THE BRITISH WIND ENERGY ASSOCIATION

Grid/Electrical

BWEA Response to OFGEM: The Grid Code under BETTA

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1 Introduction

This response is based on the Ofgem document "The Grid Code Under BETTA" September 2003. References to the document section numbers are in parenthesis.

2 Summary of Key Points

1) BWEA welcomes the advent of a GB Grid Code provided it does create a single set of requirements for wind generators over the whole of GB.
2) BWEA remains unconvinced that it will be possible to apply a set of minimum requirements (specified in the Connection Conditions) equitably to different generation technologies.
3) BWEA believes that the MW limits for the definition of small, medium and large power stations should be the same across the single GB system, as they are within each Transmission System at present.
4) BWEA notes that the 5MW Grid Code threshold in the SHETL area has been effectively ignored over the last 6 years in connecting 83MW of wind energy. We would therefore maintain that is unreasonable to retain this threshold without "rigorous" justification.
5) BWEA does not accept that differing technical conditions occurring in disparate parts of the GB transmission system should result in different rules in different regions at different times as is proposed.
6) BWEA is very concerned that the new GBSO will interpret the existing rules for renewable generators in a more onerous way in Scotland.
7) BWEA believes that the rapid development of different kinds and scales of renewable generation and the associated code changes that will ensue, will necessitate greater representation of renewables on the Grid Code Review Panel than is currently proposed.

3 GB Code

BWEA greatly welcomes the advent of a GB Grid Code and believes such a code is vital for wind energy to have consistent rules in GB. BWEA believes this is one of the pre-requisites for reaching the Government's renewable energy targets.

BWEA does however remain concerned that a code that is based on Connection Conditions, which stipulate a minimum set of requirements for all generators, is inappropriate as new technologies are developed. BWEA believes that these requirements should be replaced by market mechanisms, rewards and penalties as appropriate to ensure a level playing field between all generator technologies and other infeeds (e.g. dc links) to the total system.

4 Regional Differences

This arises in paragraphs 4.50 and 4.51 of the consultation ('**The Basis of a GB Grid Code**'). In this regard we would note that a key issue for BWEA is the application of various MW thresholds to define small, medium and large power stations in each transmission owner's area.

4.1 Justification

BWEA notes that Ofgem/DTI agrees that regional differences would need to be "rigorously justified" (Para. 4.50). We note that in regard to different thresholds for generation, no such rigour has been provided. As is demonstrated in the table in section 4.3 below the current low thresholds in SHETL have been effectively ignored for the past six years and have therefore been largely irrelevant to date. The same may apply to thresholds in the SP TSO area.

4.2 Single system, single thresholds

It is noted that "the differing treatment has been developed to accommodate the differing technical requirements of the transmission system in the three areas". (Para. 4.51). BWEA notes that there are differing technical requirements in different parts of each TSO's area and yet each TSO has come up with a single threshold that does not vary geographically. In extending this precedent to a GBSO there should therefore logically be a single MW threshold for small, medium and large generators throughout GB.

4.3 No effective MW limit

BWEA notes that in the SHETL area there are several wind power stations above the 5MW central despatch / Grid Code threshold which operate under various contracts and under self despatch without issuing physical notifications (PNs). These include projects in the following table.

Windfarm	Capacity	Commissioning date
Tangy	12.75MW	December 2002
Deucheran Hill	15 MW	November 2001
Beinn an Tuirc	30MW	December 2001
Beinn Ghlas	8.4MW	June 1999
Novar	17 MW	November 1997

BWEA concludes that the current 5MW despatch limit and Grid Code requirement is irrelevant and has not been challenged because of its irrelevance.

4.4 Stability of requirements

BWEA is concerned that Ofgem/DTI appear to believe that the MW levels should depend "upon the physical characteristics of the transmission system" (Para. 4.99). This implies that as the transmission system changes, the MW levels will also need to change. It also implies that additional regional differences may be introduced and BWEA would note that this uncertainty is very unhelpful in terms of building stability and confidence for investment in wind energy.

4.5 Site specific requirements only if necessary

BWEA believes the requirements should be the same throughout GB. If additional generation data or site-specific requirements are shown to be necessary for the TSO to operate and manage parts of the network due to specific local distribution or transmission conditions, this is best dealt with on a site-specific basis.

4.6 New SO interpretation of the Code in Scotland

BWEA notes Ofgem/DTI's desire for "minimum necessary disturbance to current technical arrangements" (Para. 4.51). Under the Scottish Grid Code (CC1.6) any generation in Scotland that cannot meet Grid Code requirements can enter into discussions with the TSO for exemptions. This is evidenced by the connection of significant amounts of renewable generation (especially under the SRO) that has not been required to meet (or demonstrate an ability to meet) many of the Connection Conditions in the Scottish Code.

BWEA notes that NGT (the E&W TSO) has not had such experience as there are no renewable generators currently connected directly to its network. It is therefore not clear how NGT will interpret the equivalent E&W Grid Code clause CC6.3.1. BWEA does not believe that Ofgem/DTI can guarantee a "minimum necessary disturbance" under these proposals.

4.7 Immediate Review of Thresholds

BWEA is of the view that it is wholly unwelcome to use the current MW thresholds in each TSO area. These thresholds have never undergone proper review and scrutiny. To defer such a review may very well damage confidence, delay projects and cause developers to incur unnecessary costs.

5 Generator Representation

This issue is raised in Paragraph 4.56 – 4.67 ('**Composition of the Grid Code Review Panel**'). Having studied these proposals BWEA believes that there should be greater representation, than currently proposed, of renewable generators on the Grid Code Review Panel.

Grid Code changes are being driven first and foremost by the development of renewable energy and this will continue for some time to come. It is therefore important to have comprehensive representation of these different renewable technologies and scales of generation. BWEA believe that, in order to ensure an effective development of the GB Grid Code, representation should be made available on the Panel for three renewable generators. These three representatives would be for;

- Large transmission connected wind
- Embedded wind
- Other renewables.

We believe that the above two representatives for wind would adequately reflect the current activity in wind generation development vis-à-vis other technologies. If this level of activity changes it would be reasonable to review the representation accordingly.