



**National Grid**

**A REPORT TO THE AUTHORITY**

**Pursuant to Paragraph 2 of Condition 7 of the  
Transmission Licence.**

**Proposed Changes to Grid Code OC8 –  
Safety Co-ordination for work near to HV Apparatus  
in substations**

**The purpose of this document is to assist the Authority in its  
decision of whether to implement the proposed  
Grid Code Modification**

Consultation Paper Ref	E/02
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Prepared by	National Grid

## DISTRIBUTION

Name	Organisation
Authority	Ofgem
Grid Code Review Panel Members	Various
National Grid Industry Information Website	

1. Paragraph 2 of Condition 7 of the Transmission Licence granted to National Grid Company plc ("National Grid") provides that National Grid shall, in consultation with authorised electricity operators liable to be materially affected thereby, periodically review the Grid Code and its implementation. That paragraph also requires National Grid, following such review, to send to the Authority:-
  - (a) a report on the outcome of such review;
  - (b) any proposed revisions to the Grid Code as National Grid (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives set out in sub-paragraph (b) of Condition 7 of the Transmission Licence; and
  - (c) any written representations or objections from authorised electricity operators (including any proposals by such operators for revisions to the Grid Code not accepted by National Grid in the course of the review) arising during the consultation process and subsequently maintained.
2. National Grid has just completed a review of the Grid Code. This review relates to proposed changes to the Grid Code OC8 – Safety Co-ordination to incorporate provisions to deal with working **near to** (in addition to working on) HV Apparatus in substations. Attached as Appendix A are the proposed revisions to the current Grid Code OC8 and Glossary and Definitions (shown in typed form with the deletions crossed through and additions double underlined).
3. The proposed changes to the Grid Code were discussed at the Grid Code Review Panel on 5<sup>th</sup> September 2002 and it was agreed that National Grid should issue a Consultation Paper. National Grid has not identified any consequential changes required to the BSC and CUSC.
4. National Grid, in accordance with its obligations under its Transmission Licence, consulted those authorised electricity operators listed in Appendix C by circulating to them Consultation Paper E/02, which was dated 14<sup>th</sup> October 2002 and which contained the proposed amendments to the Grid Code. A copy of Consultation Paper E/02 is attached to this Report as Appendix B. National Grid also placed a copy of the Consultation Paper on its website to ensure its wide availability.
5. Comments were invited from all such authorised electricity operators by 8<sup>th</sup> November 2002. National Grid received responses from 8 authorised electricity operators. 4 respondents identified some concerns with the processes described in the proposed Grid Code changes. National Grid has replied to each of the respondents and discussed/clarified the concerns raised with them. As a result there are no outstanding objections to the proposals. Where changes to the original proposals have been identified as a result of such discussions these are indicated in the Appendix by a vertical line in the right hand margin.
6. The proposed revisions to the Grid Code are, as indicated above, set out in Appendix A to this Report. By way of summary, the proposed changes are described below :-

## Background

- 6.1 Grid Code OC8 is concerned with the co-ordination of Isolation and Earthing utilising Safety Co-ordinators in relation to each Connection Point. OC8 currently deals with this co-ordination when work is being carried out on the System of NGC or a User and Isolation and/or Earthing is consequently needed on the other's System. OC8 regulates how National Grid and Users, through the Safety Co-ordinators manage safety across boundaries when working on electrical equipment.
- 6.2 The Grid Code does not currently give any guidance on how work **near to** other's equipment **within** the Connection Site shall be managed. It gives no guidance on how Users or National Grid at a Connection Site request and manage Safety Precautions when those Safety Precautions are required for work close to but not on the other's equipment. The changes proposed which were the subject of Consultation Paper E/02 seek to include the situation where work is to be undertaken **near to** overhead/underground conductors of another's System **within** a Connection Site, in relation to the Connection Point. They also cover a situation where work is to be undertaken near to a person's own circuit.

## The Proposed Changes

- 6.3 It is proposed that a new defined term **Permit for Work for proximity work** should be added to the Glossary and Definitions. In addition there would need to be some consequential changes to references to OC8 in the Glossary and Definitions.
- 6.4 A new section, OC8.8, is proposed to deal with working near to a System, which contains the provisions to reflect the process to issue a **Permit For Work for proximity work**.
- 6.5 In support of this, a new paragraph is proposed for the Introduction section (OC8.1.2), and to ensure that defined terms which are included in OC8 structurally fit in with the new section, it is proposed that the paragraph dealing with the term 'Safety Precautions' is moved to OC8.1.5.3 from OC8.5.1.
- 6.7 The Objective section (OC8.2) is proposed to be amended to reflect the new process, and various consequential changes made throughout OC8, including to reflect paragraph renumbering and references. OC8.8 is based, structurally, on the process for the RISSP provisions, written to define the conditions required for the Permit for Work for proximity work. The 'System' being referred to on which Safety Precautions have been implemented is the Implementing Safety Co-ordinator's, as opposed to the Requesting Safety Co-ordinator's in the case of the RISSP provisions, reflecting that the Requesting Safety Co-ordinator's 'System' is not involved.
- 6.8 A small change is proposed for OC8.1.1 and OC8.2.1 to reflect work being undertaken near to a person's own circuit.

7. As indicated above, having regard to the outcome of the review described in this Report, National Grid proposes the revisions to the Grid Code set out in Appendix A, which revisions we reasonably think fit for the achievement of the objectives referred to in sub-paragraph (b) of paragraph 1 of Condition 7 of the Transmission Licence. In view of this, National Grid would be grateful if the Authority would approve the revisions pursuant to paragraph 3 of Condition 7 of the Transmission Licence.
  
8. Given the logistic exercise of organising replacement pages to reflect the changes required by your letter of approval, I would be grateful if you would contact me prior to issuing any letter specifying an effective date, in order to seek to ensure that the date is consistent with any other Code changes which may then be approved or be close to being approved.

SIGNED BY

For and on behalf of National Grid Company plc  
13<sup>th</sup> June 2003



## Appendix A

### Extract from Glossary and Definitions - OC8 Related Definitions

#### Isolation

The disconnection of **HV Apparatus** (as defined in [OC8.1.4.2](#) [OC8.1.5.2](#)) from the remainder of the **System** in which that **HV 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 retained in safe custody; or
  - (ii) maintained and/or secured by such other method which must be in accordance with the **Local Safety Instructions** of **NGC** or the **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 **NGC** or the **User**, as the case may be.

#### Permit for Work for proximity work

A document issued by **NGC** or a **User** in accordance with its respective **Safety Rules** to enable work to be carried out in accordance with **OC8.8** and which provides for **Safety Precautions** to be applied and maintained. An example format of **NGC**'s permit for work is attached as [Appendix E to OC8](#).

#### Point of Isolation

The point on **Apparatus** (as defined in [OC8.1.4.2](#) [OC8.1.5.2](#)) at which **Isolation** is achieved.

#### Safety Co-ordinator

A person or persons nominated by **NGC** and each **User** to be responsible for the co-ordination of **Safety Precautions** at each **Connection Point** when work (which includes testing) is to be carried out on a **System** which necessitates the provision of **Safety Precautions** on **HV Apparatus** (as defined in [OC8.1.4.2](#) [OC8.1.5.2](#)), pursuant to **OC8**.

#### Safety From The System

That condition which safeguards persons when work is to be carried out on or near a **System** from the dangers which are inherent in the **System**.



# OPERATING CODE NO.8

## SAFETY CO-ORDINATION

### CONTENTS

(This contents page does not form part of the Grid Code)

Paragraph No/Title	
OC8.1	INTRODUCTION.....
OC8.2	OBJECTIVE .....
OC8.3	SCOPE .....
OC8.4	PROCEDURE.....
OC8.4.1	Approval of Local Safety Instructions .....
OC8.4.2	Safety Co-ordinators.....
OC8.4.3	RISSP .....
OC8.5	SAFETY PRECAUTIONS ON HV APPARATUS.....
OC8.5.1	<u>Agreement of</u> Safety Precautions.....
OC8.5.2	<u>Implementation of Isolation</u> <del>Agreement of Safety Precautions</del> .....
OC8.5.3	Implementation of <u>Earthing Isolation</u> .....
OC8.5.4	<u>RISSP Issue Procedure</u> <del>Implementation of Earthing</del> .....
OC8.5.5	RISSP <u>Cancellation Issue</u> Procedure .....
OC8.5.6	RISSP <del>Cancellation Procedure</del> OC8.5.7 <del>RISSP</del> Change Control.....
OC8.6	TESTING AFFECTING ANOTHER SAFETY CO-ORDINATOR'S SYSTEM.....
OC8.7	<u>EMERGENCY SITUATIONS</u> .....
OC8.8	<u>SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV SYSTEM</u> .....
OC8.8.1	<u>Agreement of Safety Precautions</u> .....
OC8.8.2	<u>Implementation of Isolation and Earthing</u> .....
OC8.8.3	<u>Permit for Work for proximity work Issue Procedure</u> .....
OC8.8.4	<u>Permit for Work for proximity work Cancellation Procedure</u> .....
OC8.9	LOSS OF INTEGRITY OF SAFETY PRECAUTIONS .....
OC8.10	<del>8.8</del> SAFETY LOG .....
APPENDIX A	– RISSP-R.....
APPENDIX B	– RISSP-I.....
APPENDIX C	– FLOWCHARTS.....
APPENDIX D	– NGSC.....
APPENDIX E	– <u>Form of NGC Permit for Work</u> .....

## OPERATING CODE NO.8

### SAFETY CO-ORDINATION

#### OC8.1 INTRODUCTION

OC8.1.1 Operating Code No.8 ("**OC8**") specifies the standard procedures to be used by **NGC** and **Users** for the co-ordination, establishment and maintenance of necessary **Safety Precautions** when work is to be carried out on or near the **System** of **NGC** or a **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. In this **OC8** the term "work" includes testing, other than **System Tests** which are covered by **OC12**.

OC8.1.2 OC8 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 User's Site or a NGC Site (as the case may be) on equipment of the User or NGC as the case may be where the work or equipment is near to HV Apparatus on the Implementing Safety Co-ordinator's System

OC8.1.3 **OC8** does not apply to the situation where **Safety Precautions** need to be agreed solely between **Users**.

~~OC8.1.3~~OC8.1.4 **OC8** does not seek to impose a particular set of **Safety Rules** on **NGC** and **Users**; the **Safety Rules** to be adopted and used by **NGC** and each **User** shall be those chosen by each.

~~OC8.1.4~~OC8.1.5 Defined terms

~~OC8.1.4.1~~OC8.1.5.1 **Users** should bear in mind that in **OC8** only, in order that **OC8** reads more easily with the terminology used in **NGC's** and certain **Users' Safety Rules**, the term "**HV Apparatus**" is defined more restrictively and is used accordingly in **OC8**. **Users** should, therefore, exercise caution in relation to this term when reading and using **OC8**.

~~OC8.1.4.2~~OC8.1.5.2 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 retained in safe custody; or

- (ii) maintained and/or secured by such other method which must be in accordance with the **Local Safety Instructions** of **NGC** or that **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 **NGC** or that **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.
- (3) "**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~~ **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 retained 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 **NGC** or that **User** as the case may be.

OC8.1.5.3 For the purpose of the co-ordination of safety relating to HV Apparatus the term "Safety Precautions" means Isolation and/or Earthing.

## OC8.2 OBJECTIVE

OC8.2.1 The objective of **OC8** is to achieve:-

- (i) **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 **User's Site** or a **NGC Site** (as the case may be) on equipment of the **User** or **NGC** where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**

OC8.2.2 A flow chart, set out in Appendix C, illustrates the process utilised in **OC8** to achieve the objective set out in OC8.2.1. In the case of a conflict between the flow chart and the provisions of the written text of **OC8**, the written text will prevail.

## OC8.3 SCOPE

OC8.3.1 **OC8** applies to **NGC** and to **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 **NGC** with **Externally Interconnected System Operators** are set out in **Interconnection Agreements** with each **Externally Interconnected System Operator**.

## OC8.4 PROCEDURE

### OC8.4.1 Approval of Local Safety Instructions

- OC8.4.1.1 (a) In accordance with the timing requirements of its **Bilateral Agreement**, each **User** will supply to **NGC** 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**, **NGC** will supply to each **User** a copy of its **Local Safety Instructions** relating to the **NGC** side of the **Connection Point** at each **Connection Site**.
- (c) Prior to connection each party must have approved the other's relevant **Local Safety Instructions** in relation to **Isolation** and **Earthing**.

OC8.4.1.2 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.

OC8.4.1.3 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 OC8.4.1.2 apply.

### OC8.4.2 Safety Co-ordinators

OC8.4.2.1 For each **Connection Point**, **NGC** and each **User** will at all times have nominated and available 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 **OC8**. A **Safety Co-ordinator** may be responsible for the co-ordination of safety on **HV Apparatus** at more than one **Connection Point**.

OC8.4.2.2 Each **Safety Co-ordinator** shall be authorised by **NGC** or a **User**, as the case may be, as competent to carry out the functions set out in **OC8** to achieve **Safety From The System**. Confirmation from **NGC** or a **User**, as the case may be, that its **Safety Co-ordinator(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 **OC8**.

OC8.4.2.3 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 **OC8**.

OC8.4.2.4 If work is to be carried out on a **System** or on equipment of **NGC** or a **User** near to a **System** as provided in this **OC8**, which necessitates the provision of **Safety Precautions** on **HV Apparatus** in accordance with the provisions of **OC8**, 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**.

- OC8.4.3 **RISSP**
- OC8.4.3.1 **OC8** sets out the procedures for utilising the **Record of Inter-System Safety Precautions ("RISSP")**, which will be used except where dealing with equipment in proximity to the other's System as provided in OC8.8. Sections OC8.4 to OC8.7 inclusive should be read accordingly.
- OC8.4.3.2 **NGC** will use the format of the **RISSP** forms set out in Appendix A and Appendix B to **OC8**. That set out in Appendix A and designated as "RISSP-R", shall be used when **NGC** is the **Requesting Safety Co-ordinator**, and that in Appendix B and designated as "RISSP-I", shall be used when **NGC** is the **Implementing Safety Co-ordinator**. Proformas of RISSP-R and RISSP-I will be provided for use by **NGC** staff.
- OC8.4.3.3 (a) **Users** may either adopt the format referred to in OC8.4.3.2, 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 **Users** adopt the format referred to in OC8.4.3.2, or use the equivalent format as above, the format may be produced and held in, and retrieved from an electronic form by the **User**.
- (c) Whichever method **Users** choose, each must provide proformas (whether in tangible or electronic form) for use by its staff.
- OC8.4.3.4 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 **User**.
- OC8.4.3.5 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 **User** or **NGC**, as the case may be) serial number consisting of four digits and the suffix "R"
- OC8.4.3.6 (a) In accordance with the timing requirements set out in CC.5.2 each **User** shall apply in writing to **NGC** for **NGC's** approval of its proposed prefix.
- (b) **NGC** shall consider the proposed prefix to see if it is the same as (or confusingly similar to) a prefix used by **NGC** or another **User** and shall, as soon as possible (and in any event within ten days), respond in writing to the **User** with its approval or disapproval.
- (c) If **NGC** disapproves, it shall explain in its response why it has disapproved and will suggest an alternative prefix.
- (d) If **NGC** has disapproved, then the **User** shall either notify **NGC** in writing of its acceptance of the suggested alternative prefix or it shall apply in writing to **NGC** with revised proposals and the above procedure shall apply to that application.
- OC8.4.3.7 The prefix allocation will be periodically circulated by **NGC** to all **Users**, for information purposes, using a National Grid Safety Circular in the form set out in Appendix D.

## OC8.5 **SAFETY PRECAUTIONS ON HV APPARATUS**

### ~~OC8.5.1~~ **Safety Precautions**

~~For the purpose of the co-ordination of safety relating to HV Apparatus the term "Safety Precautions" means Isolation and/or Earthing.~~

## OC8.5.2OC8.5.1 Agreement of Safety Precautions

OC8.5.2.1OC8.5.1.1 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**.

OC8.5.2.2OC8.5.1.2 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 OC8.5.2.2OC8.5.1.2 shall not include the **Requesting Safety Co-ordinator's System** which is dealt with in OC8.5.2.3-OC8.5.1.3.

OC8.5.2.3OC8.5.1.3 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**.

### OC8.5.2.4OC8.5.1.4 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**.

## OC8.5.3OC8.5.2 Implementation of Isolation

OC8.5.3.1OC8.5.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8.5.2OC8.5.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation**.

OC8.5.3.2OC8.5.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** 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 or by an adequate physical separation;
- (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** that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** will be retained in safe custody; or

- (ii) maintained and/or secured by such other method which must be in accordance with the **Local Safety Instructions** of **NGC** or that **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 **NGC** or that **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.

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

~~OC8.5.3.3~~OC8.5.2.3 Following the confirmation of **Isolation** being established by the **Implementing Safety Co-ordinator** and the necessary establishment of relevant **Isolation** on the **Requesting Safety Co-ordinators System**, the **Requesting Safety Co-ordinator** may then request the implementation of **Earthing** by the **Implementing Safety Co-ordinator**, if agreed in section ~~OC8.5.2~~OC8.5.1

~~OC8.5.4~~OC8.5.3 **Implementation of Earthing**

~~OC8.5.4.1~~OC8.5.3.1 The **Implementing Safety Co-ordinator** shall then establish the agreed **Earthing**.

~~OC8.5.4.2~~OC8.5.3.2 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~~**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** will be retained 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 **NGC** or that **User**, as the case may be.

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

~~OC8.5.4.3~~OC8.5.3.3 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**.

~~OC8.5.5~~OC8.5.4 **RISSP Issue Procedure**

~~OC8.5.5.1~~OC8.5.4.1 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.

~~OC8.5.5.2~~OC8.5.4.2 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 **NGC** 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 **NGC** and the **User**, with each **Safety Co-ordinator** issuing one **RISSP** number.

~~OC8.5.5.3~~OC8.5.4.3 Once the **Safety Precautions** have been established (in accordance with ~~OC8.5.3 and OC8.5.4~~, OC8.5.2 and OC8.5.3), the **Implementing Safety Co-ordinator** shall complete parts 1.1 and 1.2 of a RISSP-I form recording the details specified in ~~OC8.5.2.3, OC8.5.3.2 and OC8.5.4.2~~, OC8.5.1.3, OC8.5.2.2 and OC8.5.3.2. 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.

~~OC8.5.5.4~~OC8.5.4.4 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.

~~OC8.5.5.5~~OC8.5.4.5 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.

~~OC8.5.5.6~~OC8.5.4.6 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.

~~OC8.5.5.7~~OC8.5.4.7 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 OC8.6 shall be implemented.

#### ~~OC8.5.6~~OC8.5.5 RISSP Cancellation Procedure

~~OC8.5.6.1~~OC8.5.5.1 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**.

~~OC8.5.6.2~~OC8.5.5.2 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.

~~OC8.5.6.3~~OC8.5.5.3 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 ~~OC8.5.6.4 and OC8.5.6.5~~, OC8.5.5.4 and OC8.5.5.5.

~~OC8.5.6.4~~OC8.5.5.4 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**.

~~OC8.5.6.5~~OC8.5.5.5 Subject to the provisions in ~~OC8.5.6.4~~, OC8.5.5.4, 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. The only situation in which any **Safety Precautions** may be removed without first cancelling the **RISSP** in accordance with ~~OC8.5.6 or OC8.5.7~~OC8.5.5 or OC8.5.6 is when **Earthing** is removed in the situation envisaged in OC8.6.2(b).

#### ~~OC8.5.7~~OC8.5.6 **RISSP Change Control**

Nothing in this OC8 prevents **NGC** and **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.

### OC8.6 **TESTING AFFECTING ANOTHER SAFETY CO-ORDINATOR'S SYSTEM**

OC8.6.1 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 OC8.6 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 ~~OC8.5.6;~~OC8.5.5;
- (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**.

- OC8.6.2
- (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 ~~OC8.5.6 or OC8.5.7~~OC8.5.5 or OC8.5.6. 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 OC8.6.2.

## OC8.7 EMERGENCY SITUATIONS

- OC8.7.1 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 **NGC Transmission System** and a **User's System**, for example resulting from an incident where one line becomes attached or unacceptably close to another.
- OC8.7.2 In those circumstances, if both **NGC** and the respective **User** agree, the relevant provisions of OC8.5 will apply as if the electrical connections or potential connections were, solely for the purposes of this OC8, a **Connection Point**.
- OC8.7.3
- (a) The relevant **Safety Co-ordinator** shall be that for the electrically closest existing **Connection Point** to that **User's System** or such other local **Connection Point** as may be agreed between **NGC** and the **User**, with discussions taking place between the relevant local **Safety Co-ordinators**. The **Connection Point** to be used shall be known in this OC8.7.3 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**.

## OC8.8 SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV SYSTEM

OC8.8 applies to the situation where work is to be carried out at a **User's Site** or a **NGC Site** (as the case may be) on equipment of the **User** or **NGC** 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 OC8 applies. In this part of OC8, a **Permit for Work for proximity work** is to be used, rather than the usual **RISSP** procedure, given the nature and effect of the work, all as further provided in the OC8.8.

### OC8.8.1 Agreement of **Safety Precautions**

OC8.8.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** when work is to be carried out at a **User's Site** or a **NGC Site** (as the case may be) on equipment of the **User** or **NGC**, 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**.

OC8.8.1.2 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 **User's Site** or a **NGC 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 OC.8.8.1.2 shall not include the Requesting Safety Co-ordinator's System

OC8.8.1.3 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.

OC8.8.2 Implementation of Isolation and Earthing

OC8.8.2.1 Following the agreement of the Safety Precautions in accordance with OC8.8.1 the Implementing Safety Co-ordinator shall then establish the agreed Isolation and (if required) Earthing.

OC8.8.2.2 The Implementing Safety Co-ordinator shall confirm to the Requesting Safety Co-ordinator that the agreed Isolation and (if required) Earthing has been established.

OC8.8.2.3 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.

OC8.8.3 Permit for Work for proximity work Issue Procedure

OC8.8.3.1 Where Safety Precautions on another System(s) are being provided to enable work to be carried out at a User's Site or NGC 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 work shall identify the Implementing Safety Co-ordinator's HV Apparatus in proximity to the required work

OC8.8.3.2 Once the Safety Precautions have been established (in accordance with OC8.8.2), 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.

OC8.8.3.3 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.

OC8.8.3.4 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.

OC8.8.4 Permit for Work for proximity work Cancellation Procedure

~~OC8.8.4.1~~ 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**.

~~OC8.8.4.2~~ 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**.

~~OC8.8.4.3~~ 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.

## ~~OC8.8~~~~OC8.9~~ **LOSS OF INTEGRITY OF SAFETY PRECAUTIONS**

~~OC8.8.1~~~~OC8.9.1~~ 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.

## ~~OC8.9~~~~OC8.10~~ **SAFETY LOG**

~~OC8.9.1~~~~OC8.10.1~~ **NGC** and **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 one year.

## **OC8 - APPENDIX A**

[Not shown in this report to the Authority]

## **OC8 - APPENDIX B**

[Not shown in this report to the Authority]

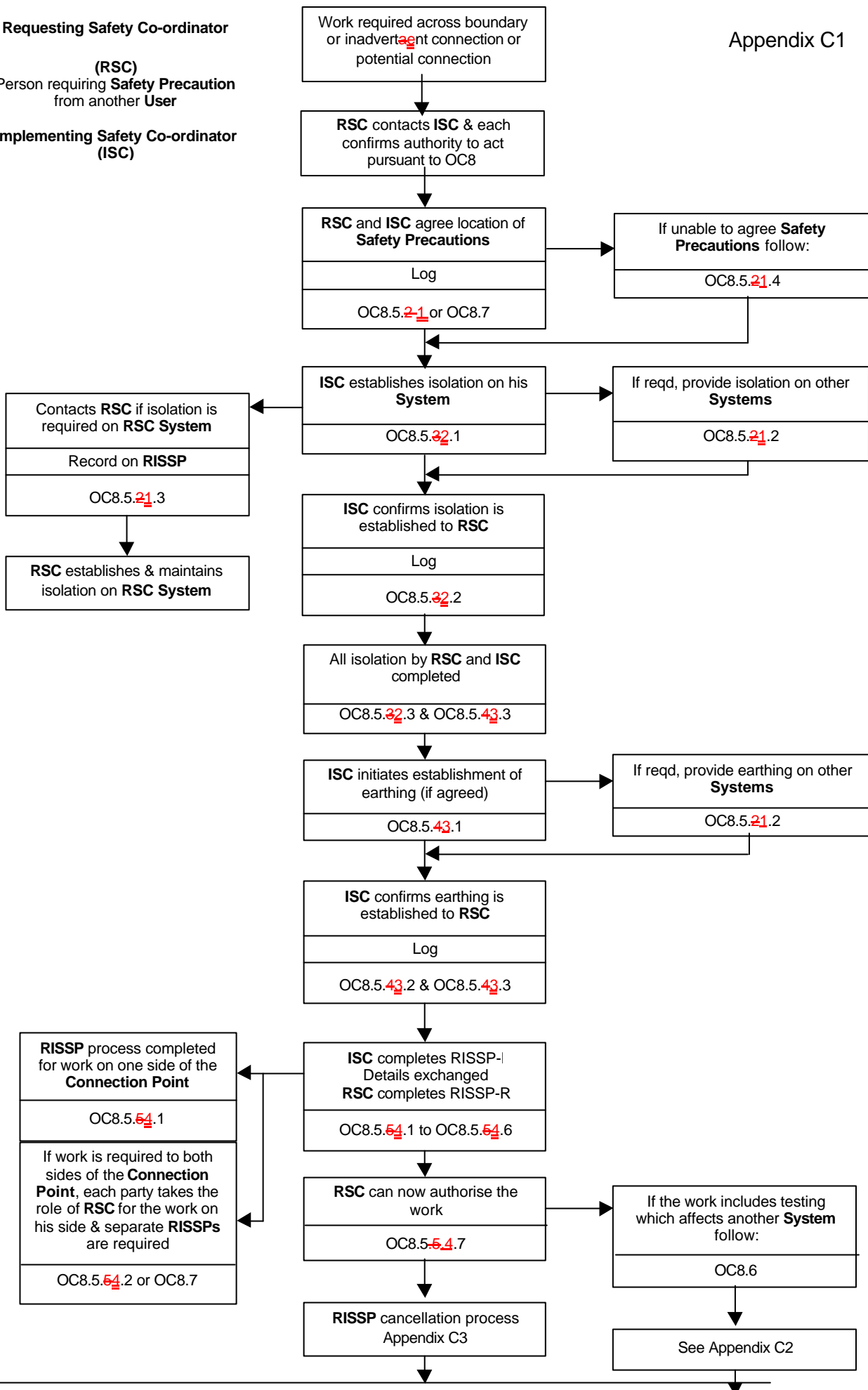
**RISSP ISSUE PROCESS**

- OC8 -

Appendix C1

**Requesting Safety Co-ordinator  
(RSC)**  
Person requiring **Safety Precaution**  
from another **User**

**Implementing Safety Co-ordinator  
(ISC)**



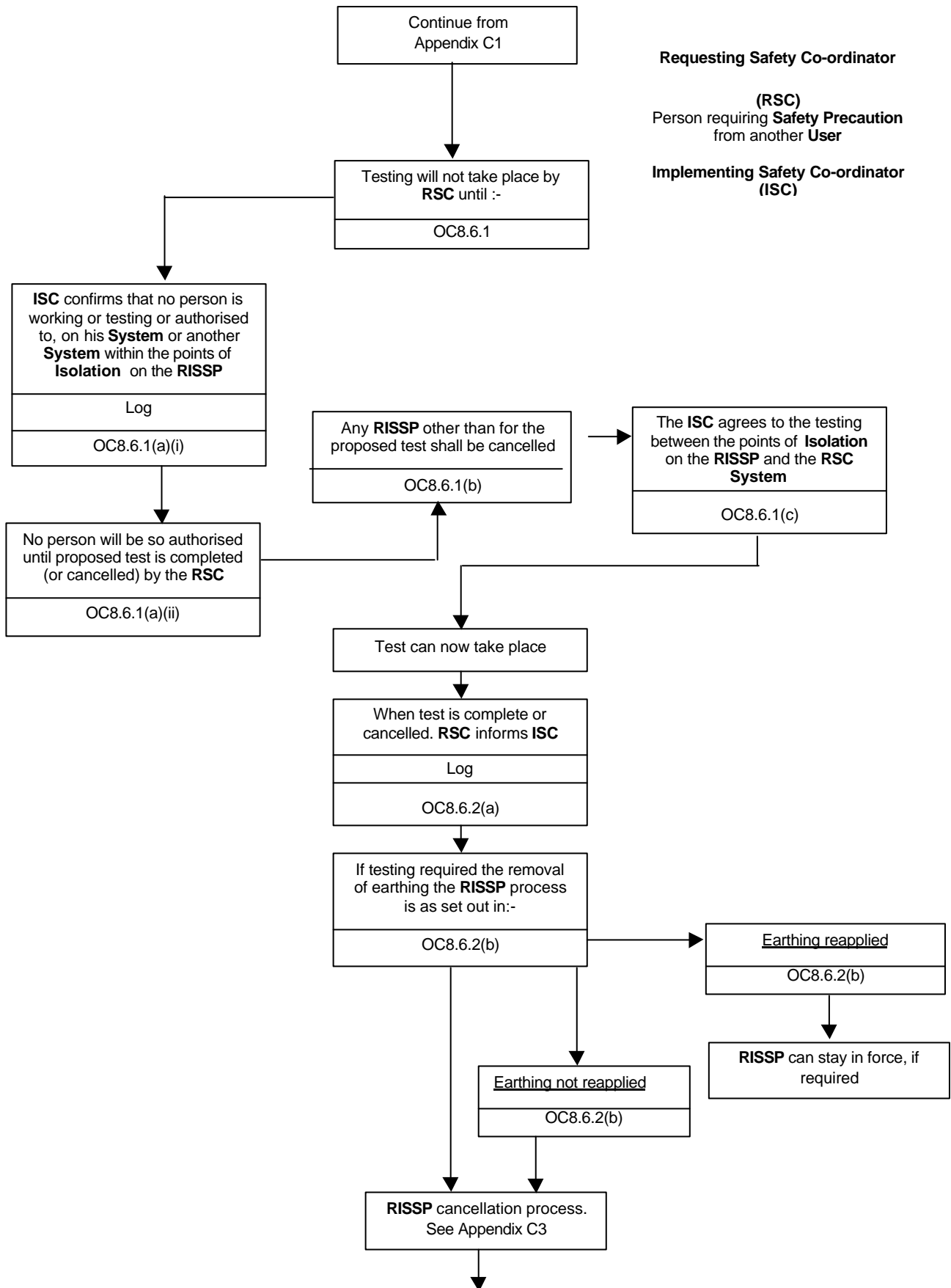


# TESTING PROCESS

- OC8 -

## Where testing affects another Safety Co-ordinator's System

Appendix C2



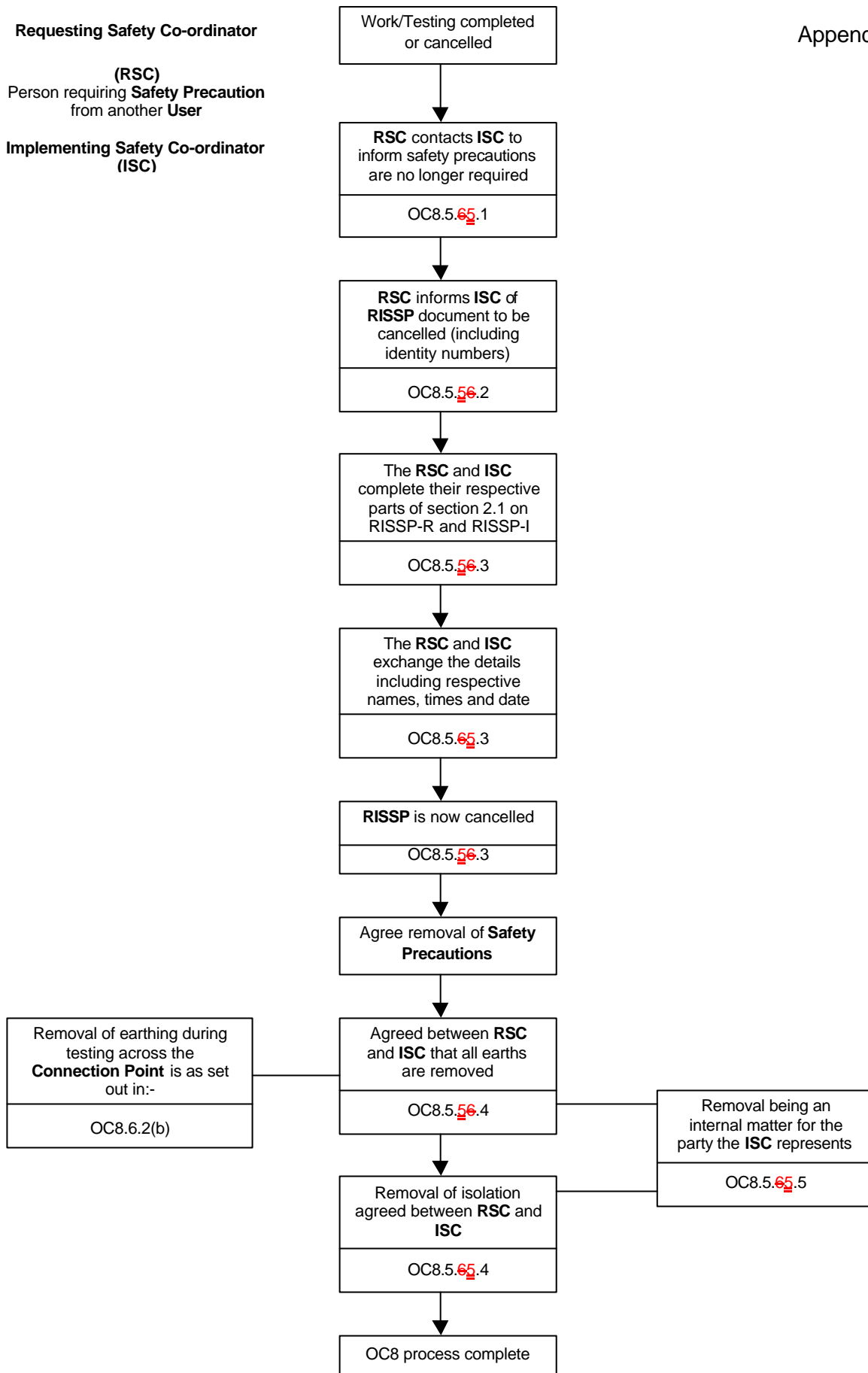
# RISSP CANCELLATION PROCESS

- OC8 -

Appendix C3

**Requesting Safety Co-ordinator  
(RSC)**  
Person requiring **Safety Precaution**  
from another **User**

**Implementing Safety Co-ordinator  
(ISC)**



**PROCESS FOR WORKING NEAR  
TO SYSTEM EQUIPMENT**

**- OC8 -**

**Appendix C4**

**Requesting Safety Co-ordinator**

**(RSC)**

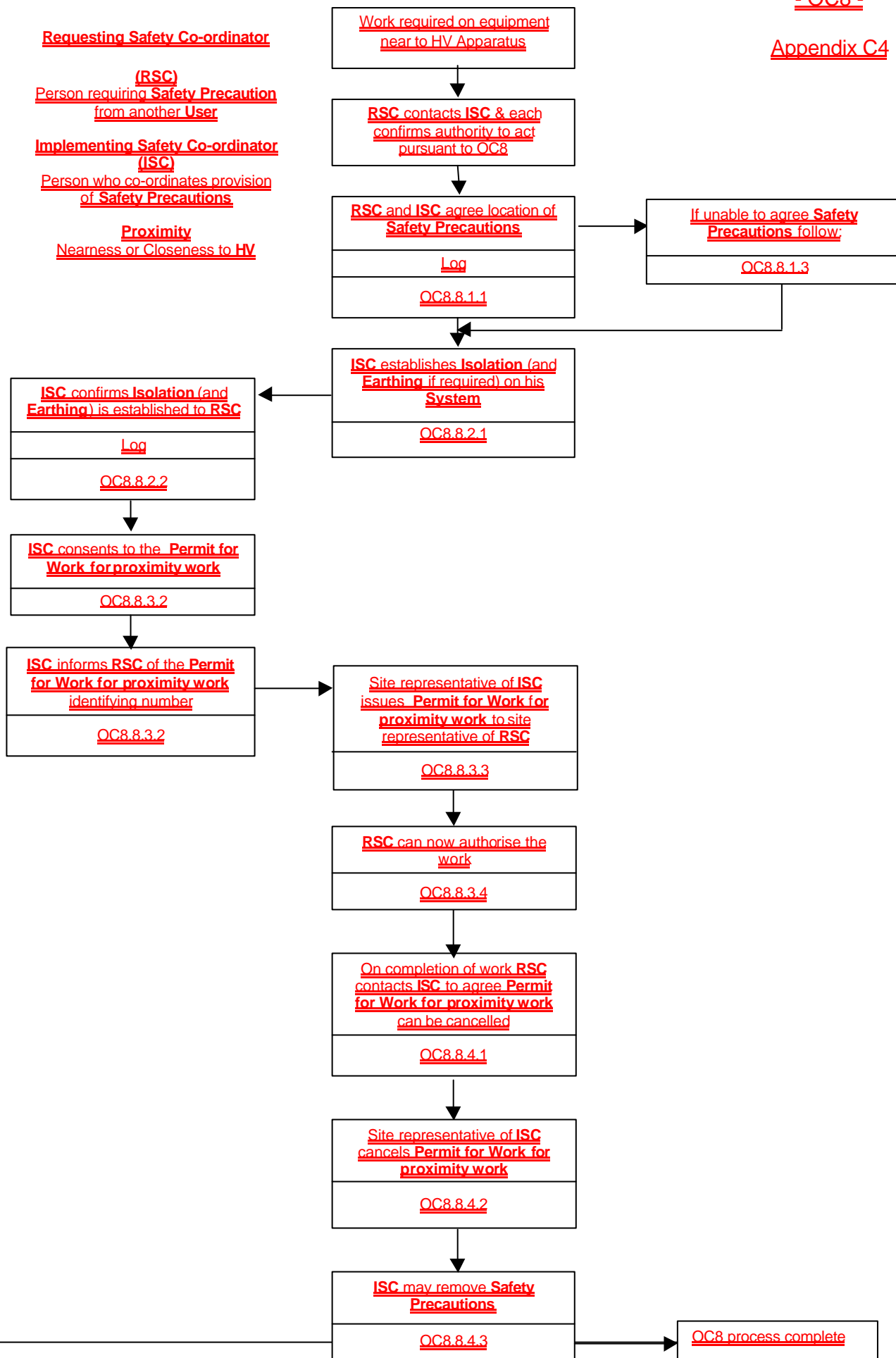
**Person requiring Safety Precaution  
from another User**

**Implementing Safety Co-ordinator**  
**(ISC)**

**Person who co-ordinates provision  
of Safety Precautions**

**Proximity**

**Nearness or Closeness to HV**



Not shown in this report to the Authority



No. [ ] [ ] [ ]

# PERMIT FOR WORK

1. **Location** .....  
**Equipment Identification**.....  
 .....  
 Work to be done  
 .....  
 .....

**3.2. 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/ Symbols\*** [ ] **Flags (No. off)\*** [ ] **Wristlets (No. off)\*** [ ]  
 Issued (Signed) [ ] **Senior Authorised Person**  
 Received (Signed) [ ] Time [ ] Date [ ]  
**Competent Person**  
 Name (Block letters) [ ] Company [ ]

# delete as appropriate \*write N/A if not applicable

February 1995



## APPENDIX B

# Consultation Paper E/02



## APPENDIX C

# AEO Distribution List for Consultation Paper E/02

24 Seven	Energy Power Resources Limited
ABB Equity Development Co Ltd	Enfield Energy Centre Ltd
Accord Energy Limited	Enron Teesside Operations Ltd
AEP Energy Services UK Generation Ltd	Entergy-Koch Trading Ltd
AES (for Partington Ltd)	EPN Distribution
AES Barry Limited	Fellside Heat & Power Ltd
AES Drax Power Ltd	Fibrogen Ltd + Fibropower Ltd + Fibrothetford Ltd
AES Fifoots Point Ltd	First Hydro Company
AES Indian Queens Power	First Hydro Company
AES NEW ENERGY LTD (UK)	Fortum Direct Ltd
Alcan Aluminium UK Ltd	Fortum Energy plus Ltd
Allied Steel & Wire	Great Yarmouth Power Limited
AMERADA	Greenwich Energy Trading Ltd
Angelsey Aluminium	Grovehurst Energy Ltd
Aquila Energy Supplies Ltd	Heartlands Power Ltd
Aquila Networks plc	Humber Power Ltd
Atlantic Electric & Gas Ltd	ICI Chemicals & Polymers Ltd
Atmel North Tyneside Ltd	Immingham CHP Ltd
Baglan Generating Ltd + Baglan Operations Ltd + Fleetwood Power Ltd	INEOS Chlor Energy Ltd
Barking Power	Innogy + Innogy (Cogen Trading) Ltd + npower
BIZZENERGY LIMITED	Jade Power Generation Ltd
BNFL + Magnox Electric Ltd	Keadby Gen Ltd + HE Cogen Ltd + HE Energy Ltd
BOC Limited	Killingholme Power Ltd
BP Chemicals Ltd	Lakeland Power Ltd
British Energy Generation Ltd (inc Eggborough Power)	London Electricity plc
British Gas Generation Ltd (Centrica KL + Centrica PB)	London Electricity Services Ltd
British Gas Trading Ltd (3th Floor North)	London Power Networks
BritNed Development Ltd	London Underground Ltd
Burlington Resources (Irish Sea) Ltd	Manweb Services (Imperial Park)
Canatxx Energy Ventures Ltd	Manx Electricity Authority
Celtpower Ltd	Maverick Energy Ltd
Cinergy Global Power (UK) Ltd	Medway Power Ltd
Commercial Electricity Supplies Ltd	Midlands Gas Ltd + OwnLabel Energy Ltd + Severn Trent Energy Ltd + Western Gas Ltd
Corby Power Ltd	Morgan Stanley Capital Group Inc
Corus UK Ltd	Northern Electric Distribution Ltd
Coryton Energy Co Ltd	Norweb Energi Ltd
Cottam Development Centre	Pentex Oil and Gas Ltd
Cottam Power Ltd	PowerGen UK plc + PowerGen CHP Ltd
Damhead Creek Ltd	Railtrack plc
Derwent Co-Generation Limited	Regional Power Generators Limited
Duke Energy International	Rocksavage Power Company Ltd
Dynegy UK Ltd	RTE SENE
East Midlands Electricity	Rugeley Power Ltd (& Deeside PDC)
EDF Service National	RWE Trading Direct Ltd
EDF Trading Ltd	Saltend Cogeneration Co Ltd
Electrabel S.A.	Savage Land Ltd
Electricity Direct (UK) Ltd	Scottish & Southern
Emerald Power Generation Ltd	Scottish & Southern Energy

Scottish and Southern Energy plc  
Scottish Power Generation Ltd  
Scottish Power plc  
Scottish Power Energy Retail Ltd  
Seabank Power Ltd  
SEEBOARD Energy Ltd  
SEEBOARD Power Networks  
Sempra Energy Europe Ltd  
Sheffield Heat and Power Ltd  
Shell Gas Direct Limited  
Shotton Combined Heat & Power Ltd +Peterborough Power  
  
Slough Energy Supplies Ltd  
SMARTESTENERGY LTD  
South Coast Power Ltd  
Southern Electric Power Distribution plc  
SP MANWEB plc  
Spalding Energy Company Ltd  
SSE Energy Ltd  
Statnett SF  
Sutton Bridge Power Ltd  
Thameside Energy Park Ltd  
The Renewable Energy Co. Ltd  
TotalFinaElf Gas and Power Ltd  
TXU Europe  
TXU Europe Merchant Generation + Shotton CHP Ltd + Citigen  
(London) Ltd  
UK Electric Power Ltd  
UKAEA  
United Utilities  
Utility Link Ltd  
Wainstones Power Ltd  
West Burton Ltd  
Western Power Distribution  
Williams Energy Marketing & Trading Europe Ltd  
Yorkshire Electricity Group plc (distribution)