STCP Modification Proposal Form (System Operator – Transmission Owner Code)	
# PM0112: Consequential STCP Updates following implementation of RfG and HVDC into the GB Grid Code	01 Initial STCP Modification Proposal Form

Purpose of Modification: This proposal seeks to modify the Relevant STCP's to ensure consistency with the STC and GB Grid Code following implementation of the European Connection Network Codes (RfG, HVDC and DCC).

The Proposer recommends that this modification should be:

- proceed to Consultation
- This modification was raised on **22 March 2019** and will be presented by the Proposer to the Panel on **29 May 2019**. The Panel will consider the Proposer's recommendation and determine the appropriate route.

High Impact: In order to satisfy the requirements of EU law following the introduction of the European Third Energy Package, The GB Grid Code was updated in 2018 to reflect the requirements of the European Connection Network Codes (RfG, HVDC and DCC). Since the STC makes numerous references to the Grid Code Connection Conditions there is a need to update the STC in respect of these consequential Grid Code changes. Proposals to update the STC are detailed in Paper Reference CM070 and this paper proposed changes to the relevant STCP's which are believed to be limited to STCP18-1, STC 04 – 3 and STCP 19-3.

There is a high impact to Transmission Licensees In particular Offshore Transmission Licensees who are caught by the following criteria.

Transmission Licensees who own an AC Transmission System and that AC Transmission System was first connected to the Transmission System on or after 27 April 2019 and the purchase contracts for the main plant and apparatus had concluded on or after 17 May 2018 or: -

Transmission Licensees, who own a Transmission System comprising an HVDC

	System and that HVDC System was first connected to the Transmission System on or after 8 September 2019 and the purchase contracts for the Main Plant and Apparatus forming part of that HVDC Transmission System had concluded on or after 28 September 2018. This modification is particularly relevant for Offshore Transmission Licensee's which are developed under the Generator Build approach and once transferred are required to satisfy the applicable requirements of the STC and STCP's. It is vital that as part of this process there is a seamless transfer between the requirements in the Grid Code and those in the STC and STCP's at the point in time that the Transmission Assets are transferred from the Generator to the Offshore Transmission Licensee.
	Medium Impact:- Not applicable
	Low Impact There will no impact to existing Transmission Licensees unless they wish to install new HVDC equipment or undertake substantial modifications to their Offshore Transmission Networks.

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Timetable

The Code Administrator recommends the following timetable:

Proposal Form Submitted to Code Administrator for review	15 March 2019
Proposal form submitted to STC Panel Secretary	21 March 2019
STCP's are presented and approved by the Panel	29 May 2019

Any questions?

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Sign off	Ahead of 16 July 2019 – date TBC
Implementation	16 July 2019

Details of Proposer: (Organisation Name)	National Grid (ESO)
Capacity in which the STC Modification Proposal is being proposed: (i.e. STC Party, Party Representative or person or persons having a relevant interest as may be designated in writing for this purpose by the Authority	STC Party
Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:	 Antony Johnson National Grid 01926 65546 Antony.Johnson@nationalgrid.com
Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:	 Rob Wilson National Grid
Attachments (Yes/No): Yes STCP amendments **If Yes, Title and No. of pages of each Attachment:**	

Impact on Core Industry Documentation.

BSC	
Grid Code	
CUSC	
Other	√

(Please specify) - **STC**

Modification raised at March 2019 Panel meeting for amendments to the STC (CM070)

1 Summary

Defect

The GB Grid Code was updated in 2018 following implementation of the EU Connection Network Codes (RfG (Requirements for Generators), HVDC (HVDC Code) and DCC (Demand Connection Code)). These Codes resulted from the introduction of the European Energy Third Package which have been encapsulated into European law which takes precedence over GB law.

As a result of this EU Directive, the GB Grid Code has been updated to ensure consistency with the European Connection Network Codes which has resulted in several new sections in addition to numerous updates to other sections of the code.

The STC refers to certain parts of the Grid Code and as a consequence of these European Connection Network Codes, proposal CM070 has been raised to propose changes to the STC. In addition, there is also a requirement to update the relevant STCP's which are believed to be limited to STCP18-1, STC 04–3 and STCP 19-3. These STCP's make references to the GB Grid Code Connection Conditions and Compliance Processes. As a result of the updates to the GB Grid Code following the implementation of RG and HVDC Codes the Grid Code included two new sections, these being the European Connection Conditions and the European Compliance Processes. As a consequence, the relevant STCP's will need to be updated to include these additional references so they are consistent with the STC and GB Grid Code.

What

As part of the European Connection Network Codes (RfG, HVDC and DCC), three new sections of the GB Grid Code have been introduced, these being the European Connection Conditions (ECC's), the European Compliance Processes (ECP's) and Demand Response Services Code (DRSC).

As the EU Connection Network Codes only apply to new plant, then the existing sections of the GB Grid Code (ie the Connection Conditions (CC's) and Compliance Processes(CP's)) have had to be retained but as noted above the ECC's, ECP's and DRSC have also been added. The Demand Response Services Code (DRSC) is a new section of the Grid Code and has been introduced as part of the Demand Connection Code (DCC) relating to the provision of demand response providers so its application as part of this proposed STC modification is more limited.

The important element is that as noted in Paper CM070 the STC makes several references to the Grid Code Connection Conditions. Likewise, a number of the STCP's (notably STCP 18-1, STC 04–3 and STCP 19-3) make specific references the Grid Code Connection Conditions and Compliance Processes. As a result, there is therefore a need to ensure the relevant STC Procedures are updated to include the new references in the Grid Code ECC's and ECP's where appropriate.

In general, the changes required are very minor. For example, STCP18-1 refers to Grid Code CC.6.5.7 and to ensure the STCP is consistent with the Grid Code the reference will have to be updated to states Grid Code CC.6.5.7 and ECC.6.5.7. In general, and where possible, most of the references in the Connection Conditions (eg CC.6.5.7) retain the same reference as the European Connection Conditions (eg ECC.6.5.7).

Why

For existing Transmission Licensee's the implications of these European Network Codes are limited and there is no real change. However, for new Transmission Owners who are caught by the requirements of the Grid Code European Connection Conditions (ECC's) or European Compliance Processes (ECP's) the STCP's need to be updated so they universally work for both existing and new transmission licensees.

How

It is proposed that the most eloquent solution to this issue is to update the relevant STC Procedures to reference the new sections of the Grid Code, in particular the European Connection Conditions (ECC's) and European Compliance Processes (ECP's).

2 Governance

Requested Next Steps

STCPs proposed to be signed off in line with modification CM070. Implementation should be on 16 July 2019.

3 Why Change?

The European Energy Third Package was introduced as a directive to promote cross border trade in Gas and Electricity. As a consequence of this, ENTSO-E (The European Network Transmission System Operators – Electricity) under the direction of the European Commission, have developed a set of Codes to facilitate the objectives of this directive. All of these codes were subject to a consultation phase and assessment by ACER (the European Regulators) ahead of the comitology stage which is effectively the process which by the Code is translated into European law.

Figure 1 shows the process of implementing the Codes into European law and Figure 2 shows the codes which have been developed.

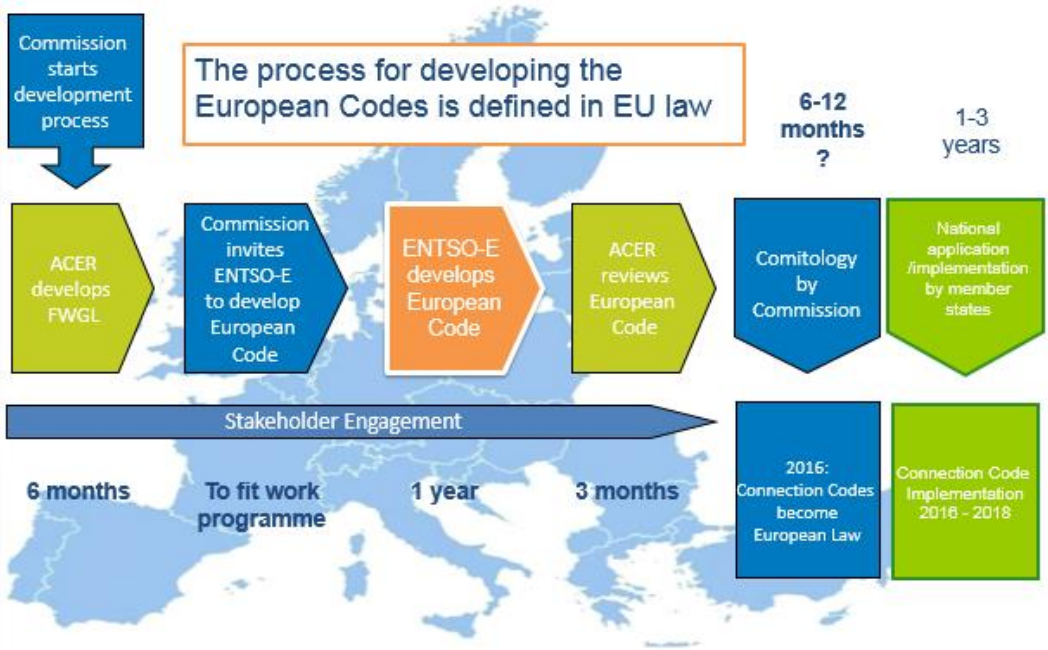

Figure 1 – European Network Code Development Process

Markets	*Establishes a platform for managing capacity and flow around the interconnected system to facilitate the setup of a single EU market*		
	Capacity Allocation & Congestion Management ("CACM")	**Forward Capacity Allocation ("FCA")**	**Electricity Balancing Guideline ("EBGL")**
System Operation	*Harmonises the processes Transmission System Operators have to manage their systems, including system restoration*		
	(Transmission) System Operation Guideline ("TSOG")	**Emergency & Restoration ("ER")**	
Grid Connection	Sets consistent technical requirements across EU for new connections of user equipment (e.g. generation/interconnectors)		
	Requirements for Generators ("RfG")	**High Voltage Direct Current ("HVDC")**	**Demand Connection (Code) ("DCC")**

Figure 2 – An overview of the European Network Codes

The Connection Network Codes (RfG, HVDC and DCC) were approved into European law in 2016 and subsequently implemented into the GB Grid Code in 2018. The dates for which these requirements became binding are as follows and are summarised below on a per code basis.

- **RfG** – Applicable to any Generator whose Main Plant and Apparatus connects to the System on or after 27 April 2019 and who had concluded purchase contracts or its Main Plant and Apparatus on or after 17th May 2018.
- **HVDC** - Applicable to any HVDC System or DC Connected Power Park Module whose Main Plant and Apparatus connects to the System on or after 8 September 2019 and who had concluded purchase contracts or its Main Plant and Apparatus on or after 28th September 2018.

- **DCC** - Applicable to any Demand owner whose Main Plant and Apparatus connects to the System on or after 18 August 2019 and who had concluded purchase contracts or its Main Plant and Apparatus on or after 18th August 2018.

To facilitate these changes and reflect the connection dates, the Grid Code had been updated to define two classes of User, these being a GB Code User who are effectively User's caught by the existing GB Grid Code arrangements and EU Code User's who will be caught by the EU Codes. The consequence of this is that GB Code User's will still need to comply with the requirements of the Connection Conditions and Compliance Processes and EU Code User's will need to comply with the requirements of the European Connection Conditions and European Compliance Processes. Other sections of the Grid Code (eg the Planning Code, Operating Codes and Balancing Codes etc) will continue to apply, being universally applicable to both GB Code User's and EU Code User's.

So far as Transmission Licensee's are concerned, the impacts mainly affect Offshore Transmission Licensees. Transmission Licensees are not defined as User's under the Grid Code. The STC (as noted in CM070) and related STCP's does however place obligations on Transmission Licensees (to satisfy specific requirements of the Grid Code including the Connection Conditions and Compliance Processes. There is therefore a requirement to update the relevant STCP's to also include references to the ECC's and ECP's as well as the CC's and CP's. In addition, where there is general statement referring to the Grid Code Connection Conditions or Grid Code Compliance Processes the corresponding European Connection Conditions or European Compliance Processes will need to be inserted.

Table 1 below lists the relevant STCP's and relevant sections that will need to be updated

STCP	**Updated section**
STCP 18-1	Appendix C, Schedule B
STCP 04-3	Section B4
STCP 19-3	Section A1 – Example of Compliance Monitoring Statement

Table 1

4 Impacts & Other Considerations

Modifications have already been made to the Grid Code and approved by The Authority in respect of RfG, HVDC and DCC Codes. Modifications in respect of the STC are detailed in CM070.

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

No.

Consumer Impacts

There are not expected to be any significant consumer impacts as a result of these consequential changes on the basis that they largely reflect Grid Code changes which have been subject to the full open Governance Process and approved by The Authority.

STC Parties' Assessments

National Grid (SO)

National Grid (SO) require updates to the STCP's to ensure consistency with the Grid Code and the European Network Codes. This is necessary to ensure compliance with the EU Connection Network Codes and prevent complexities to Offshore Transmission Licensees during the transfer period and ensure there is full consistency between the STC, STCP's and Grid Code.

National Grid (TO)

To be populated following Panel

Offshore Transmission Owners (OFTOs)

To be populated following Panel

Scottish Hydro Electric Transmission plc (SHET)

To be populated following Panel

SP Transmission Limited (SPT)

To be populated following Panel

Relevant Objectives

Impact of the modification on the STC Applicable Objectives and STCP Assessment Criteria:	
Relevant STC Objective	Identified impact
(a) efficient discharge of the obligations imposed upon transmission licensees by transmission licences and the Act	Positive
(b) development, maintenance and operation of an efficient, economical and coordinated system of electricity transmission	Positive
(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	Positive
(d) protection of the security and quality of supply and safe operation of the national electricity transmission system insofar as it relates to interactions between transmission licensees	Positive

(e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC.	Positive
(f) facilitation of access to the national electricity transmission system for generation not yet connected to the national electricity transmission system or distribution system;	Positive
(g) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.	Positive

In addition, for an STCP Change, Section B 7.3.2 details that the following should be considered:

Provision	View of the Proposer
the amendment or addition does not impair, frustrate or invalidate the provisions of the Code	The modification is a necessity to ensure consistency with the EU Connection Network Codes. Failure to meet these requirements would be in breach of European law.
the amendment or addition does not impose new obligations or liabilities or restrictions of a material nature on Relevant Parties which are not subsidiary to the rights and obligations of the Relevant Parties under the Code	The amendment does impose some new obligations of a material nature on Relevant Parties. However these obligations have already been assessed and subject to the full Grid Code governance process and hence it is seen as consequence that these obligations apply as a result of the European Third Package rather than a new specific issue. The implications of the implementation of the Energy Third Package package has been discussed amongst the industry for some time.
the amendment or addition is not inconsistent or in conflict with the Code, Transmission Licence Conditions or other relevant statutory requirements	Agree – the purpose of this proposed modification is to provide greater consistency and clarification between the Grid Code and STC.
the Relevant Party Representatives deem that the amendment or addition is appropriate to support compliance with the Code	Agree

This change is necessary to ensure the STCP's are consistent with the requirements of the updated Grid Code following the implementation of the European Connection Network Codes. CM070 details the changes necessary to the STC to facilitate this change and this paper details the corresponding changes necessary to the SCTP's.

The Proposer believes that this change will better facilitate relevant objective(s) A & E and Section B 7.3.2 is satisfied.

5 Solution

In summary, the solution simply proposes to update the STCP's so that any references to the Grid Code Connection Conditions or Compliance Processes also make reference to the European Connection Conditions / European Compliance Processes and other Grid Code clauses where these have changed as a result of the EU Connection Network Codes.

The full legal text is referenced in section 6 however based on a review of the entire suite of the STCP's the only ones which are believed to require updating are STCP18-1, STC 04–3 and STCP 19-3.

6 Implementation

As consequential changes have already been implemented into the GB Grid Code, these changes need to be implemented into the STCP's as soon as possible and reflect the corresponding changes noted in CM070 which detail the STC changes. This is important for i) the need for Transmission Licensees owning new HVDC Systems to comply with the requirements of the HVDC Code and ii) to ensure there are no issues with the transfer process where an Offshore Transmission System has been designed, constructed and commissioned under the Generator Build Arrangements and then subsequently transferred to an appointed Offshore Transmission Licensee.

7 Legal Text

The accompanying legal text is shown in Annex 1. In summary, the only changes required to the suite of STCP's are STCP18-1, STC 04–3 and STCP 19-3

8 Recommendation

Proposer's Recommendation to Panel

Panel is asked to:

Approve the STCP amendments to be signed off and implemented on 16 July 2019 inline with STC modification CM070.

Annex 1 Legal text

