

THE NATIONAL GRID COMPANY plc

Revisions to the Grid Code

Consultation Paper B/01

DEFINITION OF NGC DEMAND AND NATIONAL DEMAND

29 May 2001

A. Introduction

1. The National Grid Company plc ("NGC"), in accordance with its obligations under paragraph 2 of Condition 8 of the Transmission Licence, believes that the time has come to review, in consultation with authorised electricity operators liable to be materially affected thereby, the Grid Code and its implementation in certain respects.
2. This review relates to the Grid Code definitions of the terms "NGC Demand" and "National Demand". The proposed changes to the Grid Code were discussed at the Grid Code Review Panel meeting held on 17th May 2001. Panel members agreed that NGC should issue a Consultation Paper.
3. Following receipt of comments from those authorised electricity operators which it has consulted by this Paper, NGC intends, in accordance with paragraph 2 of Condition 8 of the Transmission Licence, to send to the Authority :-
 - (a) a report on the outcome of its review, including this consultation process;
 - (b) the proposed revisions to the Grid Code which NGC (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives of the Grid Code referred to in sub-paragraph (b) of paragraph 1 of Condition 8 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 NGC in the course of the review) arising during the consultation process and subsequently maintained.
4. The revisions to the Grid Code proposed by NGC and sent to the Authority then require approval by that body and will, if approved, come into force on such date (or dates) of which you will be notified by NGC, in accordance with the Authority's approval.

B. DESCRIPTION OF THE PROPOSED AMENDMENTS AND THEIR EFFECTS

5. Background

- 5.1 The Grid Code contains many references to the term 'NGC Demand', which is the demand estimate used by NGC both in long term and short term planning (down to operational timescales). The current definition of NGC Demand has been in the Grid Code since 1990, but was developed slightly to reflect new terminology during the work on the NETA Grid Code. It incorporated only the minimum changes necessary for NETA.

- 5.2 Subsequent examination of the definition has revealed that it is, particularly with the new terminology, unclear in certain areas, is open to interpretation and as a consequence is not entirely appropriate when applied to demand forecasts in longer term planning timescales.
- 5.3 National Demand, although referred to in the Grid Code less frequently, has a fixed relationship to NGC Demand and its definition follows a similar form. Both definitions currently make reference to "Demand on the Total System". This has led to some problems of interpretation due to uncertainty in practice about whether this term takes account of exports to External Systems.
- 5.4 It is proposed that the definitions of both terms are amended to clarify the meaning, using similar format, so that the differences between the two demand figures can be more readily identified.
- 5.5 It should be noted that the proposed amendments to the definitions of these terms will not affect the demand forecasts attributed to these terms; i.e., the magnitude of NGC Demand and National Demand forecasts will continue unchanged.

6. The Proposed Changes

- 6.1 It is proposed that the definitions of both NGC Demand and National Demand follow a common format, avoid reference to "Demand on the Total System" and clearly indicate those factors included and excluded. It is also proposed that two changes are made in the Planning Code to ensure that imports across Embedded External Interconnections are taken account of in a manner which is consistent with the proposed definitions of the two demand terms.
- 6.2 The Appendix to this paper comprises the proposed new wording of the definitions of NGC Demand and National Demand and of the proposed modifications to the Planning Code, with changes from the existing definitions shown by way of strikeout and underlining.

B. COMMENTS

- 7. NGC would be grateful to receive your comments on, or any suggestions you may have in relation to, these proposed amendments to the Grid Code. Comments would be welcomed and should be sent to NGC by 29th June 2001. The comments will be reviewed and responded to and NGC will then prepare its report to the Authority.
- 8. Your formal responses may be:-

Posted to: Mr David Payne
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The National Grid Company plc
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Appendix 1

Extracts from the Glossary and Definitions (GD)

<p><u>National Demand</u></p> <p>(Existing)</p>	<p>Demand on the Total System less:-</p> <p>(a) the output of Medium Power Stations and Small Power Stations; and</p> <p>(b) the Demand being taken by Station Transformers and Pumped Storage Units; and</p> <p>(c) exports from the NGC Transmission System across External Interconnections.</p>
<p>(Proposed)</p>	<p><u>The amount of electricity supplied from the Grid Supply Points plus:-</u></p> <ul style="list-style-type: none"> • <u>that supplied by Embedded Large Power Stations, and</u> • <u>NGC Transmission Losses,</u> <p><u>minus:-</u></p> <ul style="list-style-type: none"> • <u>the Demand taken by Station Transformers and Pumped Storage Units,</u> <p><u>and, for the purposes of this definition, does not include:-</u></p> <ul style="list-style-type: none"> • <u>any exports from the NGC Transmission System across External Interconnections.</u>

<p>NGC Demand</p> <p>(Existing)</p>	<p>(a) The amount of electricity to be supplied from the Grid Supply Points and to be supplied by Embedded Large Power Stations plus NGC Transmission System Losses less the output of directly connected Medium Power Stations and directly connected Small Power Stations; or which may also be expressed as</p> <p>(b) Demand on the Total System less the output of Medium Power Stations and Small Power Stations.</p>
<p>(Proposed)</p>	<p><u>The amount of electricity supplied from the Grid Supply Points plus:-</u></p> <ul style="list-style-type: none"> • <u>that supplied by Embedded Large Power Stations, and</u> • <u>exports from the NGC Transmission System across External Interconnections, and</u> • <u>NGC Transmission Losses,</u> <p><u>and, for the purposes of this definition, includes:-</u></p> <ul style="list-style-type: none"> • <u>the Demand taken by Station Transformers and Pumped Storage Units.</u>

Extracts from the Planning Code (PC)

PC.A.4.2.3 All forecast **Demand (Active Power)** and **Active Energy** specified in PC.A.4.2.1 shall:

- a)
- b) in the case of PC.A 4.2.1(a), (b) and (c), be that remaining after any deductions reasonably considered appropriate by the **User** to take account of the output profile of all **Embedded Small Power Stations** and **Embedded Medium Power Stations** and **Customer Generating Plant** and imports across **Embedded External Interconnections**;

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PC.A.4.3.2 All forecast **Demand** specified in PC.A.4.3.1 shall:

- (a) be that remaining after any deductions reasonably considered appropriate by the **User** to take account of the output of all **Embedded Small Power Stations** and **Embedded Medium Power Stations** and **Customer Generating Plant** and imports across **Embedded External Interconnections** and such deductions should be separately stated;
- (b).....