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Subject: Generator Operating Modes and “Qualified-to-Bid” Flags for Reserve under SMD2

Under SMD2, generators operate in one of several modes. Units that operate in flexible modes may be scheduled to provide reserve. “Qualified-to-bid” flags are used to reflect the ability of a generator to provide spinning or non-synchronous reserve. Generators must ensure that the “qualified-to-bid” flags in the Market Information System (MIS) correctly reflect the capabilities of the unit.

Details:

Under SMD2, generators may operate in one of four modes:

- ISO-Committed Flexible;
- ISO-Committed Fixed;
- Self-Committed Flexible; and,
- Self-Committed Fixed.

Details regarding these modes may be found in Article 4 of the Services Tariff.

Depending on the generator’s operating mode, the generator may be evaluated for energy only or energy and reserve. All generators operating as ISO-Committed Flexible or Self-Committed Flexible in the Day-Ahead or Real-Time Markets may be scheduled to provide energy, reserves, or both. The maximum quantity of spinning reserve that may be obtained from a flexible unit is determined automatically by the NYISO as 10-minutes times the unit’s emergency ramp rate. The maximum quantity of non-synchronous reserve that may be obtained from a flexible unit is also determined automatically by the NYISO as its upper operating limit. Either normal or emergency upper operating limit may be used, depending on the situation.

The real-time operating mode of a generator is determined, in part, by the operating mode declared day-ahead. The table below details the real-time operating modes that are allowed:

Day Ahead	Real Time		
	ISO-Committed Flexible	Self-Committed Flexible	Self-Committed Fixed
ISO-Committed Flexible	Yes	Yes	By exception only
Self-Committed Flexible	No	Yes	By exception only
ISO-Committed Fixed	No	No	Yes
Self-Committed Fixed	No	No	Yes
No Day-Ahead Schedule	Yes	Yes	Yes

The purpose of this “Technical Bulletin” is to facilitate participation in the NYISO by communicating various NYISO concepts, techniques, and processes to Market Participants before they can be formally documented in a NYISO manual. The information contained in this bulletin is subject to change as a result of a revision to the ISO Tariffs or a subsequent filed tariff with the FERC.

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The Market Information System (MIS) maintains a set of “qualified-to-bid” flags for each generator that reflects the unit’s capability to provide various services. The “qualified-to-bid” flags are maintained by the NYISO and are not part of a generator’s bid parameters. “Qualified-to-bid” flags indicate, among other things, which reserve products a unit is capable of providing. The “qualified-to-bid” flag for spinning reserves must be set for a flexible generator in order for the generator to be scheduled for spinning reserves. The “qualified-to-bid” flag for non-synchronous (10- or 30-minute) reserves must be set for a flexible generator in order for the generator to be scheduled for non-synchronous reserves. It is the generator’s responsibility to ensure that the “qualified-to-bid” flags in the Market Information System (MIS) accurately reflect the unit’s capabilities. “Qualified-to-bid” flags take precedence over bid parameters that may otherwise preclude providing a service. For example, when a start-up time might otherwise preclude a unit from providing non-synchronous reserve, but the “qualified-to-bid” flag indicates that the unit is capable of providing non-synchronous reserve, the “qualified-to-bid” flag will prevail and the unit may be scheduled to provide non-synchronous reserve. Inability to perform may subject the unit to a derate.

The process for changing “qualified-to-bid” flags is described in section 6.4.2 of the Market Participant User Guide (MPUG). Market Participants are not permitted to change a generator’s “qualified-to-bid” flags. Market Participants must contact their Customer Representative to make these changes. Additionally, the NYISO Market Monitoring and Performance Unit (MMP) must approve any changes to these flags.