

****For discussion purposes only****

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 = 1st Draft Materials

Underlined Red Font = 2nd Draft Materials

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	Yes	<ul style="list-style-type: none"> All radial transmission lines⁴
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 ⁵	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	Yes	<ul style="list-style-type: none"> Result in a load transfer ≤ 50 MW between step-down transformer stations
	Adversely affect a generator or dispatchable load	No	
<u>Transmission or Distribution</u> Reactive resources	15 MVAR or greater in areas electrically south of Essa TS in Barrie	Yes	<ul style="list-style-type: none"> Distribution connected that start and end on the same day or have a recall ≤ 15 minutes
	10 MVAR or greater in areas electrically north of Essa TS in Barrie		
	<u>Synchronous Condensers and Static VAR Compensators (SVCs)</u>	No	
Power system auxiliaries ⁵	Control systems designed to dynamically respond to system conditions such as: <ul style="list-style-type: none"> Power system stabilizers (PSSs) Automatic voltage regulators (AVRs) 	Yes	<ul style="list-style-type: none"> Involve a loss of redundancy and have a recall time of ≤ 15 minutes
	Operating aids such as: <ul style="list-style-type: none"> Under-frequency load shedding (ULFS) facilities Circuit auto-reclosure schemes Voltage reduction facilities 	Yes	
	<u>Primary or backup</u> protection systems designed to detect and isolate failed or faulted elements	Yes	<ul style="list-style-type: none"> Primary protections that involve a loss of redundancy Backup protections where the equipment being protected remains

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			<u>in-service</u>
	Special Protection Systems (SPS) that detect identified system conditions and take corrective action such as: <ul style="list-style-type: none"> • Combined generator and load rejection schemes • Reactor tripping schemes 	Yes	<ul style="list-style-type: none"> • <u>Involve a loss of redundancy and have a recall time of ≤ 15 minutes</u>
	Communication facilities such as: <ul style="list-style-type: none"> • SCADA • RTUs, ICCP links or telemetry facilities for display of quantities • Market participant dispatch tools and facilities • Voice, data and protection tone communications 	Yes	<ul style="list-style-type: none"> • <u>Involve a loss of redundancy and have a recall time of ≤ 15 minutes</u>
	Switchyard auxiliaries such as: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <u>Involve a loss of redundancy and have a recall time of ≤ 15 minutes</u>
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	<ul style="list-style-type: none"> • <u>Starts and ends on the same day or has a recall ≤ 15 minutes,</u>
	<u>Segregated Mode of Operation (SMO)</u>	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: <ul style="list-style-type: none"> • Service air or instrument air • Boiler feed pumps • Station Service 	Yes	<ul style="list-style-type: none"> • <u>Recall time ≤ 15 minutes and the multiple unit/aggregate loss occurs > 30 minutes after the loss of the auxiliary element</u>
	Affects the availability to provide ancillary services such as: <ul style="list-style-type: none"> • Automatic Generation Control (AGC) • Voltage support • Black start service 	Yes	<ul style="list-style-type: none"> • <u>Starts and ends on the same day or has a recall ≤ 15 minutes,</u>
Testing	All tests described in Section 1.3.11: System Tests	No	
	Testing of generation units, including: <ul style="list-style-type: none"> • In-service or commissioning tests • Testing of derated units at levels above the derated levels • Testing of units currently on outage 	Yes	<ul style="list-style-type: none"> • <u>Starts and ends on the same day or has a recall ≤ 15 minutes,</u>

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| | • Tests of facilities providing ancillary services | | |
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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. Provided the terminal breakers are required only for switching (< 15 minutes) and does not conflict with any other pre-approval criteria (i.e. a transmission line outage that also removes a generator from service for more than a day in duration)
5. 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.
6. 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.
7. If the facility is not registered with the IESO, this responsibility falls on the market participant (i.e. transmission customers for the facility).