



# Operating Code OC9 – Operational Tests and Site Investigations

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## Operating Code OC9 – Operational Tests and Site Investigations

### OC9.1 Introduction

Operating Code OC9 sets out the authorization required and the procedures to be followed by OETC, PWP and Users wishing to conduct Operational Tests or Site Investigations involving Plant that is Connected to or part of the Transmission System.

OC9 stipulates that prior authorisation from OETC is required before conducting Operational Tests or Site Investigations.

### OC9.2 Objective

The objectives of OC9 are to ensure that Operational Tests and Site Investigations;

- are authorized by OETC and are carried out in accordance with appropriate procedures;
- are carried out in a coordinated manner to avoid unnecessary risk or damage to Plant and to minimise costs to OETC, PWP, and affected Users;
- do not threaten the safety of personnel or the general public;
- do not threaten the security or stability of the Transmission System; and
- are properly evaluated on completion and, where appropriate, subject to certain reporting arrangements.

A further objective of OC9 is to allow sufficient tests to be conducted to enable predictive fault finding.

### OC9.3 Scope

In addition to OETC, OC9 applies to;

- Power Producers;
- Licensed Distributors;
- Directly Connected Consumers;
- Internally Interconnected Parties;
- International Interconnected Parties; and
- PWP (with regard to tests carried out under PPAs/PWPAs)

### OC9.4 Terms

For the purposes of this section of the Grid Code, the term;

- **“Site Investigation Tests”** are tests conducted in relation to Plant and operational procedures at Production Facilities and User sites or to monitor and assess the characteristics of Plant;
- **“Test Document”** means the document prepared by the Test Panel setting out all aspects for the management and implementation of a test;
- **“Test Panel”** means a panel established to prepare a detailed programme for the conduct of an Operational Test or Site Investigation and to prepare a formal Test Document; and



- “**Test Request**” means a document setting out the detailed proposal for an Operational Test or Site Investigation.

## **OC9.5 Categories of tests**

OC 9 applies to the following categories of tests;

- **Operational tests:**
  - required by OETC;
  - requested by a User; and
  - requested by PWP or a Power Producer to commission or test the compliance of Production Facilities with the requirements of a PPA or PWPA or for other purposes specified in a PPA/PWPA..
- **Site Investigation tests:**
  - in relation to Plant and operational procedures at Production Facilities and User sites; and
  - to monitor and assess the characteristics of Plant for which a User is required to provide or has contracted to provide certain Ancillary Services.
- **Other tests:**
  - required, in certain circumstances, (whether by means of a formal test or verification by inspection) to ascertain whether Operating Parameters and/or Connection Conditions are being complied with in respect of Gensets, Desalination Units and User’s Plant;
  - required, in certain circumstances, to assess whether Operating Margin requirements can be met;
  - required, in certain circumstances, at the request of a User; and
  - other tests and measurements that may have an Operational Effect on the System.

## **OC9.6 Authorisation and test procedures**

### **OC9.6.1 Test requests**

Prior authorisation from OETC is required before conducting an Operational Test, Site Investigation or other test.

PWP or Users seeking to conduct an Operational Test or Site Investigation shall submit a Test Request to OETC giving at least 8 weeks minimum notice before the date of the proposed test. A Test Request shall include a detailed test proposal including;

- a brief description of the proposed test;
- the preferred time or times for the test and the potential duration;
- the reason for the proposed test indicating whether the test is required for compliance with licence conditions, statutory regulations, or Safety Rules. This will assist in determining the priority to be given to the test;
- an indication of any potential adverse effects if the Test is cancelled at short notice or delayed (reasonable detail of such adverse affects to be provided);
- an indication of any Dispatch Instructions required to facilitate the test; and



- details of any operational switching required to facilitate to test.

OETC shall evaluate all Test Requests submitted to it. On receipt of a Test Request OETC shall within 2 weeks either;

- approve the Test Request;
- request any additional information from the test proposer required to evaluate the impact of the Test Request; or
- reject the Test Request application.

OETC shall consider the following factors when evaluating a Test Request;

- the impact of the requested test on Transmission System stability and security;
- the impact of the requested test on Transmission System economics;
- the impact of the requested test on other Users; and
- the effect of the requested test on the continuity and quality of electricity Supply.

If OETC approves a Test Request, it will inform the test proposer accordingly.

If OETC requests additional information from the test proposer to evaluate the impact of a Test Request OETC shall stipulate the time within which the information shall be provided. If the information is not provided in the timescale indicated by OETC the Test Request shall automatically lapse.

If OETC does not approve a Test Request, it will set down its reasons for rejecting a Test Request application and consult with the Test proposer (and the PWP if the proposed Test is in relation to Production Facilities subject to a PPA/PWPA) on any changes to the Test proposal required to secure approval for the Test. The Test proposer may update a Test proposal in accordance with guidance provided by OETC and submit a revised Test Request.

OETC shall not withhold approval of a Test Request unless it considers it has reasonable grounds for doing so. If a User is not satisfied that a Test Request was rejected on reasonable grounds it can refer the matter to the Regulatory Authority for determination.

OETC shall not disclose any information received as part of a Test Request application without the consent of the User who submitted the Test Request if it reasonably believes the information to be commercially sensitive or otherwise potentially sensitive.

### **OC9.6.2 Test Panel**

If a Test Request is approved, OETC shall decide if a Test Panel is required. If OETC decides that a Test Panel is required, the test proposer shall convene a Test Panel. The number of Test Panel members shall be kept to the minimum number of persons compatible with affected User representation.

The Chairman of a Test Panel shall be appointed by the test proposer. As regards other representation;

- OETC shall have a representative on all Test Panels;
- PWP shall have a representative on all Test Panels that are concerned with tests arising from a PPA or PWPA; and
- all directly affected Users shall be represented on the Test Panel.

The duties and responsibilities of the Test Panel are as follows;



- to prepare a detailed programme for the conduct of the test, including the start and end date of the test, and any Dispatch requirements and operational switching required to facilitate the test;
- to identify the detailed management requirements of the test;
- to ensure that all affected parties are properly informed of and have access to all relevant information;
- to schedule the resources required to conduct the test; and
- to prepare a Test Document that shall include all the elements listed above.

The Test Document shall be copied to all members of the Test Panel at least 2 weeks before the start date of the test. Members of the Test Panel may provide comments on the Test Document to the Chairman of the Test Panel no later than 1 week before the scheduled start date of the Test.

The test shall proceed only on the condition that the Test Panel has approved the Test Document. If a member of the Test Panel is not satisfied with the test proceeding and they have fully discussed the issues within the Test Panel, they may make representation to the Regulatory Authority.

Neither OETC nor the PWP shall disclose information provided to a Test Panel without the consent of the person who submitted the information if it reasonably believes the information to be commercially sensitive or otherwise potentially sensitive.

### **OC9.6.3 Post test reporting requirements**

At the conclusion of an Operational Test or Site Investigation the test proposer shall prepare a written report on the test that shall be available within 4 weeks of the conclusion of the Operational Test. The report shall be copied to OETC and the Regulatory Authority in all cases and to the PWP where a Power Producer conducted the test or a test arose from a PPA/PWPA.

The Test Report shall not be submitted to any other person who is not a representative of OETC or the test proposer unless OETC and the test proposer having reasonably considered the confidentiality issues arising, and shall have unanimously approved such submission.

The Test Report shall include a detailed description of the completed Test, the Plant to which the Test relates, together with the results, conclusions and recommendations as they relate to the Test proposer, OETC, PWP where relevant, and operationally affected Users, where applicable.

The Test Panel shall be disbanded after the final test report has been approved.

### **OC9.7 Operational tests**

OETC shall cooperate with the implementation of all Operational Tests.

Where OETC considers the impact of an Operational Test to be significantly greater than originally estimated, OETC may at any time contact the Test proposer (and the PWP where the Test is in relation to a PPA/PWPA) to discuss a revised Test procedure or schedule. OETC shall, where it considers it necessary to do so, cancel, interrupt, or postpone an Operational Test at any time.

If the Test proposer wishes to cancel an Operational Test before commencement of the Test or during the Test, the Test proposer (and the PWP where the Test is in relation to a



PPA/PWPA) must notify OETC immediately and the notice must be confirmed in writing within 1 hour by facsimile or other electronic means. The form and any change to the form of confirmation must have been agreed in writing with OETC.

### **OC9.7.1 Operational tests required by OETC**

OETC, as operator of the Transmission System, may from time to time need to conduct Operational Tests in order to maintain and develop operational procedures, to train staff, and to acquire information in respect of Transmission System behaviour under abnormal System conditions.

OETC will endeavour to keep the frequency of occurrence, scope, and impact of Operational Tests to the minimum necessary.

Where OETC intends to carry out an Operational Test and in OETC's reasonable opinion, such a test will or may have an operational effect on a User's System, OETC shall give 8 weeks notice and provide sufficient information to the affected Users to enable the affected Users to assess any risks to their Systems. The information provided by OETC shall include;

- a brief description of the Operational Test;
- the probable effects of the Operational Test; and
- the scheduled time and duration of the Operational Test.

Affected Users may contact OETC to request additional time or information to consider the impact of the Operational Test on their Systems and shall respond to OETC within 2 weeks of receipt of OETC's notice of the test.

### **OC9.7.2 Operational tests required by Users**

Operation of Users' Plant in accordance with Good Industry Practice requires testing to maintain and develop operational procedures, develop and measure Plant performance, comply with statutory or other industry obligations and contracts, and to train staff.

Each User shall endeavour to limit the frequency of occurrence of Operational Tests and to limit the effects of such Operational Tests on the Transmission System.

Users shall submit a Test Request to OETC in accordance with the requirements of OC 9.6.1.

### **OC9.7.3 Operational tests at Production Facilities**

The PWP or User shall submit a Test Request to OETC in accordance with the requirements of OC 9.6.1. OETC will incorporate any requirements identified in the Operational Test proposal within the programming phase of Operational Planning OC2 and in accordance with the Scheduling and Dispatch Codes SDC1 and SDC2.

Where an Operational Test requires a Dispatch Instruction that is outside the currently declared Operating Parameters, then OETC may so Dispatch the Genset for the period required for the Operational Test.

However, OETC shall contact the Power Producer and PWP 2 days before the test date and review the Dispatch Instructions contained in the formal Operational Test proposal. The Power Producer and PWP shall confirm their acceptance or rejection of the proposed Dispatch Instructions without undue delay.

On notification of rejection of the proposed Dispatch Instructions, the Power Producer and PWP may enter into discussions with OETC as to an alternative schedule for the Operational



Test, or may request a different Operational Test or may request the Operational Test at an alternative time.

OETC shall inform other Users of the scheduled time and nature of the test, if in the opinion of OETC those Users will or may be affected by the test.

The Operational Test shall proceed in accordance with normal operational practices but with particularly close communication between the control engineer and the test manager. Where the Operational Test is complex or time consuming, OETC shall provide additional support at the Control Centre, if necessary.

#### **OC9.7.4 Other operational tests**

Any Operational Test proposal accompanying a Test Request shall indicate whether Dispatch Instructions and operational switching instructions are required to facilitate the test. OETC will, subject to any amendments it may require to be made, incorporate the Dispatch Instructions and operational switching instructions required to facilitate the test within the programming phase of Operational Planning OC2 and in accordance with the codes SDC1 and SDC2. OETC shall issue Dispatch Instructions for Operational Tests in accordance with the procedures set out in code SDC2.

Where an Operational Test requires a Dispatch Instruction that is outside the currently declared Operating Parameters, then OETC may so Dispatch the Genset for the period required for the Operational Test.

OETC shall inform other Users of the scheduled time and nature of the test, if in the opinion of OETC those Users will or may be affected by the test.

The Operational Test shall proceed in accordance with normal operational practices but with particularly close communication between the control engineer and the test manager. Where the Operational Test is complex or time consuming, OETC shall provide additional support at the Control Centre, if necessary.

#### **OC9.8 Site Investigation tests**

OETC may, if it reasonably considers that there may be an issue of non-compliance with an agreement by the User, request PWP to carry out a Site Investigation to acquire or verify information relevant to Users' Plant and/or apparatus design, Operation or Connection requirements under the PPA, PWPA, Grid Code, Connection Agreements and other agreements between Users and OETC or PWP.

OETC or PWP may, having given reasonable notice, send a representative or agent to a User's site in order to investigate any equipment or operational procedure applicable to the User site insofar as the condition of that equipment or operational procedure is relevant to compliance with a PPA, PWPA, the Grid Code, a Connection Agreement, or other relevant agreements.

#### **OC9.9 Other tests**

OETC and/or PWP can, at any time, request a test. Where a PWP, PWPA or Agreement exists (with appropriate test procedures) these will form the basis of the test.

Testing (including tests carried out under a PWP, PWPA or any relevant agreement) may involve attendance by PWP, OETC or their representatives at User sites in order to carry out or observe such tests.



Where required a test shall be carried out in accordance with Dispatch Instructions and operational switching instructions issued by OETC or by such alternative procedures as is required or permitted by the Grid Code.

Where a test is required at short notice, OETC shall use reasonable endeavours to accommodate the test in the requested timescale provided that in OETC's reasonable opinion the test would not compromise the security and stability of the Total System, or pose a risk to the safe and secure operation of Plant, or compromise the safety of related personnel and the general public.