



# National Grid

## GRID CODE CONSULTATION DOCUMENT

### Proposed Changes to Grid Code OC8 Associated with Management of Safety Keys and Other Housekeeping Changes

The purpose of this document is to consult on the above Grid Code Modification Proposal with authorised electricity operators liable to be materially affected by the proposed changes

Consultation Ref	C/04
Issue	2.0
Date of Issue	23 November 2004
<b>Responses required by</b>	<b>17 December 2004</b>
Prepared by	National Grid

## DOCUMENT LOCATION

National Grid website:

[http://www.nationalgridinfo.co.uk/grid\\_code/mn\\_consultation\\_papers.html](http://www.nationalgridinfo.co.uk/grid_code/mn_consultation_papers.html)

## DISTRIBUTION

Name	Organisation
AEO's	Various
GCRP Members/Alternates	Various
Interested Parties	Various
National Grid Industry Information Website	

A. Introduction

1. National Grid Company plc ("National Grid"), in accordance with its obligations under paragraph 2 of Condition C14 of the Transmission Licence, believes that the time has come to review, in consultation with authorised electricity operators liable to be materially affected thereby, the Grid Code and its implementation in certain respects.
2. This is the second consultation concerned with a review associated with the management of Safety Keys under Grid Code OC8 and some areas for clarification identified by HSE during a previous consultation. Some other minor housekeeping changes are also included. It should also be noted that while these proposals have been developed following discussions with generators in particular, National Grid believes that the proposals would be relevant to all Users.
3. Proposed changes to the Grid Code were initially discussed at the Grid Code Review Panel meeting held on 26<sup>th</sup> February 2004 and Panel members agreed that having taken account of comments received at the Panel meeting National Grid should issue a Consultation Paper. Version 1 of the Consultation (C/04) was issued on 21<sup>st</sup> April 2004.
4. Responses were received to the first consultation and some areas for clarification were identified. The BETTA GO-ACTIVE Grid Code (Issue 3 of the Grid Code) was implemented on 1<sup>st</sup> September 2004 which included substantive changes to OC8, in particular the inclusion of separate requirements for England & Wales system and the Scotland system. The Grid Code Review Panel was informed at the 23<sup>rd</sup> September 2004 meeting that the Consultation would be reissued as Version 2 to enable the proposed changes to be assessed against the current version of the Grid Code.
5. Following receipt of comments from those authorised electricity operators which it has consulted by this Paper, National Grid intends, in accordance with paragraph 2 of Condition C14 of the Transmission Licence, to send to the Authority :-
  - (a) a report on the outcome of its review, including this consultation process;
  - (b) the proposed revisions to the Grid Code which National Grid (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives of the Grid Code referred to in subparagraph (b) of paragraph 1 of Condition C14 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.
6. The report will also be made publicly available on National Grid's website.
7. The revisions to the Grid Code proposed by National Grid and sent to the Authority then require approval by that body and will, if approved, come into

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force on such date (or dates) of which you will be notified by National Grid, in accordance with the Authority's approval.

B. DESCRIPTION OF THE PROPOSED AMENDMENTS AND THEIR EFFECTS

8. Background

Management of Safety Keys

8.1 National Grid has been in discussion with Users (in particular Generators) in relation to the management of the Record of Inter-System Safety Precautions (RISSP) process at generator sites. As a result best practice has been identified as:

‘To ensure that key safe keys (where reasonably practicable) shall be given to the site representative of the Requesting Safety Co-ordinator, where the Implementing and Requesting Safety Co-ordinators are at the same Complex or Connection Site’.

8.2 National Grid believes that generators would have no difficulty with key safe keys being given to the Site Representative of the Requesting Safety Co-ordinator. The receipt of keys would provide additional confidence at a site that the Grid Code OC8 requirements had been complied with and would remain active until keys were returned.

8.3 National Grid believes that the Health and Safety Executive (HSE) take the view that it would be reasonably practicable for key safe keys to be exchanged at the same complex or connection site.

8.4 National Grid believes that some issues that have arisen in the past could have been avoided had these proposals already been in place and key safe keys been passed to a Site Representative of the Requesting Safety Co-ordinator.

8.5 With respect to ‘reasonably practical’, National Grid believes that it would be reasonably practical for key safe keys to be passed to the Site Representative of the Requesting Safety Co-ordinator where those key safe keys are at the same complex or connection site as the Site Representative of the Requesting Safety Co-ordinator.

8.6 However, it would be unlikely to be ‘reasonably practical’ to pass key safe keys to the Site Representative in the following situations:

- Where the Isolation or Earthing was implemented remotely from the complex or connection site; and
- Where there was a significant distance between the Site Representatives of the Requesting and Implementing Safety Co-ordinators e.g. at opposite ends of feeder circuits and at sites remote from one another.

Housekeeping Changes

8.7 As part of Grid Code Consultation E/02 – Proximity Working, HSE responded with comments that, although useful, were not directly related to Consultation E/02. National Grid agreed to consider the comments and consult on the proposed changes as part of a future OC8 consultation.

8.8 The comments from HSE sought clarification of the following:

- The process carried out when the Implementing Safety Co-ordinator applies requested earthing.
- The process followed for issuing two RISSP numbers by the Requesting Safety Co-ordinators when work is carried out on both sides of a boundary.

8.9 In addition some minor typographical errors have also been identified.

## 9. Proposed Changes

9.1 The following Grid Code changes are proposed associated with the Management of Safety Keys:

- In the Glossary and Definitions amendments to the defined terms **Isolation** and **Earthing**
- Defined Terms within OC8A.1.6.2 and OC8B.1.7.2
- Implementation of Isolation OC8A.5.2.2 and OC8B.5.2.2
- Implementation of Earthing OC8A.5.3.2 and OC8B.5.3.2
- RISSP Cancellation Procedure OC8.5.5.5 and OC8B.5.5.5
- Clarification that it is only necessary to exchange one key after both isolation and earthing have been carried out prior to the issue of a RISSP – OC8A.5.2.3 and OC8B.5.2.3

9.2 The following housekeeping Grid Code changes are proposed:

- Amendment of OC8A.5.2.3 and OC8B.5.2.3 to clarify the process of when the Implementing Safety Co-ordinator applies the requested earthing.
- Amendment of OC8A.5.4.2 and OC8B.5.4.2 to clarify the process followed for issuing two RISSP numbers by the Requesting Safety Co-ordinators when work is carried out on both sides of a boundary.
- Correction of typographical errors in OC8A.8.4.2 and OC8B.8.4.2.

- 9.3 The proposed changes to the Glossary and Definitions and OC8A and OC8B are shown in Appendix 1.

C. COMMENTS

- 10 National Grid would be grateful to receive your comments on, or any suggestions you may have in relation to, these proposed amendments to the Grid Code. Comments would be welcomed and should be sent to National Grid by **17 December 2004**. The comments will be reviewed and responded to and National Grid will then prepare its report to the Authority.
- 11 Unless otherwise marked as confidential any responses containing objections to the proposals which are maintained will be published on our website in the copy of the Report to the Authority referred to in paragraphs 5 and 6.

12. Your formal responses may be:-

Posted to: David Payne  
Industry Codes  
Commercial Frameworks  
National Grid Company plc  
National Grid Transco House  
Warwick Technology Park  
Gallows Hill  
Warwick  
CV34 6DA

Emailed to: [david.payne@ngtuk.com](mailto:david.payne@ngtuk.com)

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## Appendix 1

### 1. Proposed changes to Glossary and Definitions:

**Isolation** The disconnection of **HV Apparatus** (**Apparatus** (as defined in OC8A.1.6.2 & OC8B.1.7.2) 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 given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody or 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 **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.

**Earthing** A way of providing a connection between conductors and earth by an **Earthing Device** which is either:

- (a) 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 or 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
- (b) 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.

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2. Proposed Changes To OC8A

OC8A.1.6.2

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(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 or 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

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(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** 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 or 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

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OC8A.5.2 Implementation of Isolation

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OC8A.5.2.2

- .....
- (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 or 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

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OC8A.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~~ will then request the implementation of **Earthing** by the **Implementing Safety Co-ordinator**, if requested in section OC8A.5.1. If the implementation of Earthing has been requested, then the authorised site representative of the Implementing Safety Co-ordinator may retain the 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

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OC8A.5.3.2

- .....
- (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 or 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

OC8A.5.4 **RISSP Issue Procedure**

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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 **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 the **NGC** and the **User**, with each **Requesting Safety Co-ordinator** issuing a separate **RISSP** number.

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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** as soon as reasonably practicable. 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).

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3. **Proposed Changes To OC8B**

OC8B.1.7.2 .....

(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 or 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

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(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 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 be given to the duly authorised site representative of the Requesting Safety Co-ordinator where reasonably practicable and is to be retained in safe custody or where not reasonably practicable the Key Safe Key must be retained by the Implementing Safety Co-ordinator in safe custody; or

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OC8B.5.2 Implementation of Isolation

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OC8B.5.2.2 .....

- (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 or 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

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OC8B.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 will then request the implementation of **Earthing** by the **Implementing Safety Co-ordinator**, if agreed requested in section OC8B.5.1. If the implementation of Earthing has been requested, then the authorised site representative of the Implementing Safety Co-ordinator may retain the Key Safe Key in safe custody until any Safety Key used for Earthing has been secured in the Key Safe.

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OC8B.5.3 Implementation of Earthing

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OC8B.5.3.2 .....

- (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 or 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

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OC8B.5.4 **RISSP Issue Procedure**

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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.

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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 as soon as reasonably practicable. 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).

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**4. Proposed correction of typographical errors in OC8.**

<b>Grid Code Reference</b>	<b>Summary of Error</b>	<b>Proposed correction</b>
OC8A.8.4.2	First line of paragraph misaligned	Correct misalignment of first line
OC8B.8.4.2	First line of paragraph misaligned	Correct misalignment of first line