

## **Ofgem's Open letter, Connecting the Scottish Islands –update**

### **Response from Professor Andrew Bain**

1 I write this response as someone who is interested in the arrangements for supplying electricity in the UK in general and Scotland in particular. I participated in the Royal Society of Edinburgh's Inquiry into Energy in Scotland, and I have acted as an expert witness in planning enquiries connected with the proposed Beaulay-Denny grid reinforcement and the Eisgein wind farm in the Western Isles. I am mindful of Ofgem's obligation to protect the interests of consumers in respect of the prices charged for electricity. My concern is to ensure that future electricity consumers are not saddled with unnecessary costs as a result of investment in the electricity grid that goes beyond what is required to deliver the Government's renewable energy targets in an economic and efficient manner. My comments relate to the Western Isles link.

2 The proposed 450MW link from Lewis to Beaulay in 2012 is based on contracted connection dates for island generators. To my knowledge there are currently two live major wind farm proposals in the Western Isles: Eisgein and Pairc. Both now envisage generation capacity considerably less than that originally proposed, and for which contracted connection dates have been determined. In the case of Eisgein planning consent for 159MW has been applied for. The application encountered strong opposition and a decision after a public inquiry is awaited. That public inquiry was informed that the Pairc proposal has been reduced to 96MW. So what was 450MW when grid connections were applied for has now been reduced to some 250MW; and it is by no means certain that either or both of these proposals will gain planning consent.

3 Any new link should, of course also cater for other renewable energy developments in the Western Isles. On the assumption that Eisgein and Pairc are granted planning consent, further "community-scale" developments might justify a modestly higher capacity. But the same cannot be said for the prospect of large-scale wave or tidal generation. In the present state of technology, with the associated extraordinarily high costs of generation, talk of future industrial-scale wave and tidal developments is much too speculative to warrant any significant addition to transmission capacity from the Western Isles. It is also relevant that the recent Scottish Power proposals for tidal generation are in the Pentland Firth and Sound of Islay, where tides run much faster than in even the most favourable locations off the Western Isles.

4 The upshot is that the proposed 450MW link would provide much more capacity than will realistically be required for the export of energy from the Western Isles to mainland Scotland in the foreseeable future. The need for even a 250MW link will remain uncertain until the outcome of the major planning applications is known, and until the developers have entered into firm commitments to pay the appropriate annual charges for their contracted

shares of the capacity. Even if planning consent is obtained decisions by the developers to go ahead with the projects cannot be taken for granted.

5 The open letter implies that a new transmission link to the Western Isles is required to enable the Governments' targets for renewable energy to be met. This is simply not the case. As the figures for planning applications and disposals for onshore wind farms in Scotland demonstrate, Scotland's 50% target for renewable generation in 2020 can be readily attained without *any* industrial-scale wind farms in the Western Isles – and that is without allowing for any further offshore wind, wave or tidal developments in Scotland. Indeed, when refusing consent for the large Lewis Wind Power planning application, the relevant Minister in the Scottish Government, Mr Mather, confirmed that he was confident that the Scottish Government's "ambitious" target for renewable energy in 2020 would be attained.

6 When the costs of investment in the transmission network are taken into account wind farms in the Western Isles turn out to be a much higher cost source of renewable energy than comparable wind farms on the mainland in the north of Scotland. If *developers* can afford to pay those costs and still make a profit, so be it. But there is no reason why UK electricity *consumers* should be required to bear the cost of generating electricity from renewable resources in unnecessarily high cost locations.

### **The Way Forward**

7 It seems to me premature to consult on establishing an appropriate level of funding for SHETL's current proposal. I agree that the best way forward for a Western Isles connection is a modified status quo approach, with SHETL shouldering some of the risk. However, there should be no firm commitment to the construction of *any* new link for the Western Isles until the appropriate capacity for the link can be established with reasonable precision. That will not be possible until two preconditions have been met. First, the outcome of the major planning applications must be known. Secondly, the developers must enter into firm commitments to complete their proposed developments and pay over the life of those developments for the associated grid costs. If construction does go ahead before these conditions have been satisfied, one of the risks that should be borne by SHETL – not future electricity consumers - is the risk that the link will become a partly or wholly stranded asset.

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