# STC Amendment Proposal Form CA047

### 1. Title of Amendment Proposal

Consequential Changes to Section K following implementation of Grid Code D/10 Frequency and Voltage Operating Range.

### 2. Description of the Proposed Amendment (mandatory field)

This Proposed Amendment is being raised as a consequential change as a result of Grid Code Modification - D/10 Frequency And Voltage Operating Range<sup>1</sup>. Connection Condition 6 of the Grid Code was modified 18<sup>th</sup> July 2011, to ensure that the Grid Code obligations relating to the voltage and fault ride through ranges are clear, unambiguous and are appropriately consistent with international obligations.

### **Fault Ride Through Capability**

As highlighted in the Grid Code Modification, there is a similar conflict in the STC between the obligation to trip if the voltage measured at the Interface Point drops below 80% for more than 2 seconds and the fault ride through obligation in STC - Section K 3.1.2 which requires the Offshore Transmission System to remain connected to the Onshore Transmission System without tripping for 2.5 seconds. It is therefore recommended that STC - Section K 3.1.4 (c) should be amended from "below 80% for more than 2 seconds" to "below 80% for more than 2.5 seconds"

In addition to the consequential change this proposal also seeks to address a housekeeping error identified by National Grid in 3.1.4.(d), and recommends that it should be amended from "Interface Point or above" to "Interface Point is above".

#### **Frequency Obligations**

STC - Section K 5.4 currently references Grid Code CC.6.1.3 and states that System Frequency could rise to 52Hz or fall to 47Hz and that each Offshore Transmission System or any constituent element must be capable of:

- Continuous operation in the Frequency range 47.5Hz to 52Hz and
- For at least 20 seconds on each occasion the Frequency is below 47.5Hz

This obligation is now inconsistent with the revised obligations contained within Grid Code CC.6.1.3; it is therefore proposed to update the STC to reflect the introduction of limited operation requirements in certain frequency bands. These proposed changes have been reflected in the attached proposed legal text.

The Grid Code Working Group for D/10 recommended that the Grid Code should be modified because it was assessed to have no impact on system security and may be beneficial for the procurement of generation plant.

# 3. <u>Description of Issue or Defect that Proposed Amendment seeks to Address</u> (mandatory field)

Following the implementation of Grid Code Modification - D/10 Frequency and Voltage Operating Range, it is proposed to amend the STC to reflect the introduction of limited operation requirements in certain frequency bands and to modify the under-voltage tripping times in Section K paragraph 3.1.4 (c) which apply to Offshore Transmission systems connected to Onshore System in Scotland to align with the Grid Code Changes.

### 4. Impact on the STC

Section K paragraphs 3.1.4 & 5.4.

### 5. Impact on other frameworks e.g. CUSC, BSC

None

#### 6. Impact on Core Industry Documentation

None

## 7. Impact on Computer Systems and Processes used by STC Parties

None

### 8. Details of any Related Modifications to Other Industry Codes (where known)

Grid Code D/10 Frequency and Voltage Operating Range changes implemented 18<sup>th</sup> July 2011.

# 9. <u>Justification for Proposed Amendment with Reference to Applicable STC Objectives</u> (mandatory field)

- (b) development, maintenance and operation of an efficient, economical coordinated system of electricity transmission;
- (c) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity;
- (e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC;

The amendment of the frequency ranges to better meet the standard capabilities of globally available generation plant, whilst avoiding any detrimental affect on to the security of the transmission system, avoids over investment in future generation equipment and avoids introducing a barrier to market entry and therefore better facilitates STC objectives (b) and (c).

By amending the STC as described above this will address the consequential change that has arisen as a result of a Grid Code Modification and therefore better facilities STC objective (e).

10.		

<b>Details of Proposer</b> Organisation's Name	National Grid Electricity Transmission plc			
Capacity in which the Amendment is being proposed				
(i.e. STC Party or other Party as designated by the Authority pursuant to STC section B7.2.2.1 (b))	STC Party/Code Administrator			
Details of Proposer's Representative Name Organisation Telephone Number Email Address	Louise McGoldrick National Grid Electricity Transmission plc 01926 655422 Louise.McGoldrick@uk.ngrid.com			
Details of Representative's Alternate Name Organisation Telephone Number Email Address	Audrey Ramsay National Grid Electricity Transmission plc 01189 363633 Audrey.Ramsay@uk.ngrid.com			
Attachments (Yes/No): Yes				

Appendix 1 – Legal Text to support this proposal

#### Notes:

- Those wishing to propose an Amendment to the STC should do so by filling in this "Amendment Proposal Form" that is based on the provisions contained in Section 7.2 of the STC.
- 2. The Committee Secretary will check that the form has been completed, in accordance with the requirements of the STC, prior to submitting it to the Committee. If the Committee Secretary accepts the Amendment Proposal form as complete, then she/he will write back to the Proposer informing them of the reference number for the Amendment Proposal and the date on which the Committee will consider the Proposal. If, in the opinion of the Committee Secretary, the form fails to provide the information required in the STC, then he/she may reject the Proposal. The Committee Secretary will inform the Proposer of the rejection and report the matter to the Committee at their next meeting. The Committee can reverse the Committee Secretary's decision and if this happens the Committee Secretary will inform the Proposer.

The completed form should be returned to:

Lucy Hudson STC Committee Secretary Regulatory Frameworks National Grid National Grid House Warwick Technology Park Gallows Hill

1. http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/2010/

Warwick, CV34 6DA

Or via e-mail to: <a href="mailto:lucy.hudson@uk.ngrid.com">lucy.hudson@uk.ngrid.com</a>

