

BWEA Response to PRE-CONSULTATION DOCUMENT GB ECM-08 -

Charging arrangements associated with the Offshore Transmission Network

Introduction

We welcome the use of the pre-consultation mechanism by National Grid, to explore the main options available to modify the charging arrangements to provide for offshore transmission networks. This allows early sight of, together with the opportunity for beneficial refinement of, proposals and issues in order to produce a more effective full consultation.

Offshore electricity transmission networks will be required to transfer electricity from *principally* offshore *renewable* generating stations to the onshore networks. The Government expects offshore renewables to make an important contribution to the achievement of the Government's target to generate up to 20 per cent of Britain's energy from renewable resources.

The Spring Council of EU leaders approved a significant climate change and energy package which included a binding target of a 20% share of renewable energies in overall EU consumption by 2020. While burden sharing criteria have yet to be formalised, this commitment strengthens the need to accelerate the deployment of scale renewable electricity capacity, particularly offshore.

It is important that 'fit for purpose' offshore networks are put in place and their associated access, charging and compensation arrangements <u>facilitate and promote</u> the development of offshore renewable generation.

A key objective behind the Government's implementation of a regulated offshore transmission framework is that generators should not face unnecessarily high charges. This is reflected in the March 2006 conclusion, that offshore electricity transmission should be regulated under a licensed price control approach.

The Government has stated that where applicable, onshore processes should be extended offshore, with suitable modifications as necessary. Ofgem and National Grid have agreed that, in progressing the development of an offshore charging regime, National Grid will apply the same primary objectives as for onshore.

It is against this background and framework that the charging arrangements should be developed.

Charging Principles

The BWEA concur that the current GB charging methodology should be used as the basis for the development of offshore arrangements as offshore wind developers will be connecting to the GB transmission system and will expect its rights and obligations to be consistent, as far as possible, with onshore arrangements.



Offshore Connection / Use of System Boundary

Of the three suggested options for consideration. BWEA believes that given the basis on which the overall Offshore Regime and the Charging Arrangements are being developed:-

- Option One is the natural and logical conclusion which flows from this. It is consistent with onshore arrangements and formed the basis on which the work and recommendations of both the Offshore SQSS and Offshore Grid Code sub-Groups were based.
- Options Two and Three Implementation of either of these options would amount to undue discrimination against offshore generators in the BWEA's opinion.

The BWEA do not support Option Three. The decision to adopt a regulated regime and separate the roles of offshore generator and offshore transmission provider was made in order to facilitate offshore renewables. This option leaves the offshore generator exposed to increased cost and risk, compared to an integrated approach.

With regard to Option Two, we note that the Offshore Grid Code sub-Group primarily examined the implications for *Grid Code compliance* of connection at the LV and HV busbars, rather than ownership implications. Where a particular project had a specific and *significant need* for connection at HV, then this would need to be considered. However, BWEA does not support this option.

Offshore Circuit Expansion Factors

Whichever approach is taken, specific or generic, a key element will be the requirement for sufficient information to be specified and made available in the tender process such that:

- either specific expansion constants with the required degree of accuracy can be determined, or
- a usable and relevant database of historic tender information is available in order to allow a meaningful periodic review to reassess generic assumptions and costs.

With regard to the Specific Expansion Factor approach, we would favour the proper identification of non-locational assets in the process, whilst appreciating that this may lead to some additional complexity in the process. This approach would be consistent with the likely development of offshore networks, where there would be shared connections and increasing interconnection.

The Generic Approach could be implemented. Given the *current* relatively small amount of data with which to work, this approach has certain risks:

- Cable asset lives of 20 years appear far too short and if used, would lead to charging over-recovery
- As noted, there is a risk of significant variation between individual offshore connection actual costs and the charges levied via the methodology. This is a



more pronounced effect for offshore connections [than onshore], given the magnitude and variation of cost involved.

The generic approach appears more suitable for a transmission network which contains a significant proportion of each asset type and is itself of a size whereby the cost averaging effect is consistent with the shared use of the system by its users. Given the above, the "best fit" solution might be to commence the regime with a specific approach and, as the offshore network expanded and became increasingly meshed, move to a generic approach. We appreciate that this may require further work to identify the implications for implementation, but is worthy of further consideration.

High Voltage Direct Current (HVDC)

Whilst there are arguments in favour of both approaches for AC circuits, a specific approach must be used in determining the cost recovery structure for HVDC.

As noted in the Consultation, a generic HVDC Expansion Factor approach requires a number of assumptions to be made such as circuit length and transmission capacity. If the fixed unit cost of the convertor stations is then apportioned into a '£/MWkm' value, then it could lead to the situation where those projects with longer connections (and therefore a lower than apportioned £/km cost) will be subsidising those with shorter connections. It will militate against the use of HVDC for "far offshore" connections which is the primary application of this technology.

For HVDC circuits, a specific Expansion Factor approach should be used.

Generation charging zones

We understand and appreciate that using the accepted zoning criteria, each offshore generator would qualify for a zone containing a single node.

GB SQSS

We note that National Grid is currently developing a charging amendment to deal with onshore SQSS Design Variation single circuit connections. Whilst the Offshore SQSS subgroup have indeed recommended that the *minimum* offshore level of security should be zero redundancy, this does <u>not</u> mean that the onshore arrangements will be *directly applicable* to offshore connections.

The charging methodology has to recognise we have a n-0 GBSQSS defacto, therefore there is no customer choice with regards to compensatory events.

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