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6th November 2012

Dear Sir/Madam

THE SERVICED GRID CODE - ISSUE 5 REVISION 1

Issue 5 Revision 1 of the Grid Code has been approved by the Authority for implementation on 6th November 2012.

In order to ensure your copy of the Grid Code remains up to date, you will need to replace the sections affected with the revised versions available on the National Grid website.

The revisions document provides an overview of the changes made to the Grid Code since the previous issue.

Yours faithfully,

Lucy Hudson Code Coordinator Electricity Codes

THE GRID CODE - ISSUE 5 REVISION 1

INCLUSION OF REVISED PAGES

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Operating Code 8B	OC8B	-	Entire section reissued
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SUMMARY OF CHANGES

The changes arise from the implementation of modifications proposed in the following Consultation Paper:

C/12 - Safety Management Of Three Position GIS Earth Switches

Summary of Proposal

This amendment modifies the Grid Code to to permit the option of Earthing before Points of Isolation have been established to reflect the design changes in Three Position Gas Insulated Switchgear (GIS) Earth Switches.

The categories of Users affected by this revision to the Grid Code are:

- Directly Connected Generators
- Non-Embedded Customers
- Distribution Network Operators (DNOs)
- Transmission Owners (TOs)

THE GRID CODE

ISSUE 5

REVISION 1

06 NOVEMBER 2012

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OPERATING CODE NO. 8 APPENDIX 1

(OC8A)

SAFETY CO-ORDINATION IN RESPECT OF THE E&W TRANSMISSION SYSTEMS OR THE SYSTEMS OF E&W USERS

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OC8A.1 INTRODUCTION

OC8A.1.1 OC8A specifies the standard procedures to be used by the Relevant E&W Transmission Licensee, NGET (where NGET is not the Relevant E&W Transmission Licensee) and Users for the co-ordination, establishment and maintenance of necessary Safety Precautions when work is to be carried out on or near the E&W Transmission System or the System of an E&W User and when there is a need for Safety Precautions on HV Apparatus on the other's System for this work to be carried out safely. OC8A applies to Relevant E&W Transmission Licensees and E&W Users only. Where work is to be carried out on or near equipment on the Scottish Transmission System or Systems of Scottish Users, but such work requires Safety Precautions to be established on the E&W Transmission System or the Systems of E&W Users, OC8A should be followed by the Relevant E&W Transmission Licensee and E&W Users to establish the required Safety Precautions.

OC8B specifies the procedures to be used by the Relevant Scottish Transmission Licensees and Scottish Users.

In this **OC8A** the term "work" includes testing, other than **System Tests** which are covered by **OC12**.

- OC8A.1.2 OC8A also covers the co-ordination, establishment and maintenance of necessary safety precautions on the Implementing Safety Co-ordinator's System when work is to be carried out at an E&W User's Site or a Transmission Site (as the case may be) on equipment of the E&W User or the Relevant E&W Transmission Licensee as the case may be where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System.
- OC8A.1.3 OC8A does not apply to the situation where Safety Precautions need to be agreed solely between E&W Users. OC8A does not apply to the situation where Safety Precautions need to be agreed solely between Transmission Licensees.
- OC8A.1.4 OC8A does not seek to impose a particular set of Safety Rules on the Relevant E&W Transmission Licensee and E&W Users; the Safety Rules to be adopted and used by the Relevant E&W Transmission Licensee and each E&W User shall be those chosen by each.
- OC8A.1.5 Site Responsibility Schedules document the control responsibility for each item of Plant and Apparatus for each site.
- OC8A.1.6 <u>Defined Terms</u>
- OC8A.1.6.1 **E&W Users** should bear in mind that in **OC8** only, in order that **OC8** reads more easily with the terminology used in certain **Safety Rules**, the term "**HV Apparatus**" is defined more restrictively and is used accordingly in **OC8A**. **E&W Users** should, therefore, exercise caution in relation to this term when reading and using **OC8A**.
- OC8A.1.6.2 In **OC8A** only the following terms shall have the following meanings:
 - (1) "HV Apparatus" means High Voltage electrical circuits forming part of a System, on which Safety From The System may be required or on which Safety Precautions may be applied to allow work to be carried out on a System.
 - (2) "Isolation" means the disconnection of **Apparatus** from the remainder of the **System** in which that **Apparatus** is situated by either of the following:
 - (a) an **Isolating Device** maintained in an isolating position. The isolating position must either be:

- (i) maintained by immobilising and Locking the Isolating Device in the isolating position and affixing a Caution Notice to it. Where the Isolating Device is Locked with a Safety Key, the Safety Key must be secured in a Key Safe and the Key Safe Key must be, where reasonably practicable, given to the authorised site representative of the Requesting Safety Co-ordinator and is to be retained in safe custody. Where not reasonably practicable the Key Safe Key must be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
- (ii) maintained and/or secured by such other method which must be in accordance with the Local Safety Instructions of the Relevant E&W Transmission Licensee or that E&W User, as the case may be; or
- (b) an adequate physical separation which must be in accordance with, and maintained by, the method set out in the Local Safety Instructions of the Relevant E&W Transmission Licensee or that E&W User, as the case may be, and, if it is a part of that method, a Caution Notice must be placed at the point of separation;
- or
- (c) in the case where the relevant **HV Apparatus** of the **Implementing Safety Coordinator** is being either constructed or modified, an adequate physical separation as a result of a **No System Connection**.
- (3) "No System Connection" means an adequate physical separation (which must be in accordance with, and maintained by, the method set out in the Local Safety Instructions of the Implementing Safety Co-ordinator) of the Implementing Safety Co-ordinator's HV Apparatus from the rest of the Implementing Safety Co-ordinator's System where such HV Apparatus has no installed means of being connected to, and will not for the duration of the Safety Precaution be connected to, a source of electrical energy or to any other part of the Implementing Safety Co-ordinators System.
- (4) **"Earthing**" means a way of providing a connection between conductors and earth by an **Earthing Device** which is either:
 - (i) immobilised and Locked in the earthing position. Where the Earthing Device is Locked with a Safety Key, the Safety Key must be secured in a Key Safe and the Key Safe Key must be, where reasonably practicable, given to the authorised site representative of the Requesting Safety Co-ordinator and is to be retained in safe custody. Where not reasonably practicable the Key Safe Key must be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
 - (ii) maintained and/or secured in position by such other method which must be in accordance with the Local Safety Instructions of the Relevant E&W Transmission Licensee or that E&W User as the case may be.
- OC8A.1.6.3 For the purpose of the co-ordination of safety relating to **HV Apparatus** the term **"Safety Precautions**" means **Isolation** and/or **Earthing**.

OC8A.2 <u>OBJECTIVE</u>

- OC8A.2.1 The objective of OC8A is to achieve:-
 - Safety From The System when work on or near a System necessitates the provision of Safety Precautions on another System on HV Apparatus up to a Connection Point; and
 - (ii) Safety From The System when work is to be carried out at an E&W User's Site or a Transmission Site (as the case may be) on equipment of the User or the Relevant E&W Transmission Licensee (as the case may be) where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System.

OC8A.2.2 A flow chart, set out in **OC8A Appendix C**, illustrates the process utilised in **OC8A** to achieve the objective set out in OC8A.2.1. In the case of a conflict between the flow chart and the provisions of the written text of **OC8A**, the written text will prevail.

OC8A.3 <u>SCOPE</u>

- OC8A.3.1 **OC8A** applies to the **Relevant E&W Transmission Licensee** and to **E&W Users**, which in OC8A means:
 - (a) **Generators**;
 - (b) Network Operators; and
 - (c) Non-Embedded Customers.

The procedures for the establishment of safety co-ordination by the **Relevant E&W Transmission Licensee** in relation to **External Interconnections** are set out in **Interconnection Agreements** with relevant persons for the **External Interconnections**.

OC8A.4 PROCEDURE

- OC8A.4.1 Approval Of Local Safety Instructions
- OC8A.4.1.1 (a) In accordance with the timing requirements of its **Bilateral Agreement**, each **E&W User** will supply to the **Relevant E&W Transmission Licensee** a copy of its **Local Safety Instructions** relating to its side of the **Connection Point** at each **Connection Site**.
 - (b) In accordance with the timing requirements of each Bilateral Agreement, the Relevant E&W Transmission Licensee will supply to each E&W User a copy of its Local Safety Instructions relating to the Transmission side of the Connection Point at each Connection Site.
 - (c) Prior to connection the **Relevant E&W Transmission Licensee** and the **E&W User** must have approved each other's relevant **Local Safety Instructions** in relation to **Isolation** and **Earthing**.
- OC8A.4.1.2 Either party may require that the **Isolation** and/or **Earthing** provisions in the other party's **Local Safety Instructions** affecting the **Connection Site** should be made more stringent in order that approval of the other party's **Local Safety Instructions** can be given. Provided these requirements are not unreasonable, the other party will make such changes as soon as reasonably practicable. These changes may need to cover the application of **Isolation** and/or **Earthing** at a place remote from the **Connection Site**, depending upon the **System** layout. Approval may not be withheld because the party required to approve reasonably believes the provisions relating to **Isolation** and/or **Earthing** are too stringent.
- OC8A.4.1.3 If, following approval, a party wishes to change the provisions in its **Local Safety Instructions** relating to **Isolation** and/or **Earthing**, it must inform the other party. If the change is to make the provisions more stringent, then the other party merely has to note the changes. If the change is to make the provisions less stringent, then the other party needs to approve the new provisions and the procedures referred to in OC8A.4.1.2 apply.

- OC8A.4.2 <u>Safety Co-ordinators</u>
- OC8A.4.2.1 For each **Connection Point**, the **Relevant E&W Transmission Licensee** and each **E&W User** will at all times have nominated and available a person or persons ("Safety Coordinator(s)") to be responsible for the co-ordination of Safety Precautions when work is to be carried out on a System which necessitates the provision of Safety Precautions on HV Apparatus pursuant to OC8A. A Safety Co-ordinator may be responsible for the coordination of safety on HV Apparatus at more than one Connection Point.
- OC8A.4.2.2 Each Safety Co-ordinator shall be authorised by the Relevant E&W Transmission Licensee or an E&W User, as the case may be, as competent to carry out the functions set out in OC8A to achieve Safety From The System. Confirmation from the Relevant E&W Transmission Licensee or an E&W User, as the case may be, that its Safety Coordinator(s) as a group are so authorised is dealt with in CC.5.2. Only persons with such authorisation will carry out the provisions of OC8A.
- OC8A.4.2.3 Contact between **Safety Co-ordinators** will be made via normal operational channels, and accordingly separate telephone numbers for **Safety Co-ordinators** need not be provided. At the time of making contact, each party will confirm that they are authorised to act as a **Safety Co-ordinator**, pursuant to **OC8A**.
- OC8A.4.2.4 If work is to be carried out on a **System**, or on equipment of the **Relevant E&W Transmission Licensee** or an **E&W User** near to a **System**, as provided in this **OC8A**, which necessitates the provision of **Safety Precautions** on **HV Apparatus** in accordance with the provisions of **OC8A**, the **Requesting Safety Co-ordinator** who requires the **Safety Precautions** to be provided shall contact the relevant **Implementing Safety Co-ordinator** to co-ordinate the establishment of the **Safety Precautions**.
- OC8A.4.3 RISSP
- OC8A.4.3.1 **OC8A** sets out the procedures for utilising the **RISSP**, which will be used except where dealing with equipment in proximity to the other's **System** as provided in OC8A.8. Sections OC8A.4 to OC8A.7 inclusive should be read accordingly.
- OC8A.4.3.2 The **Relevant E&W Transmission Licensee** will use the format of the **RISSP** forms set out in Appendix A and Appendix B to **OC8A**. That set out in **OC8A** Appendix A and designated as "RISSP-R", shall be used when the **Relevant E&W Transmission Licensee** is the **Requesting Safety Co-ordinator**, and that in **OC8A** Appendix B and designated as "RISSP-I", shall be used when the **Relevant E&W Transmission Licensee** is the **Implementing Safety Co-ordinator**. Proformas of RISSP-R and RISSP-I will be provided for use by the **Relevant E&W Transmission Licensee** staff.
- OC8A.4.3.3 (a) **E&W Users** may either adopt the format referred to in OC8A.4.3.2, or use an equivalent format, provided that it includes sections requiring insertion of the same information and has the same numbering of sections as RISSP-R and RISSP-I as set out in Appendices A and B respectively.
 - (b) Whether **E&W Users** adopt the format referred to in OC8A.4.3.2, or use the equivalent format as above, the format may be produced and held in, and retrieved from an electronic form by the **E&W User**.
 - (c) Whichever method **E&W Users** choose, each must provide proformas (whether in tangible or electronic form) for use by its staff.
- OC8A.4.3.4 All references to RISSP-R and RISSP-I shall be taken as referring to the corresponding parts of the alternative forms or other tangible written or electronic records used by each **E&W User**.
- OC8A.4.3.5 RISSP-R will have an identifying number written or printed on it, comprising a prefix which identifies the location at which it is issued, and a unique (for each **E&W User** or the **Relevant E&W Transmission Licensee**, as the case may be) serial number consisting of four digits and the suffix "R".
- OC8A.4.3.6 (a) In accordance with the timing requirements set out in CC.5.2 each **E&W User** shall apply in writing to the **Relevant E&W Transmission Licensee** for the **Relevant E&W Transmission Licensee**'s approval of its proposed prefix.

- (b) The Relevant E&W Transmission Licensee shall consider the proposed prefix to see if it is the same as (or confusingly similar to) a prefix used by the Relevant E&W Transmission Licensee or another User and shall, as soon as possible (and in any event within ten days), respond in writing to the E&W User with its approval or disapproval.
- (c) If the **Relevant E&W Transmission Licensee** disapproves, it shall explain in its response why it has disapproved and will suggest an alternative prefix.
- (d) If the Relevant E&W Transmission Licensee has disapproved, then the E&W User shall either notify the Relevant E&W Transmission Licensee in writing of its acceptance of the suggested alternative prefix or it shall apply in writing to the Relevant E&W Transmission Licensee with revised proposals and the above procedure shall apply to that application.
- OC8A.4.3.7 The prefix allocation will be periodically circulated by **NGET** to all **E&W Users**, for information purposes, using a National Grid Safety Circular in the form set out in **OC8A** Appendix D.

OC8A.5 SAFETY PRECAUTIONS ON HV APPARATUS

- OC8A.5.1 Agreement Of Safety Precautions
- OC8A.5.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the **Location** of the **Safety Precautions** to be established. This agreement will be recorded in the respective **Safety Logs**.
- OC8A.5.1.2 It is the responsibility of the **Implementing Safety Co-ordinator** to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved on the **HV Apparatus**, specified by the **Requesting Safety Co-ordinator** which is to be identified in Part 1.1 of the **RISSP**. Reference to another **System** in this OC8A.5.1.2 shall not include the **Requesting Safety Co-ordinator's System** which is dealt with in OC8A.5.1.3.
- OC8A.5.1.3 When the Implementing Safety Co-ordinator is of the reasonable opinion that it is necessary for Safety Precautions on the System of the Requesting Safety Co-ordinator, other than on the HV Apparatus specified by the Requesting Safety Co-ordinator, which is to be identified in Part 1.1 of the RISSP, he shall contact the Requesting Safety Co-ordinator and the details shall be recorded in part 1.1 of the RISSP forms. In these circumstances it is the responsibility of the Requesting Safety Co-ordinator to establish and maintain such Safety Precautions.
- OC8A.5.1.4 In The Event Of Disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** on which **Safety From The System** is to be achieved as indicated on the **Operation Diagram**.

- OC8A.5.2 Implementation Of Isolation
- OC8A.5.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8A.5.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation**.
- OC8A.5.2.2 The Implementing Safety Co-ordinator shall confirm to the Requesting Safety Coordinator that the agreed Isolation has been established, and identify the Requesting Safety Co-ordinator's HV Apparatus up to the Connection Point, for which the Isolation has been provided. The confirmation shall specify:
 - (a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as applicable) of each point of **Isolation**;

- (b) whether **Isolation** has been achieved by an **Isolating Device** in the isolating position, by an adequate physical separation or as a result of **a No System Connection**;
- (c) where an **Isolating Device** has been used whether the isolating position is either:
 - (i) maintained by immobilising and Locking the Isolating Device in the isolating position and affixing a Caution Notice to it. Where the Isolating Device has been Locked with a Safety Key, the confirmation shall specify that the Safety Key has been secured in a Key Safe and the Key Safe Key has been given to the authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable (including where Earthing has been requested in OC8A.5.1), the confirmation shall specify that the Key Safe Key will be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
 - (ii) maintained and/or secured by such other method which must be in accordance with the Local Safety Instructions of the Relevant E&W Transmission Licensee or that E&W User, as the case may be; and
- (d) where an adequate physical separation has been used that it will be in accordance with, and maintained by, the method set out in the Local Safety Instructions of the Relevant E&W Transmission Licensee or that E&W User, as the case may be, and, if it is a part of that method, that a Caution Notice has been placed at the point of separation;
- (e) where a No System Connection has been used the physical position of the No System Connection shall be defined and shall not be varied for the duration of Safety Precaution and the Implementing Safety Co-ordinator's relevant HV Apparatus will not, for the duration of the Safety Precaution be connected to a source of electrical energy or to any other part of the Implementing Safety Co-ordinator's System.

The confirmation of Isolation shall be recorded in the respective Safety Logs.

- OC8A.5.2.3 Following the confirmation of Isolation being established by the Implementing Safety Coordinator and the necessary establishment of relevant Isolation on the Requesting Safety Co-ordinators System, the Requesting Safety Co-ordinator will then request the implementation of Earthing by the Implementing Safety Co-ordinator, if agreed in section OC8A.5.1. If the implementation of Earthing has been agreed, then the authorised site representative of the Implementing Safety Co-ordinator shall retain any Key Safe Key in safe custody until any Safety Key used for Earthing has been secured in the Key Safe.
- OC8A.5.3 Implementation Of Earthing
- OC8A.5.3.1 The Implementing Safety Co-ordinator shall then establish the agreed Earthing.
- OC8A.5.3.2 The Implementing Safety Co-ordinator shall confirm to the Requesting Safety Coordinator that the agreed Earthing has been established, and identify the Requesting Safety Co-ordinator's HV Apparatus up to the Connection Point, for which the Earthing has been provided. The confirmation shall specify:
 - (a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as is applicable) of each point of **Earthing**; and
 - (b) in respect of the Earthing Device used, whether it is:
 - (i) immobilised and Locked in the earthing position. Where the Earthing Device has been Locked with a Safety Key, that the Safety Key has been secured in a Key Safe and the Key Safe Key has been given to the authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable, that the Key Safe Key will be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
 - (ii) maintained and/or secured in position by such other method which is in accordance with the Local Safety Instructions of the Relevant E&W

Transmission Licensee or the Relevant Transmission Licensee or that E&W User, as the case may be.

The confirmation of **Earthing** shall be recorded in the respective **Safety Logs**.

- OC8A.5.3.3. The Implementing Safety Co-ordinator shall ensure that the established Safety Precautions are maintained until requested to be removed by the relevant Requesting Safety Co-ordinator.
- OC8A.5.3.4 Certain designs of gas insulated switchgear three position isolator and earth switches specifically provide a combined **Isolation** and **Earthing** function within a single mechanism contained within a single integral unit. Where **Safety Precautions** are required across control boundaries and subject to the requirements of OC8A.5.1, it is permissible to earth before **Points of Isolation** have been established provided that all interconnected circuits are fully disconnected from live **HV Apparatus**.

OC8A.5.4 RISSP Issue Procedure

- OC8A.5.4.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work on the **Requesting Safety Co-ordinator's System**, before any work commences they must be recorded by a **RISSP** being issued. The **RISSP** is applicable to **HV Apparatus** up to the **Connection Point** identified in section 1.1 of the RISSP-R and RISSP-I forms.
- OC8A.5.4.2 Where **Safety Precautions** are being provided to enable work to be carried out on both sides of the **Connection Point** a **RISSP** will need to be issued for each side of the **Connection Point** with the **Relevant E&W Transmission Licensee** and the respective **User** each enacting the role of **Requesting Safety Co-ordinator**. This will result in a RISSP-R and a RISSP-I form being completed by each of the **Relevant E&W Transmission Licensee** and the **E&W User**, with each **Requesting Safety Co-ordinator** issuing a separate **RISSP** number.
- OC8A.5.4.3 Once the **Safety Precautions** have been established (in accordance with OC8A.5.2 and OC8A.5.3), the **Implementing Safety Co-ordinator** shall complete parts 1.1 and 1.2 of a RISSP-I form recording the details specified in OC8A.5.1.3, OC8A.5.2.2 and OC8A.5.3.2. Where **Earthing** has not been requested, Part 1.2(b) will be completed with the words "not applicable" or "N/A". He shall then contact the **Requesting Safety Co-ordinator** to pass on these details.
- OC8A.5.4.4 The **Requesting Safety Co-ordinator** shall complete Parts 1.1 and 1.2 of the RISSP-R, making a precise copy of the details received. On completion, the **Requesting Safety Coordinator** shall read the entries made back to the sender and check that an accurate copy has been made.
- OC8A.5.4.5 The **Requesting Safety Co-ordinator** shall then issue the number of the **RISSP**, taken from the RISSP-R, to the **Implementing Safety Co-ordinator** who will ensure that the number, including the prefix and suffix, is accurately recorded in the designated space on the RISSP-I form.
- OC8A.5.4.6 The **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** shall complete and sign Part 1.3 of the RISSP-R and RISSP-I respectively and then enter the time and date. When signed no alteration to the **RISSP** is permitted; the **RISSP** may only be cancelled.
- OC8A.5.4.7 The **Requesting Safety Co-ordinator** is then free to authorise work (including a test that does not affect the **Implementing Safety Co-ordinator's System**) in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's System**. This is likely to involve the issue of safety documents or other relevant internal authorisations. Where testing is to be carried out which affects the **Implementing Safety Co-ordinator's System**, the procedure set out below in OC8A.6 shall be implemented.

- OC8A.5.5 RISSP Cancellation Procedure
- OC8A.5.5.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **RISSP**.
- OC8A.5.5.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **RISSP** identifying number (including the prefix and suffix), and agree it is the **RISSP** to be cancelled.
- OC8A.5.5.3 The **Requesting Safety Co-ordinator** and the relevant **Implementing Safety Co-ordinator** shall then respectively complete Part 2.1 of their respective RISSP-R and RISSP-I forms and shall then exchange details. The details being exchanged shall include their respective names and time and date. On completion of the exchange of details the respective **RISSP** is cancelled. The removal of **Safety Precautions** is as set out in OC8A.5.5.4 and OC8A.5.5.5.
- OC8A.5.5.4 Neither **Safety Co-ordinator** shall instruct the removal of any **Isolation** forming part of the **Safety Precautions** as part of the returning of the **HV Apparatus** to service until it is confirmed to each by each other that every earth on each side of the **Connection Point**, within the points of isolation identified on the **RISSP**, has been removed or disconnected by the provision of additional **Points of Isolation**.
- OC8A.5.5.5 Subject to the provisions in OC8A.5.5.4, the Implementing Safety Co-ordinator is then free to arrange the removal of the Safety Precautions, the procedure to achieve that being entirely an internal matter for the party the Implementing Safety Co-ordinator is representing. Where a Key Safe Key has been given to the authorised site representative of the Requesting Safety Co-ordinator, the Key Safe Key must be returned to the authorised site representative of the Implementing Safety Co-ordinator. The only situation in which any Safety Precautions may be removed without first cancelling the RISSP in accordance with OC8A.5.5 or OC8A.5.6 is when Earthing is removed in the situation envisaged in OC8A.6.2(b).
- OC8A.5.6 RISSP Change Control

Nothing in this **OC8A** prevents the **Relevant E&W Transmission Licensee** and **E&W Users** agreeing to a simultaneous cancellation and issue of a new **RISSP**, if both agree. It should be noted, however, that the effect of that under the relevant **Safety Rules** is not a matter with which the **Grid Code** deals.

OC8A.6 TESTING AFFECTING ANOTHER SAFETY CO-ORDINATOR'S SYSTEM

- OC8A.6.1 The carrying out of the test may affect **Safety Precautions** on **RISSPs** or work being carried out which does not require a **RISSP**. Testing can, for example, include the application of an independent test voltage. Accordingly, where the **Requesting Safety Co-ordinator** wishes to authorise the carrying out of such a test to which the procedures in OC8A.6 apply he may not do so and the test will not take place unless and until the steps in (a)-(c) below have been followed and confirmation of completion has been recorded in the respective **Safety Logs**:
 - (a) confirmation must be obtained from the Implementing Safety Co-ordinator that:
 - (i) no person is working on, or testing, or has been authorised to work on, or test, any part of its System or another System(s) (other than the System of the Requesting Safety Co-ordinator) within the points of Isolation identified on the RISSP form relating to the test which is proposed to be undertaken, and
 - (ii) no person will be so authorised until the proposed test has been completed (or cancelled) and the Requesting Safety Co-ordinator has notified the Implementing Safety Co-ordinator of its completion (or cancellation);
 - (b) any other current **RISSPs** which relate to the parts of the **System** in which the testing is to take place must have been cancelled in accordance with procedures set out in OC8A.5.5;

- (c) the Implementing Safety Co-ordinator must agree with the Requesting Safety Co-ordinator to permit the testing on that part of the System between the points of Isolation identified in the RISSP associated with the test and the points of Isolation on the Requesting Safety Co-ordinator's System.
- OC8A.6.2 (a) The **Requesting Safety Co-ordinator** will inform the **Implementing Safety Co-ordinator** as soon as the test has been completed or cancelled and the confirmation shall be recorded in the respective **Safety Logs**.
 - (b) When the test gives rise to the removal of **Earthing** which it is not intended to re-apply, the relevant **RISSP** associated with the test shall be cancelled at the completion or cancellation of the test in accordance with the procedure set out in either OC8A.5.5 or OC8A.5.6. Where the **Earthing** is re-applied following the completion or cancellation of the test, there is no requirement to cancel the relevant **RISSP** associated with the test pursuant to this OC8A.6.2.

OC8A.7 EMERGENCY SITUATIONS

- OC8A.7.1 There may be circumstances where **Safety Precautions** need to be established in relation to an unintended electrical connection or situations where there is an unintended risk of electrical connection between the **National Electricity Transmission System** and an **E&W User's System**, for example resulting from an incident where one line becomes attached or unacceptably close to another.
- OC8A.7.2 In those circumstances, if both the **Relevant E&W Transmission Licensee** and the respective **E&W User** agree, the relevant provisions of OC8A.5 will apply as if the electrical connections or potential connections were, solely for the purposes of this **OC8A**, a **Connection Point**.
- OC8A.7.3 (a) The relevant Safety Co-ordinator shall be that for the electrically closest existing Connection Point to that E&W User's System or such other local Connection Point as may be agreed between the Relevant E&W Transmission Licensee and the E&W User, with discussions taking place between the relevant local Safety Co-ordinators. The Connection Point to be used shall be known in this OC8A.7.3 as the "relevant Connection Point".
 - (b) The Local Safety Instructions shall be those which apply to the relevant Connection Point.
 - (c) The prefix for the **RISSP** will be that which applies for the relevant **Connection Point**.

OC8A.8 SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV SYSTEM

OC8A.8 applies to the situation where work is to be carried out at an **E&W User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or the **Relevant E&W Transmission Licensee** as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**. It does not apply to other situations to which **OC8A** applies. In this part of **OC8A**, a **Permit for Work for proximity work** is to be used, rather then the usual **RISSP** procedure, given the nature and effect of the work, all as further provided in the OC8A.8.

OC8A.8.1 Agreement Of Safety Precautions

- OC8A.8.1.1 The Requesting Safety Co-ordinator who requires Safety Precautions on another System(s) when work is to be carried out at an E&W User's Site or a Transmission Site (as the case may be) on equipment of the User or the Relevant E&W Transmission Licensee, as the case may be, where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System will contact the relevant Implementing Safety Co-ordinator(s) to agree the Location of the Safety Precautions to be established, having as part of this process informed the Implementing Safety Co-ordinator of the equipment and the work to be undertaken. The respective Safety Co-ordinators will ensure that they discuss the request with their authorised site representative and that the respective authorised site representatives discuss the request at the Connection Site. This agreement will be recorded in the respective Safety Logs.
- OC8A.8.1.2 It is the responsibility of the Implementing Safety Co-ordinator, working with his authorised site representative as appropriate, to ensure that adequate Safety Precautions are established and maintained, on his and/or another System connected to his System, to enable Safety From The System to be achieved for work to be carried out at an E&W User's Site or a Transmission Site (as the case may be) on equipment and in relation to work which is to be identified in the relevant part of the Permit for Work for proximity work where the work or equipment is near to HV Apparatus of the Implementing Safety Co-ordinator's System specified by the Requesting Safety Co-ordinator. Reference to another System in this OC8A.8.1.2 shall not include the Requesting Safety Co-ordinator's System.
- OC8A.8.1.3 In The Event Of Disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** near to which the work is to be carried out as indicated on the **Operation Diagram**.

- OC8A.8.2 Implementation Of Isolation And Earthing
- OC8A.8.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8A.8.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation** and (if required) **Earthing**.
- OC8A.8.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** and (if required) **Earthing** has been established.
- OC8A.8.2.3 The Implementing Safety Co-ordinator shall ensure that the established Safety Precautions are maintained until requested to be removed by the relevant Requesting Safety Co-ordinator.

OC8A.8.3 Permit For Work For Proximity Work Issue Procedure

- OC8A.8.3.1 Where Safety Precautions on another System(s) are being provided to enable work to be carried out at an E&W User's Site or Transmission Site (as the case may be) on equipment where the work or equipment is in proximity to HV Apparatus of the Implementing Safety Co-ordinator, before any work commences they must be recorded by a Permit for Work for proximity work being issued. The Permit for Work for proximity to the required work.
- OC8A.8.3.2 Once the Safety Precautions have been established (in accordance with OC8A.8.2), the Implementing Safety Co-ordinator shall agree to the issue of the Permit for Work for proximity work with the appropriately authorised site representative of the Requesting Safety Co-ordinator's Site. The Implementing Safety Co-ordinator will inform the Requesting Safety Co-ordinator of the Permit for Work for proximity work identifying number.
- OC8A.8.3.3 The appropriately authorised site representative of the **Implementing Safety Co-ordinator** shall then issue the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Requesting Safety Co-ordinator**. The **Permit for Work for proximity work** will in the section dealing with the work to be carried out, be completed to identify that the work is near the **Implementing Safety Co-ordinator's HV Apparatus**. No further details of the **Requesting Safety Co-ordinator's** work will be recorded, as that is a matter for the **Requesting Safety Co-ordinator** in relation to his work.
- OC8A.8.3.4 The **Requesting Safety Co-ordinator** is then free to authorise work in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's Site**. This is likely to involve the issue of safety documents or other relevant internal authorisations.
- OC8A.8.4 Permit For Work For Proximity Work Cancellation Procedure
- OC8A.8.4.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **Permit for Work for proximity work**.
- OC8A.8.4.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co**ordinator of the **Permit for Work for proximity work** identifying number, and agree that the **Permit for Work for proximity work** can be cancelled. The cancellation is then effected by the appropriately authorised site representative of the **Requesting Safety Co-ordinator** returning the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Implementing Safety Co-ordinator**.
- OC8A.8.4.3 The **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing.
- OC8A.9 LOSS OF INTEGRITY OF SAFETY PRECAUTIONS
- OC8A.9.1 In any instance when any **Safety Precautions** may be ineffective for any reason the relevant **Safety Co-ordinator** shall inform the other **Safety Co-ordinator(s)** without delay of that being the case and, if requested, of the reasons why.

OC8A.10 SAFETY LOG

OC8A.10.1 The **Relevant E&W Transmission Licensee** and **E&W Users** shall maintain **Safety Logs** which shall be a chronological record of all messages relating to safety co-ordination under **OC8A** sent and received by the **Safety Co-ordinator(s)**. The **Safety Logs** must be retained for a period of not less than one year.

APPENDIX A - RISSP-R

[the Relevant E&W Transmission Licensee]

CONTROL CENTRE/SITE]

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-R) (Requesting Safety Co-ordinator's Record)

[

RISSP NUMBER

PART 1

1.1 HV APPARATUS IDENTIFICATION

Safety Precautions have been established by the Implementing Safety Co-ordinator (or by another User on that User's System connected to the Implementing Safety Co-ordinator's System) to achieve (in so far as it is possible from that side of the Connection Point) Safety From The System on the following HV Apparatus on the Requesting Safety Co-ordinator's System: [State identity - name(s) and, where applicable, identification of the HV circuit(s) up to the Connection Point]:

Further Safety precautions required on the Requesting Safety Co-ordinator's System as notified by the Implementing Safety Co-ordinator.

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) **ISOLATION**

[State the Location(s) at which Isolation has been established (whether on the Implementing Safety Co-ordinator's System or on the System of another User connected to the Implementing Safety Co-ordinator's System). For each Location, identify each point of Isolation. For each point of Isolation, state the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other safety procedures applied, as appropriate.]

(b) <u>EARTHING</u>

[State the Location(s) at which Earthing has been established (whether on the Implementing Safety Co-ordinator's System or on the System of another User connected to the Implementing Safety Co-ordinator's System). For each Location, identify each point of Earthing. For each point of Earthing, state the means by which Earthing has been achieved, and whether, immobilised and Locked, other safety procedures applied, as appropriate].

1.3 <u>ISSUE</u>

I have received confirmation from	(name of Implementing Safety Co-
ordinator) at	(location) that the Safety Precautions identified in paragraph
1.2 have been established and that instructions will not be issued	at his location for their removal until this RISSP is cancelled.

Signed	(Requesting Safety C	o-ordinator)
--------	----------------------	--------------

at(time) on(Date)

<u>PART 2</u>

2.1 CANCELLATION

I have confirmed to ______ (name of the Implementing Safety Co-ordinator) at ______ (location) that the Safety Precautions set out in paragraph 1.2 are no longer required and accordingly the RISSP is cancelled.

Signed(Requesting Safety Co-ordinator)

APPENDIX B - RISSP-I

[the Relevant E&W Transmission Licensee]

CONTROL CENTRE/SITE

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-I) (Implementing Safety Co-ordinator's Record)

RISSP NUMBER

[____]

1.1 HV APPARATUS IDENTIFICATION

<u>PART 1</u>

Safety Precautions have been established by the Implementing Safety Co-ordinator (or by another User on that User's System connected to the Implementing Safety Co-ordinator's System) to achieve (in so far as it is possible from that side of the Connection Point) Safety From The System on the following HV Apparatus on the Requesting Safety Co-ordinator's System: [State identity - name(s) and, where applicable, identification of the HV circuit(s) up to the Connection Point]:

Recording of notification given to the **Requesting Safety Co-ordinator** concerning further **Safety Precautions** required on the **Requesting Safety Co-ordinator's System**.

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

[State the Location(s) at which Isolation has been established (whether on the Implementing Safety Co-ordinator's System or on the System of another User connected to the Implementing Safety Co-ordinator's System). For each Location, identify each point of Isolation. For each point of Isolation, state the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other safety procedures applied, as appropriate.]

(b) EARTHING

[State the Location(s) at which Earthing has been established (whether on the Implementing Safety Co-ordinator's System or on the System of another User connected to the Implementing Safety Co-ordinator's System). For each Location, identify each point of Earthing. For each point of Earthing, state the means by which Earthing has been achieved, and whether, immobilised and Locked, other safety procedures applied, as appropriate].

1.3 ISSUE

<u>PART 2</u>

2.1 CANCELLATION

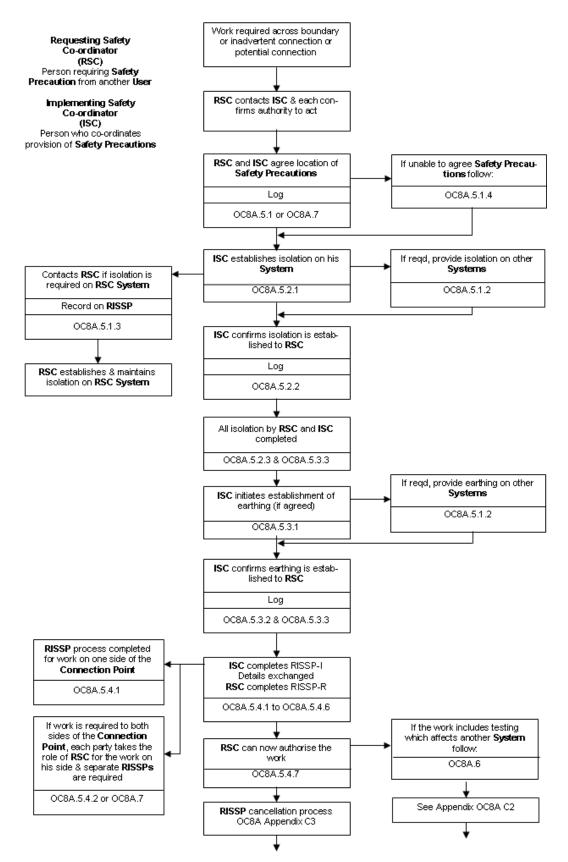
I have received confirmation from ______ (name of the **Requesting Safety Co**ordinator) at ______ (location) that the **Safety Precautions** set out in paragraph 1.2 are no longer required and accordingly the **RISSP** is cancelled.

Signed(Implementing Safety Co-ordinator)

(Note: This form to be of a different colour from RISSP-R)

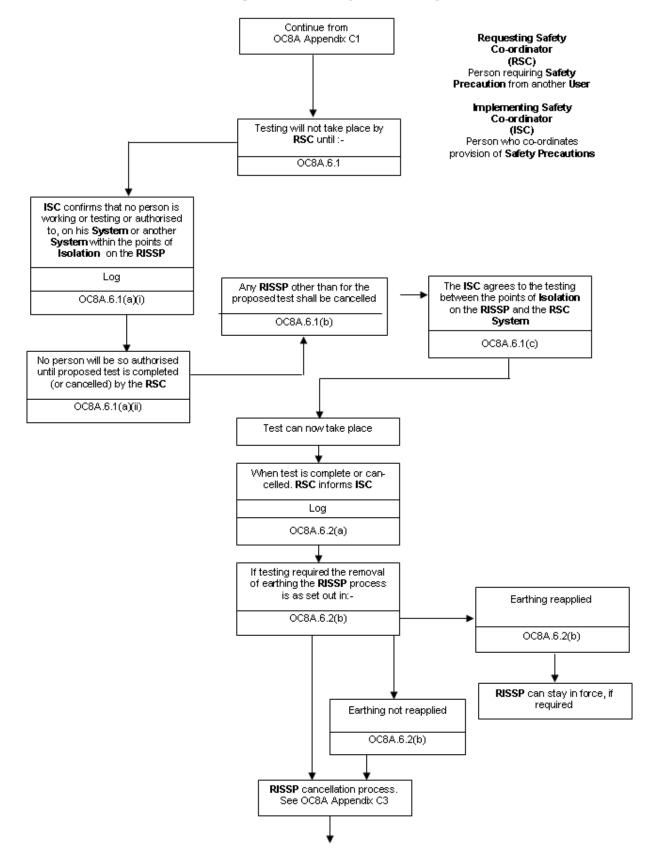
APPENDIX C - FLOWCHARTS

APPENDIX C1 - RISSP ISSUE PROCESS

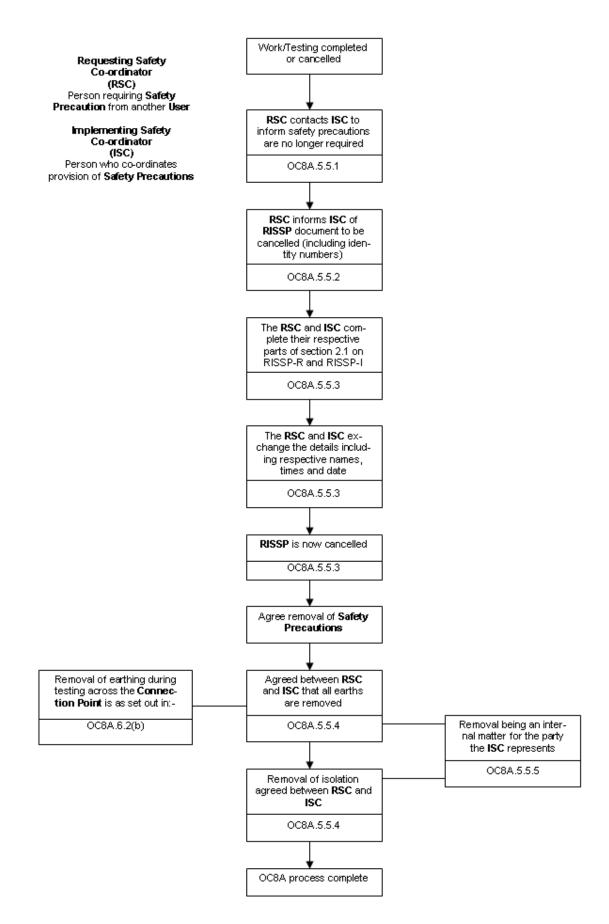


APPENDIX C2 - TESTING PROCESS

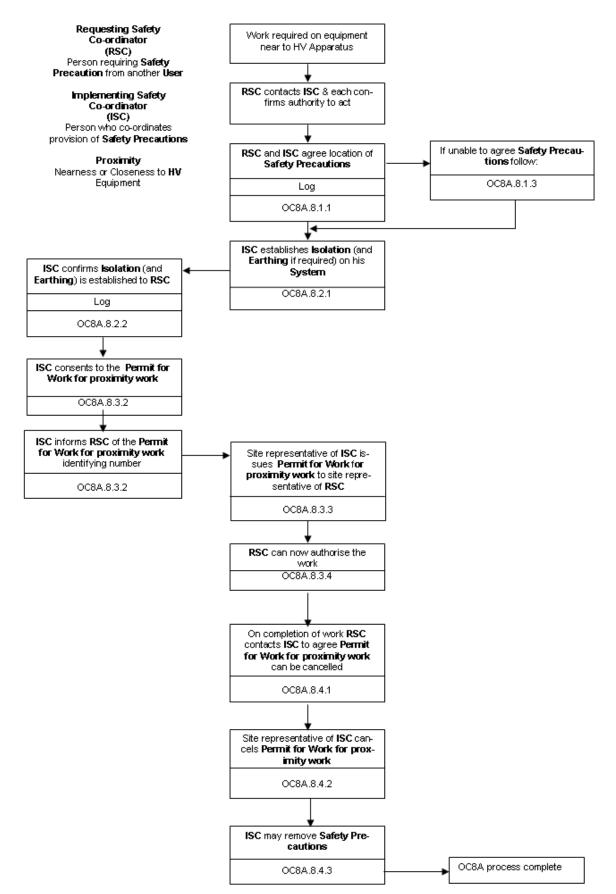
Where testing affects another Safety Co-ordinator's System



APPENDIX C3 - RISSP CANCELLATION PROCESS



APPENDIX C4 - PROCESS FOR WORKING NEAR TO SYSTEM EQUIPMENT



APPENDIX D - NATIONAL GRID SAFETY CIRCULAR

National Grid Safety Circular (NGSC)	NGSC Number:
RISSP prefixes - Issue x	Date: Issued By:
Example	

Pursuant to the objectives of The Grid Code, Operating Code 8A1 - Safety Co-ordination, this circular will be used in relation to all cross boundary safety management issues with the **Relevant E&W Transmission** Licensee customers. Of particular note will be the agreed prefixes for the Record of Inter System Safety Precautions (RISSP) documents.

APPENDIX E - FORM OF NGET PERMIT TO WORK

[Form of the Relevant E&W Transmission Licensee Permit for Work]

PERMIT FOR WORK

No.	

1.	Location
	Equipment Identification
	Work to be done
2.	Precautions taken to achieve Safety from the System Points of Isolation
	Primary Earths
	Actions taken to avoid Danger by draining, venting, purging and containment or dissipation of stored energy*
	Further precautions to be taken during the course of the work to avoid System derived hazards*
3.	Precautions that may be varied*
4.	Preparation Control Person(s) (Safety) giving Consent Key Safe number*
	State whether this Permit for Work must be personally retained yes no
	Signed Time Date
	Senior Authorised Person

5.	Issue & Receipt Key Safe Number*	Safety Keys (No. off)*
	Earthing Schedule Number*	Portable Drain earths (No. off)*
	Recommendations for General Safety Report Number*	Approved (ROMP)#/Card Safe#/ Procedure Number*
	Circuit Identification – Colours/	Flags (No. off)* Wristlets (No. off)*
	Issued (Signed)	
	Senior Authorised Person Received (Signed) Competent Person	Time Date
	Name (Block letters)	Company

delete as appropriate *write N/A if not applicable

February 1995

< END OF OPERATING CODE NO. 8 APPENDIX 1>

OPERATING CODE NO. 8 APPENDIX 2

(OC8B)

SAFETY CO-ORDINATION IN RESPECT OF THE SCOTTISH TRANSMISSION SYSTEMS OR THE SYSTEMS OF SCOTTISH USERS

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OC8B.1 INTRODUCTION

OC8B.1.1 OC8B specifies the standard procedures to be used by NGET, the Relevant Scottish Transmission Licensees and Scottish Users for the co-ordination, establishment and maintenance of necessary Safety Precautions when work is to be carried out on or near the Scottish Transmission System or the System of a Scottish User and when there is a need for Safety Precautions on HV Apparatus on the other's System for this work to be carried out safely. OC8B applies to Relevant Scottish Transmission Licensees and Scottish Users. Where work is to be carried out on or near equipment on an E&W Transmission System or the Systems of E&W Users, but such work requires Safety Precautions to be established on a Scottish Transmission System or the Systems of Scottish Users, OC8B should be followed by the Relevant Scottish Transmission Licensee and Scottish Users to establish the required Safety Precautions.

OC8A specifies the procedures to be used by the Relevant E&W Transmission Licensee and E&W Users.

NGET shall procure that **Relevant Scottish Transmission Licensees** shall comply with **OC8B** where and to the extent that such section applies to them.

In this **OC8B** the term "work" includes testing, other than **System Tests** which are covered by **OC12**.

- OC8B.1.2 OC8B also covers the co-ordination, establishment and maintenance of necessary safety precautions on the Implementing Safety Co-ordinator's System when work is to be carried out at a Scottish User's Site or a Transmission Site (as the case may be) on equipment of the Scottish User or the Relevant Scottish Transmission Licensee as the case may be where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System.
- OC8B.1.3 OC8B does not apply to the situation where Safety Precautions need to be agreed solely between Scottish Users. OC8B does not apply to the situation where Safety Precautions need to be agreed solely between Transmission Licensees.
- OC8B.1.4 OC8B does not seek to impose a particular set of Safety Rules on Relevant Scottish Transmission Licensees and Scottish Users. The Safety Rules to be adopted and used by the Relevant Scottish Transmission Licensee and each Scottish User shall be those chosen by each.
- OC8B.1.5 Site Responsibility Schedules document the control responsibility for each item of Plant and Apparatus for each site.
- OC8B.1.6 (a) The Relevant Scottish Transmission Licensee may agree alternative site-specific operational procedures with Scottish Users for the co-ordination, establishment and maintenance of Safety Precautions instead of the Record of Inter-System Safety Precautions ("RISSP") procedure detailed in this OC8B. Such operational procedures shall satisfy the requirements of paragraphs OC8B.1.7, OC8B.2.1, OC8B.4.1, OC8B.4.2, OC8B.9, OC8B.10. These alternative site-specific operational procedures for the co-ordination, establishment and maintenance of Safety Precautions will be referenced in the relevant Site Responsibility Schedule.
 - (b) The Relevant Scottish Transmission Licensee may agree with Scottish Users site-specific procedures for the application of Safety Precautions across the interface between Relevant Scottish Transmission Licensee and Scottish User in addition to and consistent with either the RISSP procedure or the alternative site-specific operational procedures described in OC8B.1.6 (a). These site-specific procedures will be referenced in the relevant Site Responsibility Schedule.
 - (c) The **Relevant Scottish Transmission Licensee** and the **Scottish User** shall comply with the procedures agreed pursuant to OC8B.1.6 (a) and OC8B.1.6 (b).

OC8B.1.7 Defined Terms

- OC8B.1.7.1 Scottish Users should bear in mind that in OC8 only, in order that OC8 reads more easily with the terminology used in certain Safety Rules, the term "HV Apparatus" is defined more restrictively and is used accordingly in OC8B. Scottish Users should, therefore, exercise caution in relation to this term when reading and using OC8B.
- OC8B.1.7.2 In **OC8** only the following terms shall have the following meanings:
 - (1) "HV Apparatus" means High Voltage electrical circuits forming part of a System, on which Safety From The System may be required or on which Safety Precautions may be applied to allow work to be carried out on a System.
 - (2) **"Isolation**" means the disconnection of **Apparatus** from the remainder of the **System** in which that **Apparatus** is situated by either of the following:
 - (a) an **Isolating Device** maintained in an isolating position. The isolating position must either be:
 - (i) maintained by immobilising and Locking the Isolating Device in the isolating position and affixing a Caution Notice to it. Where the Isolating Device is Locked with a Safety Key, the Safety Key must be secured in a Key Safe and the Key Safe Key must be given to the authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable the Key Safe Key must be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
 - (ii) maintained and/or secured by such other method which must be in accordance with the Safety Rules of the Relevant Scottish Transmission Licensee or that Scottish User, as the case may be; or
 - (b) an adequate physical separation which must be in accordance with, and maintained by, the method set out in the Safety Rules of the Relevant Scottish Transmission Licensee or that Scottish User, as the case may be, and, if it is a part of that method, a Caution Notice must be placed at the point of separation; or
 - (c) in the case where the relevant **HV Apparatus** of the **Implementing Safety Coordinator** is being either constructed or modified, an adequate physical separation as a result of a **No System Connection**.
 - (3) "No System Connection" means an adequate physical separation (which must be in accordance with, and maintained by, the method set out in the Safety Rules of the Implementing Safety Co-ordinator) of the Implementing Safety Co-ordinator's HV Apparatus from the rest of the Implementing Safety Co-ordinator's System where such HV Apparatus has no installed means of being connected to, and will not for the duration of the Safety Precaution be connected to, a source of electrical energy or to any other part of the Implementing Safety Co-ordinator's System.
 - (4) **"Earthing**" means a way of providing a connection between conductors and earth by an **Earthing Device** which is either:
 - (i) immobilised and Locked in the earthing position. Where the Earthing Device is Locked with a Safety Key, the Safety Key must be secured in a Key Safe and the Key Safe Key must be given to the authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable the Key Safe Key must be retained by the authorised site representative of the Implementing Safety Coordinator in safe custody; or
 - (ii) maintained and/or secured in position by such other method which must be in accordance with the Safety Rules of the Relevant Scottish Transmission Licensee or that Scottish User as the case may be.

- OC8B.1.7.3 For the purpose of the co-ordination of safety relating to **HV Apparatus** the term **"Safety Precautions"** means **Isolation** and/or **Earthing**.
- OC8B.2 OBJECTIVE
- OC8B.2.1 The objective of OC8B is to achieve:-
 - Safety From The System when work on or near a System necessitates the provision of Safety Precautions on another System on HV Apparatus up to a Connection Point; and
 - (ii) Safety From The System when work is to be carried out at a Scottish User's Site or a Transmission Site (as the case may be) on equipment of the Scottish User or the Relevant Scottish Transmission Licensee (as the case may be) where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System.
- OC8B.2.2 A flow chart, set out in **OC8B** Appendix C, illustrates the process utilised in **OC8B** to achieve the objective set out in OC8B.2.1. In the case of a conflict between the flow chart and the provisions of the written text of **OC8B**, the written text will prevail.

OC8B.3 SCOPE

- OC8B.3.1 OC8B applies to NGET, Relevant Scottish Transmission Licensees and to Scottish Users, which in OC8 means:-
 - (a) Generators;
 - (b) Network Operators; and
 - (c) Non-Embedded Customers.

The procedures for the establishment of safety co-ordination by **NGET** in relation to **External Interconnections** are set out in **Interconnection Agreements** with relevant persons for the **External Interconnections**.

OC8B.4 PROCEDURE

OC8B.4.1 Approval Of Safety Rules

- OC8B.4.1.1 (a) In accordance with the timing requirements of its **Bilateral Agreement**, each **Scottish User** will supply to the **Relevant Scottish Transmission Licensee** a copy of its **Safety Rules** relating to its side of the **Connection Point** at each **Connection Site**.
 - (b) In accordance with the timing requirements of each Bilateral Agreement the Relevant Scottish Transmission Licensee will supply to each Scottish User a copy of its Safety Rules relating to the Transmission side of the Connection Point at each Connection Site.
 - (c) Prior to connection the Relevant Scottish Transmission Licensee and the Scottish User must have approved each other's relevant Safety Rules in relation to Isolation and Earthing.

- OC8B.4.1.2 Either party may require that the **Isolation** and/or **Earthing** provisions in the other party's **Safety Rules** affecting the **Connection Site** should be made more stringent in order that approval of the other party's **Safety Rules** can be given. Provided these requirements are not unreasonable, the other party will make such changes as soon as reasonably practicable. These changes may need to cover the application of **Isolation** and/or **Earthing** at a place remote from the **Connection Site**, depending upon the **System** layout. Approval may not be withheld because the party required to approve reasonably believes the provisions relating to **Isolation** and/or **Earthing** are too stringent.
- OC8B.4.1.3 If, following approval, a party wishes to change the provisions in its **Safety Rules** relating to **Isolation** and/or **Earthing**, it must inform the other party. If the change is to make the provisions more stringent, then the other party merely has to note the changes. If the change is to make the provisions less stringent, then the other party needs to approve the new provisions and the procedures referred to in OC8B.4.1.2 apply.

OC8B.4.2 <u>Safety Co-ordinators</u>

- OC8B.4.2.1 For each Connection Point, the Relevant Scottish Transmission Licensee and each Scottish User will have nominated to be available, to a timescale agreed in the Bilateral Agreement, a person or persons ("Safety Co-ordinator(s)") to be responsible for the co-ordination of Safety Precautions when work is to be carried out on a System which necessitates the provision of Safety Precautions on HV Apparatus pursuant to OC8B. A Safety Co-ordinator may be responsible for the co-ordination of safety on HV Apparatus at more than one Connection Point.
- OC8B.4.2.2 Each Safety Co-ordinator shall be authorised by the Relevant Scottish Transmission Licensee or a Scottish User, as the case may be, as competent to carry out the functions set out in OC8B to achieve Safety From The System. Confirmation from the Relevant Scottish Transmission Licensee or a Scottish User, as the case may be, that its Safety **Co-ordinator(s)** as a group are so authorised is dealt with, for **Scottish Users**, in CC.5.2 and for Relevant Scottish Transmission Licensees in the STC. Only persons with such authorisation will carry out the provisions of OC8B. Each User shall, prior to being connected to the National Electricity Transmission System, give notice in writing to the Relevant Scottish Transmission Licensee of its Safety Co-ordinator(s) and will update the written notice yearly and whenever there is a change to the identity of its Safety Co-ordinators or to the Connection Points. The Relevant Scottish Transmission Licensee will, at the time of a Scottish User being connected to the National Electricity Transmission System give notice in writing to that Scottish User of the identity of its Safety Co-ordinator(s) and will update the written notice whenever there is a change to the Connection Points or Safety Co-ordinators.
- OC8B.4.2.3 Contact between **Safety Co-ordinators** will be made via normal operational channels, and accordingly separate telephone numbers for **Safety Co-ordinators** need not be provided.
- OC8B.4.2.4 If work is to be carried out on a System, or on equipment of the Relevant Scottish Transmission Licensee or a Scottish User near to a System, as provided in this OC8B, which necessitates the provision of Safety Precautions on HV Apparatus in accordance with the provisions of OC8B, the Requesting Safety Co-ordinator who requires the Safety Precautions to be provided shall contact the relevant Implementing Safety Co-ordinator to co-ordinate the establishment of the Safety Precautions.
- OC8B.4.3 RISSP
- OC8B.4.3.1 **OC8B** sets out the procedures for utilising the **RISSP**, which will be used except where dealing with equipment in proximity to the other's **System** as provided in **OC8B.8**. Sections **OC8B.4** to **OC8B.7** inclusive should be read accordingly.

- OC8B.4.3.2 The **Relevant Transmission Licensee** will use the format of the **RISSP** forms set out in Appendix A and Appendix B to **OC8B**, or any other format which may be agreed between the **Relevant Scottish Transmission Licensee** and each **User**. That set out in **OC8B** Appendix A and designated as "RISSP-R", shall be used when the **Relevant Scottish Transmission Licensee** is the **Requesting Safety Co-ordinator**, and that in **OC8B** Appendix B and designated as "RISSP-I", shall be used when the **Relevant Transmission Licensee** is the **Implementing Safety Co-ordinator**. Proformas of RISSP-R and RISSP-I will be provided for use by **Relevant Scottish Transmission Licensees** staff.
- OC8B.4.3.3 Scottish Users may either adopt the format referred to in OC8B.4.3.2 or any other format which may be agreed between the **Relevant Scottish Transmission Licensee** and the **Scottish User** from time to time.
- OC8B.4.3.4 All references to RISSP-R and RISSP-I shall be taken as referring to the corresponding parts of the alternative forms or other tangible written or electronic records used by each **Scottish User** or **Relevant Scottish Transmission Licensee**.
- OC8B.4.3.5 RISSP-R will have an identifying number written or printed on it, comprising a prefix which identifies the location at which it is issued, and a unique (for each **Scottish User** or **Relevant Scottish Transmission Licensee**, as the case may be) serial number consisting of four digits and the suffix "R".
- OC8B.4.3.6 (a) In accordance with the timing requirements set out in the **Bilateral Agreement** each **Scottish User** shall apply in writing to **Relevant Scottish Transmission Licensee** for **Relevant Scottish Transmission Licensee's** approval of its proposed prefix.
 - (b) Relevant Scottish Transmission Licensee shall consider the proposed prefix to see if it is the same as (or confusingly similar to) a prefix used by Relevant Scottish Transmission Licensee or another User and shall, as soon as possible (and in any event within ten days), respond in writing to the Scottish User with its approval or disapproval.
 - (c) If **Relevant Scottish Transmission Licensee** disapproves, it shall explain in its response why it has disapproved and will suggest an alternative prefix.
 - (d) If Relevant Scottish Transmission Licensee has disapproved, then the Scottish User shall either notify Relevant Scottish Transmission Licensee in writing of its acceptance of the suggested alternative prefix or it shall apply in writing to Relevant Scottish Transmission Licensee with revised proposals and the above procedure shall apply to that application.

OC8B.5 SAFETY PRECAUTIONS ON HV APPARATUS

- OC8B.5.1 Agreement Of Safety Precautions
- OC8B.5.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the **Location** of the **Safety Precautions** to be established. This agreement will be recorded in the respective **Safety Logs**.
- OC8B.5.1.2 It is the responsibility of the **Implementing Safety Co-ordinator** to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved on the **HV Apparatus**, specified by the **Requesting Safety Co-ordinator** which is to be identified in Part 1.1 of the **RISSP**. Reference to another **System** in this OC8B.5.1.2 shall not include the **Requesting Safety Co-ordinator**'s **System** which is dealt with in OC8B.5.1.3.

- OC8B.5.1.3 When the Implementing Safety Co-ordinator is of the reasonable opinion that it is necessary for Safety Precautions on the System of the Requesting Safety Co-ordinator, other than on the HV Apparatus specified by the Requesting Safety Co-ordinator, which is to be identified in Part 1.1 of the RISSP, he shall contact the Requesting Safety Co-ordinator and the details shall be recorded in part 1.1 of the RISSP forms. In these circumstances it is the responsibility of the Requesting Safety Co-ordinator to establish and maintain such Safety Precautions.
- OC8B.5.1.4 The location of the **Safety Precautions** should be indicated on each **Scottish User's** operational diagram and labelled as per the local instructions of each **Scottish User**.
- OC8B.5.1.5 In The Event Of Disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** on which **Safety From The System** is to be achieved as indicated on the **Operation Diagram**.

- OC8B.5.2 Implementation Of Isolation
- OC8B.5.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8B.5.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation**.
- OC8B.5.2.2 The Implementing Safety Co-ordinator shall confirm to the Requesting Safety Coordinator that the agreed Isolation has been established, and identify the Requesting Safety Co-ordinator's HV Apparatus up to the Connection Point, for which the Isolation has been provided. The confirmation shall specify:
 - (a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as applicable) of each point of **Isolation**;
 - (b) whether **Isolation** has been achieved by an **Isolating Device** in the isolating position, by an adequate physical separation or as a result of a **No System Connection**;
 - (c) where an Isolating Device has been used whether the isolating position is either :
 - (i) maintained by immobilising and Locking the Isolating Device in the isolating position and affixing a Caution Notice to it. Where the Isolating Device has been Locked with a Safety Key, the confirmation shall specify that the Safety Key has been secured in a Key Safe and the Key Safe Key has been given to the authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable (including where Earthing has been requested in OC8B.5.1), the confirmation shall specify that the Key Safe Key will be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
 - (ii) maintained and/or secured by such other method which must be in accordance with the Safety Rules of the Relevant Scottish Transmission Licensee or that Scottish User, as the case may be; and
 - (d) where an adequate physical separation has been used that it will be in accordance with, and maintained by, the method set out in the Safety Rules of the Relevant Scottish Transmission Licensee or that Scottish User, as the case may be, and, if it is a part of that method, that a Caution Notice has been placed at the point of separation;
 - (e) where a No System Connection has been used the physical position of the No System Connection shall be defined and shall not be varied for the duration of the Safety Precaution and the Implementing Safety Co-ordinator's relevant HV Apparatus will not, for the duration of the Safety Precaution be connected to a source of electrical energy or to any other part of the Implementing Safety Co-ordinator's System.

The confirmation of Isolation shall be recorded in the respective Safety Logs.

- OC8B.5.2.3 Following the confirmation of Isolation being established by the Implementing Safety Coordinator and the necessary establishment of relevant Isolation on the Requesting Safety Co-ordinators System, the Requesting Safety Co-ordinator will then request the implementation of Earthing by the Implementing Safety Co-ordinator, if agreed in section OC8B.5.1. If the implementation of Earthing has been agreed, then the authorised site representative of the Implementing Safety Co-ordinator shall retain any Key Safe Key in safe custody until any Safety Key used for Earthing has been secured in the Key Safe.
- OC8B.5.3 Implementation Of Earthing
- OC8B.5.3.1 The Implementing Safety Co-ordinator shall then establish the agreed Earthing.
- OC8B.5.3.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co**ordinator that the agreed **Earthing** has been established, and identify the **Requesting Safety Co-ordinator's HV Apparatus** up to the **Connection Point**, for which the **Earthing** has been provided. The confirmation shall specify:
 - (a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as is applicable) of each point of **Earthing**; and
 - (b) in respect of the **Earthing Device** used, whether it is:
 - (i) immobilised and Locked in the earthing position. Where the Earthing Device has been Locked with a Safety Key, that the Safety Key has been secured in a Key Safe and the Key Safe Key has been given to the authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable, that the Key Safe Key will be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or
 - (ii) maintained and/or secured in position by such other method which is in accordance with the Safety Rules of the Relevant Scottish Transmission Licensee or that Scottish User, as the case may be.

The confirmation of Earthing shall be recorded in the respective Safety Logs.

- OC8B.5.3.3 The Implementing Safety Co-ordinator shall ensure that the established Safety Precautions are maintained until requested to be removed by the relevant Requesting Safety Co-ordinator.
- OC8B.5.3.4 Certain designs of gas insulated switchgear three position isolator and earth switches specifically provide a combined **Isolation** and **Earthing** function within a single mechanism contained within a single integral unit. Where **Safety Precautions** are required across control boundaries and subject to the requirements of OC8B.5.1, it is permissible to earth before **Points of Isolation** have been established provided that all interconnected circuits are fully disconnected from live **HV Apparatus**.
- OC8B.5.4 RISSP Issue Procedure
- OC8B.5.4.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work on the **Requesting Safety Co-ordinator's System**, before any work commences they must be recorded by a **RISSP** being issued. The **RISSP** is applicable to **HV Apparatus** up to the **Connection Point** identified in section 1.1 of the RISSP-R and RISSP-I forms.
- OC8B.5.4.2 Where **Safety Precautions** are being provided to enable work to be carried out on both sides of the **Connection Point** a **RISSP** will need to be issued for each side of the **Connection Point** with **Relevant Scottish Transmission Licensee** and the respective **User** each enacting the role of **Requesting Safety Co-ordinator**. This will result in a RISSP-R and a RISSP-I form being completed by each of the **Relevant Scottish Transmission Licensee** and the **Scottish User**, with each **Requesting Safety Co-ordinator** issuing a separate **RISSP** number.

- OC8B.5.4.3 Once the **Safety Precautions** have been established (in accordance with OC8B.5.2 and OC8B.5.3), the **Implementing Safety Co-ordinator** shall complete parts 1.1 and 1.2 of a RISSP-I form recording the details specified in OC8B.5.1.3, OC8B.5.2.2 and OC8B.5.3.2. Where **Earthing** has not been requested, Part 1.2(b) will be completed with the words "not applicable" or "N/A". He shall then contact the **Requesting Safety Co-ordinator** to pass on these details.
- OC8B.5.4.4 The **Requesting Safety Co-ordinator** shall complete Parts 1.1 and 1.2 of the RISSP-R, making a precise copy of the details received. On completion, the **Requesting Safety Co-ordinator** shall read the entries made back to the sender and check that an accurate copy has been made.
- OC8B.5.4.5 The **Requesting Safety Co-ordinator** shall then issue the number of the **RISSP**, taken from the RISSP-R, to the **Implementing Safety Co-ordinator** who will ensure that the number, including the prefix and suffix (where applicable), is accurately recorded in the designated space on the RISSP-I form.
- OC8B.5.4.6 The **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** shall complete and sign Part 1.3 of the RISSP-R and RISSP-I respectively and then enter the time and date. When signed no alteration to the **RISSP** is permitted; the **RISSP** may only be cancelled.
- OC8B.5.4.7 The **Requesting Safety Co-ordinator** is then free to authorise work, but not testing, in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's System**. This is likely to involve the issue of safety documents or other relevant internal authorisations. Where testing is to be carried out, the procedure set out below in OC8B.6 shall be implemented.
- OC8B.5.5 RISSP Cancellation Procedure
- OC8B.5.5.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **RISSP**.
- OC8B.5.5.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **RISSP** identifying number, including the prefix and suffix (where applicable), and agree it is the **RISSP** to be cancelled.
- OC8B.5.5.3 The **Requesting Safety Co-ordinator** and the relevant **Implementing Safety Co-ordinator** shall then respectively complete Part 2.1 of their respective RISSP-R and RISSP-I forms and shall then exchange details. The details being exchanged shall include their respective names and time and date. On completion of the exchange of details the respective **RISSP** is cancelled. The removal of **Safety Precautions** is as set out in OC8B.5.5.4 and OC8B.5.5.5.
- OC8B.5.5.4 Neither **Safety Co-ordinator** shall instruct the removal of any **Isolation** forming part of the **Safety Precautions** as part of the returning of the **HV Apparatus** to service until it is confirmed to each by each other that every earth on each side of the **Connection Point**, within the points of isolation identified on the **RISSP**, has been removed or disconnected by the provision of additional **Points of Isolation**.
- OC8B.5.5.5 Subject to the provisions in OC8B.5.5.4, the Implementing Safety Co-ordinator is then free to arrange the removal of the Safety Precautions, the procedure to achieve that being entirely an internal matter for the party the Implementing Safety Co-ordinator is representing. Where a Key Safe Key has been given to the authorised site representative of the Requesting Safety Co-ordinator, the Key Safe Key must be returned to the authorised site representative of the Implementing Safety Co-ordinator. The only situation in which any Safety Precautions may be removed without first cancelling the RISSP in accordance with OC8B.5.5 or OC8B.5.6 is when Earthing is removed in the situation envisaged in OC8B.6.2(b).

OC8B.5.6 RISSP Change Control

Nothing in this **OC8B** prevents **Relevant Scottish Transmission Licensee** and **Scottish Users** agreeing to a simultaneous cancellation and issue of a new **RISSP**, if both agree. It should be noted, however, that the effect of that under the relevant **Safety Rules** is not a matter with which the **Grid Code** deals.

OC8B.6 TESTING

- OC8B.6.1 The carrying out of the test may affect **Safety Precautions** on **RISSPs** or work being carried out which does not require a **RISSP**. Testing can, for example, include the application of an independent test voltage. Accordingly, where the **Requesting Safety Co-ordinator** wishes to authorise the carrying out of such a test to which the procedures in OC8B.6 apply he may not do so and the test will not take place unless and until the steps in (a)-(c) below have been followed and confirmation of completion has been recorded in the respective **Safety Logs**:
 - (a) confirmation must be obtained from the Implementing Safety Co-ordinator that:
 - (i) no person is working on, or testing, or has been authorised to work on, or test, any part of its System or another System(s) (other than the System of the Requesting Safety Co-ordinator) within the points of Isolation identified on the RISSP form relating to the test which is proposed to be undertaken, and
 - (ii) no person will be so authorised until the proposed test has been completed (or cancelled) and the Requesting Safety Co-ordinator has notified the Implementing Safety Co-ordinator of its completion (or cancellation);
 - (b) any other current **RISSPs** which relate to the parts of the **System** in which the testing is to take place must have been cancelled in accordance with procedures set out in OC8B.5.5;
 - (c) the Implementing Safety Co-ordinator must agree with the Requesting Safety Co-ordinator to permit the testing on that part of the System between the points of Isolation identified in the RISSP associated with the test and the points of Isolation on the Requesting Safety Co-ordinator's System.
- OC8B.6.2 (a) The **Requesting Safety Co-ordinator** will inform the **Implementing Safety Co-ordinator** as soon as the test has been completed or cancelled and the confirmation shall be recorded in the respective **Safety Logs**.
 - (b) When the test gives rise to the removal of **Earthing** which it is not intended to re-apply, the relevant **RISSP** associated with the test shall be cancelled at the completion or cancellation of the test in accordance with the procedure set out in either OC8B.5.5 or OC8B.5.6. Where the **Earthing** is re-applied following the completion or cancellation of the test, there is no requirement to cancel the relevant **RISSP** associated with the test pursuant to this OC8B.6.2.

OC8B.7 <u>EMERGENCY SITUATIONS</u>

- OC8B.7.1 There may be circumstances where **Safety Precautions** need to be established in relation to an unintended electrical connection or situations where there is an unintended risk of electrical connection between the **National Electricity Transmission System** and a **Scottish User's System**, for example resulting from an incident where one line becomes attached or unacceptably close to another.
- OC8B.7.2 In those circumstances, if both the **Relevant Scottish Transmission Licensee** the **Scottish User** agree, the relevant provisions of OC8B.5 will apply as if the electrical connections or potential connections were, solely for the purposes of this OC8B, a **Connection Point**.

- OC8B.7.3 (a) The relevant Safety Co-ordinator shall be that for the electrically closest existing Connection Point to that Scottish User's System or such other local Connection Point as may be agreed between the Relevant Scottish Transmission Licensee and the Scottish User, with discussions taking place between the relevant local Safety Co-ordinators. The Connection Point to be used shall be known in this OC8B.7.3 as the "relevant Connection Point".
 - (b) The Safety Rules shall be those which apply to the relevant Connection Point.
 - (c) The prefix for the **RISSP** (where applicable) will be that which applies for the relevant **Connection Point**.

OC8B.8 <u>SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV</u> <u>SYSTEM</u>

OC8B.8 applies to the situation where work is to be carried out at a **Scottish User's Site** or a **Transmission Site** (as the case may be) on equipment of the **Scottish User** or a **Relevant Scottish Transmission Licensee** as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**. It does not apply to other situations to which **OC8B** applies. In this part of **OC8B**, a **Permit for Work for proximity work** is to be used, rather then the usual **RISSP** procedure, given the nature and effect of the work, all as further provided in the OC8B.8.

OC8B.8.1 Agreement Of Safety Precautions

- OC8B.8.1.1 The Requesting Safety Co-ordinator who requires Safety Precautions on another System(s) when work is to be carried out at a Scottish User's Site or a Transmission Site (as the case may be) on equipment of the Scottish User or a Relevant Scottish Transmission Licensee, as the case may be, where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System will contact the relevant Implementing Safety Co-ordinator(s) to agree the Location of the Safety Precautions to be established, having as part of this process informed the Implementing Safety Coordinator of the equipment and the work to be undertaken. The respective Safety Coordinators will ensure that they discuss the request with their authorised site representative and that the respective authorised site representatives discuss the request at the Connection Site. This agreement will be recorded in the respective Safety Logs.
- OC8B.8.1.2 It is the responsibility of the Implementing Safety Co-ordinator, working with his authorised site representative as appropriate, to ensure that adequate Safety Precautions are established and maintained, on his and/or another System connected to his System, to enable Safety From The System to be achieved for work to be carried out at a Scottish User's Site or a Transmission Site (as the case may be) on equipment and in relation to work which is to be identified in the relevant part of the Permit for Work for proximity work where the work or equipment is near to HV Apparatus of the Implementing Safety Coordinator's System specified by the Requesting Safety Coordinator. Reference to another System in this OC8B.8.1.2 shall not include the Requesting Safety Coordinator's System.

OC8B.8.1.3 In The Event Of Disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** near to which the work is to be carried out as indicated on the **Operation Diagram**.

- OC8B.8.2 Implementation Of Isolation And Earthing
- OC8B.8.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8B.8.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation** and (if required) **Earthing**.

- OC8B.8.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** and (if required) **Earthing** has been established.
- OC8B.8.2.3 The Implementing Safety Co-ordinator shall ensure that the established Safety Precautions are maintained until requested to be removed by the relevant Requesting Safety Co-ordinator.
- OC8B.8.3 Permit For Work For Proximity Work Issue Procedure
- OC8B.8.3.1 Where Safety Precautions on another System(s) are being provided to enable work to be carried out at a Scottish User's Site or Transmission Site (as the case may be) on equipment where the work or equipment is in proximity to HV Apparatus of the Implementing Safety Co-ordinator, before any work commences they must be recorded by a Permit for Work for proximity work being issued. The Permit for Work for proximity to the Implementing Safety Co-ordinator's HV Apparatus in proximity to the required work
- OC8B.8.3.2 Once the Safety Precautions have been established (in accordance with OC8B.8.2), the Implementing Safety Co-ordinator shall agree to the issue of the Permit for Work for proximity work with the appropriately authorised site representative of the Requesting Safety Co-ordinator's Site. The Implementing Safety Co-ordinator will inform the Requesting Safety Co-ordinator of the Permit for Work for proximity work identifying number.
- OC8B.8.3.3 The appropriately authorised site representative of the **Implementing Safety Co-ordinator** shall then issue the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Requesting Safety Co-ordinator**. The **Permit for Work for proximity work** will in the section dealing with the work to be carried out, be completed to identify that the work is near the **Implementing Safety Co-ordinator's HV Apparatus**. No further details of the **Requesting Safety Co-ordinator's** work will be recorded, as that is a matter for the **Requesting Safety Co-ordinator** in relation to his work.
- OC8B.8.3.4 The **Requesting Safety Co-ordinator** is then free to authorise work in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's Site**. This is likely to involve the issue of safety documents or other relevant internal authorisations.
- OC8B.8.4 Permit For Work For Proximity Work Cancellation Procedure
- OC8B.8.4.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **Permit for Work for proximity work**.
- OC8B.8.4.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co**ordinator of the **Permit for Work for proximity work** identifying number, and agree that the **Permit for Work for proximity work** can be cancelled. The cancellation is then effected by the appropriately authorised site representative of the **Requesting Safety Co-ordinator** returning the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Implementing Safety Co-ordinator**.
- OC8B.8.4.3 The **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing.

OC8B.9 LOSS OF INTEGRITY OF SAFETY PRECAUTIONS

OC8B.9.1 In any instance when any **Safety Precautions** may be ineffective for any reason the relevant **Safety Co-ordinator** shall inform the other **Safety Co-ordinator(s)** without delay of that being the case and, if requested, of the reasons why.

OC8B.10 SAFETY LOG

OC8B.10.1 Relevant Scottish Transmission Licensees and Scottish Users shall maintain Safety Logs which shall be a chronological record of all messages relating to safety co-ordination under OC8 sent and received by the Safety Co-ordinator(s). The Safety Logs must be retained for a period of not less than six years.

APPENDIX A - RISSP-R

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-R)

(Requesting Safety Co-ordinator's Record)

RISSP NUMBER _____

Part 1

1.1 <u>CIRCUIT IDENTIFICATION</u>

Safety Precautions have been established by the Implementing Safety Co-ordinator to achieve Safety From The System on the following HV Apparatus:

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

State the Locations(s) at which Isolation has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Isolation. For each point of Isolation state, the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other Safety Precautions applied, as appropriate.

(b) EARTHING

State the Locations(s) at which Earthing has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Earthing. For each point of Earthing state, the means by which the Earthing has been achieved, and whether, immobilised and Locked, other Safety Precautions applied, as appropriate.

1.3 <u>ISSUE</u>

I have received confirmation from	(name of Implementing
Safety Co-ordinator) at	_ (Location) that the Safety
Precautions identified in paragraph 1.2 have been not be issued at his Location for their removal un	
Signed (Request	ing Safety Co-ordinator)
at (time) on	(date)

<u>PART 2</u>

2.1 <u>CANCELLATION</u>

	(name of the Implementing Safety _ (Location) that the Safety Precautions set ed and accordingly the RISSP is cancelled.
Signed	(Requesting Safety Co-ordinator)
at (time) on	(date)

APPENDIX B - RISSP-I

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-I)

(Implementing Safety Co-ordinator's Record)

RISSP NUMBER _____

<u> PART 1</u>

1.1 <u>CIRCUIT IDENTIFICATION</u>

Safety Precautions have been established by the Implementing Safety Co-ordinator to achieve Safety From The System on the following HV Apparatus:

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

State the Location(s) at which isolation has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Isolation. For each point of Isolation state, the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other Safety Precautions applied, as appropriate.

(b) EARTHING

State the Location(s) at which Earthing has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Earthing. For each point of Earthing state, the means by which the Earthing has been achieved, and whether, immobilised and Locked, other Safety Precautions applied, as appropriate.

1.3 <u>ISSUE</u>

I confirmed to	(name of Requesting Safety Co-ordinator) at
(Location) that the Safety Precautions identified in paragraph
1.2 have been established	and that instructions will not be issued at my Location for
their removal until this RIS	SP is cancelled.

Signed (Implementing Safety Co-ordinator)

at (time) on (date)

<u>PART 2</u>

2.1 <u>CANCELLATION</u>

I have received confirmation from ______ (name of the Requesting Safety Co-ordinator) at ______ (Location) that the Safety Precautions set out in paragraph 1.2 are no longer required and accordingly the RISSP is cancelled.

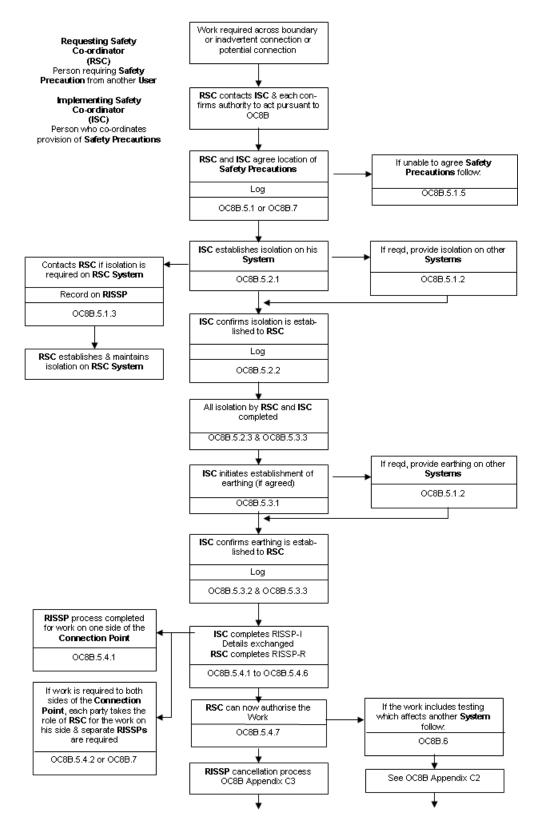
Signed (Implementing Safety Co-ordinator)

at (time) on (date)

(Note: This form to be of a different colour from RISSP-R.)

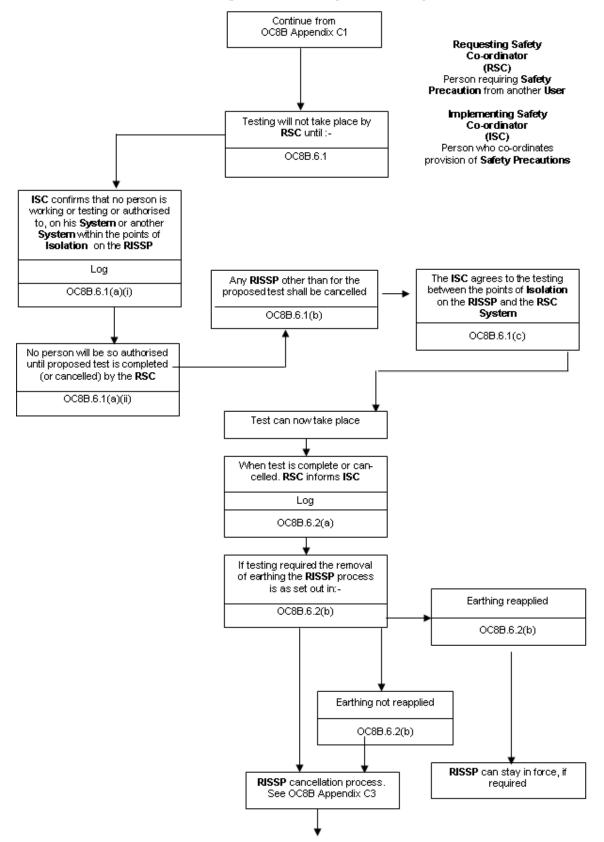
APPENDIX C - FLOWCHARTS

APPENDIX C1 - RISSP ISSUE PROCESS

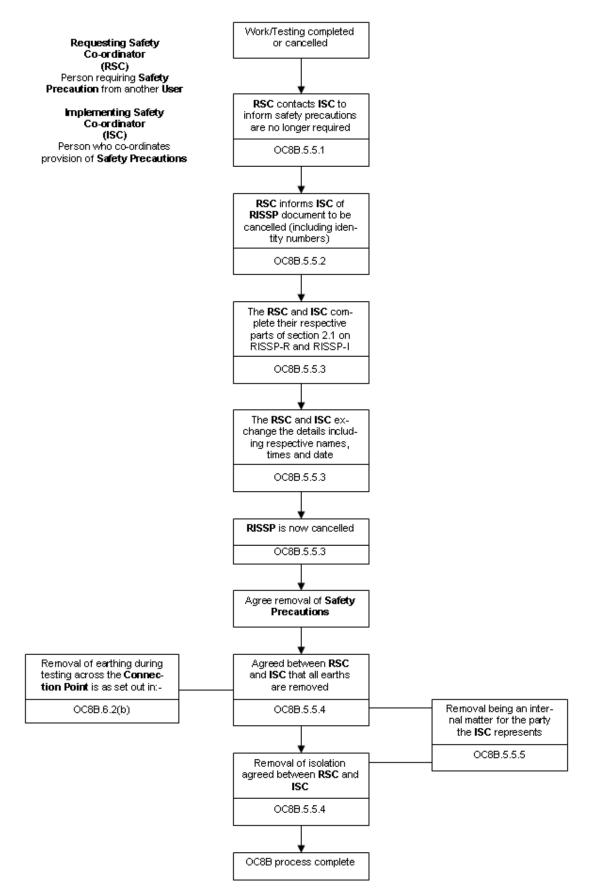


APPENDIX C2 - TESTING PROCESS

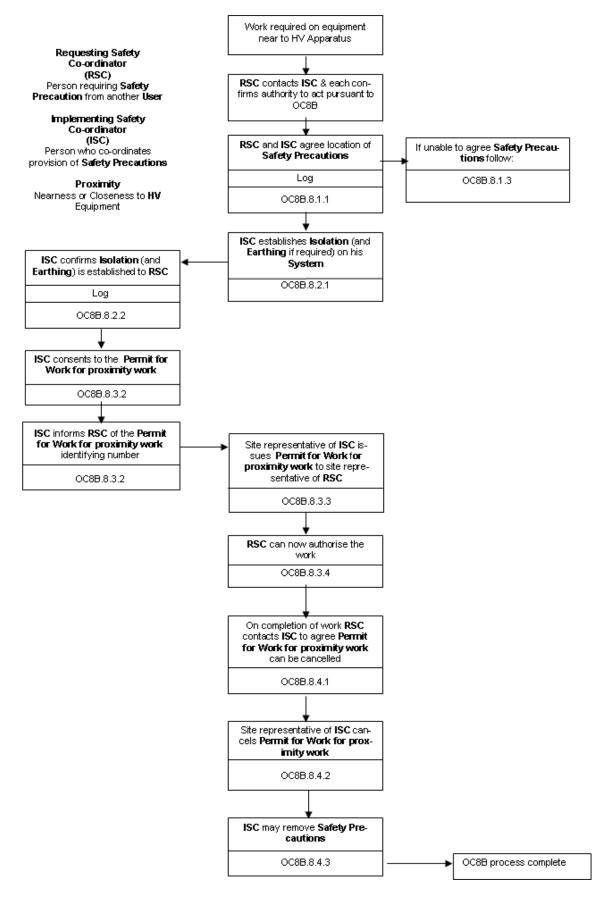
Where testing affects another Safety Co-ordinator's System



APPENDIX C3 - RISSP CANCELLATION PROCESS



APPENDIX C4 - PROCESS FOR WORKING NEAR TO SYSTEM EQUIPMENT



APPENDIX D - NOT USED

Not Used

APPENDIX E - FORM OF PERMIT TO WORK

Scottish & Southern Energy plc

PERMIT-TO-WORK No.

1.	ISSUE
То	
this Pe	lowing High Voltage Apparatus has been made safe in accordance with the Operational Safety Rules for the work detailed on rmit-to-Work to proceed:
	TREAT ALL OTHER APPARATUS AS LIVE
	Main Earths are applied at:
	precautions (see Operational Safety Rules 3.2.1(b), 4.6.2(c) and 5.5.3), and any special instructions:
The fol	lowing work is to be carried out:
 Circuit	Identification Issued: Colour No. of wristlets No. of step bolts
Name:	(print): Date: Date:

2. RECEIPT

I accept responsibility for carrying out the work on the Apparatus detailed on this Permit-to-Work, applying additional earths as necessary. No attempt will be made by me, or by the persons under my charge, to work on any other Apparatus.

Name: (print): Date: Date:

Circuit Identification Equipment Checked as above (Initials):

3. CLEARANCE

All persons under my	control have been withdraw	vn and warned that it is	no longer safe to work o	on the Apparatus of	letailed on this
Permit-to Work.					

All gear, tools and additional earths have/have not* been removed. The works is/is not* complete.

All circuit identification equipment issued as above has been returned

Name: (print): Date: Date:

* Delete where not applicable

4. CANCELLATION

This Permit-to-Work is cancelled.

Name: (print): Date: Date:

		KEY SAFE No.
1.	(i)	LOCATION
	(ii)	PLANT/APPARATUS IDENTIFICATION
	(iii)	WORK TO BE DONE
2.	(i)	PRECAUTIONS TAKEN TO ACHIEVE SAFETY FROM THE SYSTEM: State points at which Plant/Apparatus has been Isolated and specify position(s) of Earthing Devices applied. State actions taken to avoid Danger by draining, venting, purging and containment or dissipation of stored energy.
Cau	ution	Notices have been affixed to all points of isolation
	(ii)	FURTHER PRECAUTIONS TO BE TAKEN DURING THE COURSE OF WORK TO AVOID SYSTEM DERIVED HAZARDS
in S cert	Section tify that	infirmed with the Control Person(s) *
		nit for Work must only be transferred under the Personal Supervision of a Senior Authorised
		being a Senior Authorised Person . Time: Date:
Sig	neu .	Dellig a Sellor Autionseu Person. Time
3.	ISS	UE
(i) F	Key S	afe Key (No.)* (ii) Earthing Schedule* (iii) Portable Drain Earths (No. off)*
. ,		cted Person's Report (No.)* (v) Circuit Identification Flags (No. off)*
. ,		it Identification Wristlets (No. off)* and Colours/Symbols
Sig	ned	being the Senior Authorised Person responsible
		for the issue of this Permit for Work Time: Date:

4. RECEIPT

I understand and accept my responsibilities under the ScottishPower Safety Rules as recipient of this **Permit for Work** and acknowledge receipt of the items in Section 3.

Signed Name (Block Letters)

PART 1 PART 2 PART 3 Time +Person receiving reissued Senior Time Person Senior surrendering Authorised Document Authorised Date Date Document Person receiving Person Signature Name (Block suspended reissuing Letters) Document * document

TRANSFER RECORD

+Signature of Person receiving re-issued Document in accordance with conditions detailed in Section 4.

5. CLEARANCE: I certify that all persons working under this **Permit for Work** have been withdrawn from, and warned not to work on, the **Plant/Apparatus** in Section 1. All gears, tools, **Drain Earths** and loose material have been removed and guards and access doors have been replaced, except for:

Signedbeing the Competent Person responsible for			
	clearing this Permit for Work	Time Date	

*N/A if Not Applicable

< END OF OPERATING CODE NO. 8 APPENDIX 2 >

REVISIONS

(R)

(This section does not form part of the Grid Code)

- R.1 **NGET's Transmission Licence** sets out the way in which changes to the Grid Code are to be made and reference is also made to **NGET's** obligations under the General Conditions.
- R.2 All pages re-issued have the revision number on the lower left hand corner of the page and date of the revision on the lower right hand corner of the page.
- R.3 The Grid Code was introduced in March 1990 and the first issue was revised 31 times. In March 2001 the New Electricity Trading Arrangements were introduced and Issue 2 of the Grid Code was introduced which was revised 16 times. At British Electricity Trading and Transmission Arrangements (BETTA) Go-Active Issue 3 of the Grid Code was introduced and subsequently revised 35 times. At Offshore Go-active Issue 4 of the Grid Code was introduced and has been revised 13 times since its original publication. Issue 5 of the Grid Code was published to accommodate the changes made by Grid Code Modification A/10 which has incorporated the Generator compliance process into the Grid Code.
- R.4 This Revisions section provides a summary of the sections of the Grid Code changed by each revision to Issue 5.
- R.5 All enquiries in relation to revisions to the Grid Code, including revisions to Issues 1, 2, 3, 4 and 5 should be addressed to the Grid Code development team at the following email address:

Grid.Code@nationalgrid.com

Revision	Section	Related Modification	Effective Date
0	Glossary and Definitions	A/10 and G/11	17 August 2012
0	Planning Code – PC.2.1	G/11	17 August 2012
0	Planning Code – PC.5.4	G/11	17 August 2012
0	Planning Code – PC.8	G/11	17 August 2012
0	Planning Code – PC.8.2	G/11	17 August 2012
0	Planning Code – PC.A.1	G/11	17 August 2012
0	Planning Code – PC.A.2	A/10 and G/11	17 August 2012
0	Planning Code – PC.A.3	G/11	17 August 2012
0	Planning Code – PC.A.5	A/10 and G/11	17 August 2012
0	Compliance Processes	A/10	17 August 2012
0	Connection Conditions – CC.1.1	A/10	17 August 2012
0	Connection Conditions – CC.2.2	G/11	17 August 2012
0	Connection Conditions – CC.3.3	A/10	17 August 2012
0	Connection Conditions – CC.4.1	A/10	17 August 2012
0	Connection Conditions – CC.5.2	G/11	17 August 2012
0	Connection Conditions – CC.6.1	G/11	17 August 2012
0	Connection Conditions – CC.6.3	G/11	17 August 2012
0	Connection Conditions – CC.6.6	A/10	17 August 2012
0	Connection Conditions – CC.7.2	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	Connection Conditions – CC.7.4	G/11	17 August 2012
0	Connection Conditions – CC.A.1	G/11	17 August 2012
0	Connection Conditions – CC.A.2	G/11	17 August 2012
0	Connection Conditions – CC.A.3	G/11	17 August 2012
0	Connection Conditions – CC.A.4	G/11	17 August 2012
0	Connection Conditions – CC.A.6	A/10	17 August 2012
0	Connection Conditions – CC.A.7	A/10 and G/11	17 August 2012
0	Connection Conditions – Figure CC.A.3.1	G/11	17 August 2012
0	Operating Code No. 2 – OC2.4	G/11	17 August 2012
0	Operating Code No. 2 – OC2.A.1	G/11	17 August 2012
0	Operating Code No. 5 – OC5.3	A/10	17 August 2012
0	Operating Code No. 5 – OC5.5	A/10 and G/11	17 August 2012
0	Operating Code No. 5 – OC5.7	G/11	17 August 2012
0	Operating Code No. 5 – OC5.8	A/10 and G/11	17 August 2012
0	Operating Code No. 5 – OC5.A.1	A/10	17 August 2012
0	Operating Code No. 5 – OC5.A.2	A/10	17 August 2012
0	Operating Code No. 5 – OC5.A.3	A/10	17 August 2012
0	Operating Code No. 5 – OC5.A.4	A/10	17 August 2012
0	Operating Code No. 7 – OC7.4	G/11	17 August 2012
0	Operating Code No. 8 – OC8.2	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	Operating Code No. 8 – OC8A.1	G/11	17 August 2012
0	Operating Code No. 8 – OC8A.5	G/11	17 August 2012
0	Operating Code No. 8 – OC8B.1	G/11	17 August 2012
0	Operating Code No. 8 – OC8B.4	G/11	17 August 2012
0	Operating Code No. 8 – OC8B.5	G/11	17 August 2012
0	Operating Code No. 8 – OC8B Appendix E	G/11	17 August 2012
0	Operating Code No. 9 – OC9.2	G/11	17 August 2012
0	Operating Code No. 9 – OC9.4	G/11	17 August 2012
0	Operating Code No. 9 – OC9.5	G/11	17 August 2012
0	Operating Code No. 12 – OC12.3	G/11	17 August 2012
0	Operating Code No. 12 – OC12.4	G/11	17 August 2012
0	Balancing Code No. 1 – BC1.5	G/11	17 August 2012
0	Balancing Code No. 1 – BC1.8	G/11	17 August 2012
0	Balancing Code No. 1 – BC1.A.1	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.5	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.8	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.A.2	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.A.3	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.A.4	G/11	17 August 2012
0	Balancing Code No. 3 – BC3.5	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	Balancing Code No. 3 – BC3.7	G/11	17 August 2012
0	Data Registration Code – DRC.1.5	G/11	17 August 2012
0	Data Registration Code – DRC.4.2	G/11	17 August 2012
0	Data Registration Code – DRC.4.4	G/11	17 August 2012
0	Data Registration Code – DRC.5.2	A/10 and G/11	17 August 2012
0	Data Registration Code – DRC.5.5	G/11	17 August 2012
0	Data Registration Code – DRC.6.1	A/10 and G/11	17 August 2012
0	Data Registration Code – DRC.6.2	A/10	17 August 2012
0	Data Registration Code – Schedule 1	A/10 and G/11	17 August 2012
0	Data Registration Code – Schedule 2	G/11	17 August 2012
0	Data Registration Code – Schedule 3	G/11	17 August 2012
0	Data Registration Code – Schedule 4	G/11	17 August 2012
0	Data Registration Code – Schedule 5	G/11	17 August 2012
0	Data Registration Code – Schedule 10	G/11	17 August 2012
0	Data Registration Code – Schedule 12A	G/11	17 August 2012
0	Data Registration Code – Schedule 14	A/10 and G/11	17 August 2012
0	Data Registration Code – Schedule 15	G/11	17 August 2012
0	Data Registration Code – Schedule 19	A/10	17 August 2012
0	General Conditions – GC.4	G/11	17 August 2012
0	General Conditions – GC.12	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	General Conditions – GC.15	G/11	17 August 2012
0	General Conditions – GC.A1	G/11	17 August 2012
0	General Conditions – GC.A2	G/11	17 August 2012
0	General Conditions – GC.A3	G/11	17 August 2012
1	Operating Code No. 8 – OC8A.5.3.4	C/12	6 November 2012
1	Operating Code No. 8 – OC8B.5.3.4	C/12	6 November 2012

< END OF REVISIONS >