

Modification proposal:	System Operator ("SO") – Transmission Owner ("TO") Code ("STC") CM080 – Transmission Impact Assessment Process (CM080)		
Decision:	The Authority ¹ directs this modification be made ²		
Target audience:	National Grid ESO, Parties to the STC, bidders and prospective bidders to the offshore tender process and other interested parties		
Date of publication:	4 January 2024	Implementation date:	10 working days after Authority decision

Background

The System Operator Transmission Owner Code (STC) change CM080 amends the STC legal framework to align with the CUSC in relation to the introduction of a more efficient aggregated assessment of embedded generation³ that has, or may have, an impact on the National Electricity Transmission System (NETS). The Appendix G process has been trialled by Distribution Network Operators (DNOs) and used when reviewing embedded generation connections applications to assess the reinforcements needed to the NETS to enable such connections. Currently, the process is not standardised, and several versions are used across the industry. This modification is accompanied by an associated Connection and Use of System Code (CUSC) modification CMP298. The CUSC modification aims to introduce the process known as Appendix G into the CUSC legal framework, to become known as 'Transmission Impact Assessment' (TIA), thereby clarifying the processes and products that the National Grid Electricity System Operator (NGESO) and DNOs will follow and remove ambiguity in the terminology used. We issued a separate decision on CMP298 on 4 January 2024.

The modification proposal

This modification proposal was raised by NGESO on 8 December 2021 and seeks to improve the efficiency of the current Statement of Works (SoW) process - by introducing a new 'Transmission Impact Assessment' process, which improves the flow of information between the DNOs and NGESO.

Specifically, it seeks to ensure consistency between the CUSC and the STC with respect to the insertion of a more efficient aggregated assessment of embedded generators that have, or may have, an impact on the NETS. The change requires TOs to submit additional information on available capacity at Grid Supply Points (GSPs) and also determine the Evaluation of Transmission Impact (ETI)⁴ Trigger Criteria⁵ for each GSP, which will in-turn determine if a TIA or SoW process is required.

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ (also known as distributed generation or distributed energy resources) refers to electricity generation or storage plants connected to a distribution network rather than the transmission network (What is embedded generation? | ESO (nationalgrideso.com)).

⁴ The ETI shall set the maximum values for the parameters identified in CUSC 4.3.1 to 4.3.4 (the "Trigger Criteria") which will require the Distribution Network Operator to apply for either a Statement of Works or Transmission Impact Assessment in order to connect any single or collectively relevant embedded generation.

⁵

4.3.1 Active Power (MW)

4.3.2 Apparent Power (MVA)

4.3.3 Reactive Power (MVAR)

4.3.4 Amperage (KA)

It proposes to amend Section D, Part 4 of the STC which sets out the SoW process and planning assumptions to insert the following;

- create the concept of an ETI which has multiple routes to complete
- create the concept and processes for the TIA method to meet the ETI
- create the provision of ETI Trigger Criteria per GSP so decisions can be made on the most appropriate ETI application route.

Two Code Administrator Consultations were issued. The first opened on 28 April 2022 and closed on 20 May 2022, which received two responses that identified legal text issues in Section D, Part 4, paragraphs 4.3.2 and 4.3.3 as the inclusion of the 'Apparent Power (MVA)' and 'Reactive Power (MVAR)' criteria were viewed as unnecessary due to providing minimal value that is not already provided by the 'Active Power (MW)' criteria. The Workgroup agreed that a second consultation was needed to discuss the legal text being amended to change the wording of Section D, Part 4, paragraph 4.3 so that Transmission Owners now 'may' require to submit the trigger criteria 'as agreed with NGESO'. The second consultation opened on 8 August 2022 and closed on 15 August 2022, receiving two non-confidential responses which were generally supportive. We note that the proposed changes made to the legal text in the Second Code Administrator Consultation were not incorporated in the final legal text presented to us, nor did the Panel comment on the proposed changes to the legal text. Therefore, our interpretation is that the Panel chose not to proceed with the proposed legal text arising from the second consultation.

STC Modification Panel⁶ recommendation

The STC Modification Panel (the Panel) considered the draft Final Modification Report (FMR) at its meeting on 22 September 2022⁷. The Panel considered that CM080 would better facilitate the STC objectives, and the Panel therefore recommended its approval. A majority of the Panel considered that CM080 better facilitated STC objectives (b), (e), and (f). One Panel member voted that it would better facilitate objective (a) and another Panel member assessed CM080 to have a neutral impact on all STC objectives.

Our decision

We have considered the issues raised by the proposal and the FMR. We have considered and taken into account the responses of the STC Parties included in the FMR. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the applicable STC objectives,⁸ and
- directing that the modification be made is consistent with our principal objective and statutory duties⁹.

⁶ The STC Modification Panel is established and constituted from time to time pursuant to and in accordance with section B6 of the STC.

⁷ <https://www.nationalgrideso.com/document/268481/download>

⁸ The Applicable STC Objectives are set out in Standard Licence Condition B12 (3) (a) to (f) of the Transmission Licence.

⁹ The Authority's statutory duties are wider than matters that the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

Reasons for our decision

We consider this modification proposal will better facilitate STC objectives (a), (b), (e) and (f), and has a neutral impact on the other STC objectives.

(a) efficient discharge of the obligations imposed upon transmission licensees by transmission licences and the Act

With the changes to Section D, Part 4 of the STC, the SoW process does not need to be triggered for each individual connection application. This is due to the shared access to information on the available capacity of GSPs. Currently, this can only be checked once the SoW and Project Progression (PP) processes have been initiated.

The availability of the information on GSP utilisation is dependent on regular DNO data submissions to NGENSO by DNOs. DNOs can continue to make offers until the Planning Limit of the GSP is reached, without starting the 2-step process¹⁰ each time when faced with clustered embedded generation applications, conducting an aggregated assessment instead.

In our view, the modification streamlines the connections process and reduces the time needed by the DNO to provide a connection offer, ultimately facilitating the obligation to provide an offer within 90 days. Therefore, we believe CM080 better facilitates STC objective (a) than the baseline.

(b) development, maintenance and operation of an efficient, economical and co-ordinated system of electricity transmission;

We believe the modification better facilitates development and maintenance of a coordinated system of electricity transmission as it significantly reduces the time required to assess the impact of individual projects connecting at distribution on the transmission system.

It allows investors to make streamlined, more economical investment decisions based on the information on capacity available on GSPs. Therefore, we consider that CM080 better facilitates STC objective (b) than the baseline.

(e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC;

CM080 will better facilitate STC objective (e) than the baseline by promoting efficiency as the introduction of the ETI process will mitigate the need for customers to make SoW requests for multiple individual connections reducing the administrative load on both DNOs and NGENSO and allowing them to provide faster and more accurate connection offers.

(f) facilitation of access to the national electricity transmission system for generation not yet connected to the national electricity transmission system or distribution system;

CM080 will better facilitate objective (f) than the baseline by allowing DNOs to consider the cumulative impact of multiple individual connections reducing the administrative burden and consequently enabling DNOs to provide faster and more accurate connection offers to customers.

¹⁰ SoW and PP

Decision notice

In accordance with Standard Condition B12 of the Electricity Transmission Licence, the Authority hereby directs that modification proposal CM080: '*Transmission Impact Assessment Process*' be made.

Tessa Hall
Head of Electricity Connections

Signed on behalf of the Authority and authorised for that purpose