



## **GRID CODE CONSULTATION DOCUMENT**

### **Grid Code changes relating to BSC proposal P243**

*Extension of OC2 obligations to include Interconnector Owners*

**The purpose of this document is to consult on the above Grid Code Modification Proposal with authorised electricity operators liable to be materially affected by the proposed changes and forms the basis of the subsequent Report to the Authority**

Consultation Ref	F/09
Issue	1.0
Date of Issue	6 November 2009
<b>Responses required by</b>	<b>4 December 2009</b>
Prepared by	National Grid

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**DOCUMENT LOCATION**

National Grid website:

<http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/>

**DISTRIBUTION**

<b>Name</b>	<b>Organisation</b>
AEO's	Various
GCRP Members/Alternates	Various
Interested Parties	Various
National Grid Website	

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**A. INTRODUCTION**

1. Paragraph 2 of Condition C14 of the Transmission Licence granted to the National Grid Electricity Transmission plc ("National Grid") provides that National Grid shall, in consultation with Authorised Electricity Operators liable to be materially affected thereby, periodically review the Grid Code and its implementation. That paragraph also requires National Grid, following such review, to send to the Authority:-
  - (a) a report on the outcome of such review;
  - (b) any proposed revisions to the Grid Code as National Grid (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives set out in sub-paragraph (b) of Condition C14 of the Transmission Licence; and
  - (c) any written representations or objections from Authorised Electricity Operators (including any proposals by such operators for revisions to the Grid Code not accepted by National Grid in the course of the review) arising during the consultation process and subsequently maintained.
2. This review examines proposed changes to the existing Grid Code provisions which may be needed in parallel with BSC proposal P243 'publication of generator forward availability by fuel type'.
3. The vast majority of the forward availability data required by P243 is already provided by the generators as Output Usable under OC2. However, P243 also requires publication of forward availability data for individual interconnectors. Consequently, a Grid Code change needs to be progressed in order to extend OC2 obligations to Interconnector Owners so that:
  - i) The existing Interconnector Owners provide OC2 data in the same way as the generators do.
  - ii) Any future Interconnector Owners have the same obligations as the existing Interconnector Owners.
4. Following P243 Working Group discussions on 23 September 2009, National Grid considers that the associated Grid Code changes need to be progressed relatively quickly with the aim that the Authority receives the Grid Code and the BSC reports around the same time for its consideration (the BSC report is scheduled to go to the Authority in December 2009).
5. Comments upon the proposed changes within this consultation should be sent to National Grid by **4 December 2009** as detailed in section C. The comments will be reviewed and responded to.
6. Following this consultation, National Grid will prepare a Report to the Authority detailing National Grid's recommended changes to the Grid Code and all comments/responses received from Authorised Electricity Operators through this consultation. Once sent to the Authority this report will be made available on National Grid's website.
7. Where Authorised Electricity Operators' responses have been marked as confidential they will not be published within the version of the Report to the Authority placed on the National Grid website.
8. The revisions to the Grid Code proposed by National Grid and sent to the Authority require approval by that body and will, if approved, come into force on such date (or dates) of which you will be notified by National Grid, in accordance with the Authority's approval.

**B. DESCRIPTION OF THE PROPOSED AMENDMENTS AND THEIR EFFECTS**

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## Background

1. National Grid provides a range of data to the Balancing Mechanism Reporting Service (BMRS) including a breakdown of near real-time (5-minute average) and half-hourly (30-minute average) generation by fuel type. This information is based on National Grid's operational metering and is available on [http://www.bmreports.com/bsp/bsp\\_home.htm](http://www.bmreports.com/bsp/bsp_home.htm) for the following categories:
  - (a) CCGT Modules;
  - (b) Oil Plant;
  - (c) Coal Plant;
  - (d) Nuclear Plant;
  - (e) Power Park Modules;
  - (f) Pumped Storage Plant;
  - (g) Non Pumped Storage Hydro Plant;
  - (h) Open Cycle Gas Turbine Plant;
  - (i) External Interconnection flows from France to England;
  - (j) External Interconnection flows from Northern Ireland to Scotland; and
  - (k) A single category containing any other generation not covered by (a)-(j) above.
2. The BSC proposal P243<sup>1</sup> (in progress) proposes to publish forward availability data for the above categories. With the exception of Interconnectors, this data is already provided by Generators as Output Usable under Grid Code OC2.
3. In parallel with P243, a Grid Code change needs to be progressed in order to extend OC2 obligations to Interconnector Owners so that:
  - i) The existing Interconnector Owners provide OC2 data in the same way as the Generators do.
  - ii) Any future Interconnector Owners have the same obligations as the existing Interconnector Owners.
4. Given that the P243 is already in progress and the final P243 report is scheduled to go to the Authority in December 2009, the Grid Code consultation needs to be progressed in a timely manner.

National Grid uses information provided by Generators under OC2 relating to outages and Output Usable to plan the operation of the National Electricity Transmission System. With the increasing number of Interconnectors and other changes to the System, the impact of interconnector flows on the operation of the National Electricity Transmission System will become more critical. Consequently it would be beneficial to the operational planning process if information on interconnector outages and capacity were made available to National Grid through the OC2 process (rather than through less transparent operational agreements under which National Grid currently receives such information). Furthermore, it would add transparency to the requirements for new potential interconnector operators.

## Proposed Grid Code Changes

5. Generators provide National Grid with outage programmes and forecasts of the maximum level at which Gensets can export to the System (Output Usable) for the period 5 years down to 2 days ahead, National Grid provides each Generator with information on National Electricity Transmission System outages which are likely to affect the export capability of the Gensets. This information is used to:

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<sup>1</sup> Publication of Generator Forward Availability by Fuel Type. See <http://www.elexon.co.uk/changeimplementation/ModificationProcess/modificationdocumentation/modProposalView.aspx?propID=268>

- Facilitate the efficient and economic co-ordination of Gensets and National Electricity Transmission System outages;
  - Enable National Grid to provide surpluses of generation over demand for the National Electricity Transmission System and System Zones;
  - Plan the operation of the National Electricity Transmission System;
  - Provide market information to facilitate improved market participant decision-making.
6. In light of the BSC proposal P243, National Grid has considered two options for changes to the Grid Code:
- i) Make minimal changes to the Grid Code, as required by P243 i.e. only incorporate changes related to Output Usable; or
  - ii) Make changes that ensure consistency between obligations on Generators and Interconnector Owners i.e. incorporate changes related to both the Output Usable and the outage programmes;
7. If option 1 above is implemented, it is likely that OC2 will need to be reviewed in the future in order to ensure consistency between Generator obligations and Interconnector Owner obligations. This inconsistency and the inefficiency associated with going through the Grid Code governance again could be avoided if option 2 is pursued. Consequently, National Grid proposes that option 2 should be progressed in preference to option 1.
8. This proposal will therefore widen the scope of OC2 to include Interconnector Owners (as defined in the CUSC) in respect of exchanging information with National Grid on the availability of interconnector capacity and outage programmes. Two definitions of interconnector capacity (based on the existing definition of Output Usable) are needed to take into account the bidirectionality of Interconnectors:
- **Interconnector Export Capacity** The daily or weekly forecast value in MW at the time of the daily or weekly peak demand of the maximum level at which the External Interconnection can export to the Grid Entry Point
  - **Interconnector Import Capacity** The daily or weekly forecast value in MW at the time of the daily or weekly peak demand of the maximum level at which the External Interconnection can import from the Grid Entry Point
- In addition, the Interconnector Owners and National Grid will exchange information about their outage programmes.
9. The proposed amendments are shown in Appendix A.
10. It should be noted that another Grid Code modification is currently being progressed. E/09 consists of some minor Grid Code changes made necessary by CAP169 which enhances the provision of reactive power from Large Power Stations, Power Park Modules and embedded generation. The E/09 Consultation closed on 7<sup>th</sup> October 2009 and contained a change to Appendix 1 of OC2. The proposals within this consultation (F/09) also change OC2 although the two modifications **do not** change the same parts of this section. The proposed changes in Appendix A are against the current baseline and if, subsequently, after the submission of the E/09 Report of the Authority the changes are implemented, the final proposals for F/09 will be against that baseline.
11. It is proposed that the Interconnector Owners will use the same process for exchanging information as the generators currently do i.e. via National Grid's TOGA system.

Impact on National Electricity Transmission System

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The proposed changes will not have any adverse impact on the National Electricity Transmission System. The proposed changes will facilitate the discharge of potential BSC obligations by National Grid.

There is likely to be an impact on National Grid's TOGA system for facilitating exchange of information with Interconnector Owners.

#### Impact on Grid Code Users

The proposals will place additional obligations on Interconnector Owners to provide OC2 data, and will provide additional clarity to Users and ensure consistency in interpretation of the requirements.

National Grid has separately discussed the potential impact of OC2 changes with the following Interconnector Owners:

- National Grid Interconnector Limited;
- Moyle Interconnector Limited; and
- BritNed Development Limited.

All the Interconnector Owners are broadly supportive of the proposed changes.

#### Assessment Against Grid Code Objectives

The proposed changes will better facilitate Grid Code Objectives by improving the consistency and clarity of the OC2 requirements.

#### Impact on Industry Documents

##### *Impact on Core Industry Documents*

None.

##### *Impact on other Industry Documents*

None.

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**C. RESPONSES**

20. This section will contain a summary of responses received during the Consultation and will be completed as part of the Report to the Authority.

21. Views are invited upon the proposals outlined in this report, which should be received **by 4 December 2009**. Views on the following areas would be especially welcomed:

- Impact of the proposals on Grid Code users.
- Any improvements or changes to the proposals that in a respondent's view would better facilitate the objectives of the Grid Code.

34. Your formal responses may be:-

Posted to: Shafqat Ali  
Electricity Codes  
Regulatory Frameworks  
National Grid Electricity Transmission plc  
National Grid House  
Warwick Technology Park  
Gallows Hill  
Warwick  
CV34 6DA

Emailed to: [shafqat.r.ali@uk.ngrid.com](mailto:shafqat.r.ali@uk.ngrid.com)

## **Appendix A: Proposed Grid Code Changes**

Please See Separate Volume: Appendix A