

## Connection and Use of System Code (CUSC)

### Title of the CUSC Modification Proposal

Introduction of a new “Category 5 Intertripping Scheme” to include System to System intertrips in relation to One-off Charges.

### Submission Date

17 June 2015

### Description of the Issue or Defect that the CUSC Modification Proposal seeks to address

A User may receive an advancement Offer with respect to a Bilateral Embedded Generation Agreement (BEGA) with NGET to connect the User’s proposed generator. As part of the Offer, NGET may seek a “One-Off” charge relating to a “System to System Intertrip”. This type of intertrip is not currently described as either a Category 1, 2, 3 or 4 Intertripping Scheme under the CUSC or the Grid Code. In Section 14.4.2 of CUSC it defines which intertrips can be charged as One-off Works but does not include how unspecified intertrips (such as the System to System operational intertrip) shall be treated.

On comparison of the functionality of Categories 1, 2, 3 and 4 Intertripping Scheme, it is of the belief that the proposed “System to System Intertrip” is similar to Categories 2 and 4 Intertripping Schemes which are not subject to One-off Charges under section 14.4.2 of CUSC as specified below:

“a one-off charge will be levied for a **Category 1 Intertripping Scheme** or a **Category 3 Intertripping Scheme**. A one-off charge will **not** be levied for a **Category 2 Intertripping Scheme** or a **Category 4 Intertripping Scheme**.”

The differences and similarities between the new “Category 5 Intertripping Scheme” and the existing categories are outlined below:

- Category 1 Intertripping Scheme relates to a Variation to Connection Design, which is not the case for the Category 5 Intertripping Scheme;
- Category 2 Intertripping Scheme is to alleviate overload on a circuit which is also the purpose as the Category 5 Intertripping Scheme;
- Category 3 Intertripping Scheme is to prevent overload on a third party circuit which is not the case for the Category 5 Intertripping Scheme; and
- Category 4 is to allow timely restoration of the Transmission System, which is one of the purposes of the Category 5 Intertripping Scheme.

In conclusion, the characteristics of the Category 5 Intertripping Scheme are similar to those of

Categories 2 and 4 Intertripping Scheme and unrelated to Categories 1 and 3 Intertripping Scheme and, therefore, in accordance with GB ECM-01 there should be no One-off Charge for a Category 5 Intertripping Scheme.

### Description of the CUSC Modification Proposal

This modification proposal aims to class a System to System Intertrip within the CUSC as a Category 5 Intertripping Scheme, therefore clarifying the position in relation to the treatment of a System to System Intertrip in relation to One off Works.

The proposed text change to Section 11 of CUSC is:

**“Category 5 Intertripping Scheme”** as defined in the Grid Code.

Another CUSC modification has been proposed alongside this proposal to make an amendment to Section 14.4.2 of the CUSC as follows;

“Consistent with these principles and in accordance with Connection Charging Methodology modification GB ECM-01, which was implemented on 1 December 2005, a one-off charge will be levied for a **Category 1 Intertripping Scheme** or a **Category 3 Intertripping Scheme**. A one-off charge will **not** be levied for a **Category 2 Intertripping Scheme**, a **Category 4 Intertripping Scheme** or a **Category 5 Intertripping Scheme**.”

### Impact on the CUSC

As set out above: amendments to the Definitions section.

### Do you believe the CUSC Modification Proposal will have a material impact on Greenhouse Gas Emissions? Yes / No

Yes - without this modification there is a risk that a System to System Intertrip (Category 5 Intertripping Scheme) which will reduce system constraints and is enduring but is charged as One-off Works to a specific User will not be implemented because the User will not be able to afford the One-off Charges. Consequently, this may result in a termination of the agreement with National Grid which will result in the intertrip not being implemented. As a result increasing constraints on renewable generation will increase carbon dioxide emissions accordingly.

### Impact on Core Industry Documentation. Please tick the relevant boxes and provide any supporting information

BSC

Grid Code

STC

Other   
(please specify)

The System to System intertrip should be described in the Grid Code. Suggested text for this scheme and an update of the definition of Operational Intertripping is outlined below:

**“Operational Intertripping**

The automatic tripping of circuit-breakers to prevent abnormal system conditions occurring, such as over voltage, overload, **System** instability, etc. after the tripping of other circuit-breakers following power **System** fault(s) which includes **System to Generating Unit, System to CCGT Module, System to Power Park Module, System to DC Converter, System to Demand and System to System Intertrip Scheme.**”

**“Category 5 Intertripping Scheme**

A **System to System** intertrip scheme which is required to alleviate an overload on one or more circuits on the **National Electricity Transmission System** and the operation of which results in a reduction in **Active Power** on the overloaded circuit(s) which connect one part of the **National Electricity Transmission System** to another part of the **National Electricity Transmission System.**”

**Urgency Recommended: Yes / No**

Yes

**Justification for Urgency Recommendation**

The One-off Charge proposed by NGET to the User is putting the development of the project at risk due to its high costs. The One-off Charge would, therefore, have a significant commercial impact on the User.

**Self-Governance Recommended: Yes / No**

No

**Justification for Self-Governance Recommendation**

Not applicable.

**Should this CUSC Modification Proposal be considered exempt from any ongoing Significant Code Reviews?**

No. It is not believed that this proposal will interact with any ongoing SCRs.

### Impact on Computer Systems and Processes used by CUSC Parties:

None identified at this stage.

### Details of any Related Modification to Other Industry Codes

Grid Code modifications have been identified but have not been requested.

### Justification for CUSC Modification Proposal with Reference to Applicable CUSC Objectives:

#### Please tick the relevant boxes and provide justification:

(a) the efficient discharge by The Company of the obligations imposed upon it by the Act and the Transmission Licence

National Grid's licence requires it to operate an efficient and reliable National Electricity Transmission System within certain technical parameters (under the Grid Code, for example) to ensure a continual and safe operation. This modification, if approved, would lead to greater transparency regarding transmission operational intertrips and formalises the definition of a new kind of intertrip which has overall system benefits.

(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.

This modification ensures that Users are dealt with in an equitable manner in respect of One-Off Charges and intertrips. The treatment of existing Category 1-4 Intertrips in relation to One-Off charges has set a precedent. At present the rules on One-Off Charges for intertrips do not include the new intertrip (as described above) and this new intertrip should be defined in the Grid Code and CUSC and should be assessed using the same principles as existing intertrips (for example in GB ECM-01) in order to ensure that it is also applied in an equitable and consistent manner thereby not distorting competition.

(c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.  
These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.

Objective (c) was added in November 2011. This refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

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**Additional details**

<b>Details of Proposer:</b> (Organisation Name)	Tullymurdoch Limited
<b>Capacity in which the CUSC Modification Proposal is being proposed:</b> (i.e. CUSC Party, BSC Party or “National Consumer Council”)	CUSC Party
<b>Details of Proposer’s Representative:</b> Name: Organisation: Telephone Number: Email Address:	Guy Nicholson Grid Manager Element Power 07824145479 <a href="mailto:Guy.nicholson@elpower.com">Guy.nicholson@elpower.com</a>
<b>Details of Representative’s Alternate:</b> Name: Organisation: Telephone Number: Email Address:	Steven Pottinger RDS 0131 339 2161 <a href="mailto:steven.pottinger@btinternet.com">steven.pottinger@btinternet.com</a>
<b>Attachments: No</b> <b>If Yes, Title and No. of pages of each Attachment: n/a</b>	

## Contact Us

If you have any questions or need any advice on how to fill in this form please contact the Panel Secretary:

E-mail [cusc.team@nationalgrid.com](mailto:cusc.team@nationalgrid.com)

Phone: 01926 653606

For examples of recent CUSC Modifications Proposals that have been raised please visit the National Grid Website at <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/Current/>

## Submitting the Proposal

Once you have completed this form, please return to the Panel Secretary, either by email to [jade.clarke@nationalgrid.com](mailto:jade.clarke@nationalgrid.com) and copied to [cusc.team@nationalgrid.com](mailto:cusc.team@nationalgrid.com), or by post to:

Jade Clarke  
CUSC Modifications Panel Secretary, TNS  
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CV34 6DA

If no more information is required, we will contact you with a Modification Proposal number and the date the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, the Proposal can be rejected. You will be informed of the rejection and the Panel will discuss the issue at the next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform you.