

Inadvertent Use of 1x Ramp Rate Multiplier: Administered Pricing Events for the Period May 28 to June 4



1. Background

In order to manage the IESO Administered Markets reliably and efficiently, the IESO uses a variety of integrated computer systems which model the power grid and its various components. This 'network model' is a component of the Market Information System (MIS) and the Supervisory Control & Data Acquisition (SCADA) system. The network model is updated eleven times a year. This change process, which is coordinated within the IESO and with the external stakeholders, is known as the network model build (NMB). This NMB is 'scripted,' implemented and checked by the IESO IT department and then validated by the IESO Operations group before going live.

There are two systems online at all times for each of MIS and SCADA: live and hot standby. Each is continuously synchronized with the other and the live can be replaced with the standby at any instance if required. During the NMB, the hot standby system is removed from service and the required changes are transferred by IT from the developmental system to the hot standby.

There are two sets of required checks to perform before the revised NMB goes live. One is a "health check" to ensure that all required changes have been made. This is completed once SCADA and MIS are up. Once SCADA and MIS pass the first check, the programs are running awaiting final approval. Final approval comes after switchover checks.

2. Summary of Events

The NMB in May was done on the 28th, 2008:

- 9:10am: The hot standby program is removed from service and the IESO begins to transfer the changes from the developmental system to the hot standby. Once transferred, the IESO reviewed the changes and other variables.
- 12:19pm: Scheduled NMB begins (scheduled outage for live system). The revised hot standby system must wait for the live system to come completely offline before it goes live, as the two are no longer synchronized.
- 12:36pm: SCADA is up and first check begins.
- 12:41pm: SCADA is pending RT approval.
- 12:46pm: MIS is pending RT approval.

4. Outcomes

A number of changes have been implemented subsequent to this event:

1. The IESO has revised their procedures to be more specific about what needs to be checked in each system.
2. A software update will be deployed during the September software update that will default the ramp rate multiplier to the correct value so it will not default to 0 as it does today after each NMB and software update.
3. The monitoring of ramp rate will be included in the next Central Alarm Management System update, after the current upgrade project is completed.