# **GB Transmission System Study Network Data File**

#### Introduction

1. This paper explains the existing Grid Code provisions for the exchange of GB Transmission System network data by National Grid to Network Operators and invites the GCRP to agree that the current provisions would benefit from clarification.

## **Background**

- 2. The Grid Code clauses (OC2.4.1.3.3 (i), OC2.4.1.3.4 (d), OC2.4.1.3.5 (a)) relate to the provision of the GB Transmission System Study Network Data File (GBTSSNDF) by National Grid to Network Operators. The GBTSSNDF is inclusive of National Grid's view of the expected output from Generating Units, based on submitted OC2 data.
- 3. The data held in the GBTSSNDF allows a Network Operator to study the operation of their sub-transmission network with that of the transmission system. This is particularly important for complex interconnected sub-transmission networks where a co-ordinated approach is particularly valuable.
- 4. A number of Network Operators have requested that National Grid provides them with a regular update of the GBTSSNDF on a weekly basis for the week-ahead timescale using a new form of network modelling data. It is anticipated that the numbers of this type of request will increase in the future given the projected increase in the number of complex interconnected sub-transmission networks.

#### **Data Provisions**

- 5. The Grid Code currently allows Network Operators to choose whether they want National Grid to provide an equivalent network model (option (x) and / or (y)) or for National Grid to provide the GBTSSNDF (option (z)).
- 6. The provision of GBTSSNDF is subject to both National Grid and the applicable Network Operator agreeing that the information should be exchanged.
- 7. Grid Code clause OC2.4.1.3.4 (d) obliges National Grid to provide updates to the GBTSSNDF during Year 0. This provision appears in the section heading 'Operational Planning Phase' with no duplicate provision under the section heading 'Programming Phase' which Users may have expected<sup>1</sup>.
- 8. In the absence of any explicit statement to limit the exchange of the GBTSSNDF (option z) to the Operational Planning Phase it is construed that the obligation extends into the Programming Phase. From a User perspective this lack of clarity may potentially lead to confusion regarding the scope of the provisions.

#### Recommendation

- 9. The GCRP are invited to:
  - note that current wording and obligations regarding the exchange of the GBTSSNDF applies to the 'Programming Phase';
  - agree that National Grid should proceed with an industry consultation such that the existing Grid Code wording provides greater clarity to Users regarding the scope of the existing clauses to avoid unnecessary confusion.

The Glossary and Definition inform Users that headings are only inserted for convenience and should be ignored when construing the Grid Code.

# Appendix 1 - Grid Code Changes

Proposed Changes to Glossary and Definitions

# **GB Transmission System Study Network Data File**

A computer file <u>produced by NGET</u> which in <u>NGET's view provides an appropriate representation of containing details of transmission plant and <u>Large Power Stations</u> and the configuration of the connection between them, together with data on <u>Demand and on the GB Transmission System for a specific point in time. The computer file will include information and data on <u>Demand on the GB Transmission System</u> and on <u>Large Power Stations</u> including <u>Genset power output consistent with Output Useable and NGET's view of prevailing system conditions. The computer file is to be used for technical analysis purposes only.</u></u></u>

These details, when read together as represented in the file, form **NGET's** view of an appropriate representation of the **GB Transmission System** for technical analysis purposes only. The file will only deal with the **GB Transmission System** 

Proposed Changes to OC2 (Operational Planning and Data Provision)

# OC2.4.1.3.5 Programming Phase

- (a) By 1600 hours each Thursday
  - (i) NGET shall continue to update a preliminary GB Transmission System outage programme for the eighth week ahead, a provisional GB Transmission System outage programme for the next week ahead and a final day ahead GB Transmission System outage programme for the following day.
  - (ii) NGET will notify each Generator and Network Operator and each Non-Embedded Customer, in writing of those aspects of the preliminary GB Transmission System outage programme which may operationally affect each Generator (other than those aspects which may operationally affect Embedded Small Power Stations or Embedded Medium Power Stations) or Network Operator and each Non-Embedded Customer including in particular proposed start dates and end dates of relevant GB Transmission System outages—and changes to information supplied to NGET pursuant to OC2.4.1.3.3(i)(x) and (y) (if OC2.4.1.3.3(i)(z) does not apply).

NGET will also notify changes to information supplied by NGET pursuant to OC2.4.1.3.3(i)(x) and (y) except where in relation to a User information was supplied pursuant to OC2.4.1.3.3(i)(z). In that case:-

- NGET will, by way of update of the information supplied by it pursuant to OC2.4.1.3.3(i)(z), make available the GB Transmission System Study Network Data Files for the next week ahead and
- 2. **NGET** will notify each relevant **Network Operator**, as soon as reasonably practicable after it has updated the

# <u>GB Transmission System Study Network Data Files</u> covering the next week ahead that it has done so, and

3. The provisions of OC2.4.1.3.3(i)(z)(2), (3) and (5) shall apply to the provision of data under this part of OC2.4.1.3.5(a)(ii) as if set out in full.

NGET may make available the GB Transmission System Study Network Data Files for the next week ahead where NGET and a particular User agree, and in such case the provisions of OC2.4.1.1.3.3(i)(x) and (y) and the provisions of OC2.4.1.3.4(d) and OC2.4.1.3.5(a) which relate to OC2.4.1.1.3.3(i)(x) and (y) shall not apply. In such case the provisions of this OC2.4.1.3.5(a)(ii)2 and 3 shall apply to the provision of the data under this part of OC2.4.1.3.5(a)(ii) as if set out in full.

NGET will also indicate where a need may exist to arm an Operational Intertripping scheme, emergency switching, emergency Demand management or other measures including the issuing of other operational instructions or notifications or Emergency Instructions to Users in accordance with BC2 to allow the security of the GB Transmission System to be maintained within the Licence Standards.