Eimear Watson
SONI Ltd.
[sent by email
eimear.watson@soni.ltd.uk]

30th April 2014

**Consultation Paper on consenting requirements in advance of application for offshore generation connection**

Dear Ms Watson,

See below our response to the Consultation Paper on Consenting Requirements in Advance of Application for Offshore Generation Connection issued by SONI/NIE dated the 1st April 2014.

In October 2012 The Crown Estate awarded two separate Agreements for Lease (AfL) for the development of two 100 MW Tidal Energy Parks located on the north coast of County Antrim in Northern Ireland. Due to the close proximity of the two projects they may share onshore grid connection assets. As the two projects have similar grid challenges, the developers of the two projects have prepared a joint response to this consultation.

The developers and their respective projects are detailed as follows:

Tidal Ventures Ltd (TVL) is a joint venture between Bord Gáis Energy and OpenHydro Technology Ltd that holds an AfL for the development of a 100MW tidal energy park in the waters offshore of Torr Head.

Fairhead Tidal Energy Park Ltd is a development company set up by the DP Marine Energy and DEME Blue Energy development consortium (DPME/DBE) that holds an AfL for the development of a 100 MW tidal energy park in the waters offshore of Fair Head.

As part of the AfL agreements with the Crown Estate there are major milestones before 2020 where the consortiums are required to provide evidence of project funding and commencement of construction works.

A significant risk to the delivery of both projects is associated with access to the grid and the current uncertainty relating to the grid connection process and associated planning issues. We welcome this consultation which we hope will provide greater clarity to this process.

**Do you consider that an Exclusivity Agreement and an Agreement for Lease from The Crown Estate alone should be the required level of consent to allow offshore developers to submit a Connection Application?**

The two consortia consider that tidal energy developers should be allowed to submit an application for connection based on permissions other than the receipt of Planning Approval. We believe that the appropriate threshold to be attained by tidal developers in order for SONI to process a connection application would be the signing of an AfL with The Crown Estate. We are of the understanding that processing an application would intrinsically include the issue of a connection offer and the allocation of an FAQ.

The question in the Consultation Paper refers to an Exclusivity Agreement and suggests that this might be required in addition to an Agreement for Lease to allow offshore developers to submit a Connection Application. The Crown Estate awarded exclusive rights to the two consortia in Agreements for Lease; there was therefore no need for separate Exclusivity Agreements. Accordingly, we suggest that an Exclusivity Agreement **or** an Agreement for Lease from The Crown Estate alone should be the required level of consent to allow offshore developers to submit a Connection Application.

The reasons for the award of the AfL being the appropriate threshold for tidal energy projects are given below:

Commitment to Project

If the purpose of having a minimum requirement before a connection application will be accepted is primarily to test commitment to the project, we consider that the competitive process for obtaining the AfL with The Crown Estate signals a significant commitment. The competitive tendering process for the AfL is assessed against a number of key principles including:

- the Bidder's commitment, ability and resources to deliver the project;
- the demonstration of a strategy for successfully achieving consent and safely constructing (or having a clear path to enable the construction of) the Project to programme;
- the appropriateness of the Development Site sought when considered against the capacity which is to be installed at each phase of the proposed development;
- a lack of conflict between the proposed Project and other uses of the Development Site;
- the ability of the Bidder to fund development of the project within the context of its existing financial commitments for other projects; and
- the bidder is required to demonstrate a thorough understanding of risk, including consent, technology and grid connection.

The competitive nature of the tender process requires that significant time and financial resources are invested in investigating potential tidal development sites, preparing the tender application for the recommended site and a significant fee is required to be paid upon award of the AfL. This is a similar financial level of commitment to that which would be expected of an onshore wind farm planning application. Additionally there are separate milestone requirements under the terms of the AFL, one of which is delivery of a grid connection contract.

The tender process for awarding offshore development rights was controlled by The Crown Estate following the completion of a Strategic Environmental Assessment and the preparation of an Offshore Renewable Energy Strategic Action undertaken by the Department of Enterprise Trade and Investment (DETI). This plan led approach prevented the potential for speculative applications for offshore development rights.

Policy Context

In the DETI Offshore Renewable Energy Strategic Action Plan, DETI explicitly states that it wants to optimise the amount of offshore energy resources to enhance security of supply and diversity. The plan also provides that DETI and industry must look to increase deployment of newer technologies to reduce the cost of commissioning offshore tidal and wave energy generators and to make them more commercially competitive in the medium to longer term. Finally it also says that they (DETI) will work with NIE, SONI and the UR to facilitate the development of the NI Grid to take offshore energy.

DETI's action plan for offshore energy points in the direction of offshore renewables being different to onshore wind energy and that in order to promote diversity and security of supply they need to help increase deployment to make them more commercially viable.

NI Government Strategic Energy Policy, as set out in the Strategic Energy Framework 2010, is to achieve 40% renewable electricity in the supplied energy mix by 2020. As well as obviously improving environmental sustainability, one of the key objectives is to provide future energy supply security. If renewable energy is to provide 40% of the energy mix, then the renewable quota itself must be made up of a balanced and complimentary portfolio of generation sources and technologies. Tidal generation will have an important role to play in this, with the distinct advantage of providing energy from a resource that is entirely predictable and consistent.

In this context it is worth highlighting that the policy environment is supportive of initiatives needed to progress deployment and reduce the commercial costs of tidal and wave technologies specifically.

It should also be noted that Northern Ireland has taken a different approach than the rest of the UK, where developers may apply and receive a grid offer prior to securing planning

consent. This puts Northern Ireland at a potential competitive disadvantage for attracting developers, particularly of emerging technologies where risk is already increased.

Planning Process

One significant difference between onshore wind and offshore tidal energy developments is that there is much more certainty regarding the process for achieving planning permission for onshore wind.

Whilst a significant effort has been made to date to streamline the process for offshore generators, it is still a process that has not been tested. This could potentially result in significant delays as there are no existing tidal energy arrays with which to compare potential impacts described in the Environmental Statement with real impacts.

An additional licence needs to be obtained for an offshore development (any offshore generation project will have an onshore as well as an offshore element). Associated with this, there is a level of uncertainty regarding the limit of responsibility of the developer for the onshore elements of the project. The additional marine license requirement makes it difficult to complete the onshore element at the same time as the offshore element of a tidal energy project, thereby significantly increasing the time required to get full planning permission for all elements of the project.

All of the aforementioned uncertainty increases the risk of delays in achieving full planning permission for a tidal energy project.

It would unduly burden off-shore developers if it was required to obtain all the additional consents prior to a connection application submission which would confirm whether or not a viable grid connection existed. This is particularly acute for tidal developers because of the already increased financial risk due to the infancy of the industry.

If the connection application submission is delayed until after all additional consents for the off-shore assets are obtained, the impact on the critical path timeline for the delivery of the projects will result in it being unlikely that the projects will contribute towards the 2020 renewable targets and failure to meet the Crown estate AFL milestones.

Economic Considerations

The technology required to generate electricity from tidal energy on a commercial scale is still in development. Potential investors at the pre-construction and construction stages therefore need to have more certainty regarding potential revenue and project timelines. While it is accepted that all electricity generation technologies will need a minimum level of certainty regarding access to the grid, this will be a more significant barrier for a technology at an early stage of development i.e. tidal energy. This is of particular note given the location where the Fair Head and Torr Head projects will be connecting, circa 50km from the existing transmission system.

The consultation also acknowledges that the securing of a Marine Licence is likely to be much more onerous than the granting of planning permission for an onshore wind farm. The cost of the environmental assessments and other surveys are significantly higher for an off-shore project than they would be for an equivalent on-shore project. This is due to the nature of work in a harsh offshore environment, with a much higher risk of delays as a result of inclement weather, the limited availability of specialist vessels and contractors to carry out the survey works, and generally longer timelines to do surveys.

Unique Benefits of Tidal Energy

The proposed tidal energy developments that have AfL's signed with The Crown Estate, with a combined export capacity of 200 MW, will make a significant contribution to the Northern Ireland target of 40% of energy generation from renewable sources by 2020. In addition to this, Northern Ireland has the opportunity to be world leaders in the utilisation of tidal and the benefits that the diversity of the technology brings to the overall generation portfolio.

Some of the unique benefits of tidal energy are set out below:

- improves grid management because the electricity produced is entirely predictable for years in advance;
- has a different generation profile to wind energy which will allow a higher penetration of renewable generation;
- higher level of diversity of renewable generation type available on the system;
- generally accepted to have a low human and environmental impact;
- relatively small footprint compared to other renewable technologies;
- potential to capitalise on the wider benefit by extending its R&D expertise in this field and securing its position in the future supply chain;
- due to the stage of development of the technology, locations where early deployment is successful will result in comparative advantage to local businesses involved in the development and will attract scientific interest.

Generator Connection Process Decision Paper – July 2013

We note that the definition of 'Application Date' as set out in this decision paper will need to be changed should there be approval of a different level of consent for tidal energy development. In this respect, we suggest the following revised text:

*The date of receipt of connection application by either SONI or NIE subject to the conditions that the connection application in question is (1) fully complete and (2) supported by the prior granting of planning consent or other level of consent approved by NIE and SONI following appropriate consultation.*

Please do not hesitate in contacting us if you have any queries or wish to discuss this matter further.

Yours sincerely,

Donal O'Sullivan
Project Manager
**Tidal Ventures Limited**
donalosull@bordgais.ie

Damian Bettles
Project Manager
**Fair Head Tidal Energy Park Ltd**
damian.bettles@dpenergy.com