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Dear Andrew

**Consultation Document GB ECM-08**

**Modification proposal to the Transmission Network Use of System Charging Methodology to introduce charging arrangements associated with Offshore Transmission Networks**

I set out below the views of Scottish and Southern Energy (SSE) on National Grid's proposals for the charging arrangements for offshore transmission networks which are intended to apply following the commencement of the forthcoming regulatory regime for offshore transmission.

**Offshore connection / use of system boundary**

SSE continues to support the principle that the boundary between connection assets and transmission system infrastructure assets should be, as far as is practically possible, the same for all generation users of the GB transmission system. Hence, we support National Grid's view that connection / use of system boundary for offshore users should be at the offshore transmission substation LV busbar.

**Offshore circuit expansion factors**

Again, and notwithstanding our wider concerns about the transmission network use of system (TNUoS) charging methodology, we believe that a consistent approach for onshore and offshore generation users is required; hence, we continue to support the principle that the current TNUoS

charging methodology should be used as the basis for determining TNUoS tariffs for offshore generation users.

However, we understand that in the absence of a cost base from which generic circuit expansion factors can be derived (and subsequently reviewed to ensure that expansion factors remain as close as possible to current incremental prices) a modification to the charging methodology is required. Hence, we support National Grid's view that, in the first instance, specific circuit expansion factors should be derived from the average annual revenue requirements of the offshore transmission owner. For consistency with the current charging methodology, we agree that offshore circuit specific expansion factors should be determined for locational (circuit) assets only.

Notwithstanding this, in our response to the July 2007 pre-consultation document we expressed some reservations about the options presented for deriving circuit expansion factors for offshore transmission system infrastructure assets. While we accept the practical necessity (within the current charging arrangements) of specific expansion factors for offshore circuits, we continue to have some reservations about this approach; in particular:

- **Future changes in construction costs.** It is proposed that specific expansion factors for offshore circuits should be derived from the average annual revenue requirements of the offshore transmission owner. This means that offshore circuit expansion constants would reflect the new build cost in the year of construction and, by implication, would not be updated to ensure that the costs reflect the current incremental cost (as is the case for onshore circuit expansion constants) – does this mean that offshore circuit expansion factors would be fixed for the lifetime of the asset? This is unclear in this consultation document, and we would welcome further detail on this aspect of the proposed methodology change.
- **Dealing with indexation.** Since this consultation document was published, Ofgem has published a policy update for offshore electricity transmission. This document confirms Ofgem's preference for a 'fixed' regulatory settlement that would require the prospective offshore transmission owner to include provision for future price changes (inflation) within its bid. The proposed methodology states that *'the annual locational revenue requirements for the remainder of the onshore [sic] TO price control period are averaged'*; Ofgem's policy update does not provide comfort that sufficient information will be available to remove the offshore transmission owner's assumptions about future inflation for charging purposes. We would welcome an update on the impact of Ofgem's policy update on this aspect, and more widely, of the proposed methodology change.
- **GB Security and Quality of Supply Standard (GB SQSS) and the Locational Security Factor (LSF).** As the consultation document notes, the offshore GB SQSS subgroup has recommended that the offshore level of security should be zero redundancy connections. The consultation document goes on to note that this is discordant with the proposed methodology change whereby a LSF of 1.8 is assumed across all circuits, i.e. with circuit specific expansion factors, the offshore generation user is directly exposed to nearly twice the revenue of the offshore transmission

owner. Further, under the GB SQSS proposals, the offshore generation user would have the right to request a higher level of security than that specified in the standard. The consultation document indicates that a solution to these GB SQSS related issues is to be determined by 1 April 2009 under the GB ECM-09 workstream. Given the importance of this workstream, we believe clear terms of reference should be available and these should include the charging arrangements for additional transmission infrastructure assets.

We would welcome more detail from National Grid on its proposed approach in relation to these points, and the opportunity to comment further before the conclusions report is submitted to the Authority.

### **Reactive compensation and High Voltage Direct Current (HVDC)**

In this consultation document, National Grid proposes that two additional types of asset cost are included in the derivation of specific expansion factors for offshore circuits: the costs of any reactive compensation equipment installed by the offshore transmission owner, and the costs of HVDC converter stations.

With respect to the costs of reactive compensation equipment, it is our understanding that where reactive compensation is required on the GB transmission system this, generally, is not charged as a connection asset rather it is treated as non-locational infrastructure. Given this, we are not clear as to why it would be appropriate for these assets to be included in the derivation of specific expansion factors for offshore circuits – where again it would be subject to the LSF. We would welcome more detail on this issue from National Grid, including examples of where possible differences between the treatment of this equipment on onshore and offshore networks are expected to arise.

The most appropriate cost recovery mechanism for HVDC converter stations is, in our view, also unclear. We agree that currently HDVC cables and converter stations are procured as a single 'module'; hence, there is a rationale for the inclusion of the costs of HVDC converter stations in the derivation of specific expansion factors for offshore circuits. However, as far as we are aware, HVDC links are not proposed for any of the Round 1 or Round 2 offshore windfarms and it is not clear at this time what form future offshore HVDC networks will take (for example, the Crown Estate has put forward proposals for a meshed HVDC network that would require HVDC substations). As there is no need at this current time to develop charging arrangements for HVDC links developed by offshore transmission owners, we believe that it would be inappropriate and unnecessary to determine such charging arrangements now.

## **Scottish Islands**

Finally, we note National Grid's comments in section 4.5 of the document that it believes that its proposals for connection / use of system boundary, the derivation of expansion factors and the treatment of HVDC assets for offshore transmission owners should also be applicable to future reinforcements to the Scottish islands.

While we welcome this recognition that work needs to be done to progress the development of TNUoS tariffs for the Scottish islands, we firmly believe that it would be inappropriate at this stage to seek to apply (even at the highest level) offshore, generation-only, charging principles to these transmission reinforcements. In our view, there needs to be acknowledgement of the wider role of such links in not only facilitating generation but also supporting demand and accommodating potential future through flows before developing charging arrangements for such transmission reinforcements. In particular, we note that the least cost, economic solutions identified by Scottish Hydro Electric Transmission Limited (SHETL) are based on single HVDC circuits whose treatment under the GB SQSS, and consequential commercial terms seen by users, remain to be confirmed. In our view, these significant uncertainties mean that the confirmation of charging principles would be premature.

I hope these comments are helpful. If you would like to discuss any aspect of this response further then please give me a call.

Yours sincerely,

**Malcolm J Burns**  
**Regulation Manager**