THE NATIONAL GRID COMPANY plc

GRID CODE REVIEW PANEL

CLARIFICATION OF REQUIREMENTS FOR HYDRO AND RENEWABLE ENERGY PLANT

1. Introduction

- 1.1. When the Grid Code was initially produced at privatisation, it was envisaged that any new hydro or renewable energy plant would be of small size and therefore have an insignificant impact on the Transmission System. Consequently, the section of the Grid Code dealing with generating unit requirements (CC.6.3) included a statement to indicate that these requirements would not apply to such plant if they were not designed for frequency or voltage control.
- 1.2. The number of new renewable energy plants (probably mostly wind powered) is likely to increase to meet government targets. These are now being designed with higher outputs so it is becoming more likely that it will be necessary to ensure that these are designed to provide frequency and voltage control.
- 1.3. Some concern has been expressed that the existing Grid Code wording in CC.6.3.1 could be misinterpreted to imply that renewable energy plant never needs to be designed for frequency or voltage control. To avoid this misinterpretation, it is suggested that a small change is introduced to the wording of this paragraph to clarify the situation.
- 1.4. National Grid is also working to draw up suitable generic Grid Code conditions to be met by wind powered generation, and will provide details of these to the Grid Code Review Panel as soon as practicable.

2. Grid Code Changes

2.1. The proposed changes to the Grid Code to clarify the existing position in relation to hydro and renewable energy plant are shown in the Appendix to this paper.

3. The Way Forward

3.1. Members of the Grid Code Review Panel are invited to consider the issues raised above and note that, following discussion at the GCRP meeting, National Grid intends to issue a Grid Code consultation paper.

The National Grid Company plc 8 May 2002

APPENDIX

PROPOSED GRID CODE CHANGES

EXTRACT FROM CONNECTION CONDITIONS

CC.6.3 GENERAL GENERATING UNIT REQUIREMENTS

CC.6.3.1 This section sets out the technical and design criteria and performance requirements for **Generating Units** (whether directly connected to the **NGC Transmission System** or **Embedded**) which each **Generator** must ensure are complied with in relation to its **Generating Units**, but does not apply to **Small Power Stations**, hydro units and renewable energy plant not designed for **Frequency** and voltage control. <u>The</u> relevant **CUSC Contract** shall detail whether or not hydro units or renewable energy plant should be designed for **Frequency** and voltage control. <u>Where the **CUSC Contract** provides that it should be so designed, then, for the avoidance of doubt, the requirements of CC6.3 shall apply to such units or plant.</u> References to **Generating Units** in this CC.6.3 should be read accordingly.