

# ICAP & UCAP Calculation Method for NYCA & Localities J, K & G-J

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# Overview of ICAP & UCAP Process

- ◆ ICAP Requirements for Transmission Districts (TD) are considered jointly by NYISO and stakeholders in the Load Forecasting Task Force (LFTF).
- ◆ TOs & LSEs identify the allocation within a TD, based upon share of LSE load at time of NYCA peak.
- ◆ NYISO determines UCAP Requirements for TDs, and distributes to TOs and LSEs based on shares determined by TO (which is the metering authority in the TD.)
- ◆ Data and analysis in this presentation are for illustrative purposes only. Consult the ICAP Manual in the event an example appears at variance with any ICAP Manual procedure.

# Steps in Calculating ICAP and UCAP Requirements

- 1. Actual load of LSE and TO at time of NYCA peak and time of Locality Peaks**
- 2. Weather adjustments of the actual peaks**
- 3. RLGf – Regional Load Growth Factor in the TD**
- 4. IRM - Installed Reserve Margin**
- 5. LCR – Locational Minimum Installed Capacity Requirement**
- 6. UCAP Translation Factor – Converts Installed Capacity to Unforced Capacity**

# Relationship of NYCA UCAP and Locality UCAP Values

- ◆ There is a NYCA-wide UCAP value for each LSE, such that total UCAP in a TD is satisfied. UCAP Requirements other than for a Locality can be satisfied by qualified capacity from anywhere in the NYCA or External qualified capacity.
- ◆ Locational Minimum Installed Capacity Requirements (LCRs) require that a certain amount of UCAP must be obtained within the Locality.
- ◆ NCZ (G-J) LCR UCAP Requirement:
  - ◆ *LSEs within load Zone J will satisfy the LCR UCAP requirement for Locality J and the LCR UCAP requirement for Locality G-J.*
  - ◆ *LSEs within load Zones G-I will satisfy the LCR UCAP requirement for Locality G-J.*
  - ◆ *The Appendix includes a numerical example. Values used are not intended to be representative.*

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# Appendix

# Example: How much ICAP and UCAP an LSE needs to procure\*\*

		NYCA	J	K	G-J
(a)	<b>LSE Actual Peak Load</b>	<b>10.0</b>	<b>10.0</b>	<b>10.0</b>	<b>10.0</b>
(b)	Weather-Adjusted Factor	1.03	1.03	1.03	1.03
(c)	Regional Load Growth Factor	1.02	1.02	1.02	1.02
(d)=(a)*(b)*(c)	<b>Load Forecast</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>
(e)	Install Reserve Margin (IRM)	117%	117%	117%	117%
(f)=(d)*(e)	<b>NYCA ICAP Requirement</b>	<b>12.3</b>	<b>12.3</b>	<b>12.3</b>	<b>12.3</b>
(g)	Locational Capacity Requirement (LCR)		86%	105%	88%
(h)=(d)*(g)	<b>Locational ICAP Requirement</b>		<b>9.04</b>	<b>11.03</b>	<b>9.25</b>
(i)	NYCA UCAP Translation Factor	93%	93%	93%	93%
(j)=(f)*(i)	<b>NYCA UCAP Requirement (MW)</b>	<b>11.4</b>	<b>11.4</b>	<b>11.4</b>	<b>11.4</b>
(k)	Locational UCAP Translation Factor		90%	90%	90%
(l)=(h)*(k)	<b>Locational UCAP Requirement (MW)</b>		<b>8.1</b>	<b>9.9</b>	<b>8.3</b>

LSE in Zone J	MW
Procure in Zone J	8.1
Procure in G-J	0.2
Procure NYCA wide	3.1
<b>NYCA Requirement</b>	<b>11.4</b>

LSE in Zone K	MW
Procure in Zone K	9.9
Procure NYCA wide	1.5
<b>NYCA Requirement</b>	<b>11.4</b>

LSE in Zone GHI	MW
Procure in GHI	8.3
Procure NYCA wide	3.1
<b>NYCA Requirement</b>	<b>11.4</b>

\*\* All values are for purposes of the calculation example and are not intended to be representative.