Capability Year

CARC	Rest of State	GHI	NYC Locality	LI Locality
2-Hour Energy Duration Limited	55.42%	56.16%	55.93%	52.76%
4-Hour Energy Duration Limited	64.47%	67.95%	68.84%	78.94%
6-Hour Energy Duration Limited	91.77%	91.92%	90.41%	91.53%
8-Hour Energy Duration Limited	100.00%	100.00%	100.00%	99.72%
Landfill Gas	59.67%	--	--	--
Solar	15.64%	15.62%	15.18%	11.62%
Offshore Wind	--	--	--	31.56%
Land-based Wind	12.89%	--	--	--
Limited Control Run of River	32.78%	41.23%	--	--
Large Hydro	100.00%	--	--	--
Large Hydro with partial Pump Storage	100.00%	--	--	--
Generator	100.00%	100.00%	100.00%	100.00%

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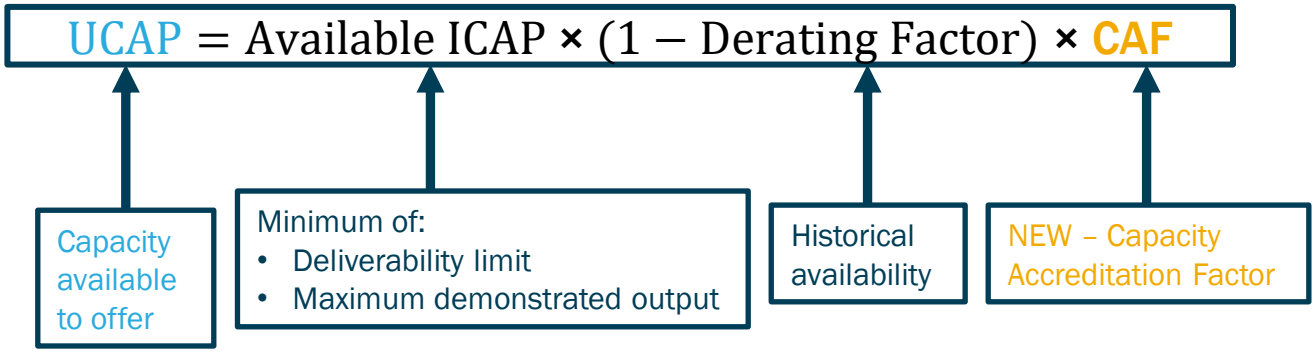
UCAP for Resources

- **In general, the following are inputs to the UCAP calculation**
  - Deliverability limit
  - Maximum demonstrated output
  - Historical availability
  - Capacity Accreditation Factor



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More References…

- Capacity Accreditation web page
  - Capacity accreditation market design
    - Implementation Details (12/14/22 BIC)
    - Capacity Accreditation Materials
  - Current Capability Year data
- Updated Training Course Materials & Infographics will be available April 2024

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Questions?

Email: accreditation@nyiso.com

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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