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14th February 2012

The Office of Gas and Electricity Markets (Ofgem)
9 Millbank,
London.
SW1P 3GE

Dear Sir

SUBJECT: Project TransmiT – Consultation Response.

Introduction & Overview:

Pelamis Wave Power (PWP) is a Scottish based world leading wave energy technology developer. Established in 1998 (formerly as Ocean Power Delivery Ltd) to develop and manufacture the Pelamis wave energy converter, PWP have achieved a number of world's first:

- First electricity export from an offshore wave energy converter to an onshore grid (0.75MW full-scale prototype Pelamis machine, European Marine Energy Centre, 2004).
- Construction and commissioning of the first array of marine energy converters (2.25MW; three full-scale Pelamis P1 machines under supply contract to Enersis and connected to the Portuguese grid, 2008).
- Acceptance of the UK's first commercial supply contracts for marine energy converters (order from E.ON UK and ScottishPower Renewables for Pelamis P2 machines, one each, to be installed and demonstrated at EMEC, with power being produced from the first unit in 2010)

The future success of PWP's business is highly reliant on its ability to connect Pelamis machines and projects to the UK electricity network; a failure to be able to connect would be a failure for the sector in the UK. As such PWP appreciates Ofgem's timely review of transmission charging through Project TransmiT.

The delivery of a successful wave industry in the UK is recognised as being capable of providing a significant contribution to the UK's efforts to decarbonise its electricity generation portfolio by harnessing a large scale, indigenous, renewable energy source, therefore PWP applauds the current initiative to review the charging and investment methodologies associated with the UK's electricity transmission system in order to ensure critical infrastructure can be delivered, fit for the purpose of delivering a low carbon step change to the UK's generation mix.

Wave and tidal energy have been identified as being able to provide a significant contribution to the future UK's energy mix, capable of providing up to 25% of current UK electricity demand from a low carbon, indigenous renewable energy resource¹. Delivering this opportunity would capture significant economic benefits to the UK and provide a net wealth generating industry through an export market which would stretch across a global resource. Both the UK and Scottish Government have recognised this potential and are putting in place enabling actions to attract private investment into the development of this sector, such as the Scottish & UK Government's initiative of a banding the Renewable Obligation to present the worlds most attractive market mechanism with a five ROC multiple.

Unlike conventional, thermal generation, which has shaped the current transmission system and charging methodologies, renewable generation is fixed to generate at the location of the resource itself. In this sense the wave sector is exposed to the extreme challenges of the current transmission charging and investment regime by being located at the peripheries of the UK transmission network (or not on it at all). This is due to the very nature of the geographic distribution of the resource it seeks to harness. As such, and given that no level of locational signal would serve to direct the industry to build projects in regions other than these (unlike wind), the current methodologies for charging and investment act as a substantial additional barrier to commercial investment within a new sector which both the UK & Scottish Government have identified as offering strategic, long term social, economic and carbon saving benefits.

As a result of the spatial distribution of the resource and strong market signal a significant amount of project development work for marine renewable projects has been triggered and committed to. These development activities, which have resulted in The Crown Estate issuing over 1.5GW of Agreement for Leases, have almost exclusively been focused on the Island groups of Orkney, Shetland and the Western Isles, where current transmission systems (or lack of) offer little or no connection options.

The lack of security on market access through the UK's transmission system is the most significant risk to the nascent marine industry in transiting to commercial scale in the UK.

The emerging wave industry has the ability to provide high levels of capital recycle for UK consumers through a largely domestic supply chain for renewable projects delivering material reductions in the UK's carbon emissions. However PWP believes that failure to resolve the key issues raised within this response will undermine the sectors ability to generate domestic market opportunities and in doing so; force the sector to relocate to alternative, overseas markets in order to grow their businesses.

¹ The Carbon Trust – Marine Energy Challenge.

Consultation Response:

Whilst PWP accepts the reasons behind Ofgem's proposal to rule out the option of socialising transmission costs across users, it is disappointed as PWP believes that this method offers the most effective charging methodology fit for the purpose of delivering low carbon electricity to the UK network at the lowest costs, given that the lowest cost of generation from renewables is at the peripheries of the UK's network and that the resultant transmission costs are lower than the higher marginal cost of generation from renewables closer to the load centres.

In relation to Ofgem's proposal that Improved ICRP is the right direction for transmission charging arrangements to move in, notwithstanding the preferred option discussed above, PWP would agree in principle.

However, where PWP acknowledges and welcomes that current modeled charging for generators in the north of Scotland under Improved ICRP is significantly better than Status Quo, it would like to highlight that this does not extend to the Island network around which most marine projects are being developed. PWP believes that the levels of transmission charges modeled within Ofgem's review for Island connected projects still represent a substantial barrier to investment for marine projects in these regions. This is a substantial barrier above and beyond the many other technical and commercial barriers this new sector must overcome. For this reason PWP would like to request that Ofgem continue to work closely with the renewables industry and local development agencies in these key Scottish Island groups to further develop Improved ICRP in an effort to reduce this barrier for investment and help facilitate the early success of this new sector.

Yours sincerely;

A handwritten signature in black ink, appearing to read 'Andrew Scott', with a long horizontal flourish extending to the right.

Andrew Scott

Project Development Manager.

Pelamis Wave Power Ltd.