New York ISO
Independent System Operator

Preliminary LCR Results

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Agenda

- Review Net CONE
- Review Transmission Security Limits (TSLs) for 2022
  - Using the Goldbook load forecast
- Preliminary LCR Results
- Next Steps

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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 Preliminary Base Case and other preliminary inputs (e.g., Net CONE Curves).**
- **Data updates will occur, such as the finalization of the NYSRC IRM case, before the final LCRs are determined by the NYISO.**

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2022 Preliminary Net CONE Curves

- **Net CONE updated consistent with FERC order**
- **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 Preliminary Net CONE Curves		
Location	LCR (%)	Net CONE ($/kW-yr)
NYCA	112.9	71.14
	115.9	72.77
	118.9	74.15
	121.9	75.46
	124.9	76.01
G-J	84.0	100.75
	87.0	102.91
	90.0	104.48
	93.0	105.92
	96.0	106.61
Zone J	80.6	148.26
	83.6	153.14
	86.6	155.12
	89.6	156.68
	92.6	157.79
Zone K	97.4	79.51
	100.4	88.98
	103.4	94.82
	106.4	97.77
	109.4	100.32

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2022 Preliminary TSL Values (Old Method)

Preliminary Base Case TSL calculations

Transmission Security Requirements	Formula	GHIJ	NYC	LI	Source
Load Forecast (MW)	[A] = Given	15,453*	11,286*	5,191.6*	2022 Goldbook Forecast
Transmission Security Limit (MW)	[B] = Given	3,400	3,200	350	2021 TSL Report
Minimum UCAP Needed (MW)	[C] = [A]-[B]	12,053	8,086	4,841	
UCAP Needed Percent	[D] = [C]/[A]	78.00%	71.65%	93.26%	
5 Year EFORd	[E] = Given	9.57%	7.99%	9.12%	2022 EFORd from PBC
ICAP Needed (MW)	[F] = [C]/(1-[E])	13,328	8,788.4	5,327.5	
ICAP Floor Requirement (TSLs)	[G] = [F]/[A]	**86.3%**	**77.9%**	**102.6%**	2022 Prelim TSLs (Old method)

* This value includes the ACHL from BTM:NG in Zone J *(21.3 MW)* and Zone K (*42.0 MW*)

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2022 Preliminary TSL Values (New Method)

Transmission Security Limit	Formula	GHIJ	NYC	Long Island	Description
Load Forecast (MW)	[A] = Given	15453.0	11286	5192	Load forecast used in 2021 TSL determination. The proposed TSL method enhancements do not affect this parameter.
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, July 2021 enrollments per NYSRC IRM Study. SCRs do not contribute to transmission security under normal transfer criteria.
ICAP Requirement (MW)	[D] = [A]-[B]+[C]	12,520	8,793	4,904	
ICAP Requirement Floor (%)	[E] = ROUND([D]/[A],1)	**81.0%**	**77.9%**	**94.5%**	

Values include the ACHL from BTM:NG in Zone J *(21.3 MW)* and Zone K (*42.0 MW*)

https://www.nyiso.com/documents/20142/24415247/Transmission%20Security%20Limit%20Method_Final.pdf/926bd2bd-ae0c-9f5f-1f42-f66c942e23d9

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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%**
deltas	0.0%	-1.1%	-0.3%	0.0%

* Determined by ICS Tan 45 Process

** The TSL Limit for Long Island was binding

The final LCRs were approved in January 2021 and are effective for the 2021-2022 Capability Year

Preliminary 2022 LCR Results

		Optimized LCRs		
	NYCA IRM	G-J	NYC	LI
2022 PBC Tan45	18.6%*	90.2%	80.6%	96.1%
2022 Prelim LCRs (old TSL)	18.6%*	86.4%	79.0%	102.6%**
2022 Prelim LCRs (new TSL)	18.6%*	90.8%	81.2%	94.7%

* Determined by ICS Tan 45 Process

** The TSL Limit for Long Island was binding

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TSLs in the LCR setting process

- **Consistent with discussions at the 6/30 and 9/9 ICAPWG meetings, the NYISO will update the method it uses to determine TSLs for the 2022-2023 Capability Year LCR determination process**
  - These updates will align the LCR TSL setting process with Transmission Security analysis conducted for Planning purposes
- **The following slide shows the 2021 final LCRs (for the 2021-2022 Capability Year) and the 2022 preliminary LCRs**

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Comparison of LCRs

		Optimized LCRs		
	NYCA IRM	G-J	NYC	LI
2021 Final LCRs	20.7%*	87.6%	80.3%	102.9%**
2022 Prelim LCRs (new TSL)	18.6%*	90.8%	81.2%	94.7%

* Determined by ICS Tan 45 Process

** The TSL Limit for Long Island was binding

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2022 Preliminary LCR Results

- **IRM Decreased; factors include:**
  - Reduction in LFU
  - Lower non-coincident peaks in forecast
- **G-J LCR**
  - Value impacted by updated LFU and Load
  - Upward pressure on G-J LCR due to reduction in K TSL and associated drop in K LCR

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2022 Preliminary LCR Results (cont.)

- **J LCR**
  - Value impacted by updated LFU and Load
  - Small upward pressure from the K TSL and associated LCR drop
- **K LCR**
  - TSL decreased and was no longer binding

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Next Steps

- **Finalize the IRM database**
  - NYSRC scheduled to approve the final IRM in early December
  - The NYSRC updates the IRM if a material system change occurs
- **Finalize Net CONE Curves**
  - NYISO posts Demand Curve Reset Annual Update results by November 30
- **Finalize TSLs in October**
  - NYISO to post TSL report which will contain final TSL values using the new TSL setting method
  - NYISO to update the load forecast to be consistent with the final IRM load forecast
  - NYISO to post an updated LCR procedure reflecting the updated TSL method
- **Provide updated preliminary LCRs in mid-December**
  - Consistent with previous discussions at ICAPWG and procedural updates, NYISO will utilize the final IRM database to determine final LCRs and will discuss those results with stakeholders in mid-December.
  - Unless the NYSRC updates the IRM after its initial approval, these preliminary LCRs will be presented to the Operating Committee for approval in January
- **Present final LCRs to the NYISO Operating Committee in January 2022**

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Questions?

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

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Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- 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

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