Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

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Dear Grant

Ofgem Consultation on New Energy Solution for Shetland - HIE Response

Thank you for the opportunity to respond to the above consultation. Highlands and Islands Enterprise (HIE) is an ambitious organisation with a unique remit from the Scottish Government that integrates economic and community development. We work in a diverse region from Shetland to Argyll, and from the Outer Hebrides to Moray, covering more than half of Scotland's land mass. We want the region to be a highly successful and competitive region in which increasing numbers of people choose to live, work, study and invest.

Energy, and in particular renewable energy, is at the heart of what we do and is critical to the growth of businesses, strengthening of communities in fragile areas, and in creating a competitive, low carbon region. We therefore welcome the commitment made to ensuring that the Shetland community, of over 23,100 people, receives an optimal energy supply. We recognise, however, that this solution will not realise the full economic and social potential from renewable deployment in Shetland. This will be realised through the proposed 270km 600MW HVDC cable connection, and appreciate the case for this is regarded as independent from the proposed solution.

The economic base of the Shetland Isles is very narrow, due to an ageing population and reliance on fisheries, aquaculture, oil and gas, and the public sector. The clear ambition of the community is to diversify the economy and invest in sectors which offer substantial opportunities for growth. Renewable energy has the potential to transform the islands, given the scale of natural resources, however, ambitions are held back due to grid constraints and the absence of a connection to the mainland UK national electricity transmission network.

The islands are home to abundant wind and wave resources, and we have long argued that island wind offers the UK significant advantages, particularly in respect of contribution towards GB energy security and economic benefit. HIE is also committed to advancing wave energy, through our support for EMEC (grid connected testing and demonstration of novel devices in Orkney) and through Wave Energy Scotland (WES) - a HIE subsidiary - providing a fully funded collaborative approach to advancing wave energy technology. Ultimately we believe wave technology will be commercialised and Shetland has the potential to play a significant part in the further demonstration and roll out of wave energy.

Therefore, we strongly believe that an optimal energy solution for Shetland, is one that both meets requirements and enables Shetland to realise its full economic and social potential through advancing renewable energy deployment. Clearly there are time constraints facing supply and uncertainty regarding island generation due to current UK Government policy, but we press for flexibility and contingency in the approach, with opportunities to consider a more efficient approach for both supply and export capacity to be kept under constant review.

We hope our attached response is helpful, but please do come back to me if you have any further queries.

Yours sincerely

Audrey MacIver

Audrey MacIver
Director of Energy & Low Carbon

Consultation on the cost of the new energy solution for Shetland

Highlands and Islands Enterprise is the economic and community development agency for the northern half of Scotland, including Shetland. We recognise the absolute requirement for stable and secure electricity provision to the Islands, and also the huge socio-economic potential afforded by renewable energy. The proposed 60MW distribution subsea connection solution takes into account supply requirements by end of 2020 and is assessed in isolation from the proposed 600MW Shetland-Caithness Interconnector supporting export capacity. Whilst that is the case, and recognises the uncertainty of the latter in terms of timescales, we urge that the optimal solution is kept under constant review, noting that any delay in the 60MW development and/or acceleration of the 600MW cable could pose an alternative, more efficient solution.

Question 1. Do you have any views on the costs of the preferred SNES (Shetland New Energy Solution)?

The overall capex costs are quoted as £303.2m for the preferred solution, of which £278.6m accounts for the 60MW subsea interconnector cable and associated works. We understand that the detailed breakdown of costs cannot yet be published due to commercial sensitivities at this time, therefore it is not possible to offer view on specific cost items.

We do however question the relative costs on a per MW basis, in comparison to that of the proposed 600MW Shetland-Caithness interconnector (est. £700m). At £4.64m/MW it is considerably more expensive than the £1.17m/MW. This would suggest greater economies with scale, and therefore strengthens the case for maintaining flexibility and contingency in the approach, depending on UK Government decision on a Non-Mainland Wind CfD, and ultimate impact on needs case for the 600MW interconnector.

Question 2. Do you have any views on whether the recommended solution represents the optimal level of cost efficiency currently available?

We agree that the primary focus should be on providing Shetland with cost efficient security of supply. The instruction to SSEN required a competitive process that a) met security of supply and b) was compatible with Shetland's energy needs, with a view to encouraging the smart, flexible, innovative, hybrid and efficient use of current assets.

The preferred solution meets the first of those requirements, but arguably fails the second. Shetland's energy needs include harnessing the potential of its rich renewable resources as well as meeting its demand, and its assets include such resource and the 484MW of consented wind projects on the Island.. We acknowledge the continuing uncertainty relating to the likelihood or otherwise of such wind projects being connected via the 600MW interconnector, and currently, therefore, would assume that the preferred solution is **currently** the optimal level of cost efficiency (noting the rigorous procurement exercise followed), but urge for flexibility and contingency to be built into the process, should greater certainty on the 600MW interconnector be gained, or any unforeseen delays in the preferred solution materialise. Our understanding is that a UK Government decision on a Non Mainland Wind CfD is to be made following the current CfD auction (Sep 2017) – therefore imminently.

The cost per MW assessment above suggests that there is scope for greater efficiency from installing a larger rated capacity cable, which would facilitate early export from consented projects and help stimulate innovative technology development in wave and tidal energy. Further it would support flexible, local energy systems, further increasing distribution scale capability throughout the Island. Noting the significant difference in costs between the preferred solution and the next best options (£188m NPV) there is perhaps still scope to consider this, and remain least cost option. Such a solution would be better placed to link to the Caithness-Moray line, compared to the constrained connection at Dounreay.

Question 3. Do you have any views on whether the proposed incentive arrangements are sufficient to maximise the availability of the service, and to minimise increases in costs to consumers on an ongoing basis?

No comment

HIE
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