

HIGHLANDS BEFORE PYLONS

RESPONSE TO OFGEM CONSULTATION: “CONNECTING THE ISLANDS OF SCOTLAND”

1. Introduction

1.1 Highlands Before Pylons is a community group based in the north west Highlands, which was formed in response to plans by Scottish Hydro Electric Transmission Ltd (SHETL) to construct a 400kV overhead transmission line between Ullapool and Beaulieu. The aims of the group are to protect the communities and landscapes of the Highlands from the effects of major new overhead transmission lines, and to promote the use of less damaging undersea cables.

2. Additional Costs

2.1 The consultation focuses on minimising the financial cost of providing transmission connections between the islands and the mainland grid. The connection with least financial cost is likely to be one where the subsea cable from the island is taken to the closest point on the mainland, with overhead lines used for the remainder. In reaching this solution, little or no account is taken of the following costs:

- The social and environmental costs of constructing new high voltage overhead lines through the Highlands and elsewhere.
- The cost of reinforcing the existing mainland grid, which does not have sufficient capacity to take electricity generated on the Scottish Islands to southern markets.

2.2 Throughout the consultation document, it is clear that the objective is to develop connections at the lowest possible cost. Only twice is brief mention made of Ofgem's wider statutory duties, which include a duty to protect the environment, and it seems clear that these carry relatively low weight when compared to the primary duty of protecting the interests of consumers. Only once is it admitted that decisions on investment in transmission infrastructure are likely to hinge on factors wider than price alone.

2.3 In addition to the environmental costs of overhead lines, HBP is also concerned about the impact on the local economy, which in remote and rural areas is highly dependent on tourism. Finally, HBP is concerned about the health effects of high voltage overhead lines where they pass close to habitation. It is unclear how these factors would be accounted for in the decision making process.

2.4 Evidence submitted to the Beaulieu to Denny Line Public Inquiry by SHETL indicates that construction of that new line alone would increase the north west boundary capability by around 650MW, enabling the connection of about 1000MW of new wind powered generation north of Beaulieu. This extra transmission capability would be utilised entirely by generation development on the mainland, and new connections from the Islands would therefore trigger further reinforcement between northern Scotland and the central belt. Beyond this, it is known that further input to the mainland grid from the Highlands and Islands will trigger the need for further reinforcement of the Scotland to England interconnector, to enable the electricity to be transmitted to centres of demand in the south. Consideration of this cost of reinforcement is particularly important when assessing options for longer subsea cables connecting closer to southern markets.

2.5 Highlands Before Pylons believe that the above financial, environmental and social costs should be included at an early stage in the decision making process relating to new transmission links to the Scottish Islands, and that environmental and social factors should be given weighting at least equal to that of the financial factors.

3. Providing Capacity for Future Development

3.1 In the section of the consultation document describing the tendering option, it is suggested that requests for connection from various parties might be co-ordinated. It seems unlikely

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that this suggestion will be viable, since the applications to construct the various power stations will be at very different stages. The question arises, would the first applicant have to wait until all applications were determined before construction of the transmission link could commence? This approach would also not satisfy the aspirations of the Islands, who are reported as desiring links with additional capacity to cope with future generation from sources such as tidal and wave power.

- 3.2 The above consideration adds weight to our call for transmission requirements to be considered in the light of an energy strategy for Scotland, that would include an indication of the amount of generating plant to be constructed in various regions by certain key dates.

4. The Link between Costs and Charges

- 4.1 The consultation document repeatedly promotes the least cost solution for constructing connections as a means of minimising transmission charges, and hence not rendering renewable energy developments on the Islands uneconomic. It is HBP's understanding that the UK government have signalled their intention to cap transmission charges for the Scottish Islands, so that this argument for minimising financial costs does not apply.

5. Public Consultation and Accountability

- 5.1 Under the present system, SHETL have engaged in public consultation in the early stages of developing options for the construction of a connection between the Western Isles and the mainland. This process has been valuable in providing a formal method by which public opinion on the various options has been gauged. Regardless of what option from the consultation document is chosen, HBP consider it important that this early public consultation is maintained.
- 5.2 It is also essential that public scrutiny of the various transmission options is possible, and particularly in regulatory options (b) and (c), that the reasoning behind important decisions is not hidden behind a cloak of commercial confidentiality.

6. The Subsea Cable Alternative

- 6.1 Research carried out by HBP over the past three years has confirmed that subsea cables provide an economic and technically feasible alternative to reinforcement and extension of the mainland grid using high voltage overhead lines.

- 6.2 Subsea cables have minimal environmental and social costs, and have significant advantages when compared to overhead lines. Amongst the advantages that we list are:

- Greatly reduced environmental impact.
- Elimination of visual impact, and consequent effect on tourism.
- Elimination of planning delays associated with construction of overhead lines.
- Reduced transmission losses.
- Elimination of potential health risks.
- Increased security of supply, with elimination of disruption due to extreme weather.

Some additional costs are associated with the converter stations at either end of the HVDC link, but these are required regardless of the route taken by the subsea cable. Once the costs of constructing these facilities is accepted, HBP contend that it makes sense to take the subsea cable as close as possible to centres of demand, by-passing constraints in the current on-shore transmission system.

- 6.3 Significant support for the use of long distance subsea cables comes from many sources, for example:

- A recent report published by HIE proposes an east coast subsea interconnector between Peterhead and northern England, as an alternative to reinforcement of the Scotland-England interconnector using a new overhead line.

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- AMEC, in proposing the largest wind farm for Lewis, have not applied to SHETL for a connection, but are proposing a subsea cable direct to the central belt.

7. CONCLUSIONS

- 7.1 The following conclusions apply regardless of what regulatory framework is adopted. It is appreciated that some conclusions go beyond Ofgem's current remit, but this should not prevent such conclusions being established as a result of the consultation.
- 7.2 When considering transmission connections to the Scottish Islands, the overall cost-benefit analysis should take account of the social and environmental impact of high voltage overhead power lines, and the cost of reinforcing the existing mainland grid.
- 7.3 Social and environmental costs should be given weighting equal or greater to that of the financial costs when deciding what transmission option to adopt.
- 7.4 A renewable energy strategy for Scotland is required, that would enable strategic long term planning of the transmission system.
- 7.5 If the government cap transmission charges for generators on the Scottish Islands, then this incentive for minimisation of construction costs associated with transmission connections disappears.
- 7.6 It is important that early public consultation continues when considering options for transmission connections to the Islands, and that the decision making process is not hidden from public scrutiny by claims of commercial confidentiality.

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