

**NATIONAL GRID COMPANY PLC**

**GRID CODE REVIEW PANEL**

**REPORT FROM THE GRID CODE  
EMBEDDED POWER STATION WORKING GROUP (EPSWG)**

## 1. Introduction

The establishment of the Embedded Power Station Working Group (EPSWG) was agreed by the Grid Code Review Panel on 21 February 2001. The Terms of Reference were agreed on 10 June 2002. A copy together with the membership of the Group is attached in Appendix 1. The first meeting of the subgroup was held on 14 May 2002 with subsequent meetings on 27 June 2002 and 8 October 2002.

## 2. Progress to Date

The first two meetings focussed on gaining a common understanding of the existing provisions in both the Grid Code and Distribution Code covering Embedded Medium and Small Power Stations. This was aided by 'walking through' a number of examples of Small and Medium Embedded Generation connecting to Distribution Network Operator (DNO) and NGC networks. The discussion covered the technical, legal and commercial frameworks as well as the background to the existing Grid Code and Distribution Code provisions. From these meetings the following areas were raised as areas to be considered for inclusion in the Distribution Code.

<b>ACTIONS AREA</b>	<b>CHANGE</b>
Grid Code (DRC) Schedule 1 Data requirements	Inclusion in Distribution Code for all embedded generation down to 12MW
50-100MW Schedule 1 Data Provisions to NGC	Collection of Schedule 1 Data directly by DNO to pass through to NGC if requested + OC1 data
<50MW-12MW	DNO give NET demand position at SG point Data available down to 12MW
Connection Conditions	Grid Code CC6 - inclusion in Distribution Code? Basic performance criteria for generators

The third meeting concentrated on the ongoing work being undertaken by the Distributed Generation Technical Steering Group Work Stream 2 – Rationalisation and Standardisation of Data Exchange, initiated by DTI/Ofgem. This work stream covers the rationalisation and standardisation of data interchange between DNOs and Generators and is being undertaken by a sub group of the Distribution Code Review Panel. It is clear that there is a strong interaction between the EPSWG and Work Stream 2. For Embedded Power Stations, there will need to be in the future an efficient, consistent and adequate flow of information from Embedded Power Stations to the host DNO and then from the host DNO to NGC. Mutually consistent provisions in both the Grid Code and the Distribution Code will be required in order to achieve

this data flow. There is currently common membership between the EPSWG and Work Stream 2. In order to facilitate the work of both Groups, it was agreed that the next EPSWG meeting would take place jointly with Work Stream 2 and this is being arranged in late November or early December.

### **3. Recommendation**

The Grid Code Review Panel is invited to NOTE this update from the Grid Code Embedded Power Station Working Group.

National Grid Company plc  
Date 7<sup>th</sup> November 2002

**APPENDIX 1 – Terms of Reference****Grid Code Embedded Power Station Working Group****Nominations for Membership**National Grid

Geoff Charter	National Grid (Chair)
Emma Groves	National Grid (Secretary)
Peter Murphy	National Grid (Operations & Trading)
Mark Horley <sup>1</sup>	National Grid (Network Strategy)

Generators

John France	Powergen
John Norbury	Innogy
Malcolm Taylor	Association of Electricity Producers
Steve Jackson	Centrica (Kings Lynn)

Network Operators

John Rossiter	East Midlands Electricity
Peter Lang	SEEBOARD Power Networks
Mark Williamson	United Utilities

Observers

Bridget Morgan	Ofgem
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**Terms of Reference**

Taking account of the potential growth in the amount of embedded generation and the steps already underway in respect of proposed amendments to licence exemptions, CUSC and Grid Codes, any work that might be commissioned under the DGCG DTI/Ofgem initiative and the potential effect of development of Transmission Access and BETTA, undertake the following review:

Stage 1

To review and consider the need for all the existing provisions in industry codes applying to Embedded Medium or Small Power Stations relating to connection to the system, operational and outage co-ordination and data exchange. To identify any new provisions that may be required.

To assess the implications on industry codes resulting from a transfer of some obligations to Network Operators, consistent with the revision to CUSC 6.5.1.

To formulate proposals for changes to the Grid Code (possibly in conjunction with changes to the Distribution Code or other industry documents) taking account of a desire to minimise any duplication of work between National Grid, Network Operators and Power Stations.

Stage 2

To extend the Stage 1 work to include consideration of requirements on Embedded Large Power Stations with a view to minimising any duplication of work between National Grid, Network Operators and Power Stations.

**Timescales**

A report arising from the work of Stage 1 to be presented to the Grid Code Review Panel in November 2002, to be followed by a report on Stage 2 by May 2003.

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<sup>1</sup> Replaced David Gray from 3<sup>rd</sup> meeting (8/10/02) onwards