



Operating Code OC5 – Notice of Operations and Incidents, and Significant Incident Reporting

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[OETC](#)



Operating Code OC5 – Notice of Operations and Incidents, and Significant Incident Reporting

OC5.1 Introduction

Operating Code OC5, Notice of Operations and Incidents, and Significant Incident reporting, requires OETC and Users to issue notices of all Operations and Incidents on their respective Systems that have or may have implications for the Transmission System or a User's System.

OETC may determine that an Incident shall be classified as a Significant Incident. OC5 sets out the procedures for reporting and subsequent assessment of Significant Incidents. OC5 requires OETC or a User to prepare;

- a preliminary written Significant Incident report within 1 day of OETC determining an Incident as a Significant Incident; and
- a full written Significant Incident report within 3 Business Days of OETC determining an Incident as a Significant Incident.

In addition, OC5 contains requirements governing the content of Significant Incident reports, the circulation of Significant Incident reports, and their subsequent assessment and review by the Grid Code Review Panel.

OC5.2 Objective

The objectives of OC5 are;

- to specify the obligations on OETC and Users regarding the issue of notices of Operations and Incidents on their respective Systems;
- to ensure notices of Operations and Incidents provide sufficient detail to allow recipients of such notices to fully assess the likely implications and risks and take the necessary actions required to maintain the security and stability of the Transmission System or a User's System;
- to specify the arrangements for reporting Incidents that OETC has determined to be a Significant Incident; and
- to provide for the review of all Significant Incident reports by the Grid Code Review Panel to assess the effectiveness of policies adopted in accordance with this Grid Code.



OC5.3 Scope

In addition to OETC, OC5 applies to;

- Power and Water Producers;
- Licensed Distributors;
- Directly Connected Consumers;
- Internally Interconnected Parties;
- International Interconnected Parties;
- PWP (copy recipient of Significant Incident reports); and
- RAEC if Connected to the Total System.

OC5.4 Notice of Operations

OETC and Users shall issue notices concerning Operations on their respective Systems that have had or may have implications for the Transmission System or a User's System. Where information is requested in writing throughout this Code, facsimile transmission or other electronic means as agreed with OETC in writing may be used. All writing shall be in the English language.

Without limiting the requirements of OC5.4, notifications shall be issued for the following;

- where an Operational Instruction to be issued may have an effect on another Users' System, or Plant;
- where Plant is expected to be operated in excess of its rated capability and may present a hazard to Persons;
- where there is an expectation of abnormal operating conditions;
- where there is increased risk of inadvertent Operation of Protection; and
- in relation to major testing, commissioning and maintenance.

OC5.4.1 Operations on the Transmission System

In the case of an Operation on the Transmission System that will have or has had an Operational Effect on the System of another User, OETC will notify the User whose System will be, is, or has been affected.

OC5.4.2 Operations on a User System

In the case of an Operation on the System of a User that will have or has had an Operational Effect on the Transmission System, the User will notify OETC. Following notification by the User, OETC will notify any other Users whose Systems will be, are, or have been affected.

OC5.4.3 Form of notice of Operations

All operational notifications must be made promptly. Notifications and responses to notifications may be made by telephone but must be confirmed in writing within 30 minutes where practical.

The appropriate party (as described in OC5.4.1 and OC5.4.2) will issue a notification (and respond to any questions asked) of any Operation that has arisen independently of any other Incident or Operation.



The notification will;

- describe the Operation (but is not required to state its cause);
- provide sufficient detail to enable the recipient of the notification to reasonably consider and assess the implications, and risks arising; and
- include the name of the Person reporting the Operation on behalf of OETC or the User.

The recipient of a notification may ask questions to clarify the notification and the provider of the notification will, insofar as it is able, answer any questions raised.

OC5.4.4 Timing

A notification will be given as far in advance as possible. Notification of future Operations shall be given in sufficient time as will reasonably allow the recipient to consider and assess the implications and risks arising from the Operation.

OC5.5 Notification of Incidents

OETC and Users shall issue notifications of Incidents on their respective Systems that have had or may have implications for the Transmission System or a User's System. Where information is requested in writing throughout this Code, facsimile transmission or other electronic means as agreed with OETC in writing may be used. All writing shall be in the English language.

Without limiting the requirements of OC5.5, Incident notifications shall be issued for the following;

- where Plant has been Operated in excess of its rated capability and presented a hazard to Persons;
- the activation of any alarm or indication of any abnormal operating condition;
- adverse weather conditions being experienced;
- breakdown of, faults on or temporary changes in the capabilities of Plant;
- breakdown of or faults on control, communication and Metering equipment; and
- increased risk of inadvertent Operation of Protection.

OC5.5.1 Incidents on the Transmission System

In the case of an Incident on the Transmission System, which has had or may have an Operational Effect on the System of a User, OETC will notify the User whose System will be, is, or has been affected.

OC5.5.2 Incidents on a User System

In the case of an Incident on the System of a User, which has had or may have an Operational Effect on the Transmission System, the User will notify OETC. Following notification by the User, OETC will notify any other Users whose Systems will be, are, or have been affected.

OC5.5.3 Form of notification

Incident notifications must be issued promptly. Notifications and responses to notifications may be made by telephone but must be confirmed in writing within 30 minutes where practical.



The appropriate party (as described in OC5.5.1 and OC5.5.2) will issue a notification (and any response to questions asked) of any Incident that has arisen independently of any other Incident or Operation.

The notification will;

- describe the Incident (but is not required to state its cause);
- be of sufficient detail to enable the recipient of the notification to reasonably consider and assess the implications, and risks arising; and
- include the name of the individual reporting the Incident on behalf of OETC or the User.

The recipient of a notification may ask questions to clarify the notification and the provider of the notification will, insofar as it is able, answer any questions raised.

OC5.5.4 Timing

An Incident notification will be given as soon after the Incident as possible to allow the recipient to consider and assess the implications and risks arising from the Incident.

OC5.6 Significant Incident reporting

OETC may determine that an Incident reported by it or a User shall be classified as a Significant Incident. OETC shall promptly notify all potentially affected Users by telephone that such a determination has been made and that procedures governing Significant Incident reporting are to be followed. OETC shall confirm such notice within 2 hours by facsimile or other electronic means or by communication on recorded telephone. All affected Users shall acknowledge receipt of the notification in writing within 2 hours of receipt. Both the notifying party and the acknowledging party shall record the communication in logbook.

Without limiting this general description, Significant Incidents will include, as a minimum all of the following;

- manual or automatic tripping of System circuits, and Plant where such tripping has resulted in interruption of supply to consumers
- Any multiple tripping or repeated tripping of System Circuits, and plant even where such tripping has not resulted in a loss of demand or generation
- voltage excursions outside normal operating limits;
- frequency excursions outside normal operating limits;
- System instability;
- overloading (i.e., loading in excess of the rated Capacity) of System circuits, and Plant; and
- breaches of Safety Rules or procedures that resulted in danger or injury to members of the public or to OETC or User employees or their representatives.

Notwithstanding the above, OETC may declare any incident to be a Significant Incident where, in its view, that incident has had a significant impact on the normal operation of the System. Timing of Significant Incident reporting

**(i) Preliminary report**

OETC and / or the notified User must produce a preliminary written Significant Incident report within 1 Day of OETC or the User receiving notification that OETC has determined an Incident to be a Significant Incident.

The preliminary written Significant Incident report shall cover in outline terms the matters specified in Appendix A.

(ii) Full report

OETC and / or the notified User must produce a full written Significant Incident report within 3 Business Days of OETC or the User receiving notification that OETC determined an Incident to be a Significant Incident

Explanation: The preliminary & final reports may have to be produced by more than one party. The following notes provided as clarification:

- OETC shall decide which party (parties) shall produce Preliminary Significant Incident Report and notify accordingly. All parties shall send their preliminary reports to OETC within 1 day.
- OETC shall consider all preliminary reports and, if necessary, issue a consolidated preliminary Significant Incident Report.
- OETC shall decide which party (parties) shall produce Final Significant Incident Report and notify accordingly. All parties shall send their Final reports to OETC within 3 business days.
- OETC shall consider all reports and, if necessary, issue a consolidated Final Significant Incident Report
- However, a party which did not receive any notification may also send their report (preliminary or final) to OETC, if they wish to report anything which they consider significant.

OC5.6.2 Written reporting of Significant Incidents by OETC to Users

In the case of an Incident that has been reported by OETC to a User, and subsequently determined by OETC to be a Significant Incident, OETC will provide a full written Significant Incident report to the User and the Regulatory Authority. The User shall not pass the report to other affected Users but;

- if the User is a Licensed Distributor, it may use the information contained therein in preparing a written report to a Power Producer with a CDGenset Connected to its System or to a Licensed Supplier of Consumers Connected to its Licensed Distribution System. The Significant Incident report may be used in connection with the reporting of Significant Incidents under the Distribution Code; and
- if the User is a Power Producer, it may use the information contained therein in preparing a written report to PWP or to another Power Producer with a Genset Connected to its System or to a Licensed Distributor Connected to its System in accordance with requirements for reporting Significant Incidents on its System.



OC5.6.3 Written reporting of Significant Incidents by Users to OETC

In the case of an Incident that has been reported by a User to OETC, and subsequently determined by OETC to be a Significant Incident, the User shall provide a full written Significant Incident report to OETC. OETC will not pass this report to other affected Users but may use the information contained therein in preparing a report to another User in relation to the Significant Incident and in the preparation of a report to the Regulatory Authority.

OC5.6.4 Form of full Significant Incident report

A full Significant Incident report prepared by OETC or a User shall be sent to the User, OETC, PWP and the Regulatory Authority. The full Significant Incident report will contain confirmation of the Significant Incident notification together with full details relating to the Significant Incident. The Significant Incident report shall cover in the necessary detail those matters specified in Appendix A.

OC5.7 Evaluation of Significant Incidents

OETC shall maintain an indexed record of all Significant Incident reports and shall review each report to determine whether there has been any lack of compliance with the Grid Code.

Each month or other period to be agreed with the Grid Code Review Panel, OETC shall produce a summary report of Significant Incidents. The report shall comprise additions to the index of Significant Incident reports since the last summary report together with commentary of the Significant Incidents added to the index. The summary shall draw specific attention to any lack of compliance with the Grid Code and to any areas where there may be a need to modify the Grid Code.

The Grid Code Review Panel shall make recommendations at any time including proposed modifications to the Grid Code arising from its review of Significant Incident reports.

OC5.8 Alerts

Whenever OETC becomes aware of any factors likely to give rise to an Emergency Condition or to unusual Operating conditions, OETC shall send an Alert to all Users who may be adversely affected by such disturbances or unusual Operating conditions.

The Alert will indicate the likely reason for the disturbance, the severity and duration of the disturbance and duration of the Alert period. An Alert shall take the following form;

- Statement "This is an Alert timed at (xx:xx) hours;
- A disturbance caused by (.....), is probable at (yy:yy) hours;
- The likely effect of the disturbance is (.....);
- The disturbance is likely to last (zz:zz) hours;
- This Alert shall be considered cancelled automatically in 2 hours time unless renewed before that time."

The following conditions are those that as a minimum should be considered to give rise to an Alert;

1. Outage of any transmission components or generation units which cause either substantial reduction in system security or violate (n-1) criteria to a supply point.
2. Outages or risks associated with 66kV or 33kV equipment, which may have



substantial impact on total system load or system operations. In such circumstances the relevant distribution or generation companies should send alert to OETC and other users who are likely to be affected

3. Outages or risks associated with generation plant, which may have substantial impact on the generation capability of the plant or system operations. In such circumstances the relevant distribution or generation companies should send alert to OETC, PAEW Water Department (if applicable) and other users who are likely to be affected
4. Condition where the Operating Margin is below the agreed standard;
5. The voltage or Frequency going outside operational limits;
6. Important events (e.g., National Day celebrations);
7. Major testing;
8. Accidents;

The Alert may be delivered by telephone but must be confirmed in writing as soon as practical.

All parties receiving the Alert shall acknowledge receipt in writing and shall report any resulting events in accordance with the procedures set down in this Code OC5.



OC5.9 Operational Logs

Each Control Centre of each User shall maintain an Operational Log of each notice of Operation and/or Incident issued and received and all relevant aspects of Significant Incident reporting. The Operational Log shall record all acknowledgements of notices and any other matters relevant to the Operation of the Transmission System.

Each Operational Log shall record as a minimum the following information;

- each day shall commence on a new page that will be dated;
- each entry shall record the name of the Person giving the instruction, report, or any other information;
- each entry shall record the name of the Person receiving the instruction, report, or any other information;
- each entry shall record the time at which the instruction was given/received;
- each entry shall record the substation name and Plant label or number to which the instruction refers;
- every instruction, etc shall be entered on a new line;
- the isolation of Plant and the connection and disconnections of main earths shall be separately recorded;
- the number and location of temporary earths and their removal shall be recorded either in the Operational Log or in a log under the control of the Safety Coordinator;
- the issuing of Safety Permits and their clearance shall each be separately recorded; and
- the numbers of individual Safety Permits shall be recorded.

OC5.10 Loss of Communication

Normal communications between operational sites shall be by telephone with confirmation by facsimile or other electronic means.

OETC shall prepare an emergency communications plan whereby in the event of failure of normal communication routes, a priority ranked order of alternative routes e.g. the National telephone service, mobile telephones, etc. is agreed in consultation with all Users. The plan shall names of contacts and alternative contact details for each operational group of each User.

OETC will review and update the emergency communications plan each year and circulate the new plan to all Users.



Appendix A Significant Incident Report

Information, if applicable to the Significant Incident and to the relevant User (or OETC, as the case may be) that shall be included in a written Significant Incident report prepared in accordance with OC5.

1. Time and date of Significant Incident;
2. Location;
3. Plant directly involved (not merely affected by the event) including numbers and nomenclature;
4. Description of Significant Incident including probable causes and any damage to Plant;
5. Demand (in MW) and/or Genset output (in MW) interrupted and duration of interruption;
6. Genset – change in Availability;
7. Genset – Frequency response (MW correction versus time achieved subsequent to the Significant Incident);
8. Genset – Mvar performance (change in output subsequent to the Significant Incident);
9. Estimated (or actual) time and date of return to service and/or return to pre-Incident Availability; and
10. Any other relevant material.