

Dispatchable Load in 10 minute synchronized reserve (10S)

Dispatchable Load Working Group
September 6, 2007



- The NPCC Task Force on Coordination of Operation (TFCO) investigated the potential use of load facilities providing synchronized reserve
- NPCC membership has approved the change, reflected as of July 17, 2007 in its documentation
- IESO is undertaking a Market Rule Amendment to align our rules with the NPCC documents and investigating what tool changes need to be implemented

- Changes to NPCC Documents A-06 and the Glossary (A-07) were approved effective July 17, 2007
- Restrictions on dispatchable loads (DL) participation in 10S
 - Reserve cannot be provided from loads where the same capacity is included in demand response programs and would result in double counting the same capacity (for example, OPA DR3, or 10N and 30R markets)
 - Loads cannot provide synchronized reserve if the reduction in load is dependent on starting an unsynchronized generator to replace energy that is supplied from the grid (this is on par with rules for generators providing 10S)

- Existing language:
 - 4.5.12 *A registered facility that is a dispatchable load or boundary entity that is used as ten-minute operating reserve shall be treated as operating reserve that is non-synchronised with the IESO controlled grid.*
- Market Rule Amendment proposal:
 - Remove reference to “dispatchable load” in 4.5.12
- MR amendment is targeted for the Technical Panel and the IESO in late 2007

- Market Manual 1.2 “Facility Registration, Maintenance, and De-Registration” Section 3.4.2 on Operating Reserve Markets is consistent with the current Market Rule on dispatchable load in 10S and must be amended along with the Market Rule
 - “...whether the *facility* is eligible to provide *10 minute spinning reserve*. *Boundary entities* and *dispatchable load facilities* are not eligible to offer *10 minute spinning*;" ...
 - “whether the *dispatchable load facility* is eligible to provide *10 minute non-spinning* or *30minute reserve*. Dispatchable load participants must have a predictable, periodic consumption cycle, and meet the eligibility criteria for participation in the *10 minute non-spinning* and *30 minute reserve* market tabled below:" ...
- Language and criteria for DL participation in OR need to be modified to specify the technical requirements for 10S

- Activation of 10S must be able to be provided by curtailment of a load that is consuming, or by loading a generator that is already synchronized to the grid.
- Dispatchable loads may have to provide information to support registration in 10S
 - Information on “behind the meter” generation that shows it can be synchronized upon receipt of a 10S schedule
 - Information on typical load factor to ensure load will be consuming at time of OR activation

- Not expected to be any additional requirements for registration with regard to DR programs run by the OPA
 - DR1 – DL allowed to offer OR until 3 hour ahead (HA) trigger is hit, DL would then have to change dispatch data in the mandatory window.
 - DR2 – Rules under development
 - DR3 – DL allowed to offer OR until IESO issues dispatch 2.5 hours ahead, DL would then have to change dispatch data outside the mandatory window.

- Changes to registration process required
- Market Participant Interface (MPI) needs to be updated to allow for submission of 10S bids
- Application Programmable Interface (API) tools used by dispatchable loads may need to be updated to allow for the submission of dispatch data from participants
- Internal IESO tools and Control Room screens will need to be updated to show dispatchable loads schedules for 10S

- Changes to IESO systems and interfaces are currently under investigation
- September – November
 - Technical Panel (TP) review of draft amendment proposal, stakeholder review and comment
 - TP vote on whether to recommend proposal
- November 15 – IESO Board Decision
- March 2008 – targeted for March market-facing technical interface release to accommodate changes to IESO and market participant tools