

# Final LCR Results

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Ryan Carlson

Senior Resource Adequacy Analyst

**ICAPWG**

January 12, 2021

# Agenda

- **Final Net Cost of New Entry (CONE) curves for 2021**
- **Locational Capacity Requirements (LCRs)**
- **Final Transmission Security Limits (TSLs) for 2021**
  - Using the ICAP load forecast
- **Final LCR Results**
- **Next Steps**

# 2021 Final Net CONE Curves

- **Created as part of the Demand Curve Reset process**
  - Since it is a Demand Curve Reset year, the full curve has been updated\*
- **Associated Proxy Units:**
  - NYBA: 328.5 MW
  - Zones G-J: 347.0 MW
  - Zone J: 348.8 MW
  - Zone K: 348.8 MW

\*Note: MST § 5.11.4 states that NYISO shall use filed CONE values to be applicable in the first Capability Year covered by applicable periodic ICAP Demand Curve review.

2021-2022 Capability Year LCRs: Net CONE Curves		
Location	LCR (%)	Net CONE (\$/kW-yr)
NYCA	112.9%	78.82
	115.9%	80.45
	118.9%	81.83
	121.9%	83.14
	124.9%	83.69
G-J	84.0%	110.9
	87.0%	113.06
	90.0%	114.63
	93.0%	116.07
	96.0%	116.76
Zone J	80.6%	156.13
	83.6%	161.01
	86.6%	162.99
	89.6%	164.55
	92.6%	165.66
Zone K	97.4%	90.31
	100.4%	99.78
	103.4%	105.62
	106.4%	108.57
	109.4%	111.12

# 2021 ICAP Load Forecast

- **Load Shape is scaled by the Non-coincident peak (NCP)**
  - All hours of the year adjusted based on ratio between historic value (2002, 2006, 2007) and forecasted value
- **Coincident peak and adjacent hours are set separately**
- **This year, although the NYCA Peak went up, the NCP updates resulted in lower values**

Non-coincident Peaks by Zone (MWs)

	IRM FBC	LCR	Delta
A	2806.3	2851.7	45.4
B	2033.8	2027.6	-6.2
C	2972.4	2882.6	-89.8
D	653.4	633.8	-19.6
E	1465.7	1433.1	-32.6
F	2442.8	2401.7	-41.1
G	2231.9	2256.1	24.2
H	642.6	649.3	6.7
I	1394.1	1403.3	9.2
J	11232.3	11217.1	-15.2
K	5282	5285.8	3.8
Total	-	-	-115.2

G-J	15385.3	15429.4	44.1
NYCA	32243	32404.8	161.8

# 2021 Final TSL Values

## Final Base Case TSL calculations

Transmission Security Requirements	Formula	GHIJ	NYC	LI	Source
Load Forecast (MW)	[A] = Given	15,429	11,217*	5,286*	2021 ICAP Load Forecast
Transmission Security Limit (MW)	[B] = Given	3,400	3,200	350	2021 TSL Report
Minimum UCAP Needed (MW)	[C] = [A]-[B]	12,029	8,017	4,936	
UCAP Needed Percent	[D] = [C]/[A]	77.96%	71.47%	93.38%	
5 Year EFORD	[E] = Given	10.07%	9.17%	9.24%	2021 EFORD from LCR Case
ICAP Needed (MW)	[F] = [C]/(1-[E])	13,376	8,826.5	5,434.83	
ICAP Floor Requirement (TSLs)	[G] = [F]/[A]	<b>86.7%</b>	<b>78.7%</b>	<b>102.9%</b>	2021 TSLs for LCR Case

\* This value includes the ACHL from BTM:NG in Zone J (18.1 MW) and Zone K (37.2 MW)

# 2021 Final Case

- **Load updated between IRM Final Base Case and Final LCR Case**
  - Led to more reliable system (Slide 4)
- **IRM held at 20.7%**
- **Zone K TSL remained unchanged and was still binding**
  - Zone K TSL 102.9%
- **With these two elements staying constant, the optimization process was able to reduce both the Zones G-J and Zone J LCRs**

# Final 2021 LCR Results - Comparison

## Optimized LCRs

	NYCA IRM	G-J	NYC	LI
2021 FBC LCRs	20.7%*	88.7%	80.6%	102.9%**
2021 Final LCRs	20.7%*	87.6%	80.3%	102.9%**
<i>deltas</i>	0.0%	-1.1%	-0.3%	0.0%

\* Determined by ICS Tan 45 Process

\*\* The TSL Limit for Long Island was binding

# Final 2021-2022 Capability Year Locational Minimum Installed Capacity Requirements (LCRs)

- **IRM: 20.7%**
  - Set by NYSRC Tan 45 Process
- **Zone J: 80.3%**
- **Zone K: 102.9%**
  - Value is bound by the TSL
- **Zones G-J: 87.6%**



# Next Steps

- **Final LCRs will be presented to the Operating Committee for approval on January 14, 2021**

# Questions?

Questions or comments can be sent to [IRM@nyiso.com](mailto:IRM@nyiso.com)

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