New York ISO
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 for Stakeholders to ask questions and/or gain additional clarification on the Final Capacity Accreditation Factors for the 2024/2025 Capability Year.
- These CAFs were calculated for 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 Capacity Accreditation Resource Classes (CARCs).
- The Capacity Accreditation Factors (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 MWs of perfect capacity to the modeling zone that corresponds to capacity zone for the 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	✓	✓	✓	✓

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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Capacity Accreditation Factors

CARC	Zone	iCAF Set #1	iCAF Set #2	FINAL CAFs
2-hour EDL	ROS	54%	53%	55%
2-hour EDL	GHI	57%	55%	56%
2-hour EDL	J	67%	73%	56%
2-hour EDL	K	56%	62%	53%
4-hour EDL	ROS	79%	66%	64%
4-hour EDL	GHI	80%	67%	68%
4-hour EDL	J	80%	83%	69%
4-hour EDL	K	88%	89%	79%
6-hour EDL	ROS	94%	92%	92%
6-hour EDL	GHI	95%	92%	92%
6-hour EDL	J	90%	92%	90%
6-hour EDL	K	96%	96%	92%
8-hour EDL	ROS	100%	98%	100%
8-hour EDL	GHI	100%	98%	100%
8-hour EDL	J	97%	98%	96%
8-hour EDL	K	99%	99%	100%

CARC	Zone	iCAF Set #1	iCAF Set #2	FINAL CAFs
Landfill Gas	ROS	71%	71%	60%
Solar	ROS	16%	22%	16%
Solar	GHI	18%	22%	16%
Solar	J	16%	22%	15%
Solar	K	13%	17%	12%
Offshore Wind	K	37%	32%	32%
Land-based Wind	ROS	13%	11%	13%
Limited Control Run of River	ROS	40%	37%	33%
Limited Control Run of River	GHI	45%	49%	41%
Large Hydro	ROS	100%	100%	100%
Large Partial Pump Hydro	ROS	100%	100%	100%
Generator	ROS	100%	100%	100%
Generator	GHI	100%	100%	100%
Generator	J	100%	100%	100%
Generator	K	100%	100%	100%

iCAFs Set 1: Informational CAFs for the 2024/2025 Capability Year
iCAFs Set 2: Informational CAFs for the 2024/2025 Capability Year (Set 2)
Final CAFs: Final CAFs for the 2024/2025 Capability Year

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Assumption Matrix Comparison

	iCAFs Set 1: 2024 PBC	iCAFs Set 2: 2024 FBC	Effective CAFs: 2024 LCR model
NYCA IRM	20.8%	23.1%	22.0%
NYCA Peak Summer Load Forecast	32,451.5 MW	31,765.6 MW	
NYCA BTM:NG Peak Load Adjustment (incorporated in Load Forecast value above)	171.5 MW	148.8 MW	
EOP Step 1: SCR Load, Gen	1,226 MW Enrolled/ 853 MW Modeled	1,281 MW Enrolled/ 896.5 MW Modeled	
EOP Step 2: 5% manual voltage Reduction	85.43 MW	113.11 MW	
EOP Step 4: Voluntary industrial curtailment	240.05 MW	267.17 MW	
EOP Step 5: General Public Appeals	80 MW	74 MW	
Emergency Assistance	3,500 MW	Bin 1: 1,470 MW Bin 2: 2,600 MW Bin 3-7: 3,500 MW	
Existing ELR Model Update		ES and small EL3 output limitations lifted at HB14	
Unforced Capacity Deliverability Rights	UDR Elections	Updated UDR Elections	

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Assumption Matrix Comparison

	iCAFs Set 1: 2024 PBC	iCAFs Set 2: 2024 FBC	Final CAFs: 2024 LCR model
G-J LCR	--	84.6%	81.0%
G-J Peak Summer Load Forecast	15,439 MW	15,273.5 MW	
G-J BTM:NG Peak Load Adjustment (incorporated in Load Forecast value above)	0 MW	0 MW	
J LCR	72.7%	72.7%	81.7%
J Peak Summer Load Forecast	11,303 MW	11,170.6 MW	
J BTM:NG Peak Load Adjustment (incorporated in Load Forecast value above)	23.0 MW	15.2 MW	
K LCR	109.9%	103.2%	105.3%
K Peak Summer Load Forecast	5,090.1 MW	5,080.3 MW	
K BTM:NG Peak Load Adjustment	38.9 MW	41.1 MW	

iCAFs Set 1: The PBC Assumptions Matrix is posted with the Installed Capacity Subcommittee Meeting No. 278 — June 28, 2023 – NYSRC meeting material.
iCAFs Set 2: The FBC Assumptions Matrix is posted with the Installed Capacity Subcommittee Meeting No. 281 — October 4, 2023 – NYSRC meeting material.
Final CAFs: The Locational Minimum Installed Capacity Requirements study Report for the 2024/2025 Capability year is posted on the NYISO website

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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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Next Steps

- **Final CAFs for the 2024/2025 Capability Year were posted on the Capacity Accreditation web page.**
  - Final CAFs for the 2024/2025 Capability Year
- **Final CAFs will be entered into ICAP AMS and assigned to specific resources by 5pm on March 11, 2024, as indicated in the ICAP Event Calendar.**
  - Should an ICAP Supplier find a discrepancy with their assigned value, inconsistent with the Resource's assigned CARC and zone, please notify NYISO prior to the deadline in which CAF Assignments are considered final.
- **Capacity Accreditation Factor Assignments are considered final at 5pm on March 18, 2024, as indicated in the ICAP Event Calendar.**

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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