

Mr Stuart Cook  
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Your Reference  
Your Message  
Our Reference

Phone  
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Date  
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17 November 2010

Dear Mr Cook

### **Project TransmiT: A Call for Evidence**

Voith Hydro Wavegen welcomes the opportunity to respond to Ofgem's 'Call for Evidence' for Project TransmiT.

Voith Hydro Wavegen is a well established (since 1991) Wave Energy technology company, based in Inverness. The company has an unrivalled operating record of commercial scale wave energy plant, and our Limpet plant on the island of Islay will reach its tenth anniversary of grid connected operation later this month. This plant is highly successful, with well over 60,000 generating hours, and power plant availability levels now exceeding 98% (with levels above 90% for the last four years). It is worth noting, however, that the single most frequent cause of downtime for this plant, which is at the very end of the 11kV system on the west of Islay, is G59 grid faults.

This last fact illustrates the huge challenge which faces new renewable energy technologies in the UK and Scotland, and particularly marine energy which, by necessity, will be located in remote areas of coastline and seaspace. Voith Hydro Wavegen has identified specific project sites for initial deployments of approximately 125MW on the Outer Hebrides. However the ability to develop these sites is undermined by the complete lack of grid capacity and the further delay of proposed new grid infrastructure (namely the 450MW HVDC link). The installation of this link has just been postponed until at least 2015 as intending customers for the proposed capacity have been unable to commit due to the extremely high TNUoS charges and underwriting requirements.

This combination of factors demonstrates very clearly how the UK Government and Scottish Government targets for renewables in general, and marine energy in particular, will not be achieved unless there is a fundamental overhaul of grid planning and charging. The National Grid was set up to take power from large power generation facilities to all users including those in remote locations, and those with low demand levels. Clearly the economics of such a system would tend to ensure that generation is sited close to larger demand centres and the lower and more remote demands are serviced by smaller and less expensive distribution networks.

However, it is now government policy, based on targets at national and European levels, to actively encourage renewable energy. Both UK and Scottish governments are explicitly encouraging development of marine energy, through both policy and various economic mechanisms, and it is clearly contrary to such policy that lack of grid infrastructure, and cost of grid usage, precludes development. The economic benefits to the UK and Scotland should not be limited through lack of grid capacity.

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Voith Hydro Wavegen proposes the following to facilitate marine energy development, and wider renewables development:

- A fundamental review of all costs associated with grid infrastructure and usage to ensure that marine renewables, as an emerging technology sector, and renewables in general, never pay more (based on exported energy) than conventional or established forms of generation. In effect there should be no locational charging, but flat rate(s) for connection and usage. (We understand that this would bring the UK in line with existing European directives.);
- Waive or socialise TNUoS charging for all marine energy projects until an agreed level (say 250MW) of installed capacity is commissioned;
- Consideration is given to further specific incentives for remote area connections to encourage development of projects in the optimum locations;
- 'Strategic' grid infrastructure plans are prepared and implemented to meet longer term generation potential from emerging renewable technologies.

History also shows that the grid was developed to take or DISTRIBUTE energy to ALL users at equal cost regardless of location. Voith Hydro Wavegen believes that a similar approach to grid development should be adopted to enable energy to be COLLECTED from ALL generators.

Voith Hydro Wavegen also supports the Outer Hebrides Renewables Group response to Project TransmiT.

We look forward to your response to this consultation, and we would be very pleased to engage with you further on this subject.

Yours faithfully



Matthew Seed  
CEO