

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	<p>This Ssection 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:</p> <ul style="list-style-type: none"> (a) the establishment and maintenance of the <i>Power System Incident Reporting Guideline</i> and the proposed content of that the guideline; (b) the requirement for <i>System Participants</i> to report the occurrence of <i>power system</i> incidents to the <i>Power System Controller</i>; (c) the requirement for the <i>Power System Controller</i> to assess <i>power system</i> incidents and, determine whether they constitute <i>reportable incidents</i> and classify reportable incidents by reference to the criteria set out in this Section 7 and the <i>Power System Incident Reporting Guideline</i>; (d) the requirement for <i>System Participants</i> to investigate and report on <i>reportable incidents</i> where required by the <i>Power System Controller</i> or the <i>Power System Incident Reporting Guideline</i>; (e) the <i>Power System Controller's</i> obligation to investigate and report on <i>reportable incidents</i> and the obligation of <i>System Participants</i> to cooperate with, and assist the <i>Power System Controller</i> in relation to, that process; (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>. <p>These procedures are critical to the proper performance of the <i>Power System Controller's</i> 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.</p>	<p>Given that there will no longer be categories of <i>reportable incidents</i> we have deleted the related words. The Guideline will now only include criteria concerning which <i>power system</i> incidents will be classified as <i>reportable</i> incidents.</p> <p>Amended to pick up the additional paragraphs added at the end of clause 7.4.1.</p>

7.2 Definitions		
7.2.1 Reportable incident	<p>(a) A reportable incident is a power system incident that:</p> <p>(1) had, or could reasonably be expected to have had, an adverse effect on power system security or the reliability of the power system;</p> <p>caused, or could reasonably be expected to have caused, a material impact (within the meaning of the Power System Incident Reporting Guideline) on supply to customers.</p> <p>(b) A reportable incident and includes, amongst other things, a power system incident that:</p> <p>(1) a power system incident that affects the energy production capability or the capacity of a generating system;</p> <p>(2) affects the capability or capacity of a transmission network or distribution network to transport energy to customers;</p> <p>(3) involves the failure of a generating system that causes, or could reasonably be expected to cause, load shedding;</p> <p>(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);</p> <p>(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) on the supply to customers; and</p> <p>(1)(6) is not reportable 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 major reportable incident.</p>	<p>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.</p>
7.2.2 Major reportable incident	<p>A major reportable incident is:</p> <p>(b) a reportable incident which involves:</p> <p>(2) load shedding arising from the failure of a generating system;</p>	<p>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.</p>

	<p>(3) load shedding lasting longer than 0.1 system minutes arising from the failure of a transmission network, excluding where the load shedding is under an agreement between a Network Operator and Network User; or</p> <p>(4) an outage of any transmission network element arising from equipment failure or operator error in a zone substation and which has a material impact (within in the meaning of the Power System Incident Reporting Guideline) on the supply to customers; and</p> <p>a reportable incident not referenced in paragraph (a), that the Power System Controller determines, in accordance with the process specified in the Power System Incident Reporting Guideline, should be classified as a major reportable incident.</p>	
<p>7.2.3 Minor reportable incident</p>	<p>A minor reportable incident is a reportable incident that is not a major reportable incident and is not otherwise classified by the Power System Controller as a major reportable incident in accordance with the Power System Incident Reporting Guideline and includes:</p> <p>(a) an outage which lasts longer than the number of customer minutes specified in the Power System Incident Reporting Guideline and that, in the reasonable opinion of the Power System Controller, should be classified as a minor reportable incident; or</p> <p>(b) a reportable incident not referenced in paragraph (a), that the Power System Controller determines, in accordance with the process specified in the Power System Incident Reporting Guideline, should be classified as a minor reportable incident.</p>	<p>Clause 7.2.3 has been removed, classification of Minor Reportable Incident has been removed as per proposed amendments post consultation.</p>
<p>7.2.24 Brief and Final Reports</p>	<p>(a) 'Brief Report' means a report that is required to be provided by:</p> <p>(1) a System Participant in accordance with clause 7.4.1(c); or</p> <p>(2) the Power System Controller in accordance with clause 7.4.2(g),</p> <p>which report must meet the requirements of the Power System Incident Reporting Guideline (including as to form, and content <u>and</u> timing).</p>	

	<p>(b) 'Final Report' means a report that is required to be provided by:</p> <ul style="list-style-type: none"> (1) the <i>System Participant</i> in accordance with clause 7.4.1(e); or (2) the <i>Power System Controller</i> in accordance with clause 7.4.2(h), <p>which report must meet the requirements of the <i>Power System Incident Reporting Guideline</i> (including as to form, and content <u>and timing</u>).</p>	
<p>7.3 Notification and classification obligations</p>		
<p>7.3.1 Notification by a <i>System Participant</i></p>	<ul style="list-style-type: none"> (a) <i>System Participants</i> must notify the <i>Power System Controller</i> as soon as reasonably practicable after becoming aware of the occurrence a <i>power system</i> incident which has the potential to be classified as a <i>reportable incident</i>. (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 <i>Network Operator</i> is responsible for liaising with <i>Network Users</i> to obtain all necessary information in relation to the occurrence of a <i>power system</i> incident involving the <i>plant</i> or <i>equipment</i> of a <i>Network User</i> which has the potential to be classified as a <i>reportable incident</i>. (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: <ul style="list-style-type: none"> (1) a <i>System Participant</i>; or (2) a <i>Network User</i> whose <i>plant</i> and <i>equipment</i> is <i>connected</i> to the <i>System Participant's plant</i> or <i>equipment</i>, <p>the <i>Power System Controller</i> may notify the <i>System Participant</i> of that view and require the <i>System Participant</i> to provide a notice under paragraph clause 7.3.1(b) with respect to that <i>power system</i> incident.</p> (e) Nothing in this clause 7.3.1 prevents a <i>System Participant</i> notifying <u>the <i>Power System Controller</i> of</u> the occurrence of a <i>power system</i> 	

incident which involves the *plant* or *equipment* of another *System Participant* or a *Network User* ~~to the *Power System Controller*.~~

7.3.2 Classification of power system incidents ~~and reportable incidents~~

- ~~(a)~~ If the *Power System Controller* forms the view at any time that a power system incident ~~could be is~~ a *reportable incident*, the *Power System Controller* ~~must determine whether that *reportable incident* should be classified as a *major reportable incident* or a *minor reportable incident*.~~
- ~~(b)~~ The determination referred to in paragraph (a) will be made in accordance with the process, criteria and time frames set out in the *Power System Incident Reporting Guideline*.
- ~~(c)~~(a) 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* to ~~determine~~ confirm the classification of the classification for that a power system incident ~~or a *reportable incident*.~~
- ~~(b)~~ For the avoidance of doubt, the *Power System Controller* can form the view that a power system incident could be a *reportable incident* and make a request under paragraph (a) even if the *Power System Controller* initially formed the view that a power system incident was not a *reportable incident*.
- ~~(d)~~(c) Each *System Participant* must co-operate with the *Power System Controller* for the purposes of determining the classification of a power system incident ~~or a *reportable incident*~~, including by providing the information and assistance requested by the *Power System Controller* under paragraph ~~(a)~~ (c) above.
- ~~(e)~~(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* change its classification of a power system incident or a *reportable incident* if the *Power System Controller* forms the view on reasonable grounds, ~~and after taking into account the requirements (if any) governing the re-classification of *reportable incidents* in the *Power System Incident Reporting Guideline*, that the power system incident no longer satisfies the criteria for a *reportable incident* (i.e. that the power system incident should cease to be classified as a *reportable incident*);~~ or
- ~~the previous classification of a *reportable incident* no longer reflects the nature of the *reportable incident* (i.e. that a *minor reportable incident* should be re-classified as a *major*~~

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*;
- deciding to reclassify a *power system* incident which has been previously classified as a *reportable incident*, as a *power system* incident which is not 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.

~~reportable incident and vice versa or should cease to be classified as a reportable incident).~~

7.3.3 Notification of a reportable incident classification by the Power System Controller

- (a) The Power System Controller must notify ~~the classification of a reportable incident (and any change to that classification made in accordance with clause 7.3.2(e))~~ to relevant System Participants and the Utilities Commission as soon as reasonably practicable after making ~~that a~~ determination that a reportable incident has occurred or change.
- ~~(b)~~ A notice from the Power System Controller referred to in paragraph (a) must meet the requirements (including as to form, content, timing and manner of notification) specified in the Power System Incident Reporting Guideline for the relevant type of notice.
- ~~(b)(c)~~ A notice issued by the Power System Controller under paragraph (a) this clause may also include a request for the relevant System Participant to provide further information or to instigate an investigation in relation to the reportable incident.

7.4 Investigation and reporting obligations

7.4.1 System Participant's investigation and reporting obligations

- (a) If requested by the Power System Controller, a System Participant must investigate the occurrence of a reportable incident that is related to:
- (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's requests, or the Power System Incident Reporting Guideline specifies, must be included in that type of report.
- ~~(a)(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.
- ~~(b)(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.

~~(e)~~(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.

~~(d)~~(e) Where a *System Participant* provides a Brief Report for a *reportable incident* under paragraph (d) ~~above and that Brief Report relates to a major reportable incident~~, 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*. ~~For the avoidance of doubt, a System Participant will not be required to provide a Final Report in respect of a minor reportable incident unless otherwise requested by the Power System Controller.~~

7.4.2 *Power System Controller's* investigation and reporting obligations

- (a) 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 of.
- (b) The purpose of the investigation, review and report under paragraph (a) ~~above~~ 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* ~~or supply to customers~~.

- (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) ~~above~~.
- (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) ~~above~~, including by using its reasonable endeavours to provide the information and assistance requested by the *Power System Controller* under paragraph (d) ~~above~~.
- (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, ~~and~~ 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 ~~minor-reportable incident or a major-reportable incident~~ *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 detailed Rreport to *System Participants* and the Utilities Commission as soon as reasonably practicable and in any event within 90 *business days* of receipt of a notification of a ~~major-reportable incident~~ (or otherwise becoming aware of the occurrence of a reportable such an incident). ~~For the avoidance of doubt, the Power System Controller will not be required to provide a detailed report in respect of a minor 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*.

<p>7.5 Power System Incident Reporting Guideline</p>		
<p>7.5.1 Obligation to develop and maintain Power System <u>Incident</u> Reporting Guideline</p>	<p><u>(a)</u> The <i>Power System Controller</i> must develop and maintain a guideline (to be known as the <i>Power System Incident Reporting Guideline</i>).</p> <p>(a)<u>(b)</u> 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.</p> <p>(b)<u>(c)</u> In developing or amending the <i>Power System Incident Reporting Guideline</i>, the <i>Power System Controller</i> must take into account <i>good electricity industry practice</i>, consider the need for consistency between this <i>Code</i> and the <i>Power System Incident Reporting Guideline</i> and consult with the Utilities Commission and <i>System Participants</i>.</p> <p>(c)<u>(d)</u> The <i>Power System Incident Reporting Guideline</i> will include provisions which describe or specify (amongst other things):</p> <ol style="list-style-type: none"> (1) additional criteria for classifying a <i>reportable incident</i>; (2) the form, manner and content of notifications and reports that are required to be provided under this Section 7; the level of investigation required with respect to different types of reportable incidents; (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 <i>Power System Controller</i> and relevant <i>System Participants</i> to notify <i>Network Users</i> who are not <i>System Participants</i> of the occurrence of a <i>power system incident</i> which has affected or potentially affected the <i>plant</i> or <i>equipment</i> of that <i>Network User</i>; and 	

	<p>(7) other requirements, considerations or matters which are reasonably required to efficiently and effectively manage the identification, classification, investigation and reporting of <i>reportable incident</i> in accordance with <i>good electricity industry practice</i> and the <i>Power System Controller's</i> function.</p>	
7.5.2 Compliance with <i>Power System Incident Reporting Guideline</i>	<p>(a) The <i>Power System Controller</i> and all other <i>System Participants</i> must comply with the <i>Power System Incident Reporting Guideline</i>.</p> <p>(b) Each <i>Network Operator</i> must ensure that each of its access connection agreements with <i>Network Users</i> require each <i>Network User</i> to support and assist the <i>Network Operator</i> in complying with this Section 7 and the <i>Power System Incident Reporting Guideline</i> to the extent that a <i>power system</i> incident is caused by the <i>Network Users plant</i> or <i>equipment</i>.</p>	
7.5 Public Reporting	<p>(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 <i>Utilities Commission</i>.</p>	
7.6 Process for and agreeing actions	<p>(a) Without limiting the <i>Power System Controller's</i> rights under this <i>Code</i>, the <i>System Control Licence</i> 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 the <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.</p> <p>(b) The <i>System Participants</i> must undertake and complete any actions that have been agreed with the <i>Power System Controller</i> under paragraph clause 7.6(a) within the agreed timeframe for undertaking those actions.</p> <p>(c) If:</p> <ol style="list-style-type: none"> (1) any the <i>System Participants</i> and the <i>Power System Controller</i> are unable to reach agreement on any the matters referred to in paragraph (a) within 15 <i>business days</i> of commencing negotiations; or (2) a <i>System Participant</i> fails to undertake an action that is agreed under paragraph (a) within the required timeframe, 	<p>Clause 7.6 Has been amended to include a post close out review of recommendation outcomes that was proposed in the consultation response documents.</p>

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 ~~whether~~:

(1) whether the *System Participant* has ~~completed~~ complied with the any actions that is agreed under paragraph (a); or

(2) whether the *System Participant* has ~~complied with the a~~ recomendations 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 *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.

~~(d)~~(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 *Power System Controller's* obligations and rights to investigate and report on *reportable incidents* under this Section 7, the *Power System Controller* must, if directed by the Utilities Commission, engage an independent expert to:

~~This is clause 7.6 of the current SCTC.
As currently drafted, there is no obligation, and only a right of the *Utilities Commission*.~~

	<ul style="list-style-type: none"> (1) investigate; (2) conduct a review of; and (3) report on, <i>a reportable incident.</i> <p>(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.</p> <p>(c) The <i>Power System Controller</i> and each <i>System Participant</i> must cooperate with the independent expert for the purposes of conducting and completing its investigation, review and report under paragraph (a) above, including by using their reasonable endeavours to provide any information and assistance requested by the independent expert.</p> <p>(d) <i>The cost of the independent investigation will be met by the Power System Controller.</i></p>	
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Clause reference	Proposed changes to clause	Comments
8.4 Power System Controller Reports		
8.4.1 Half yearly report to the Utilities Commission	<p>(a) The <i>Power System Controller</i> must submit a report to the Utilities Commission and <i>System Participants</i> which sets out:</p> <ul style="list-style-type: none"> (1) the performance of the <i>power system</i> and details of any <i>reportable incidents</i>; (2) details of any new <i>System Participants</i> and their <i>facilities</i>; (3) details of any issues causing or resulting in a risk to <i>power system security</i>; (4) details of any <i>black system</i> which occurred; (5) any excess use of the <i>Network</i>; (6) any loss of <i>generation/major transmission lines</i>; (7) the occurrence of any <i>under-frequency load shedding</i>; and (8) the occurrence of any lack of <i>reserve/low reserve</i>, during the 6 months before the submission of the report. <p>(b) The report must be issued on or before 31 January and 31 July each year.</p>	

8.4.2 Annual reports	The <i>Power System Controller</i> may contribute (as resources allow and as requested by a <i>System Participant</i>) information for that <i>System Participant's</i> annual report.
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Attachment 1 – Glossary of Terms of the Code

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