System Control Technical Code – Section 7 – Power System Incident Reporting Procedures

Note – The marked up changes in this document reflect the changes proposed post the consultation process. Wording related to the classification of a reportable incidents, customers, and the classification of minor and major reportable incidents have been removed.

Clause reference	Proposed changes to clause	Comments
7.1 Purpose	This Section 7 sets out the procedures which govern the notification and investigation of <i>power system</i> incidents and the <i>Power System Controller's</i> and other <i>System Participant's power system</i> reporting obligations. The procedures include provisions dealing with:	
	(a) the establishment and maintenance of the <i>Power System Incident Reporting Guideline</i> and the proposed content of that guideline;	
	(b) the requirement for System Participants to report the occurrence of power system incidents to the Power System Controller;	Given that there will no longer be categories of <i>reportable incidents</i> we have
	(c) the requirement for the Power System Controller to assess power system incidents and determine whether they constitute reportable incidents by reference to the criteria set out in this Section 7 and the Power System Incident Reporting Guideline;	deleted the requested words. The Guideline will now only include criteria concerning which <i>power system</i> incidents will be classified as <i>reportable</i> incidents.
	(d) the requirement for System Participants to investigate and report on reportable incidents where required by the Power System Controller or the Power System Incident Reporting Guideline;	
	(e) the Power System Controller's obligation to investigate and report on reportable incidents and the obligation of System Participants to co- operate with, and assist the Power System Controller in relation to, that process;	Amended to pick up the additional paragraphs added at the end of clause 7.4.1.
	(f) the power of the <i>Power System Controller</i> to make and monitor compliance with recommendations in reports issued by the <i>Power System Controller</i> under this Section 7 and the obligation of <i>System Participants</i> to comply with recommendations contained within those reports; and	
	(g) the role of the Utilities Commission with respect to the matters covered by this Section 7 and the <i>Power System Incident Reporting Guideline</i> .	
	These procedures are critical to the proper performance of the <i>Power System Controller</i> 's function of monitoring and controlling the operation of the <i>power system</i> with a view to ensuring that the <i>power system</i> operates reliably, safely and securely.	
7.2 Definitions		

7.2.1 Reportable incident
7.2.2 Brief and Fi

- (a) A reportable incident is a power system incident that had, or could reasonably be expected to have had, an adverse effect on power system security or the reliability of the power system.
- (b) A reportable incident includes, amongst other things, a power system incident that:
 - affects energy production capability or the capacity of a generating system;
 - affects the capability or capacity of a transmission network to transport energy;
 - (3) involves the failure of a generating system that causes, or could reasonably be expected to cause, load shedding;
 - (4) involves *load shedding* lasting longer than 0.1 *system minutes* arising from the failure of a *transmission network* (excluding where the *load shedding* is initiated under an agreement between a *Network Operator* and *Network User*);
 - (5) involves an outage of any transmission network element arising from equipment failure or operator error in a zone substation, which has a material impact on supply (within in the meaning of the Power System Incident Reporting Guideline); and
 - (6) is not referenced in paragraphs (1) to (5), that the *Power System Controller* determines, in accordance with the process specified in the *Power System Incident Reporting Guideline*, should be classified as a *reportable incident*.

Clause 7.2.2 with clause 7.2.1 have been merged to remove the classification of a reportable incident as either minor or major. Confirming that a *power system* incident that causes or could reasonably be expected to cause, a material impact on the delivery of electricity through the *power system/network* will only be a *reportable incident* when that impact on the delivery of electricity also has an adverse effect on *power system security* or the *reliability* of the *power system*. Removal of all references to *customers*.

7.2.2 Brief and Final Reports

- a) 'Brief Report' means a report that is required to be provided by:
 - (1) a System Participant in accordance with clause 7.4.1(c); or
 - (2) the *Power System Controller* in accordance with clause 7.4.2(g),

which report must meet the requirements of the *Power System Incident Reporting Guideline* (including as to form, content and timing).

- (b) 'Final Report' means a report that is required to be provided by:
 - (1) the System Participant in accordance with clause 7.4.1(e); or
 - (2) the *Power System Controller* in accordance with clause 7.4.2(h),

Clause 7.2.2 criteria has been merged with 7.2.1 and the classification of Major Reportable Incident has been removed as per proposed amendments post consultation.

Clause 7.2.3 has been removed, classification of Minor Reportable Incident has been removed as per proposed amendments post consultation.

		which report must meet the requirements of the <i>Power System Incident Reporting Guideline</i> (including as to form, content and timing).	
7.3 Notification and classification obligations			
7.3.1 Notification by a System Participant	(a)	System Participants must notify the Power System Controller as soon as reasonably practicable after becoming aware of the occurrence a power system incident which has the potential to be classified as a reportable incident.	
	(b)	The notice from the <i>System Participant</i> must meet the requirements (including as to form, content, timing and manner of notification) specified in the <i>Power System Incident Reporting Guideline</i> for that type of notice.	
	(c)	The Network Operator is responsible for liaising with Network Users to obtain all necessary information in relation to the occurrence of a power system incident involving the plant or equipment of a Network User which has the potential to be classified as a reportable incident.	
	(d)	If the <i>Power System Controller</i> becomes aware of the occurrence of a <i>power system</i> incident which the <i>Power System Controller</i> believes on reasonable grounds is related to <i>plant</i> or <i>equipment</i> operated or controlled by:	
		(1) a System Participant; or	
		(2) a Network User whose plant and equipment is connected to the System Participant's plant or equipment,	
		the Power System Controller may notify the System Participant of that view and require the System Participant to provide a notice under paragraph (b) with respect to that power system incident.	
	(e)	Nothing in this clause 7.3.1 prevents a <i>System Participant</i> notifying the <i>Power System Controller</i> of the occurrence of a <i>power system</i> incident which involves the <i>plant</i> or <i>equipment</i> of another <i>System Participant</i> or a <i>Network User</i> .	
7.3.2 Classification of power system incidents	(a)	If the Power System Controller forms the view at any time that a power system incident could be a reportable incident, the Power System Controller may request a System Participant to provide such additional information and assistance as is reasonably required by	The Power System Controller's assessment will be limited to: • determining whether a power system incident has occurred; • determining whether a power system incident should be classified as a reportable incident;

		the <i>Power System Controller</i> to confirm the classification of that <i>power system</i> incident.	 deciding to reclassify a power system incident which has been previously classified as a reportable incident, as a power system incident which is not
	(b)	For the avoidance of doubt, the <i>Power System Controller</i> can form the view that a <i>power system</i> incident could be a <i>reportable incident</i> and make a request under paragraph (a) even if the <i>Power System Controller</i> initially formed the view that a <i>power system</i> incident was not a <i>reportable incident</i> .	 a reportable incident; and deciding to reclassify a power system incident which was not previously classified as a reportable incident, as a power system incident which should be classified as reportable incident. The amendments to clause 7.3.2 reflect these principles.
	(c)	Each System Participant must co-operate with the Power System Controller for the purposes of determining the classification of a power system incident, including by providing the information and assistance requested by the Power System Controller under paragraph (a).	
	(d)	The Power System Controller may, at any time prior to concluding an investigation with respect to a reportable incident, determine that the power system incident should cease to be classified as a reportable incident if the Power System Controller forms the view on reasonable grounds that the power system incident no longer satisfies the criteria for a reportable incident.	
7.3.3 Notification of a reportable incident by the Power System Controller	(a)	The Power System Controller must notify relevant System Participants and the Utilities Commission as soon as reasonably practicable after making a determination that a reportable incident has occurred.	
	(b)	A notice from the <i>Power System Controller</i> referred to in paragraph (a) must meet the requirements (including as to form, content, timing and manner of notification) specified in the <i>Power System Incident Reporting Guideline</i> for the relevant type of notice.	
	(c)	A notice issued by the <i>Power System Controller</i> under this paragraph (a) may also include a request for the relevant <i>System Participant</i> to provide further information or to instigate an investigation in relation to the <i>reportable incident</i> .	
7.4 Investigation and reporting obligations			
7.4.1 System Participant's investigation and	(a)	If requested by the <i>Power System Controller</i> , a <i>System Participant</i> must investigate the occurrence of a <i>reportable incident</i> that is related to:	
reporting obligations		(1) its plant or equipment; or	

(2)	the plant and equipment of a Network User that is connected
	to the System Participant's plant or equipment,

and provide a written report to the *Power System Controller* which sets out the findings of that investigation and includes such other information as the *Power System Controller* requests, or the *Power System Incident Reporting Guideline* specifies, must be included in that type of report.

- (b) The Power System Controller's request, or the Power System Incident Reporting Guideline, may also specify the particular issues or matters which the Power System Controller requires the System Participant to investigate and the Power System Controller's expectations concerning the level and extent of the investigation process.
- (c) Subject to paragraph (d) below, the System Participant must conduct and complete the investigation and deliver a Brief Report to the Power System Controller in accordance with the requirements of the Power System Controller's request and the Power System Incident Reporting Guideline, as soon as reasonably practicable after receipt of the Power System Controller's notice under clause 7.3.3 and in any event within 5 business days of receipt of that notice.
- (d) If it is not reasonably possible for the System Participant to complete the investigation and provide a Brief Report within the timeframe specified in paragraph (c) (for example, if the initial investigation has not been able to identify the cause of the reportable incident), the System Participant must provide a Brief Report before the end of that period unless the Power System Controller waives this requirement.
- (e) Where a System Participant provides a Brief Report for a reportable incident under paragraph (d), a Final Report must be provided to the Power System Controller as soon as reasonably practicable but in any event within 20 business days after receipt of a notification concerning the occurrence of the reportable incident, unless otherwise required by the Power System Controller.

7.4.2 Power System Controller's investigation and reporting obligations

- The Power System Controller must:
 - (1) investigate;
 - (2) conduct a review of; and
 - (3) report on,

- every reportable incident which is notified to the Power System Controller, or of which the Power System Controller becomes aware.
- (b) The purpose of the investigation, review and report under paragraph (a) is to assess the adequacy of the provision and response of facilities or services and whether the facilities and services were appropriately established, and the appropriateness of actions (including remedial actions) taken to restore or maintain power system security and the reliability of the power system.
- (c) The Power System Incident Reporting Guideline may specify the factors and other considerations to be taken into account in assessing the matters referred to in paragraph (b).
- (d) The Power System Controller may request a System Participant to provide such information and assistance as is reasonably required by the Power System Controller to conduct and complete its investigations, review and report under paragraph (a).
- (e) Each System Participant must co-operate with the Power System Controller for the purposes of conducting and completing its investigations, review and report under paragraph (a), including by using its reasonable endeavours to provide the information and assistance requested by the Power System Controller under paragraph (d).
- (f) The Power System Incident Reporting Guideline may specify requirements applying to the conduct of the Power System Controller's investigation and review and the form, content and timing of the report.
- (g) The Power System Controller must provide a Brief Report to the Utilities Commission within 10 business days of receipt of a notification for a reportable incident (or otherwise becoming aware of the occurrence of such a reportable incident), containing key details of the reportable incident, the scope of the investigation and the Power System Controller's recommendations concerning the reportable incident.
- (h) The Power System Controller must provide a Final Report to System Participants and the Utilities Commission as soon as reasonably practicable after, and in any event within 90 business days of, receipt of a notification of a reportable incident (or otherwise becoming aware of the occurrence of a reportable incident).

	(i)	Information included in reports on reportable incidents by the Power System Controller must reflect good electricity industry practice and include such minimum information as the Power System Controller may specify in the Power System Incident Reporting Guideline. In investigating, reviewing and reporting on reportable incidents, the Power System Controller will be guided by good electricity industry practice and the requirements of the Power System Incident Reporting Guideline.	
7.5 Power System Incident Reporting Guideline			
7.5.1 Obligation to develop and maintain <i>Power System</i>	(a)	The Power System Controller must develop and maintain a guideline (to be known as the Power System Incident Reporting Guideline).	
Incident Reporting Guideline	(b)	The purpose of the <i>Power System Incident Reporting Guideline</i> is to facilitate the proper discharge of the rights and obligations of the <i>Power System Controller</i> and <i>System Participants</i> under this Section 7 and to provide further detail concerning the various processes referred to in this Section 7.	
	(c)	In developing or amending the Power System Incident Reporting Guideline, the Power System Controller must take into account good electricity industry practice, consider the need for consistency between this Code and the Power System Incident Reporting Guideline and consult with the Utilities Commission and System Participants.	
	(d)	The Power System Incident Reporting Guideline will include provisions which describe or specify (amongst other things):	
		(1) additional criteria for classifying a reportable incident;	
		(2) the form, manner and content of notifications and reports that are required to be provided under this Section 7;	
		(3) the <i>Power System Controller's</i> obligations relating to the investigation of <i>reportable incidents</i> ;	
		(4) how the requirements of this Section 7 and the <i>Power System Incident Reporting Guideline</i> are to apply to different <i>power systems</i> ;	
		(5) how extensions to timeframes will be assessed in different circumstances;	

		 (6) the obligation of the Power System Controller and relevant System Participants to notify Network Users who are not System Participants of the occurrence of a power system incident which has affected or potentially affected the plant or equipment of that Network User, and (7) other requirements, considerations or matters which are 	
		reasonably required to efficiently and effectively manage the identification, investigation and reporting of reportable incident in accordance with good electricity industry practice and the Power System Controller's function.	
7.5.2 Compliance with Power System	(a)	The Power System Controller and all other System Participants must comply with the Power System Incident Reporting Guideline.	
Incident Reporting Guideline	(b)	Each Network Operator must ensure that each of its access agreements with Network Users require each Network User to support and assist the Network Operator in complying with this Section 7 and the Power System Incident Reporting Guideline to the extent that a power system incident is caused by the Network Users plant or equipment.	
7.5 Public Reporting	(a)	Nothing in this <i>Code</i> prevents the <i>publication</i> of a report by the <i>Power System Controller</i> or by the Utilities Commission.	
7.6 Process for and agreeing actions	(a)	Without limiting the <i>Power System Controller's</i> rights under this <i>Code</i> , the System Control Licence and the <i>Electricity Reform Act</i> , following the completion by the <i>Power System Controller</i> of its investigation and reporting obligations under this Section 7 in respect of a <i>reportable incident</i> the <i>System Participants</i> affected by, or associated with, the occurrence of the <i>reportable incident</i> and the <i>Power System Controller</i> must meet with the view to negotiating in good faith and agreeing any actions to be undertaken by <i>System Participants</i> that are reasonably required to prevent a repetition of the <i>reportable incident</i> , and the timeframe for undertaking those actions.	Clause 7.6 Has been amended to include a post close out review of recommendation outcomes that was proposed in the consultation response documents.
	(b)	The System Participants must undertake and complete any actions that have been agreed with the Power System Controller under paragraph (a) within the agreed timeframe for undertaking those actions.	
	(c)	If:	
		(1) any System Participant and the Power System Controller are unable to reach agreement on any matter referred to in	

- paragraph (a) within 15 *business days* of commencing negotiations; or
- (2) a *System Participant* fails to undertake an action that is agreed under paragraph (a) within the required timeframe,

the *Power System Controller* may refer the matter to the Utilities Commission.

- (d) A System Participant must provide such evidence to the Power System Controller as is reasonably requested by the Power System Controller in order to determine:
 - (1) whether the *System Participant* has completed the actions agreed under paragraph (a);
 - (2) whether the *System Participant* has complied with the recommendations made by the *Power System Controller* in a Final Report;
 - (3) if the System Participant has not completed all of the agreed actions or complied with all of the relevant recommendations in the Final Report, the additional actions and steps which the System Participant needs to take in order to complete the agreed actions and/or comply with the relevant recommendations;
 - (4) whether the actions taken by *System Participants* will in fact prevent a repetition of the *reportable incident*; and
 - (5) whether any other actions are reasonably required to be taken by the System Participants in order to prevent a repetition of the reportable incident.
- (e) If paragraph (d)(3) applies, the relevant *System Participant* must complete the additional actions and take the additional steps notified by the *Power System Controller* as soon as reasonably possible after receiving the *Power System Controller*'s notification.
- (f) If the Power System Controller determines that additional actions are reasonably required to be taken by System Participants in order to prevent a repetition of the reportable incident, the Power System Controller must meet with the relevant System Participants with a view to negotiating in good faith and agreeing any additional actions to be undertaken by System Participants that are reasonably required to prevent a repetition of the reportable incident, and the timeframe for undertaking those actions. This clause 7.6 (other than paragraph (a)) will apply to any agreed additional actions.

7.7 Independent investigation of a reportable incident	(a)	Without limiting the <i>Power System Controller's</i> obligations and rights to investigate and report on <i>reportable incidents</i> under this Section 7, the <i>Power System Controller</i> must, if directed by the Utilities Commission, engage an independent expert to:
		(1) investigate;
		(2) conduct a review of; and
		(3) report on,
		a reportable incident.
	(b)	The terms of reference for the independent investigation must be developed by the <i>Power System Controller</i> , and approved by the Utilities Commission.
	(c)	The Power System Controller and each System Participant must co- operate with the independent expert for the purposes of conducting and completing its investigation, review and report under paragraph (a), including by using their reasonable endeavours to provide any information and assistance requested by the independent expert.
	(d)	The cost of the independent investigation will be met by the <i>Power System Controller</i> .

Clause reference	Proposed changes to clause	Comments
8.4 Power System Controller Reports		
8.4.1 Half yearly report to the Utilities Commission	(a) The Power System Controller must submit a report to the Utilities Commission and System Participants which sets out:	
Commission	 the performance of the power system and details of any reportable incidents; 	
	(2) details of any new System Participants and their facilities;	
	(3) details of any issues causing or resulting in a risk to power system security;	
	(4) details of any black system which occurred;	
	(5) any excess use of the <i>network</i> ;	
	(6) any loss of generation/major transmission lines;	
	(7) the occurrence of any under-frequency load shedding; and	

	(8) the occurrence of any lack of <i>reserve</i>/low <i>reserve</i>,(9) during the 6 months before the submission of the report.	
	(b) The report must be issued on or before 31 January and 31 July each year.	
8.4.2 Annual reports	The Power System Controller may contribute (as resources allow and as requested by a System Participant) information for that System Participant's annual report.	

Attachment 1 – Glossary of Terms of the Code

Clause reference	Proposed changes to clause	Comments, responses and questions
load	A connection point or defined set of connection points at which electrical power is delivered to a person or to another network or the amount of electrical energy delivered at a defined instant at a connection point or aggregated over a defined set of connection points.	
Power System Incident Reporting Guideline	The guideline developed by the <i>Power System Controller</i> under clause 7.5.1.	
system minute	equals the <i>energy</i> equivalent of 1 minute of <i>supply</i> at maximum historical demand for the <i>power system</i> .	