

# Informational LCR Results

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## **NYSRC – Installed Capacity Subcommittee Meeting #224**

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# Agenda

- Review Net CONE Curves used in the 2019 LCR Study
- Review Transmission Security Limit used in 2019 LCR Study
- Updated Transmission Security Limit for 2020
  - Using the Gold Book forecast and Preliminary Base Case EFORd values
- Results from preliminary LCR case
- Next steps

# 2019 Net CONE Curves

- Using Net CONE values from 2019 LCR study
- Published to the NYISO website 11/29/2018
  - <https://www.nyiso.com/documents/20142/3679493/2019-Net-CONE.pdf/66fd5afa-ea9c-792e-0213-793477adcb61>
- 2020 Net CONE values will be available in November 2019

Location	LCR	Net CONE
NYCA	111.5	95.92
	114.5	96.98
	117.5	97.56
	120.5	98.10
	123.5	98.62
G-J	84.0	145.27
	87.0	145.93
	90.0	146.66
	93.0	147.90
	96.0	148.71
Zone J	74.5	169.85
	77.5	173.83
	80.5	178.34
	83.5	180.82
	86.5	182.34
Zone K	96.5	121.26
	99.5	127.06
	102.5	132.36
	105.5	136.07
	108.5	138.21

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# 2019 Final TSL Values

## 2019 Final TSL calculations

Transmission Security Requirements	Formula	GHIJ	NYC	LI	Source
Load Forecast (MW)	[A] = Given	15845.5	11,607	5,279.1*	2019 load from 2018 GB 2019 Final TSL Report
Transmission Security Limit (MW)	[B] = Given	3,200	3,200	350	
Minimum UCAP Needed (MW)	[C] = [A]-[B]	12,646	8,406.9	4,929.1	
UCAP Needed Percent	[D] = [C]/[A]	79.80%	72.43%	93.37%	
5 Year EFORD	[E] = Given	9.63%	9.67%	9.74%	2019 IRM FBC EFORD
ICAP Needed (MW)	[F] = [C]/(1-[E])	13,993	9,306.9	5,461	
ICAP Floor Requirement (TSLs)	[G] = [F]/[A]	<b>88.3%</b>	<b>80.2%</b>	<b>103.4%</b>	2019 FBC TSLs

\* This value includes the ACHL from BTM:NG in Zone K (40.6 MW)

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# 2020 Preliminary TSL Values

## Preliminary Base Case TSL calculations

Transmission Security Requirements	Formula	GHIJ	NYC	LI	Source
Load Forecast (MW)	[A] = Given	15911	11,651	5,172.9*	2020 load from 2019 GB 2020 TSL Report
Transmission Security Limit (MW)	[B] = Given	3,400	3,200	350	
Minimum UCAP Needed (MW)	[C] = [A]-[B]	12,511	8,451	4,823	
UCAP Needed Percent	[D] = [C]/[A]	78.63%	72.53%	93.23%	
5 Year EFORD	[E] = Given	9.91%	10.05%	9.69%	9/4/2019 PBC EFORD
ICAP Needed (MW)	[F] = [C]/(1-[E])	13,887	9,395	5,340	
ICAP Floor Requirement (TSLs)	[G] = [F]/[A]	<b>87.3%</b>	<b>80.6%</b>	<b>103.2%</b>	2020 PBC TSLs

\* This value includes the ACHL from BTM:NG in Zone K (38.9 MW)

Note: Final TSL calculations will be available in December 2019

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# 2020 vs 2019 TSL Report

**TABLE 4 – Comparison of 2020 & 2019 Locality Limits**

<b><u>Locality</u></b>	<b><u>Summer 2020 Limit</u></b>	<b><u>Summer 2019 Limit</u></b>	<b><u>Difference</u></b>
Zone K Locality	350 MW	350 MW	0 MW
G-J Locality	3400 MW	3200 MW	+200 MW
Zone J Locality	3200 MW	3200 MW	0 MW

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# Preliminary LCR Results

## ■ Master Input File

- IRM Preliminary Base Case (PBC) MIF

2019 PBC	NYCA	G-J	NYC	LI	Total Cost (MM\$)**
Tan 45 LCRs	118.6%	98%*	83.9%	102.3%	\$5,081.30
Optimized LCRs	118.6%	90.3%	86.7%	103.2%***	\$5,040.60
<i>deltas</i>	0.0%	-7.7%	2.8%	0.9%	-\$40.70

\* As-found condition for the G-J Locality given the PBC IRM and LCRs.

\*\* Total cost as calculated by the LCR software, at the level of excess, considering Net CONE Curves.

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

# Next steps

- **The NYISO will return to ICAPWG in November and present informational LCRs based on the final IRM case, as presented to the New York State Reliability Council**
  - NYISO will also present materials to the NYSRC-Installed Capacity Subcommittee
- **The NYISO will calculate final LCRs in January 2020**
- **Final LCRs will be presented to the OC in January 2020**

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# Questions?

Questions or comments can be sent to

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- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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