

Mr David Smith GCRP Chairman National Grid Electricity Transmission plc National Grid Transco House Warwick Technology Park Gallows Hill Warwick CV34 6DA

Bringing choice and value to customers

Your Ref: Our Ref: blm / 109 002 Direct Dial: 020 7901 7366 Email: stuart.cook@ofgem.gov.uk

3 March 2009

Dear David

# **REVIEW OF THE GRID CODE: DECISION AND NOTICE IN RELATION TO CONSULTATION F/08 (Grid Code Requirements for System to Generator Operational Intertripping Schemes)**

The Gas and Electricity Markets Authority (the "Authority")<sup>1</sup> has carefully considered the changes that  $NGET^2$  has proposed to its Grid Code as set out in the report to the Authority arising from consultation F/08 (Grid Code Requirements for System to Generator Operational Intertripping Schemes)<sup>3</sup> that has been submitted to it for approval.

The Authority has decided to approve the proposed changes to the Licensee's Grid Code (the "Grid Code") as set out in Appendix A of the report to the Authority arising out of Consultation F/08. In conjunction, the Authority has decided to direct the amendments to the Grid Code<sup>4</sup> as set out in Appendix 1 of this letter.

This document explains the background to the proposals and sets out the Authority's reasons for its decision to approve these changes to the Grid Code and direct the amendments set out in Appendix 1. This letter constitutes notice by the Authority under Section 49A of the Electricity Act 1989 in relation to these decisions.

<sup>&</sup>lt;sup>1</sup> Ofgem is the office of the Authority. The terms "we", "Ofgem" and "the Authority" are used interchangeably in this letter.

<sup>&</sup>lt;sup>2</sup> National Grid Electricity Transmission plc

<sup>&</sup>lt;sup>3</sup> Report from NGET – Consultation Reference F/08,Issue 1, Date of Issue 26 January 2009. <u>http://www.nationalgrid.com/NR/rdonlyres/23920EE4-8415-4F46-AAAE-</u> C1110EA0ECEE4/21400/Paraetter the Authority 500 and 500 and

C1119FA956E4/31489/ReporttotheAuthorityF08.pdf

<sup>&</sup>lt;sup>4</sup> As permitted in C14.4

## Background to the proposed changes to NGET's Grid Code

NGET is proposing changes to the Grid Code to clarify the technical requirements that may be specified in a generator's bilateral agreement as part of a system to generator operational intertripping scheme requirement. This Grid Code review was initiated at the request of generators that were seeking to improve transparency of the current arrangements by including a description within the Grid Code of typical technical requirements which may form part of a bilateral agreement offered by NGET.

NGET has proposed changes to the Grid Code to amend the:

- Definitions of system to generator operation intertripping schemes to reflect changes to the CUSC (to extend payment arrangements to power park modules);
- Connection Conditions to explain the additional content of a bilateral agreement that specifies a system to generator operational intertripping scheme requirement, and
- Connection Conditions to provide generic technical information relevant to system to generator operational intertripping schemes.

NGET received two responses to Consultation F/08 from authorised electricity operators. NGET reported that both respondents were supportive of the proposed changes to the Grid Code.

One respondent also provided comments about the possible implications of this Grid Code change proposal for offshore generators following the implementation of the proposed offshore transmission regime. This respondent noted that, for offshore windfarms, a system-to-generator operational intertripping scheme would typically trip the generator's circuit breaker(s) at the onshore point of connection. However, the proposed offshore transmission regime will change the ownership boundary between generator and transmission systems. This respondent therefore questioned whether such system-to-generator operational intertripping schemes would become redefined as transmission system intertrip schemes as part of the implementation of the proposed offshore transmission regime.

## NGET's recommendation

In its report<sup>5</sup> to the Authority on Consultation F/08 NGET set out the drafting for proposed changes to the Grid Code. It recommended that the Authority approved the proposed changes.

#### Ofgem's view

Grid Code changes require Authority approval under standard condition C14(3) of the Transmission Licence. Having carefully considered the NGET's report on the proposed changes, Ofgem considers that, having had regard to the licensee's obligations<sup>6</sup> set out in

<sup>&</sup>lt;sup>5</sup> As required by C14.2.a

The licensee's transmission licence defines the Grid Code objectives as follows:

<sup>(</sup>i) to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the transmission of electricity;

<sup>(</sup>ii) to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the GB 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); and

<sup>(</sup>iii) subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in Great Britain taken as a whole.

condition C14(1)(b) of the Transmission Licence ("the obligations") and Ofgem's wider statutory duties<sup>7</sup>, that the proposed changes to the Grid Code should be approved by the Authority. Ofgem's reasons for reaching this decision are outlined below.

We note that the proposed changes to the Grid Code will provide generators with more clarity about the likely requirements of a system-to-generator operational intertripping scheme that may be included as a condition of a bilateral agreement. We consider that this additional clarity will facilitate competition in generation by providing existing and potential new entrant generators a clearer idea of the rights and obligations involved with entering into such a scheme.

We also note that these proposed Grid Code changes would support the use of systemto-generator operational intertripping schemes. We accept NGET's view that system-togenerator operational intertripping schemes (and any measures that support those schemes), facilitate the operation of an efficient system of electricity transmission as these schemes can enhance transmission system utilisation.

We note that there were inconsistent references to circuit breakers in the drafting of the proposed change to CC.6.3.18 of the Grid Code. We asked NGET to provide us with revised drafting for CC.6.3.18 of the Grid Code that addresses this inconsistency. We consider that the revised drafting more accurately reflects the intent of the F/08 change proposal. The revised drafting is included in Appendix 1 to this letter.

We have considered the comment made by one respondent about the possible implications of the F/08 change proposal for offshore generators. We note that the Grid Code arrangements for system to generator operational intertripping schemes have been developed based on a general expectation that the generator would be tripped on receipt of an intertrip signal by a circuit breaker that is owned by the generator. However, NGET has advised us that there are no fundamental reasons why a generator could not be tripped on receipt of an intertrip signal by a circuit breaker owned by a transmission licensee (subject to there being no adverse consequences to other users of the GB transmission system).

We note the specific query raised about the impact on existing contractual agreements for system-to-generator operational intertripping schemes between offshore generators and NGET. We have observed as part of our Offshore Transmission consultation process that there will be a need for changes to be made to existing contracts between NGET and offshore generators as part of the implementation of the proposed offshore transmission regime. We consider that the scope of such changes would include any changes needed to generator specific system to generator operational intertripping scheme requirements as a consequence of the change to the boundary between generator and the transmission system.

We are concerned that the Grid Code is not explicit in terms of the alternative arrangements that may be agreed between a generator and NGET. We consider that NGET should undertake a further review of the system-to-generator operational intertripping scheme descriptions and requirements in the Grid Code in parallel with the implementation of the proposed offshore transmission regime.

7

Ofgem's statutory duties are wider than the matters that the NGET has to take into consideration and include amongst other things a duty to have regard to social and environmental guidance provided to Ofgem by the government.

### The Authority's decision

Based on the reasons set out above the Authority has therefore decided to approve the Grid Code changes set out in Appendix A of the report submitted to the Authority arising from consultation F/08 (Grid Code Requirements for System to Generator Operational Intertripping Schemes). In conjunction it has decided to direct the amendments set out in Appendix 1 to correct the unintended drafting consistency issue within the F/08 change proposal.

The implementation date for these Grid Code changes is 16 March 2009.

Please do not hesitate to contact Bridget Morgan on 020 7901 7080 if you have any queries in relation to the issues raised in this letter or alternatively contact.

Yours sincerely

**Stuart Cook Director, Transmission** Signed on behalf of the Authority and authorised for that purpose by the Authority

cc: Richard Dunn, GCRP Secretary

<u>Appendix 1 – Amendment to Changes Proposed in the Report to the Authority Arising</u> <u>from Consultation F/08 (Grid Code Requirements for System to Generator Operational</u> <u>Intertripping Schemes</u>)

Amendments to Connection Condition:

CC.6.3.18 The time within which the **Generating Unit(s)** or **CCGT Module(s)** or **Power Park Module(s)** circuit breaker(s) need to be automatically tripped is determined by the specific conditions local to the **Generator**. This 'time to trip' (defined as time from provision of the trip signal by **NGET** to the specified location, to circuit breaker main contact opening) can typically range from 100ms to 10sec. A longer time to trip may allow the initiation of an automatic reduction in the **Generating Unit(s)** or **CCGT Module(s)** or **Power Park Module(s)** output prior to the automatic tripping of the **Generating Unit(s)** or **CCGT Module(s)** or **Power Park Module(s)** circuit breaker. Where applicable **NGET** may provide separate trip signals to allow for either a longer or shorter 'time to trip' to be initiated.