



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

Operating.2020@uk.ngrid.com

14/08/2009

Dear Sir/Madam

Response to National Grid Initial Consultation on Operating the Electricity Transmission Networks in 2020.

Highlands & Islands Enterprise (HIE) welcomes the opportunity to respond to this initial consultation. Transmission access, charging and operation are considered highly important by HIE for the economic development of the Highlands and Islands of Scotland. HIE has responded to a number of consultations on issues affecting development, access and management of grid infrastructure. We are working closely with Scottish Government (SG) in relation to a wide range of regulatory issues and are supporting its efforts to challenge barriers currently blocking renewables development across Scotland.

Grid integration and the ability of the system operator to manage the substantial changes required in our energy mix in order to achieve binding targets is of course essential. HIE is therefore extremely supportive of National Grid's initiative in tackling the system operation implications through the "Operating in 2020" consultation.

We feel the consultation is a very positive contribution and support the general conclusion that an ambitious "Gone Green" energy mix – delivering 15% of energy from renewables by 2020 – is achievable. HIE notes that the Highlands and Islands of Scotland make a significant contribution to meeting this UK-wide target under any of the scenarios that have been developed by National Grid and others and that our focus is on securing the maximum economic benefit for the region from this opportunity.

Scotland is on track to comfortably meet its 2020 (minimum) target for electricity demand of 50% from renewables which equates to approximately 8.4GW of new generation capacity. This is supported by an SG-commissioned consultant's report on the grid integration issues associated with the 2020 target¹.

National Grid's Gone Green scenario for 2020 envisages a GB-wide penetration of renewables of 36% by 2020 and highlights a Scottish contribution of 11.4GW. While this is higher than the figure endorsed by Scottish Ministers and embraced in the National Planning Framework(2), it does align with the onshore wind resource estimate from "Scotland's renewable resource 2001", commissioned by the Scottish Executive. This is perfectly reasonable as a starting point, albeit we would note that

¹ SKM, 2008. "Grid issues arising from changes to the generation background in Scotland."

<http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Energy-sources/19185/SKMGrid>



11.4 GW was only for onshore wind and the figure for offshore wind was much larger, and additional.

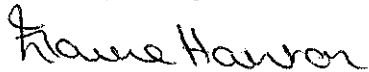
National Grid has flexed contributions from onshore and offshore wind in Scotland, within this 11.4 GW limit for 2020. The ENSG's work on 2030 may have considered an additional contribution from Scottish offshore wind, although this is not entirely clear. In any event, work on offshore wind projects in Scottish territorial waters and Round 3 sites is well underway and therefore we would ask that the Gone Green scenario is kept under review and updated to accommodate these developments.

11.4 GW is nonetheless in excess of the approximately 8GW that the Scottish Government regards as a minimum for 2020. We are of course delighted that National Grid can meet the challenge of operating the system at penetration levels in excess of 50%. HIE would like to lend its support to the BWEA and Scottish Renewables responses to National Grid's 2020 consultation, which touch on some of the more technical aspects of the system operation implications.

SG has already placed a strong emphasis on facilitating interconnections with neighbouring countries, which National Grid and others have highlighted as an essential part of managing the grid with high penetrations of variable resources. A major European-funded project on west coast interconnections with Ireland is underway, and Scotland is now part of a European initiative to interconnect offshore renewable resources in the North and Baltic seas.

I trust you find these comments helpful, and we are available for discussion on any aspect of this response.

Yours sincerely



Elaine Hanton
Head of Energy
Key Sectors
Highlands and Islands Enterprise