

## NYISO

### Locational Reserve Requirements

The NYISO shall define requirements for Spinning Reserve, which may be met only by Suppliers that are eligible to provide Spinning Reserve; 10-Minute Reserve, which may be met by Suppliers that are eligible to provide either Spinning Reserve or 10-Minute Non-Synchronized Reserve; and 30-Minute Reserve, which may be met by Suppliers that are eligible to provide any Operating Reserve product. The NYISO shall also define locational requirements for Spinning Reserve, 10-Minute Reserve, and 30-Minute Reserve located in East of Central-East (EAST), in Southeastern New York (SENY), in New York City (NYC), and on Long Island (LI) as shown in the following table:\*

	NYCA	EAST	SENY	NYC	LI
A=most severe NYCA Operating Capability Loss (1310 MWs)	Zone A-K	Zone F-K	Zone G-K	Zone J	Zone K
10 Minute Spinning Reserve	½ A = 655 MW (I)	¼ A = 330 MW (IV)	0 MW	0 MW	0 MW
10 Minute Total Reserve	A = 1310 MW (II)	1200 MW (V)	0 MW	500 MW (VIII)	1/10 V = 120 MW (X)
30 Minute Reserve	2 A = 2620 MW (III)	1200 MW (VI)	1300-1800 MW (VII)	1000 MW (IX)	270-540 MW (XI)

I NYCA 10-minute spinning reserve is equal to at least one-half of the 10-minute total reserve. [NYSRC Reliability Rules, Section E]

II NYCA 10-minute total reserve is equal to the operating capability loss caused by the most severe contingency under normal transfer conditions. [NYSRC Reliability Rules, Section E]

III NYCA 30-minute total reserve is equal to two times the 10-minute reserve necessary to replace the operating capability loss caused by the most severe contingency under normal transfer conditions. [NYSRC Reliability Rules, Section E]

IV EAST 10-minute spinning reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. [NERC TOP-002-2.1b; NPCC Reliability Directory No. 5, Section 5.6]

V EAST 10-minute total reserve is based on Reliability Rules that require immediate measures (activation of EAST 10 minute reserves) be applied to bring loadings on an internal NY transfer interface to within limits in 15 minutes. [NYSRC Reliability Rules, Section D]

VI EAST 30-minute total reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. [NERC TOP-002-2.1b; NPCC Reliability Directory No. 5, Section 5.6]

VII SENY 30-minute total reserve is, depending on the hour, based on Reliability Rules that require the ability to restore a transmission circuit loading to Emergency or Normal Transfer Operating Criteria within 30 minutes of the contingency. The SENY 30-minute total reserve requirement will vary as follows: (a) for hour beginning (HB) 00 through HB 5, the requirement is 1,300 MW; (b) for HB 6, the requirement is 1,550 MW; (c) for HB 7 through HB 21, the requirement is 1,800 MW; (d) for HB 22, the requirement is 1,550 MW; and (e) for HB 23, the requirement is 1,300 MW. [NYSRC Reliability Rules, Section D] During Thunderstorm Alerts, the otherwise applicable SENY 30-minute reserve requirement will be reduced to zero.

VIII NYC 10-minute total reserve is based on Reliability Rules that require a calculated percentage of the NYCA 10-minute total reserve requirement be procured within NYC. [NYSRC Reliability Rules, Section G] During Thunderstorm Alerts, the otherwise applicable NYC 10-minute total reserve requirement will be reduced to zero.

IX NYC 30-minute total reserve is based on Reliability Rules that require the ability to bring transmission line loadings to Normal Operating Criteria within 30 minutes following a contingency. [NYSRC Reliability Rules, Section C] During Thunderstorm Alerts, the otherwise applicable NYC 30-minute reserve requirement will be reduced to zero.

X LI 10-minute total reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. The limitation to the amount of LI 10-minute spinning reserve, LI 10-minute total reserve and LI 30-minute total reserve that can be carried on LI is equal to the applicable LI 30-minute reserve requirement; during Emergency Demand Response Program (EDRP) and/or Special Case Resource (SCR) program activations that include LI, this limitation is increased by the expected load reduction response from EDRP resources and/or SCRs on LI. [NERC TOP-002-2.1b; NPCC Reliability Directory No. 5, Section 5.6]

XI LI 30-minute total reserve is based on Reliability Rules that require the ability to restore a transmission circuit loading to Normal Operating Criteria within 30 minutes of the contingency. The LI 30-minute reserve requirement will vary from 270MW for off-peak hours to

540MW for on-peak hours. The limitation to the amount of LI 10-minute spinningreserve, LI 10-minute total reserve and LI 30-minute total reserve that can be carried on LI is equal to the applicable LI 30-minute reserve requirement [NYSRC Reliability Rules, Section D]

\*Please note that an additional 30-minute reserve requirement may be established during EDRP and/or SCR program activations [see Section 15.4.6.2 of Rate Schedule 4 of the NYISO Market Administration and Control Area Services Tariff Rate]