

Orkney Islands Council

Response to OFGEM Caithness to Moray Strategic Wider Works Needs case Assessment

The Council is grateful for the opportunity to respond to this consultation document. Renewable energy resources from the wind, waves and tides constitute a significant concentration of potentially exploitable renewable energy resources in the UK and the region is well placed to contribute to UK and European carbon reduction and renewable electricity generation targets if key regulatory barriers can be effectively addressed to facilitate deployment of renewable technologies.

The islands will in future be a key part of meeting the UK's energy needs, collecting power from a range of different technologies located on the islands and in the waters around them. To harness these resources projects based in the Northern isles rely on the need for reinforcement of the transmission capacity in the north of Scotland.

Orkney Islands Council has been working on issues associated with delivering effective Grid Infrastructure for Orkney. Considerable progress is being made in the commercialisation of marine renewable energy in Orkney with developers within the Pentland Firth and Orkney Waters progressing towards the consenting of first arrays.

This development is a core part of Orkney Islands Council's strategy for Orkney's future, building on the expertise which has already been built up in a cluster of private companies, including EMEC, with academic and public sector support. An estimated 400 jobs in Orkney depend on renewable related activity.

To support this strategy, the Council has invested some £20 million in marine facilities at three locations in the County, Hatston, Lyness, and Stromness, to ensure that the needs of the marine energy industry developing around Orkney can be met. This commitment makes the Council a substantial stakeholder in its own right in the development of renewables.

The Council remains concerned that the current procedure on how grid construction is triggered, underwritten, accessed and charged for in the Scottish islands remains a deterrent for investors.

Consultation questions

1. Do you consider SHE Transmission's proposed standalone subsea cable project to reinforce the transmission system in northern Scotland is an appropriate option for consumers at this stage? Please explain the reasons behind your views.

Orkney is the home of the European Marine Energy Centre where wave and tidal devices have been developed, tested and start to be commercialised. The first commercial scale wave and tidal leasing round in the Pentland Firth and Orkney waters will ensure a development pipeline to enable the UK to retain its lead in establishing a global market. Crucial to achieving this is the ability to export electricity to centres of demand.

Significant investment has been made to support the development of the UK marine industry in the north of Scotland and the islands by both public and private sectors. Investment of £35m has been made in the European Marine Energy Centre in Orkney which now supports around 250 UK jobs in the marine sector. Investment in infrastructure to support offshore energy, principally marine, has totalled £90m in the last three years.

These capital investments have been made in the context of an upwards trajectory for the industry. Losing momentum will likely result in a draining of talent and economic activity from the UK, and a poor return on what were planned as long-term investments.

It is the Council's view that there is a very low level of risk to the consumer that the link would not be fully utilised by generation projects in the North of Scotland and Northern Isles given the level of resources available to exploit in the area.

2. What are your views on the timing and scale of SHE Transmission's proposed subsea link to reinforce the transmission system in the Caithness Moray area?

As has been evidenced in Orkney, demand for grid connections remains high and there is evidence from both onshore wind and marine developers that projects in Orkney and the Pentland Firth would be developed subject to grid access.

What is crucial to Orkney is that there are no further delays to the proposed Orkney Mainland link. Any delay to the Caithness Moray link would have a knock on effect in construction of Orkney's transmission link.

In terms of scale, demand for renewable generation in Orkney exceeds grid capacity. A trial of active management of the Orkney distribution network has permitted over 20MW of additional renewable energy to be connected to the Orkney network. Orkney now produces more than 100% of its electricity needs from local renewable resources. Ensuring the Caithness Moray link is future proofed in term of scale to accommodate future demand will support both the UK's security of electricity supply and provide better value for money over the long term.

In Orkney, it is not just high transmission charges which are holding up renewable projects, but also the difficulty of satisfying the requirement for an assured critical mass of new projects to underwrite the high subsea cable costs. This is a consequence of Orkney's mix of large-scale marine projects which currently carry significant technology risk as the first arrays are installed, and small and medium scale onshore wind projects, often promoted by local companies and community trusts which do not have the financial strength of the big utility companies. The procedures for triggering new grid investment are not designed for this kind of mix, and this should be factored into Ofgem's needs case assessments. The Council supports development of the transmission network, in energy resource rich areas, in advance of need, and would encourage Ofgem to approve the most cost effective option per MW which allows for future anticipatory capacity. Taking these factors into account, it is the Council's view that the sub sea HVDC link is the optimum solution.

3. What are your views on the future costs of generation constraints in northern Scotland?

Based on the assumption that there is no grid outage compensation payable through the normal grid rules for island single circuit links island based projects would not receive compensation for outages.

4. What are your views on the potential wider benefits of SHE Transmission's proposed subsea link? How should wider benefits be measured and evaluated in the Needs Case assessment for a proposed transmission project?

The Council would refer to the Economic Impact Assessment report produced by Grangeston for Highlands and Islands Enterprise (May, 2014). The report indicates there are significant benefits in delivering the sub sea option by 2020 compared to delivery of the onshore AC option by 2026 (a copy of this report has been provided by Highlands and Islands Enterprise in its submission to Ofgem).

5. Do you consider we (and our consultants) have identified the relevant issues to the Needs Case assessment for SHE Transmission's proposal? Are there any other factors you think we should examine in order to inform our views on the proposed reinforcement?

The UK and Scottish Governments have recognised that the potential for renewable energy in the Scottish islands is considerable. In October 2012, The Rt. Hon. Edward Davey and the Scottish Government set up a joint independent study to address concerns that renewable projects on the Scottish islands (onshore wind and marine projects) were not coming forward quickly enough.

Based on a study undertaken by a consortium of Baringa Partners and TNEI funded by DECC and the Scottish Government (2013) they concluded that there could be considerable socio economic benefits arising to the UK that connecting 180MW of renewable generation capacity on and around Orkney.

The development of renewables generation on the islands could have significant benefits to the economy through direct, indirect and induced jobs associated with marine and onshore wind technologies. These jobs may be newly created or displaced from other geographies or industries. The Scottish islands have some of the highest fuel poverty rates in the UK. Renewable generation and associated transmission links could provide further benefits related to local security of supply whilst the diversity benefits of developing renewables on the islands, especially marine, could reduce the overall cost of intermittency on the GB system.

Both the UK and Scottish Governments have expressed a commitment to deliver Scottish island transmission links, which for Shetland and Orkney are dependent on the Caithness Moray link.

The Council would encourage Ofgem to consider these additional socio economic factors in determining the needs case.

6. Do you have any other comments on our initial views set out in this letter?

We are conscious of the continued existence of enormous frustrated interest in renewables amongst Orcadians. We are also conscious that some existing generators with RPZ connections are experiencing unexpectedly high levels of constraint with the risk that some may become non-viable.

Orkney has taken up renewables with enthusiasm, and in many ways is leading the way towards a renewable future. We achieved over 100 per cent electricity use equivalence during 2013/14. But with existing generation projects under threat and no prospect of

new generation projects able to connect to the Orkney grid without the much needed transmission capability, the Council would urge Ofgem to ensure that the Caithness Moray link project is not subject to further delay and that it approves the HVDC sub sea option taking account of future demand for connections in the North of Scotland .

Orkney Islands Council, May 2014