

LFU Status Update for 2024-25 Resource Adequacy Studies

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Agenda

- **Review of summer 2023 and winter 2023-24 extreme weather conditions**
- **LFU recommendation – maintain existing LFU multipliers**
- **Summer LFU by area and winter dynamic LFU for 2024-25 resource adequacy studies**

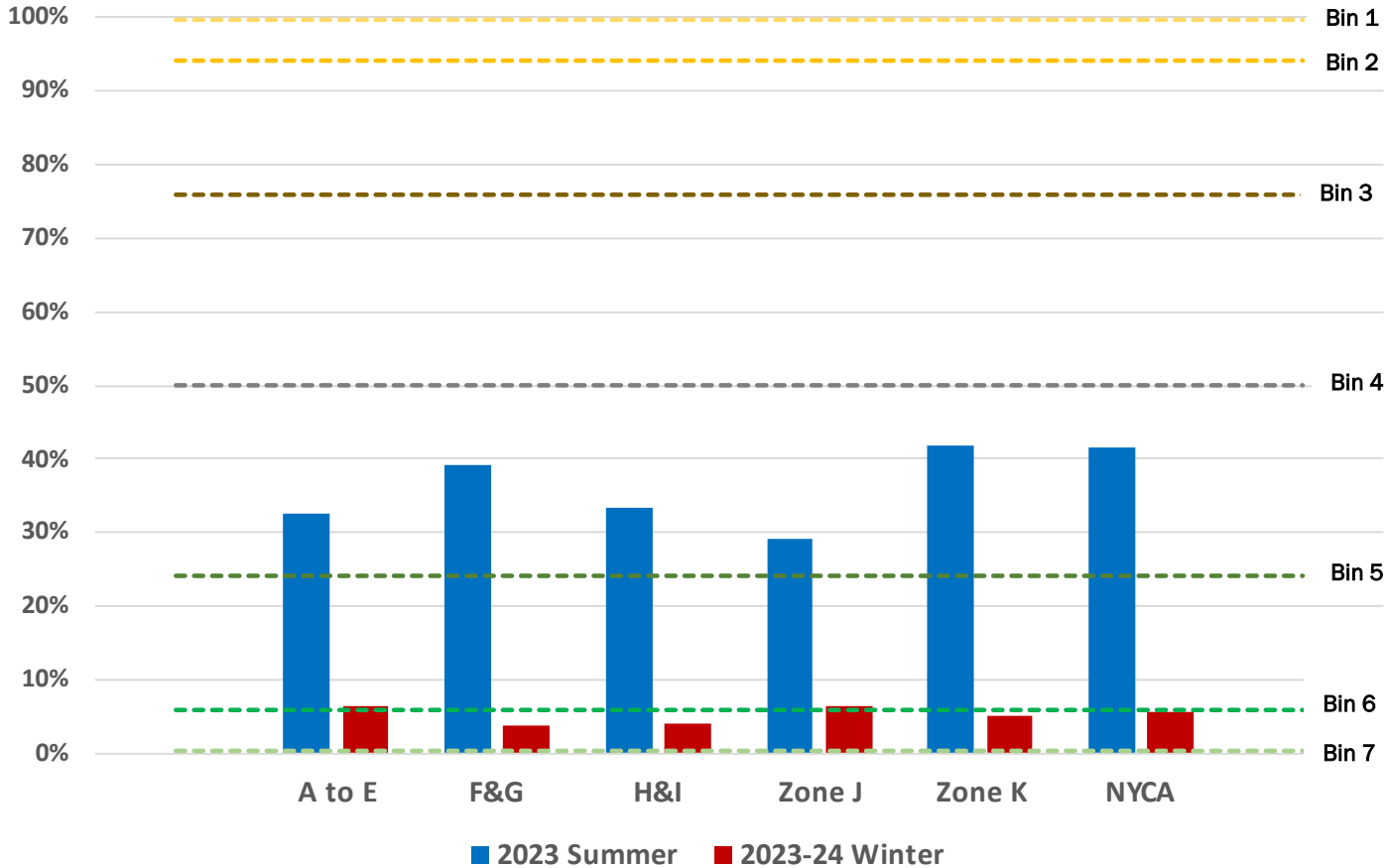
Review of Extreme Weather Conditions

- Seasonal maximum extreme weather conditions were evaluated for summer 2023 and winter 2023-24 by LFU area (A to E, F&G, H&I, Zone J, Zone K) and at the NYCA level
- Percentiles were calculated based on a 20-year distribution of Cumulative Temperature & Humidity Index (CTHI) for summer, and HDD55 (Heating Degree Days at a 55-degree set point) for winter

<i>Summer and Winter Seasonal Maximum Weather</i>						
Area	A to E	F&G	H&I	Zone J	Zone K	NYCA
<i>Average CTHI</i>	83.3	85.4	86.1	86.7	86.0	84.2
<i>Summer 2023 CTHI</i>	82.6	84.9	85.2	85.6	85.5	83.8
<i>Summer 2023 Percentile</i>	33%	39%	33%	29%	42%	42%
<i>Average HDD</i>	50.3	49.1	43.3	39.9	40.6	44.7
<i>Winter 2023-24 HDD</i>	43.1	41.0	36.2	33.6	33.9	38.1
<i>Winter 2023-24 Percentile</i>	6%	4%	4%	7%	5%	6%

Summer and Winter Seasonal Maximum Weather Percentile

Percentile



Conclusions & LFU Recommendation

- Seasonal maximum temperatures were below normal in summer 2023, and well below normal in winter 2023-24
- The summer peak in 2023 occurred in September, outside of the design summer peak window of July & August. July maximum temperatures were even lower than the seasonal maximums
- A similar analysis of the coincident peak-producing weather distributions relative to the July and September 2023 peaks, as well as the January 2024 peak, showed similar below normal results
- Since peak temperatures were below normal in these two seasons, there is no additional information to benefit the fit of load to extreme upper-bin weather conditions (which are impactful to resource adequacy modeling). Thus, it is recommended to retain the current base LFU multipliers presented in spring 2023

Summer LFU Multipliers by Area

			Summer				
Bin	Bin z	Bin Probability	A-E	F&G	H&I	J	K
Bin 1	2.74	0.62%	113.93%	110.69%	110.18%	108.88%	116.62%
Bin 2	1.79	6.06%	109.54%	107.86%	107.34%	105.42%	111.14%
Bin 3	0.89	24.17%	104.86%	104.04%	103.09%	101.61%	105.52%
Bin 4	0.00	38.29%	100.00%	99.46%	97.81%	97.51%	100.00%
Bin 5	-0.89	24.17%	95.00%	94.29%	91.70%	93.12%	94.48%
Bin 6	-1.79	6.06%	89.91%	88.61%	84.93%	88.45%	88.89%
Bin 7	-2.74	0.62%	84.79%	82.53%	77.65%	83.48%	83.27%

Winter Dynamic LFU Multipliers

Winter Dynamic LFU

Winter	Bin 1	Bin 2	Bin 3	Bin 4	Bin 5	Bin 6	Bin 7
2024-25	110.4%	106.4%	102.8%	99.4%	96.3%	93.3%	90.4%
2025-26	110.4%	106.4%	102.8%	99.4%	96.3%	93.3%	90.4%
2026-27	110.4%	106.4%	102.8%	99.4%	96.3%	93.2%	90.3%
2027-28	110.6%	106.5%	102.8%	99.4%	96.2%	93.1%	90.1%
2028-29	110.8%	106.7%	102.9%	99.4%	96.0%	92.8%	89.7%
2029-30	111.1%	106.9%	103.0%	99.3%	95.9%	92.6%	89.3%
2030-31	111.6%	107.2%	103.1%	99.3%	95.6%	92.1%	88.6%
2031-32	112.3%	107.7%	103.4%	99.2%	95.3%	91.5%	87.7%
2032-33	112.9%	108.1%	103.5%	99.2%	95.0%	90.9%	86.9%
2033-34	113.5%	108.4%	103.7%	99.1%	94.7%	90.4%	86.2%
2034-35	114.1%	108.8%	103.9%	99.1%	94.4%	89.9%	85.4%

Questions?

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