Table 1: Types of Extreme Weather Events Affecting Resource Adequacy Impacting NYCA, Import

Event	NYCA Areas Affected	System Elements Affected
Diurnal Solar Variation	All	Solar Resources
Solar Varibility	All	Extreme partly cloudy variations?
Dirunal Wind Variation	All	Wind Resources

Event	NYCA Areas Affected	System Elements Affected
Heat Wave	All	Off-Shore and On-Shore Wind, Solar, Load, Transmission
Cold Wave	All	Off-Shore and On-Shore Wind, Solar, Load, Transmission
Wind Lull	All	Off-Shore and On-Shore Wind
Solar Lull	All	Solar Resources
Snow cover	All	Solar Resources

Event	NYCA Areas Affected	System Elements Affected
Wind Lulls	All	Long duration storage capacity
Solar Lulls	All	Long duration storage capacity
River Flow	A - F	Hydro Generation
Precipitation Deficit	All	Long duration storage capacity & Hydro Generation

Event	NYCA Areas Affected	System Elements Affected
Drought	All	Hydro generation
Wind Lulls	All	Offshore and onshore wind

Regions and the System Elements That Are Affected

Diurnal Variation

Plausible Worst-Case Scenario	Return Period (see Note 1)	Duration	Design Levels
Cloudy all day			
Wind lull all dy			

Two Week Variation

Plausible Worst-Case Scenario	Return Period (see Note 1)	Duration	Design Levels
		The longest heat wave in New York City history took place at the **end of August 1953**, lasting for 12 days.	
		The longest cold wave in Albany history took place in late January 1961 lasting for 15 days	
Summer 12 days and Winter 15 days			Wind turbine
			Operational Cut-in/
			Cut-out wind speed

Annual Variation

Plausible Worst-Case Scenario	Return Period (see Note 1)	Duration	Design Levels

Interannual Variation

Plausible Worst-Case Scenario	Return Period (see Note 1)	Duration	Design Levels
		Early 1960's drought	
		Average wind can vary by 10% with ENSO, and larger variations seasonally.	

Notes
Solar irradiance
Wind speed

Notes
Load impacts magnified in future with electrification
Solar irradiance
Snow cover

Notes

Notes