

## Grid Code Generic Provisions Working Group

Notes of 1<sup>st</sup> meeting – 15 October 02

### Present

<u>Name</u>		<u>Company</u>
David Payne	(DP)	National Grid (Chairman)
Nasser Tleis	(NT)	National Grid
Steve Mortimer	(SM)	National Grid
Khadim Hussain	(KH)	National Grid (Secretary)
Mike Thorne	(MT)	National Grid
Dave Ward	(DW)	Magnox
John Norbury	(JN)	Innogy
John France	(JF)	Powergen
John Morris	(JM)	British Energy
Gareth Swales	(GS)	Electricity Direct
Charlie Zhang	(CZ)	London Electricity
Peter Lang	(PL)	Seeboard

### Apologies for Absence

Ham Hamza (HH) Innogy (John Norbury represented)

### Notes and Actions

1. DP welcomed the members, and informed that the Grid Code Generic Provisions Working Group (GPWG) was set up with the approval of GCRP at the meeting on September 02.

As an introduction to the purpose of the WG, SM presented some slides and it was agreed to circulate these.

**Action: SM**

2. JN asked for clarification of the underlying issues and whether the Bilateral Agreement offered to new plant would add or detract from the Grid Code requirements. SM/NT explained the current position regarding the application of provisions in the Grid Code to renewable energy plant and that an interim requirement document for Large Wind Farms has been produced using the existing Grid Code as a guide. This document will be discussed at the next meeting. DW expressed a view that the compliance question was probably irrelevant as the existing Grid Code was meant for synchronous machines and not for non-synchronous machines.
3. According to JM, wind turbine manufacturers are likely to need more time to meet certain requirements. SM said we need to formulate requirements without putting undue burden on manufacturers.
4. CZ asked about applications (directly connected) that NGC has received and licensing/DTI issue. NT stated we are receiving several enquiries for

connection applications and feasibility. SM added that Generators could apply to DTI for exemption for medium power stations. However, even though a Generator may be licence exempt, NGC may still require some technical requirements to be met.

5. On a question on requirements for small Wind Farms, it was mentioned that they would almost certainly be embedded and were not expected to have any major impact on the NGC transmission system. The long term aim is that requirements for embedded plant would be included in the Distribution Code. However, at present, as there are no such requirements in the Distribution Code, NGC has to define them based on current Grid Code requirements.
6. In response to a comment by SM that certain requirements may be incorporated in the Bilateral Agreement to avoid the Grid Code getting too big, JN thought the Grid Code should be as big as it needs to be but not too big to cause confusion. JN and JF regarded the right place for detailed connection and data requirements should be the Grid Code and not the Bilateral Agreements.
7. The draft Terms of Reference (TOR) were discussed and agreed with modifications. These will be taken to the next GCRP meeting for ratification.

**Action: DP**

8. It was generally acknowledged that the GPWG timescales were tight bearing in mind the Scottish Grid Code revision process. DP said we should aim for these timescales but may need to later assess the timescales depending on the work progress. DW brought up the issue of a Guidance Note, as the Scots were implementing. NT said NGC has no particular views on that but the need for a Guidance Note, if any, could be discussed at a later stage.
9. Answering a question if embedded plant is defined by voltage level or size (50MW-100MW), SM referred to the definitions as in the Grid Code. JN asked how NGC would treat a small new technology generating unit together with an existing power station, or if a power station has been mothballed and the site later used for a new technology generating unit. KH responded that such a development would be treated on its own merits based on connection point requirements.
10. It was mentioned that representation from Wind Energy groups would be useful. Malcolm Taylor was suggested as a possible contact (post-meeting: Malcolm suggested contacting Stephen Andrews, ILEX. DP has spoken to Stephen who agreed that either he or one of his 'constituents' would try to join the working group).
11. For representation of the Distribution Code Review Panel, PL agreed to inform the panel about the work of the GPWG and to provide feedback from the panel.

**Action: PL**

12. DP invited suggestions for the work plan. It was agreed that the Scots will be approached for permission to circulate the Guidance Note, NGC will identify the relevant parts of the Grid Code which would require changes, and the interim document that NGC had produced for Large Wind Farms will be circulated.

**Action: KH/MT**

13. KH asked, based on members' experience, what areas of work and issues should be considered for the work plan. DW referred to Scottish Grid Code, e.g., issues like power factor range, despatching, telemetry, frequency response capability, ramp rates/limits, and DRC for asynchronous machines and converters. PL pointed out the modelling aspects to be considered. JN raised the issue of a frequency response market (MT said we don't have this in place but Ofgem might like to see frequency response market in future) that might facilitate the connection of Wind Farms not able to economically provide frequency response. JN mentioned Wind Farms and new technologies might have very different voltage/reactive power requirements than are currently known for synchronous machines, and it may be helpful to resurrect the work carried out by the reactive market working group which considered the application of less onerous European standards. SM said we should keep to the agreed TOR if we were to meet the timescales but the need could be reviewed subject to outcome of the working group. Members asked if any relevant international documents were available. NGC stated they do have some and it was agreed to consider if these could be circulated.

**Action: KH**

14. NT said some technical requirements may initially appear to be rather onerous, but past experience had shown that manufacturers could often meet such requirements once they understood what was required. He gave an example of fault ride-through capability.

15. There was discussion on submission of data to NGC. It was generally felt that as far as was practical, data requirements should be included in the Grid Code. SM stated there is a particular problem with specifying data requirements for Wind Farms for the time being as models are still being established.

16. The next GPWG meeting was scheduled for 29 Nov 02 (post-meeting arrangement: NGH, CR4, 10:30)