



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

*Bringing choice and value  
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Your Ref: DP/A05  
Our Ref: blm / I 014a  
Direct Dial: 020 7901 7366  
Email: john.scott@ofgem.gov.uk

13 September 2005

Dear Ben

#### **STANDARD CONDITION C14 : TRANSMISSION LICENCE, LICENSEE'S GRID CODE**

##### Decision in relation to consultation B/05 "Proposed Grid Code Modification OC1 OC2 'Phase 2 – Short Term Proposals'"

The Gas and Electricity Markets Authority (the "Authority")<sup>1</sup> has carefully considered the changes that NGET<sup>2</sup> has proposed to its Grid Code as set out in the report to the Authority arising from consultation B/05 ("Proposed Grid Code Modification OC1 OC2 'Phase 2 – Short Term Proposals'")<sup>3</sup> that has been submitted to it for approval. The Authority acknowledges that the proposed changes can be considered to consist of 4 proposals<sup>4</sup> each of which can be implemented independently of the others.

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

<sup>2</sup> National Grid Electricity Transmission plc

<sup>3</sup> Report from NGET – Consultation Reference B/05, Issue 1, Date of Issue 18 August 2005 ([http://www.nationalgridinfo.co.uk/grid\\_code/pdfs/authrep\\_b05%20v1.0.pdf](http://www.nationalgridinfo.co.uk/grid_code/pdfs/authrep_b05%20v1.0.pdf)).

<sup>4</sup> Proposal 1 – Revised Definition of Output Usable, Proposal 2 – Removal of Suppliers' Customer Demand Management Obligations, Proposal 3 – Provision of Generator Outage Data at a Generating Unit level and Proposal 4 – Removal of NGET's Obligations to Provide Year 1 Final Outage Plan and Subsequent Updates to Unaffected Generators.

The Authority has decided to approve proposal 1 of the proposed changes to the Licensee's Grid Code (the "Grid Code") as set out in the Appendix A of the report to the Authority arising out of consultation B/05. For clarity the relevant changes are set out in Appendix 1 of this letter. The Authority has decided to direct a modification to the Grid Code to delete OC2.1.7 to facilitate the intent of proposal 1. The Authority has decided to reject proposals 2, 3 and 4 of the proposed changes to the Licensee's Grid Code (the "Grid Code") as set out in the Appendix A of the report to the Authority arising out of consultation B/05.

A separate letter contains the direction to NGET to modify the Grid Code to delete OC2.1.7.

This document explains the background to the proposals and sets out the Authority's reasons for its decision relating to each of the 4 change proposals within the report to the Authority arising out of consultation B/05. This letter constitutes notice by the Authority under Section 49A of the Electricity Act 1989 in relation to the decisions contained or referred to in this letter.

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

NGET has recently reviewed the Grid Code and identified changes to Operating Code 1 ("OC1") and Operating Code 2 ("OC2") that it considers achieve the objectives referred to in sub-paragraph (b) of paragraph 1 of standard condition C14 of the electricity transmission licence.

NGET considers that the changes proposed in its report to the Authority arising from consultation B/05 ("Proposed Grid Code Modification OC1 OC2 'Phase 2 – Short Term Proposals'") can be considered as 4 separate proposals that could if necessary be implemented independently of each other.

NGET received 8 responses to consultation B/05 from authorised electricity operators. The respondents' views were generally provided in relation to each specific proposal. A number of respondents also noted concern about the lack of a more fundamental review of the purpose and requirements of OC2.

#### Proposal 1 – Revised Definition of Output Usable

NGET has proposed an amendment to the definition of Output Usable ("OU") which would change the basis of the requirement so that the Generator is required to provide a forecast of the maximum level at which the Genset can export. Consultation B/05 sought views on whether OU submissions for embedded power stations should reflect the level of export at the connection point to the User System of the Grid Entry Point. NGET's proposed change to the Grid Code specifies that embedded generators should provide OU information based on expected export levels at the User System Entry Point (i.e. without adjustment for distribution network losses). Consultation B/05 also sought views on whether OU forecasts should be capped by TEC<sup>5</sup>. The proposed change requires unrestricted OU data to be submitted.

NGET reported that:-

- 4 respondents supported these proposed changes.
- 2 respondents were neutral to these proposed changes or had no comments to make.
- 2 respondents opposed the proposed changes.

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<sup>5</sup> Transmission Entry Capacity

The respondents to consultation B/05 raised a number of issues about NGET's proposed changes in particular noting that:-

- The definition of OU for consistency should refer to Grid Entry Point rather than Connection Site.
- Currently Generators are not required to adjust data to account for distribution network losses and therefore supporting the proposal that Generators should provide data for embedded power stations at User System Entry Level.
- It is inappropriate to cap OU data by TEC on the basis that the OU data is provided per Genset and TEC is defined on a power station basis.

NGET noted in its report to the Authority that it had amended the drafting of the proposed Grid Code changes to take account of the comments received from respondents.

#### Proposal 2 – Removal of Suppliers' Customer Demand Management Obligations

NGET has proposed an amendment to remove the Grid Code obligations that require Suppliers to notify it of planned and implemented Customer Demand Management (CDM). In its report, NGET notes that it is aware that Suppliers are not always notified by customers about planned CDM. NGET also states that the CDM information obtained under the Grid Code does not have a significant impact on NGET's demand forecasts. NGET advises that its demand forecast models predict demand management and that there is good correlation between forecast and actual demand. NGET considers that the removal of these Grid Code obligations would not have a significant impact on its demand forecasts.

NGET reported that:-

- 5 respondents supported these proposed changes.
- 2 respondents were neutral to these proposed changes or had no comments to make.
- 1 respondent opposed the proposed changes (and in subsequent discussions with NGET withdrew the objection).

The respondents to consultation B/05 raised a number of comments about NGET's proposed changes in particular noting that:-

- The existing Grid Code obligations are disproportionate with the benefits that they provide.
- The existing Grid Code obligations relate to different Trading Arrangements that are no longer current.
- The existing Grid Code obligations result in notified volumes that are likely to be a small proportion of the total demand reduction.
- There is growing importance placed on the provision of a demand side response. Information about usage of triad avoidance contracts on a Grid Supply Point basis may be helpful.

### Proposal 3 – Provision of Generator Outage Data at a Generating Unit Level

NGET has proposed an amendment to the OC2 obligations relating to the provision of generator outage data so that the Generator is required to submit information on a Generating Unit basis. NGET stated that individual generating units have different technical characteristics that are relevant to transmission system security studies and that it is difficult to accurately assess the impact of different scenarios without carrying out the analysis. NGET further noted that currently it has to make engineering judgements about the likely power station running arrangements based on OC2 data submissions made on a Genset basis. NGET considers that the provision of generator outage data at a Generating Unit level will enhance its system security studies and could lead to more efficient operation of the transmission system and a reduced risk to system security.

NGET reported that:-

- 3 respondents supported these proposed changes.
- 3 respondents were neutral to these proposed changes or had no comments to make.
- 2 respondents opposed the proposed changes.

The respondents that supported the proposed changes noted in particular that:-

- It already provides this level of detail in its OC2 data submissions to NGET and considers it reasonable for other Generators to also provide data on a Generating Unit basis.
- This change would not introduce significant additional workload for Generators as generator outages are usually less often than once a year.

One of the respondents who was neutral to the proposed changes indicated support should the additional information be considered by NGET to have a material impact on transmission system security and quality of supply.

The respondents that opposed the proposed changes noted in particular that:-

- NGET has never previously asked for this information.
- This information need not be provided routinely but could be provided in cases when NGET deems that it is necessary.

### Proposal 4 – Removal of NGET's Obligations to Provide its Year 1 Final Outage Plan and Subsequent Updates to Unaffected Generators

NGET has proposed an amendment to remove the Grid Code obligations that require it to provide a copy of (and updates to) the Year 1 transmission system outage plan to Generators. NGET notes that these obligations are supplementary to its other OC2 obligations to provide transmission system outage information to a Generator when NGET considers the information to be relevant to a power station connection. NGET considers that transmission system outage data is relevant to operational planning and should only be shared between affected parties. NGET does not consider that transmission system outage information can be translated into market signals but is concerned that such information could potentially be exploited by market participants to force NGET to take distressed balancing actions.

NGET reported that:-

- 3 respondents supported these proposed changes.
- 2 respondents were neutral to these proposed changes or had no comments to make.
- 3 respondents opposed the proposed changes.

The respondents to consultation B/05 raised a number of comments about NGET's proposed changes in particular noting that:-

- The scope of circuits that are deemed to affect a power station connection could be agreed in advance between NGET and the Generator.
- Justification has not been provided for this proposed amendment to remove an information provision obligation which is inconsistent with the objectives of NGET's transparency review.
- There is a risk that NGET may not correctly identify affected generators.
- Transmission system outage information should be more widely available.
- The provision of the data to affected generators only could undermine competition or could lead to private exchanges of information between generators.
- The proposed amendment should not affect existing nuclear generators' rights to outage information.

One respondent also commented that he was not aware that this type of information has previously been provided by NGET.

### **NGET's recommendation**

NGET recommends that the Authority approve the changes to the Grid Code set out in the report to the Authority arising from consultation B/05 ("Proposed Grid Code Modification OC1 OC2 'Phase 2 – Short Term Proposals'").

### **Ofgem's view**

The proposed changes by NGET are set out in its report to the Authority as required by standard condition C14(2) of NGET's electricity transmission licence. Approval of these changes by the Authority is required by standard condition C14(3). Ofgem considers that, having had regard to the licensee's obligations set out in condition C14(1)(b)<sup>6</sup> of the Transmission Licence ("the obligations") and Ofgem's wider statutory duties, that proposal 1 of the proposed changes to the Grid Code should be approved by the Authority and proposals 2, 3 and 4 should be rejected. Ofgem's reasons for reaching this decision are outlined below.

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<sup>6</sup> The licensee's transmission licence defines the Grid Code objectives as follows:

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

In relation to the more general concerns raised by some respondents about the need for a fundamental review of OC2, the Authority notes that NGET is required by its licence<sup>7</sup> to periodically review both the Grid Code and the implementation of that Grid Code but does not specify the nature or extent of review work that should be carried out. Ofgem also notes that the governance arrangements for the Grid Code allow users to submit suggested amendments to the Grid Code to NGET, for the Grid Code Review Panel's consideration.

#### Proposal 1 – Revised Definition of Output Usable

The Authority notes that the drafting of proposal 1 of the proposed Grid Code change takes account of the comments that NGET received to consultation B/05. The Authority acknowledges that the definition of OU has been broadened to include all sizes of embedded power stations but recognises that the scope of OC2 is not changed by this proposed amendment. The Authority notes that it is not proposed at this stage for OU data submissions to take account of contractual arrangements that may restrict the Generator's output.

Ofgem considers that the quality of data available to NGET has a significant contribution to the efficiency of NGET's operation of the transmission system and that the proposed changes to the Grid Code improves the clarity of this data requirement which should improve the consistency between data submissions which in turn is expected to improve the quality of the information available to NGET. Ofgem also understands that NGET uses this information when preparing forecasts that are provided to users of the transmission system. Ofgem considers that improvements to the quality of this information will facilitate competition in generation and supply and also promote the security of the electricity system as a whole by enabling market participants to make better informed decisions.

In particular, the Authority notes that one intent of the proposed change is that Generators should not be required to adjust OU data to account for distribution network losses. The Authority recognises that there are Grid Code obligations on Network Operators to provide NGET with planning data which includes details of connections between GSP and large embedded power stations. The Authority observes that OC2.1.7 requires OU forecasts for embedded generators to be adjusted by the User before the data is submitted to NGET to represent MW at the relevant GSP<sup>8</sup>. The Authority considers that OC2.1.7 is not consistent with this proposal to amend the definition of OU. On the basis that the Authority considers that the intent of proposal 1 described in consultation B/05 was clear and the views expressed by respondents to that consultation were in general supportive of that intent, the Authority has decided to direct a change to the Grid Code to delete OC2.1.7 to address this consistency issue.

#### Proposal 2 – Removal of Suppliers' Customer Demand Management Obligations

The Authority notes that the majority of respondents to NGET's consultation B/05 supported this proposal 2 to remove Grid Code obligations on Suppliers with respect to Customer Demand Management. The Authority is concerned by the justification put forward by NGET for this proposed change and is not satisfied that NGET is better placed than Suppliers to forecast demand side market participation. The Authority recognises that there may be more appropriate alternatives to the current Grid Code obligations, but does not consider that the removal of the Supplier CDM Grid Code obligations has been justified at this stage or meets any of the obligations.

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<sup>7</sup> Electricity Transmission Licence, Standard Condition C14, paragraph 2.

<sup>8</sup> Grid Supply Point.

### Proposal 3 – Provision of Generator Outage Data at a Generating Unit Level

The Authority has considered the scope of proposal 3 and notes that it would require Generators to provide outage data on a Generating Unit basis for all power stations including CCGT Modules<sup>9</sup> and Power Park Modules<sup>10</sup>. The Authority notes that NGET's consultation B/05 described the intention of the proposed Grid Code changes in terms of the characteristics of generating plant within a CCGT Module. The Authority also notes that some operators of CCGT Modules have commented in their responses to consultation B/05 about the additional workload should these proposed Grid Code changes be approved. However the Authority also notes that these respondents suggested that outage information on a Generating Unit basis could be provided to NGET on request.

The Authority is concerned that NGET's consultation did not adequately consider the impact of the proposed Grid Code changes on Generators required to provide OC2 data in respect of Power Park Modules. The Authority notes that there are a large number of such Generators with Power Park Modules that are connected or likely to be connected in the near future. The Authority does not consider that there has been sufficient consultation on proposal 3 and as a result considers that NGET has not provided sufficient justification for this part of the Grid Code change proposals to demonstrate that as a whole the proposed changes meet the obligations.

The Authority considers that in relation to outages of generating plant, it would expect that forecast Generating Unit outage data from the Generator would be more accurate than outage data provided on a module basis that is interpreted by NGET. The Authority recognises that in cases where there are little differences between the technical characteristics of the generating plant within a module then there may be little or no benefit to NGET in receiving data on a Generating Unit level. However, the Authority acknowledges the information presented in consultation B/05 and notes that there can be significant differences between the technical characteristics of the individual Generating Units within a CCGT module. In line with the view expressed in relation to proposal 1, the Authority recognises the value of accuracy in NGET's transmission system security analysis and accepts that the output of such assessments is better when the input conditions closely reflect intended operating arrangements.

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<sup>9</sup> The Grid Code defines a CCGT Module as "A collection of **Generating Units** (registered as a **CCGT Module** under the PC) comprising one or more **Gas Turbine Units** (or other gas based engine units) and one or more **Steam Units** where, in normal operation, the waste heat from the **Gas Turbines** is passed to the water/steam system of the associated **Steam Unit** or **Steam Units** and where the component units within the **CCGT Module** are directly connected by steam or hot gas lines which enable those units to contribute to the efficiency of the combined cycle operation of the **CCGT Module**."

<sup>10</sup> The Grid Code defines a Power Park Module as "A collection of **Non-synchronous Generating Units** (registered as a **Power Park Module** under the PC) that are powered by an **Intermittent Power Source**, joined together by a **System** with a single electrical point of connection to the **GB Transmission System** (or **User System** if **Embedded**). The connection to the **GB Transmission System** (or **User System** if **Embedded**) may include a **DC Converter**."

#### Proposal 4 – Removal of NGET’s Obligations to Provide its Year 1 Final Outage Plan and Subsequent Updates to Unaffected Generators

The Authority notes that a number of respondents to NGET’s consultation B/05 were strongly opposed to this proposal 4 to remove Grid Code obligations on NGET to provide to Generators a copy of and updates to its Year 1 Transmission System Outage Plan. The Authority is concerned by the comment made by one respondent who was not aware of this information having been provided previously.

The Authority notes NGET’s concern that transmission system outage plan information could be exploited by market participants. However the Authority also notes the views presented by some of the respondents that there is potentially a risk of market distortion if transmission system outage plan data is not provided to all generators on an equal basis. The Authority acknowledges the possibility that generators may seek to establish private arrangements to facilitate outage information sharing should this information be available on a more limited basis in future. The Authority welcomes the support indicated by respondents to consultation B/05 for this outage plan information to be made more widely available to the market.

The Authority does not consider that the proposal to remove these Grid Code obligations on NGET has been justified in terms of any of the relevant obligations. The Authority considers that in general measures to improve the transparency associated with information provision are of value and notes that the underlying principle for NGET’s Review of Electricity Market Information has been that information should continue to be provided unless there is good reason to the contrary. The Authority does not consider that NGET has provided sufficient evidence of its concerns about the possible misuse of transmission system outage plan information and further notes that NGET is currently required by the Grid Code to provide its Year 1 transmission system outage plan to generators. The Authority is not aware of any reported instances where there has been suspicion of transmission system outage data being inappropriately used by a market participant.

#### **The Authority’s decision**

Based on the reasons set out above the Authority has therefore decided to approve proposal 1 of the Grid Code changes set out in Appendix A of the report submitted to the Authority arising from consultation B/05 (“Proposed Grid Code Modification OC1 OC2 ‘Phase 2 – Short Term Proposals’”). For clarity the relevant changes from consultation B/05 are set out in Appendix 1 of this letter. The Authority has also decided to direct a change to the Grid Code to delete OC2.1.7 to facilitate the intent of proposal 1. An attached letter contains this direction.

The implementation date for these Grid Code changes is 30 September 2005.

Based on the reasons set out above the Authority has therefore decided to reject proposals 2, 3 and 4 of the Grid Code changes set out in Appendix A of the report submitted to the Authority arising from consultation B/05 (“Proposed Grid Code Modification OC1 OC2 ‘Phase 2 – Short Term Proposals’”).

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

Yours sincerely

A handwritten signature in black ink that reads "John Scott". The signature is written in a cursive style with a horizontal line underneath the name.

**John Scott**  
**Technical Director**

Signed on behalf of the Authority and authorised for that purpose by the Authority

cc: David Payne, GCRP Secretary

Appendix 1 – Proposal 1 of the Grid Code Changes set out in Appendix A of the Report Submitted to the Authority Arising from Consultation B/05 (“Proposed Grid Code Modification OC1 OC2 ‘Phase 2 – Short Term Proposals’”)

**Glossary and Definitions**

**Proposed definition of Output Usable or OU**

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 **Genset** can export to the **Grid Entry Point**, or in the case of **Embedded Power Stations**, to the **User System Entry Point**. That portion of **Registered Capacity** which is expected to be available and which is not unavailable due to a **Planned Outage**.