

Grid Code Issue Paper

Paper Ref: pp16/XX

Date Raised: 14 April 2016

[For presentation at the April 2016 meeting of the Grid Code Development Forum](#)

Robert Selbie on behalf of National Grid

Interconnector Physical Notification submissions following XBID (Cross Border Intra Day) market implementation; the cross border gate closure definition and its impact on the GB Grid Code.

If submitting to the Grid Code Review Panel, has this issue been discussed at the
[Grid Code Development Forum?](#)

Yes [Please provide details of any outcomes below]

☐

No

☒

N/A

GCDF is a periodic meeting where stakeholders can discuss any Grid Code-related technical issues. It gives stakeholders the opportunity to fully understand their issues before raising them to the Panel. Click the link above for more info, including dates.

RECOMMENDATION

What would you like the GCDF or GCRP to do?

Note the issue for information only

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Consider the issue and provide guidance

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Further investigate this issue at a one-off workshop
[Please consider GCDF if answered 'no' for question above]

☐

Approve this issue for a workgroup for further analysis and form solutions
[Please consider workgroup Terms of Reference and attendance at workgroup]

☐

Progress this issue straight to Industry Consultation
[Please contact the code administrator before proceeding (see details at the bottom)]

☐

DEFINE

Summary

The Intraday Cross Zonal Gate Closure Time definition assumed within the XBID (Cross Border Intra Day) project allows market participants to submit orders to power exchanges to trade electricity across Europe right up until 1 hour before the start of each market time unit. This means that interconnector owners will not know the final physical position for those interconnector User BM Units which represent nominated electricity market operators (NEMO i.e. APX and NPS) until some point after the GB gate closure.

BC1.4.4 of the GB Grid Code states that "For the avoidance of doubt, no changes to the Physical Notification, QPN data or Bid-Offer Data for any Settlement Period may be submitted to NGET after Gate Closure for that Settlement Period."

It will not be possible for interconnector owners to respect this Grid Code requirement due to XBID implementation. It is proposed that those interconnector User BM Units which represent nominated electricity market operators within GB should be able to submit PN data after the GB gate closure, but before 10 minutes after the gate closure.

Grid Code Issue Paper

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The impacted parties are; NGET, interconnector owners, NEMOs, Elexon

Description

The Capacity Allocation and Congestion Management (CACM) EU guideline requires interconnector capacity to be allocated through a continuous implicit market (rather than explicit auctions as currently in place on IFA and BritNed) with a 1 hour gate closure.

The Cross-Border Intraday Project (XBID) is the multi-TSO and multi-Power Exchange project looking to introduce continuous implicit intraday trading. Currently the project is aiming to go live Quarter 3 2017. Both NGIC and BritNed are partners of the project.

The gate closure for receiving orders onto the common XBID system is 60 minutes before the start of each market time unit. The common XBID system can continue to consider orders after the gate closure time. All positions will be known 5 minutes after the gate closure. At this point it will be possible for interconnector owners to submit to NGET their physical notifications for interconnector user BM Units which represent the GB NEMOs. The only interconnector user BM Units which will be altered by XBID are only those that represent the NEMOs (APX and NPS).

NGET uses physical notifications within the balancing mechanism in order to balance demand and supply and to ensure the security and quality of electricity supply across the GB Transmission System.

Proposed solution

From the Balancing Code:

BC1.4.4 Receipt Of BM Unit Data Prior To Gate Closure

*BM Participants submitting Bid-Offer Data, in respect of any BM Unit for use in the Balancing Mechanism for any particular Settlement Period in accordance with the BSC, must ensure that Physical Notifications and Bid-Offer Data for such BM Units are received in their entirety and logged into NGET's computer systems by the time of Gate Closure for that Settlement Period. **The only exception is the submission of Physical Notifications from those Interconnector User BM Units representing GB Nominated Electricity Market Operators undertaking the market coupling operator function within the single intraday coupling.** In all cases the data received will be subject to the application under the Grid Code of the provisions of BC1.4.5.*

*For the avoidance of doubt, no changes to the Physical Notification, QPN data or Bid-Offer Data for any Settlement Period **(except those explicitly referenced within BC1.4.6)** may be submitted to NGET after Gate Closure for that Settlement Period.*

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BC1.4.6 Special Provisions Relating To Interconnector Users

(a) The total of the relevant Physical Notifications submitted by Interconnector Users in respect of any period of time should not exceed the capability (in MW) of the respective External Interconnection for that period of time. In the event that it does, then NGET shall advise the Externally Interconnected System Operator accordingly. In the period between such advice and Gate Closure, one or more of the relevant Interconnector Users would be expected to submit revised Physical Notifications to NGET to eliminate any such over-provision.

(b) In any case where, as a result of a reduction in the capability (in MW) of the External Interconnection in any period during an Operational Day which is agreed between NGET and an Externally Interconnected System Operator after 0900 hours on the day before the beginning of such Operational Day, the total of the Physical Notifications in the relevant period using that External Interconnection, as stated in the BM Unit Data exceeds the reduced capability (in MW) of the respective External Interconnection in that period then NGET shall notify the Externally Interconnected System Operator accordingly.

(c) Physical Notifications from those Interconnector User BM Units representing GB Nominated Electricity Market Operators undertaking the market coupling operator function within the single intraday coupling must be submitted to NGET by 10 minutes after the Gate Closure for that Settlement Period.

Which Grid Code clause/section is relevant for this issue?

BC1.4.4 and BC1.4.6

How has this issue originated? [Please provide details in the text box below]

An affected party has identified a Grid Code defect	<input checked="" type="checkbox"/>
An affected party wishes to provide information to the Panel	<input type="checkbox"/>
An affected party has identified a Grid Code procedural inefficiency	<input type="checkbox"/>
An affected party needs clarity	<input type="checkbox"/>
As a consequence of Significant Code Review (initiated by the Regulatory Authority)	<input type="checkbox"/>
As a consequence of a licence or legislative change (including European Law)	<input checked="" type="checkbox"/>

Grid Code Issue Paper

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Date Raised: 14 April 2016

Other: ☒

The Capacity Allocation and Congestion Management (CACM) EU guideline requires a XBID type market.
Interconnector owners have identified that the XBID implementation is counter to the current GB Grid Code.

ASSESSMENT AGAINST GRID CODE OBJECTIVES

How are the Grid Code objectives better achieved by resolving this issue?

Economic & Efficient Development: (i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity

By resolving this issue NGET will receive more information from Interconnector User BM Units improving the efficient, coordinated and economical operation of the transmission system.

Competition: (ii) to facilitate competition in the generation and supply of electricity ... (on terms which neither prevent nor restrict competition in the supply or generation of electricity)

The introduction of a continuous implicit intraday market (as required by the CACM European Guideline) should help to deliver the objectives identified in CACM article 3. These include;
“... promoting effective competition in the generation, trading and supply of electricity;
... ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants;
...respecting the need for a fair and orderly market and fair and orderly price formation;
... creating a level playing field for NEMOs;
... providing non-discriminatory access to cross-zonal capacity.”

System Security: (iii) 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;

By only changing the Physical Notification for those Interconnector User BM Units representing GB Nominated Electricity Market Operators undertaking the market coupling operator function within the single intraday coupling there should be no impact to system security. Wholesale changes to gate closures for all BM units could jeopardise system security.

Licence Obligations: (iv) 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

A single continuous implicit intraday market is required by the European Guideline CACM.

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IMPACT

To what extent are industry stakeholders affected by this issue?

Developers/Operators of Large generation units	Low
Developers/Operators of Medium generation units	Low
Developers/Operators of Small generation units	Low
National Electricity Transmission System Operator (NETSO)	Medium
Transmission Owners (incl OFTOs & Interconnectors)	High
Distribution Network Operators	Low
Suppliers	Low
Aggregators	Low
Directly-Connected Demand (including Response providers)	Low
Manufacturers	Low
Regulator	Low
Other – Nominated Electricity Market Operators	High

Is there a positive impact on greenhouse gas emissions by resolving this issue?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
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Is there any impact on industry codes or documents?

CUSC	<input type="checkbox"/>	BSC	<input checked="" type="checkbox"/>
STC	<input type="checkbox"/>	SQSS	<input type="checkbox"/>
Distribution Code	<input type="checkbox"/>	DCUSA	<input type="checkbox"/>
Other Industry Documents	<input type="checkbox"/>		

Is there a time limitation for this issue?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
XBID go live = quarter 3 2017			

Have you attached any supporting documentation?

No	<input checked="" type="checkbox"/>
Yes [Please provide details/attach files below]	<input type="checkbox"/>

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Document Guidance

This template is used to raise an issue at the Grid Code Review Panel, as well as providing an initial assessment. An issue can be anything that a party would like to raise and does not have to result in a modification to the Grid Code or creation of a Working Group.

Grid Code Issue Papers for consideration at the next scheduled Grid Code Panel meeting (GCRP), must be submitted THREE weeks in advance [[GCRP dates](#)]

Guidance has been provided in square brackets within the document, but please contact National Grid, The Code Administrator, with any questions or queries about this template: grid.code@nationalgrid.com

An overview of the Grid Code modification process can be found here:
<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=28959>