Draft rewrite of Market Manual 7.3 Appendix B: Outage Reporting Requirements

Existing Market Manual 7.3 Appendix B

Black Font = Material taken from the existing Market Manual 7.3 Appendix B in verbatim or paraphrased form
Red Font = New material

Outage[1] Reporting Requirements		Eligible for Pre-Approval	Criteria for Pre-Approval[2]
Facility Group	Criteria for Facility Group		
Transmission facilities[3] operated at voltages ≥ 100 kV	All	No	
Transmission facilities operated at voltages < 100 kV	Removal of step-down transformers with a low-side voltage < 100 kV	Yes	
	Involve the unloading of step-down transformers or their individual windings[4]	Yes	
	Require paralleling or separation of buses via operation of bus tie breaker	Yes	
	Result in a load transfer ≥ 20 MW between step-down transformer stations	No	
	Adversely affect a generator or dispatchable load	No	
Reactive resources	15 MVAR or greater in areas electrically south of Essa TS in Barrie	~~No~~	
	10 MVAR or greater in areas electrically north of Essa TS in Barrie		
Power system auxiliaries[5]	Control systems designed to dynamically respond to system conditions such as: • Power system stabilizers (PSSs) • Automatic voltage regulators (AVRs) • Synchronous Condensers and Static VAR Compensators (SVCs)	No	
	Operating aids such as: • Under-frequency load shedding (ULFS) facilities • Circuit auto-reclosure schemes • Voltage reduction facilities	Yes	
	Protection systems designed to detect and isolate failed or faulted elements	Yes	Involve a loss of redundancy
	Special Protection Systems (SPS) that detect identified system conditions and take corrective action such as: • Combined generator and load rejection schemes • Reactor tripping schemes	Yes	Involve a loss of redundancy and have a recall time of ≤ 15 minutes
	Communication facilities such as: • SCADA • RTUs, ICCP links or telemetry facilities for display of quantities • Market participant dispatch tools and facilities • Voice, data and protection tone communications	Yes	Involve a loss of redundancy and have a recall time of ≤ 15 minutes

Comment [REW1]: Hydro One would like to include all 115 kv breakers that are non-NPCC impacted.

Comment [REW2]: Hydro One would like to increase this to 50 MW and have it Eligible for Pre-Approval.

Comment [REW3]: Hydro One would like to increase this to 26 MVAR or greater and have it eligible for Pre-Approval. If this is not doable can we have a block MVAR amount (ie: 400 MVAR) total electrically south of Essa available for pre-approval or better yet a regional matrix in which Hydro One would commit to "X" MVAR's available at any particular time.

Comment [REW4]: Increase this to 26 MVAR or greater

Comment [REW5]: Hydro One would like to include system auxillaries that have greater than 15 minute recall and are not NPCC impacted.

Outage[1] Reporting Requirements		Eligible for Pre-Approval	Criteria for Pre-Approval[2]
Facility Group	Criteria for Facility Group		
	Switchyard auxiliaries such as: • AC and DC station services • Supervisory control facilities or control room bench-boards • Multi-breaker air supply systems including compressor plants and cable cooling systems	Yes	Involve a loss of redundancy and have a recall time of ≤ 15 minutes
Non-registered facilities or embedded facilities[6]	Result in a change of more than 20 MW in demand or supply in an hour from what is typical for that hour (i.e. large industrial customers that periodically shut down plants for maintenance or holidays)	Yes	
Dispatchable load facilities	Result in changes of more than 20 MW in demand or supply in an hour from what is typical for that hour.	Yes	
Generation Facilities	All Generators	Yes	• Recall time ≤ 15 minutes • For generators unable to store their fuel, deratings above the hourly production forecast that is 2 business days in advance
	Segregated Mode of Operation (SMO)	Yes	
	Plant auxiliaries that affect more than a single generator or aggregate of generators where the loss of an additional element results in multiple unit/aggregate shutdowns within 48 hours such as: • Service air or instrument air • Boiler feed pumps • Station Service	Yes	• Recall time ≤ 15 minutes and the multiple unit/aggregate loss occurs > 30 minutes after the loss of the auxiliary element
	Affects the availability to provide ancillary services such as: • Automatic Generation Control (AGC) • Voltage support • Black start service	Yes	• Recall time ≤ 15 minutes
Testing	All tests described in Section 1.3.11: System Tests	No	
	Testing of generation units, including: • In-service or commissioning tests • Testing of derated units at levels above the derated levels • Testing of units currently on outage • Tests of facilities providing ancillary services	Yes	• Recall time ≤ 15 minutes

1. Outages, restrictions, deratings or changes in configuration or operation
2. There may be outages that meet the criteria for pre-approval but fail to meet the following principles for eligibility:

- Low reliability impact on the IESO-controlled grid;
- Requires minimal IESO assessment effort;
- Does not impact a third party market participant

The IESO will provide each market participant with a list of which facilities fail to meet these principles

3. Facilities that form part of or are connected to the IESO-controlled grid and used for the purpose of transmitting or distributing electricity. These facilities may be owned by a transmitter, wholesale customer, distributor or generator.
4. Where multiple facilities involve logic that require those facilities be operated together (i.e. both a switch and a breaker are arranged in series and the switch cannot be operated without first opening the breaker), it is only necessary to report on one of those facilities.
5. The following power system auxiliaries are excluded from outage reporting:
    - Switchyard auxiliaries that do not affect, or the loss of an additional element does not affect the operation of the IESO-controlled grid, or the operation or capability of components of the IESO-controlled grid.
    - Step-down transformer station low voltage bus protections and low voltage reactive resource protections (capacitors), unless they cause unavailability of the component and/or a reconfiguration of the IESO-controlled grid.
    - Feeder protections and feeder breaker auto-reclosures, unless they create a load transfer during system tests, or restrict access to the IESO-administered markets of embedded facilities.
6. If the facility is not registered with the IESO, this responsibility falls on the market participant (i.e. transmission customers for the facility).