

Grid Code Review Group
Management of 'No system Connections'

Executive Summary

When equipment on a third parties system is not substantially built and cannot provide any Isolation / earthing, there is no method of recording the fact that there is a 'No system connection' on a Record of Inter-System Safety Precautions (RISSP) form.

It is proposed to define the term 'No System connection' in the Glossary and Definitions of the Grid Code and amend the Grid Code OC8A 5.4 and appendix A (RISSP Proforma) to include a facility for the recording of a 'No system connection'

Recommendation

Grid Code Review Panel members are invited to consider the proposed changes to Grid Code Glossary and Definitions, OC8A and OC8B at the GCRP meeting on 24th November 2005. Having taken account of any comments received at the meeting National Grid then intends to carry out a short industry consultation on the proposed changes.

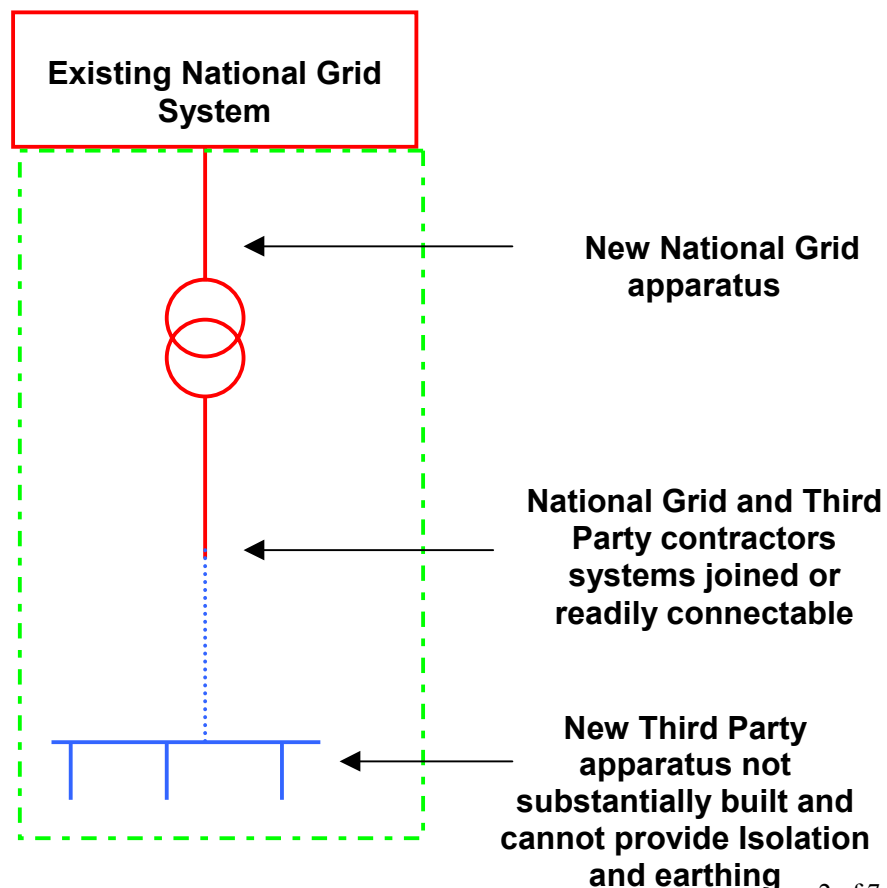
Grid Code Management of 'No system Connections'

Introduction

1. This paper has been prepared to discuss the issues involved when new apparatus is not substantially built and unable to provide Isolation and earthing to another party across a control boundary. The paper will outline the problems with the present situation and offer suggested solutions.

Problem overview

2. The example below shows National Grid and Third party contractors apparatus joined or defined as readily connectable prior to it being declared as part of the system. The Third party's apparatus is not substantially built.
3. The Grid Code OC8 Safety Co-ordination defines the method of establishing and maintaining safety across control boundaries. The RISSP process records the isolation and earthing established for another party.
4. As the Third Parties apparatus is not substantially built there is no means of providing any isolation / earthing to National Grid. As there is no other method, the current RISSP process has been used to record a "no system connection" when another party has equipment, which has not been substantially built. The current RISSP process does not formally recognise a "no system connection".



Potential solutions

5. To formally recognise the term 'No System Connection', there will be a requirement to:
 - (a) Include the term in the Glossary and Definitions (G&D) of the Grid Code (See [appendix 3](#))
 - (b) Amend Grid Code OC8A 5.4 and appendix A (RISSP Proforma) to include a facility for the recording of a 'No system connection' (see [appendix 1](#) & [appendix 2](#))
6. This will formally recognise the use of section 1.2 of the RISSP form to manage situations where there is a 'No system connection' across a control boundary.

Appendix 1

[NGET] OC8A - APPENDIX A [] 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.] Where there is no potential in feed on the Implementing Safety Co-ordinator's System, a statement shall be recorded that there is No System Connection, quoting Operation Diagram numbers.

(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

I have received confirmation from _____ (name of **Implementing Safety Coordinator**) 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 Co-ordinator**)
at(time) on (Date)

PART 2
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**)
at(time) on (Date)

EXTRACT FROM OC8A - Based on Issue 3 Rev 12 of the Grid Code.

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 **NGET** 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 **NGET** and the **User**, with each **Safety Co-ordinator** issuing one **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-The Implementing Safety Co-ordinator shall then contact the Requesting Safety Co-ordinator to pass on these details. Where there is no means of providing any isolation on the implementing party's system, due to there being no system connection on the implementing party's system, the Implementing Safety Co-ordinator shall record a 'No system connection' in part 1.2(a) of a RISSP-I form.
- 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 Co-ordinator** 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.

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 Transmission Licensee** or that **User**, as the case may be.

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

EXTRACT FROM OC8B - Based on Issue 3 Rev 12 of the Grid Code.

- 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.5.4 **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 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 Transmission Licensee** and the **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~~The Implementing Safety Co-ordinator shall then contact the **Requesting Safety Co-ordinator** to pass on these details. Where there is no means of providing any Isolation on the Implementing party's system, due to there being no system

connection on the implementing party's system, the Implementing Safety Co-ordinator shall record a 'No system connection' in part 1.2(a) of a RISSP-I form.

GLOSSARY AND DEFINITIONS ADITION

No System Connection

An **Implementing Safety Co-ordinators System** which is not connected, and will not be connected to a common source of electrical energy / **System** from the **Implementing Safety Co-ordinators System**. There will be no requirement to earth against this point.