

Grid Code Review Panel

Report from the Grid Code Reactive Review Sub-group

1 Introduction

- 1.1 The members of the Grid Code Reactive Review Sub-group have met on five occasions between September 2000 and January 2001.
- 1.2 A working group report has been prepared to address the Terms of Reference agreed at the Grid Code Review Panel on 7th September 2000.
- 1.3 The report is currently being finalised and agreed by working group members. It will be distributed to GCRP members shortly and will be the subject of a presentation to the GCRP meeting on 8th February 2001.

2 Summary of Conclusions

- 2.1 The working group report concludes that the current Grid Code provisions could be replaced by alternative provisions, which would relax the requirements on new generation and would significantly relax the ongoing operational requirements, provided that an appropriate reactive market mechanism is introduced. The new market mechanism must provide sufficient incentives to ensure that adequate reserves of reactive power are made available for the operation of the system.
- 2.2 The lifetime power factor range requirements currently residing in CC.6.3.2 would be replaced by a requirement for new generating plant to be designed in accordance with international standards and by operational requirements that the plant must continue to meet in service.
- 2.3 The new CC.6.3.2 would align with international standard EN 60034-3, subject to a minimum Short Circuit Ratio of 0.4 and a maximum rated lagging power factor of 0.9. Shortfalls in service would be accepted and handled via market contracts, subject to operational requirements continuing to be met.
- 2.4 Operational requirements would be specified functionally in CC.6.3.4 and elsewhere in the Code. CC.6.3.4 would now require generating plant to be able to achieve zero Mvar (within a defined tolerance) at its commercial boundary over the ranges of system voltage set out in CC.6.1.4. It would also be required to handle voltage variations and fluctuations that occur between reactive despatch instructions issued by NGC.

3 Recommendations

- 3.1 The Grid Code Review Panel is invited to:
 - Approve the report prepared by the Grid Code Reactive Review Sub-group;
 - Forward the report to the Transmission Users Group (TUG);
 - Request TUG to develop market proposals for reactive power which will ensure that sufficient reactive power for system needs is made available;
 - Progress the recommended Grid Code changes in parallel with the implementation of a new reactive market.