

Stage 01: Modification Proposal

Grid Code

GC0099:

Modification Title: Establishing a common approach to interconnector scheduling consistent with the single intraday market coupling processes set out within Regulation (EU) 2015/1222 (CACM).

What stage is this document at?

| | |
|----|-------------------------|
| 01 | Modification Proposal |
| 02 | Workgroup Report |
| 03 | Code Admin Consultation |
| 04 | Report to the Authority |

Purpose of Modification: This modification seeks to introduce the interconnector scheduled transfer process to the Grid Code in order to establish common timings which are compatible with both the EU single intraday market coupling processes, and GB and EU balancing processes. CACM aims to promote effective competition in the generation, trading and supply of electricity and foresees the development of more liquid intraday markets which give parties the ability to balance their positions closer to real time should help to integrate renewable energy sources into the Union electricity market.

The Proposer recommends that this modification should be:

- Assessed by a Workgroup.

This modification was raised on 12 April 2017 and will be presented by the Proposer to the Panel on 30 May 2017. The Panel will consider the Proposer's recommendation and determine the appropriate route.



High Impact: Transmission system owners and operators most notably interconnector owners. This modification is linked to TSO compliance with EU Regulation 2015/1222 (CACM).



Medium Impact: None



Low Impact: None

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Any Questions?

Contact:

Taran Heir

Code Administrator



Taran.Heir

[@nationalgrid.com](https://twitter.com/nationalgrid)



07977433974

Proposer:

Robert Selbie

National Grid

Timetable

The Code Administrator recommends the following timetable:

| | |
|---|--------------------|
| Workgroup Meeting 1 | 07 June 2017 |
| Workgroup Meeting 2 | 3 August 2017 |
| Workgroup Consultation (15 working days) | 7 August 2017 |
| Workgroup meeting 3 | 6/7 September 2017 |
| Workgroup Report presented to Panel | 20 September 2017 |
| Code Admin Consultation Report Issued to Industry (15 working days) | 24 September 2017 |
| Draft Modification Report presented to Panel | 7 November 2017 |
| Panel Determination Vote | 15 November 2017 |
| Final Modification Report published | 17 November 2017 |
| Authority decision | 22 December 2017 |
| Implementation | 12 January 2018 |

What

Currently the Interconnector Scheduled Transfer process is not clearly set out within the GB Grid Code; however related processes (PN submissions) are included. This often causes confusion for new interconnectors. The interconnector scheduling process is established within the relevant Interconnection Agreements, Operating protocols, and details are given within the BSC methodology statements for Determination of System-to-System Flow. As a result the arrangements are bespoke for each interconnector. This modification seeks to establish a common approach within the Grid Code to scheduling across all GB interconnectors.

Why

The implementation of single intraday coupling as described in CACM will move the intraday cross zonal gate closure to at most one hour before the start of the relevant market time unit. This means that existing interconnector scheduling processes will need to be updated. Updating these arrangements requires careful consideration as the timings could impact the existing GB balancing arrangements, and/or increase the complexity of the implementation of the EU network guideline on balancing.

How

This modification proposes to include the BSC definition of the Interconnector Scheduled Transfer within the Grid Code, along with common timings to be applied on all GB interconnectors. This approach has been decided upon through consultation with GB interconnector owners.

*Justification for **Self-Governance** Procedures*

We consider this modification should be considered for self-governance procedures as although it will impact the operation of the National Electricity Transmission System, it will only affect a subset of parties who have already been engaged, and the modification describes arrangements which are already in place between NGET and interconnector owners in trilateral agreements.

Self-Governance - *The modification is unlikely to discriminate between different classes of Grid Code Parties and is unlikely to have a material effect on:*

- i) Existing or future electricity customers;*
- ii) Competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution or supply of electricity,*
- iii) The operation of the National Electricity Transmission System*
- iv) Matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies*
- v) The Grid Code's governance procedures or the Grid Code's modification procedures*

Requested Next Steps

This modification should:

- be subject to Self-Governance
- be assessed by a Workgroup

3 Why Change?

This Proposal is one of a number of Proposals which seek to implement relevant provisions of a number of new EU Network Codes/Guidelines which have been introduced in order to enable progress towards a competitive and efficient internal market in electricity. Some EU Network Guidelines are still in development and these may in due course require a review of solutions developed for Codes that come into force beforehand. The full set of EU network guidelines are;

- Regulation 2015/1222 – Capacity Allocation and Congestion Management (CACM) which entered into force 14 August 2015
- Regulation 2016/1719 – Forward Capacity Allocation (FCA) which entered into force 17 October 2016
- Regulation 2016/631 - Requirements for Generators (RfG) which entered into force 17 May 2016
- Regulation 2016/1388 - Demand Connection Code (DCC) which entered into force 7 September 2016
- Regulation 2016/1447 - High Voltage Direct Current (HVDC) which entered into force 28 September 2016
- Transmission System Operation Guideline (TSOG) - entry into force anticipated Summer 2017
- Emergency and Restoration (E&R) Guideline - entry into force anticipated Autumn 2017

Electricity Balancing Guideline (EBGL) - entry into force anticipated Autumn 2017

This modification relates to the CACM guidelines which aims to; promote effective competition in the generation, trading and supply of electricity.

Article 2 of CACM states that “intraday cross-zonal gate closure time’ means the point in time where cross-zonal capacity allocation is no longer permitted for a given market time unit;” Article 59 of CACM requires that the intraday cross zonal gate closure “shall be at most one hour before the start of the relevant market time unit”. The all TSO proposal on the intraday cross–zonal gate opening and intraday cross-zonal gate closure times in accordance with Article 59(1) of CACM is currently awaiting a decision by all regulatory authorities. The all regulatory decision is due by 14/06/17.

The existing timings for the allocation of cross border capacity are defined in the relevant interconnector access rules, with nomination gate closures typically 2 – 8 hours before delivery.

Existing scheduling processes on interconnectors will have to be modified to accommodate the change to a 1 hour intraday cross zonal gate closure. This will impact existing data transfers between NGET and interconnector owners. The existing Methodology Statements for Determination of System-to-System Flow will also have to be updated to reflect these changes. The existing Interconnection Agreements and Operating protocols will also have to be updated.

This modification to the Grid Code is required to ensure a consistent approach across all GB interconnectors and to minimise the impact on the GB and EU balancing processes.

4 Code Specific Matters

Technical Skillsets

An understanding of the existing interconnector scheduling processes on IFA, BritNed, EWIC and Moyle, as described in BSC Section R.

An understanding of the single intraday coupling processes proposed under Regulation 2015/1222 (CACM).

An understanding of the impact of the interconnector scheduling processes on the GB and EU balancing processes (current and future).

Reference Documents

COMMISSION REGULATION (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management:

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.197.01.0024.01.ENG&toc=OJ:L:2015:197:TOC

BSC Methodology Statements for Determination of System-to-System Flow

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Balancing-and-Settlement-code/>

All TSO intraday cross zonal gate times proposal

https://www.entsoe.eu/Documents/Network%20codes%20documents/Implementation/cacm/161214_Attch5_IDCZGT_proposal_allTSOs_approved.pdf

XBID user group meeting minutes

https://www.apxgroup.com/wp-content/uploads/160629-XBID-4.-UG_Meeting_Minutes_FINAL.pdf

BSC section R paragraph 7

IFA access rules

BritNed access rules

EWIC access rules

Moyle access rules

5 Solution

It is proposed that the BSC definition of the “Interconnector Scheduled Transfer” (IST) is included within the Grid Code, and new requirements are introduced on interconnector owners to send copies of the IST to NGET by specified deadlines. This will be achieved through three changes to the Grid Code;

1. Introduction of the Interconnector Scheduled Transfer, intraday cross-zonal gate closure time, and intraday cross-zonal gate opening time definitions within the glossary & definitions section.
2. It is proposed to outline the Pre Gate Closure IST process within BC1. It is proposed that the IST is sent to NGET following the day ahead market coupling processes, and that this IST is updated to represent the latest market position at least every hour up until the cross zonal intraday gate closure.
3. It is proposed to outline an aspect of the Post Gate Closure IST process within BC2. Following Gate Closure and until the 5 minutes past the Gate Closure the Interconnector Owner shall update the IST to reflect those intraday trades which may have been matched shortly before the intraday cross zonal gate closure.

For the avoidance of doubt, it is not proposed to allow any additional time for Interconnector Users or other Grid Code Parties to incorporate intraday trades into their Physical Notifications. As currently, any Physical Notifications received after Gate Closure will be rejected in accordance with BC1.4.4, and BM Participants must follow the Physical Notifications in force at Gate Closure in accordance with BC2.5.1.

Who

BSC Section R. This impacts interconnector owners, interconnector users, Interconnector Administrator, Interconnector BM Units, NGET, and External System Operators.

As a minimum, changes will be required to BSC Section R to allow the Interconnector Scheduled Transfer to be amended after Gate Closure to reflect the results of the single intraday market coupling. Other changes may be desirable (e.g. to the timing of data submissions and calculations performed by the Interconnector Administrator), and this should be considered under BSC governance (in parallel with the progression of this Grid Code Modification).

Which

The IST processes in BSC section 7, including the BSC Methodology Statements for Determination of System-to-System Flow, and corresponding processes described in the relevant Interconnection Agreements.

Systems impacted

NGET BM system

NGET EBS system

NGIC, RTE, & BritNed Regional Nomination Platform (RNP) which will be used for the first implementation of XBID within GB

Other Interconnector Owner systems

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

No

Consumer Impacts

This change should facilitate the implementation of both the EU single intraday market coupling processes and EU balancing processes. These changes are expected to deliver significant benefit to the end consumer by facilitating a more liquid pan-EU intraday and balancing market.

7 Relevant Objectives

Impact of the modification on the Relevant Objectives:

| Relevant Objective | Identified impact |
|--|-------------------|
| To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity | Positive |
| To facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity) | Positive |
| Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole | Positive |
| To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and | Positive |
| To promote efficiency in the implementation and administration of the Grid Code arrangements | Neutral |

8 Implementation

Implementation should be in line with the earliest implementation of a continuous cross border intraday market on each GB interconnector. NGETs current understanding is that IFA and BritNed planned XBID go-live is by Q3 2018.

GLOSSARY & DEFINITIONS

(GD)

GD.1 In the Grid Code the following words and expressions shall, unless the subject matter or context otherwise requires or is inconsistent therewith, bear the following meanings:

...

| | |
|--|---|
| Interconnector Owner | Has the meaning given to the term in the Connection and Use of System Code . |
| Interconnector Scheduled Transfer | Has the meaning set out in the BSC . |
| Interconnector User | Has the meaning set out in the BSC . |

...

| | |
|---|---|
| intraday cross-zonal gate closure time | Has the meaning set out in the Regulation (EU) 2015/1222 . |
| intraday cross-zonal gate opening time | Has the meaning set out in the Regulation (EU) 2015/1222 . |

BC1.4.7 Special Provisions Relating To Interconnector Owners

(a) Calculate the Interconnector Scheduled Transfer (IST)

Interconnector Owners shall deliver an IST to NGET by 1230 each day which reflects the results of the single day ahead market coupling. Updates to the IST shall be delivered to NGET at least every hour between the intraday cross-zonal gate opening time and the intraday cross-zonal gate closure time.

BC2.13 LIAISON WITH INTERCONNECTOR OWNERS

(a) Calculate the Interconnector Scheduled Transfer (IST)

Interconnector Owners shall deliver an updated IST to NGET by 5 minutes after each intraday cross-zonal gate closure time. The updated IST shall fully reflect the results of the single intraday market coupling.

Text Commentary

The intention is that Interconnector Owners submit to NGET an Interconnector Scheduled Transfer representing the anticipated active energy flow across the interconnector that is updated from day ahead through until 5 minutes after the cross zonal intraday gate closure so as to fully represent the market results; including long term allocations, single day ahead and single intraday market coupling.

10 Recommendations

Panel is asked to:

- Agree that Self Governance procedures should apply
- Refer this Proposal to a Workgroup for assessment.