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Dear Sirs,

Offshore Electricity Transmission – A Joint Ofgem/BERR Policy Statement

This letter comprises Denton Wilde Sapte's response to the issues raised in Ofgem/BERR's consultation document "Offshore Electricity Transmission – A Joint Ofgem/BERR Policy Statement" (the **Consultation**). This response is non-confidential and we are happy for it to be published on the Ofgem website.

While we acknowledge and support the reasoning behind the development of the principles in the Policy Statement, in so far as they apply to offshore wind farms, in this response we argue that the proposed rules for offshore transmission should only apply to emerging technologies such as marine current, wave power and tidal current power technologies if the Government can demonstrate that the proposed rules do not act as an impediment to the development of these technologies.

1 Policy Context and Development

- 1.1 The Government's long-term aim to reduce carbon emissions in the UK by 60% by 2050 is evident in the measures that have been set out in the Energy Review and the Energy White Paper. The Government recognises that the development of renewable electricity generation has a key part to play in achieving this long-term aim. Whilst it is envisaged that wind generation will make the main contribution to the UK's renewable energy targets in the immediate future, it is also recognised that diversity is important in ensuring security and resilience of supply.
- 1.2 We consider that if the Government is to meet its commitment to the target that, by 2010, ten per cent of UK electricity supply is to be met from renewables, then development of other technologies, such as marine current, wave power and tidal current power generation, could make a significant contribution. The development of such emerging technologies offers a real opportunity to diversify the UK's electricity generation capacity. Indeed the Government has shown its support for such technologies over a number of years, through substantial financial support. While wind power technology is tried and tested, such emerging technologies contain more uncertainty, and may therefore benefit from a lighter regulatory touch.
- 1.3 Bearing the above in mind, whilst we can understand the need to adopt a price control approach to offshore electricity transmission for large-scale wind generation projects, we strongly believe that to do so for other less mature technologies may seriously hamper the ability of those projects to get off

the ground. We would request the Government to seriously review how adopting a price control approach would impact those projects involving emerging technologies (rather than offshore wind), and therefore the Government's ability to meet its renewable targets. Our view is that to adopt a price control approach globally to all offshore generation (not just wind) may:

- (a) impact the levels of investment in other renewable projects due to the uncertainties surrounding the new price control arrangements and the lack of flexibility such an approach brings with it;
- (b) delay emerging technology projects coming on line (as early decisions with respect to investment could not be taken due to (a) above); and
- (c) therefore adversely impact the Government's ability to meet its renewable targets.

If following such a review, the Government concludes that adopting the same approach to that geared towards large offshore wind farms is disproportionate and indeed problematic it will be crucial for the Government to have the ability to reconsider its approach to emerging technologies and alter the scope of the price control approach (for example, creating certain carve outs). It would be helpful if the Conclusions document makes it clear as to whether the Government will be reviewing the overall price control approach (not just in the context of offshore wind, but also in the context of other less developed technologies) and if so what its next steps will be in respect of what type of regime it will be looking to apply to emerging technologies.

- 1.4 In considering the above, we would ask the Government to appreciate that a one size fits all approach to all offshore renewable technologies may be disproportionate, and may defeat the Government's own objectives. In particular, we would request the Government to consider how other emerging offshore generation technologies could be treated differently from wind power with regards to development of offshore transmission assets.
- 1.5 It may be, however, that Ofgem/BERR (properly) only have large offshore transmission systems in mind for the new regime, and do not mean to capture potentially smaller, emerging technologies. If that is so, we request that your Conclusions document makes it clear.

2 Consultation on Regulating Offshore Transmission

- 2.1 The initial consultation on the regulation of offshore electricity transmission was issued in July 2005. On its launch particular emphasis was on the new round of offshore wind energy projects, where Malcolm Wicks stated that, *"The development of Round 2 offshore wind has a vital part to play in reaching our renewable energy targets and aspirations. Connecting them to the onshore grid is an important aspect of delivery and this consultation sets out clear options for the regulatory framework offshore. It is critical to introduce a regime that allows offshore wind farms to connect at an acceptable cost both to developers and electricity consumers."* We believe that this is the correct emphasis.
- 2.2 The consultation has evolved over the last two years and the scope of the regulations being developed will cover any high voltage connection from an offshore generating station to the onshore GB grid (whether it is to an onshore distribution or transmission system). Offshore connections to the onshore network at 132kV or more (or more than 132kV, depending on the geographical region) will fall within the definition of "high voltage line", following the proposed changes to section 180 of the Energy Act. In short, these high voltage transmission networks offshore will be subject to licensed price controls. We assume, therefore, that a different, lighter touch, regulatory regime would apply to say, an emerging technology connected by lower voltage cables. Please confirm that this is the case, and indicate what regime would apply. As an aside, we assume that the proposed regime is not intended to cover interconnectors, regardless of their voltage. Please confirm that this is the case.
- 2.3 Whilst we note that recent documents state that the regulatory regime on offshore transmission is *"being developed to allow electricity generated from offshore renewable sources – currently wind, but*

potentially wave, tidal and other renewable technologies in the future", we also note that the content of those documents entirely focuses on offshore wind R1 and R2 projects. For example:

- (a) in a summary of the Government policy in one of the consultation documents the Government concludes *"that the regulated price control approach provided a number of clear benefits to offshore wind farm developers"*; and
- (b) all illustrative maps have shown the actual or potential connection arrangements for R1 and R2 generation only.

Given that the relative maturity of this market and technology, we believe distinguishing wind from emerging technologies to be justified.

2.4 We would therefore ask the Government seriously to review again the appropriateness of utilising more widely an offshore transmission regime, which was clearly originally designed for, and consulted upon on the basis of application to, the offshore wind industry (rather than emerging renewable technologies).

2.5 We would ask the Government to clarify the comments made in the Consultation and associated documents regarding emerging technologies, for example:

- (a) in the Ofgem/DTI consultation paper on "Licensing Offshore Electricity Transmission – a Joint Ofgem/DTI Consultation" published on 20 November 2006, the Government stated that *"Wave and tidal devices may be subject to the regime described in this document, but are more likely to have lower capacity outputs and will tend, at least in the early stages, to connect via low voltage cables"*; and
- (b) in the Impact Assessment issued in July 2007 on Offshore Transmission, the Government stated that, *"We also aim to maximise the potential contribution from other emerging technologies, such as wave and tidal generation, in these and future rounds."*

We believe the second aim is highly desirable. However, it is not clear whether the Government has considered in the round how this could be best achieved. A possible approach would be to exclude such technologies as wave and tidal from the scope of the new arrangements if after consideration, it is found that the result of including these technologies hampers development and innovation. In reviewing other possible approaches, the Government may wish to consider how an emerging technology such as marine wave current power or tidal power would need to be treated differently to the large-scale R1 and R2 projects. In particular, the Government may need to consider what the key differences between wind and marine current, wave current and tidal power technologies are, such as:

- (a) the technology for the exploitation of marine currents, wave currents or tidal movements is still in its commercial infancy, unlike the technology for wind power which is now relatively advanced and its economics established; hence these projects are particularly susceptible to additional risks or delays;
- (b) marine currents, wave currents and tidal power projects will, in the initial term, generally be developed on a much smaller scale than the offshore wind projects being contemplated. As mentioned above, it may already be your intention to exclude these projects;
- (c) subject to the point made above, that we accept that developers of offshore transmission systems for emerging technologies ought to be required to offer third party access, generally, marine current, wave current power and tidal current power projects will be closer to shore than offshore wind projects and therefore do not lend themselves to offshore interconnected grids some distance away from shore in the same way as those likely to develop for offshore wind projects; and

- (d) as wind generation is a more advanced technology, developers for these projects are able to determine with more accuracy project and transmission costs, unlike developers involved in marine current, wave current and tidal current power projects where there is more uncertainty – any additional uncertainty could well render these projects too risky to proceed.

3 Discussion Regarding the Consultation

3.1 We consider that a price controlled approach to all offshore technologies should not be implemented if it is clear that such an approach would seriously hamper the development of marine currents, wave currents and tidal power projects given the significant differences between these types of projects and offshore wind projects. We set out below some of our further concerns with the current proposals should they apply to these emerging technologies.

3.2 Main concerns with the proposals with regard to Marine Currents, Wave Currents and Tidal Power projects

- The process is lengthy and complex (particularly if the Government envisages the tender process for an OFTO to provide an offshore transmission connection to take about a year to complete) – this will result in uncertainty and higher costs which will have serious implications on project delivery – it is important to stress that such implications could not be sustained with an emerging technology such as marine, wave or tidal power.
- PFI or project financed type structures lend themselves well to tried and tested technologies (and technologies that have a type certification); they do not lend themselves to emerging technologies where uncertainty with regards to project risks is high.
- Uncertainty of costs – it will be extremely difficult for developers of wave/tidal projects to quantify whether they have all financial and other requisite resources if there is uncertainty surrounding transmission costs to shore.
- Adopting standardised tender documentation for each project will be difficult if marine, wave or tidal power projects are included in the mix of generation.

4 Conclusion

We hope that these comments are considered to be constructive, and that any arrangements put in place will be developed and monitored with emerging technologies in mind.

Yours faithfully,



Denton Wilde Sapte