

# **Preliminary LCR Results**

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#### **ICAPWG**

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## Agenda

- Updated Net CONE Curves
- Updated Transmission Security Limits (TSLs) for 2022
  - Using the Fall load forecast
- Preliminary Locational Minimum Installed Capacity Requirements (LCR) Results
- Next Steps



## Background

- Each year the NYISO produces preliminary LCR values for informational and discussion purposes.
  - The process used to produce these preliminary LCRs follows the process used to determine final LCRs, i.e., the optimized LCR method.
- This presentation provides preliminary LCR values using the NYSRC IRM Final Base Case and other inputs (e.g., Net CONE Curves).



## **2022 Final Net CONE Curves**

#### Associated Proxy Units:

- NYCA: 326.7 MW
- Zones G-J: 347.0 MW
- Zone J: 348.8 MW
- Zone K: 348.8 MW

2022-2023 Net CONE Curves				
Location	LCR (%)	Net CONE (\$/kW-yr)		
NYCA	112.9	82.62		
	115.9	84.25		
	118.9	85.63		
	121.9	86.94		
	124.9	87.49		
G-J	84.0	110.17		
	87.0	112.33		
	90.0	113.9		
	93.0	115.34		
	96.0	116.03		
Zone J	80.6	157.48		
	83.6	162.36		
	86.6	164.34		
	89.6	165.9		
	92.6	167.01		
Zone K	97.4	76.97		
	100.4	86.44		
	103.4	92.28		
	106.4	95.23		
	109.4	97.78		



## **2022** Final TSL Values

Transmission Security Limit	Formula	GHIJ	NYC	Long Island	Description
Load Forecast (MW)	[A] = Given	15171.1	10944	5159	Load Forecast from 2022 Fall Forecast
Transmission Security Limit (MW)	[B] = Studied	3425.0	2900	325	Bulk power transmission capability into the Locality consistent with reliability rules, less generation source contingencies (NYC: Ravenswood 3. LI: Neptune).
Resource Unavailability (MW)	[C] = Given	492.0	407	37	Special Case Resources, per NYSRC IRM Study. SCRs do not contribute to transmission security under normal transfer criteria.
ICAP Requirement (MW)	[D] = [A]-[B]+[C]	12,238	8,451	4,871	
ICAP Requirement Floor (%)	[E] = ROUND([D]/[A],1)	80.7%	77.2%	94.4%	

The final TSL report will be posted to the NYISO website concurrent with this presentation.



## Preliminary 2022 LCR Results (PBC)

#### **Optimized LCRs**

	NYCA IRM	G-J	NYC	LI
2022 PBC Tan45	18.6%*	90.2%	80.6%	96.1%
2022 Prelim LCRs (PBC)	18.6%*	90.8%	81.2%	94.7%

\* Determined by ICS Tan 45 Process

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

- Values discussed at October 5th ICAWG

https://www.nyiso.com/documents/20142/25091789/5%202022\_prelim\_lcrs\_final.pdf/848aaf4c-062d-915f-d189-27e9c77fff39

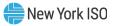


## Preliminary 2022 LCR Results (FBC)

Optimized LCRs

	NYCA IRM	G-J	NYC	LI
2022 FBC Tan45	19.6%*	90.7%	80.7%	99.8%
2022 Prelim LCRs (FBC)	19.6%*	89.2%	81.2%	99.5%

\* Determined by ICS Tan 45 Process



## 2022 Preliminary LCR Results (FBC)

#### IRM Increased from PBC; factors include:

- Additional Solar Facilities
  - Various units added in Zones A-F
- Updated Load Forecast
- Extension of Neptune outage

### G-J LCR

- Zone G marginal reliability is close to those values in Zones A, C and D
  - Lower load forecast and capacity re-ratings create more excess
  - More MWs transferred from Zone G/H/I to Zones A/C/D
  - Upstate is less expensive and MWs there have equivalent impact as downstate MW



## 2022 Preliminary LCR Results (cont.)

#### J LCR

- Minor increase in LCR due to economic optimization process
- Consistent with Tan45 value

### K LCR

- Both Tan45 LCR and optimized LCR increased due to the ongoing derate of the Neptune cable
- Consistent with Tan45 value



## **Next Steps**

#### Finalize the LCR database

- NYSRC approved an IRM of 19.6% on December 10
- If a material system change occurs, as determined by the NYSRC, then the LCR case will be updated. Otherwise, no updates to the LCR case will be made.

#### Present final LCRs to the NYISO Operating Committee in January 2022



# **Questions?**

Questions or comments can be sent to IRM@nyiso.com



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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 policymakers, stakeholders and investors in the power system



