



Ofgem: Shetland transmission project, consultation on final needs case and delivery model

Shetland Islands Council welcomes the opportunity to respond to Ofgem's consultation on the Shetland transmission project and provide a detailed response to the consultation questions.

1. Do you agree that the current network on the Shetland Isles needs reinforcing in order to connect additional generation?

The current network in Shetland is unable to offer firm connection to any additional renewable generation without grid reinforcement. Consented projects such as the VEWf (Viking Energy Wind Farm) will not go ahead without an interconnector to the UK national grid. A number of existing smaller wind projects and a tidal array on Shetland are connected under non-firm connections and are required to operate with a significant reduction in their potential annual yield. The limitations and lack of flexibility of the current network on Shetland has led to a moratorium on further renewable generation connecting to the Shetland grid at distribution level, and there is no infrastructure to export power.

Shetland currently has projects with planning consent totalling 575 MW, but there is no opportunity for these developments to be constructed without network reinforcement and an HVDC transmission link to the UK national grid. A further 145 - 200 MW project is entering the planning consent process, this project has a contracted grid agreement for a capacity of 120 MW.

The opportunity for developing projects in wave, tidal energy, research and development of renewable technologies, including the testing and demonstration of new technologies has not been possible in Shetland other than on a very small scale, due to the limitations of the current grid network. Despite having some of the best renewable resources and sites available for this kind of strategic work in the UK, Shetland has been disadvantaged in not being able to fully benefit from the UK Government's incentives schemes for developing the renewable energy sector.

2 What are your views on the generation scenarios developed by SHE-T? We are particularly interested in views on the likelihood of wind generation on Shetland developing to the levels predicted by SHE-T's scenarios.

Considering the SHE-T scenarios, the 450 MW option would be undersized and only provide capacity to connect the power from the VEWf and not be able to connect any additional renewable generation. The 800 MW option has not been considered as a tendered option by SHE-T and as noted would introduce a delay in the delivery time of 18 months to Q4 2025 for a connection date. This option introduces uncertainty and potentially could result in a scenario of open-ended consenting and re-tendering that could unravel the timeline and plans in place for VEWf to successfully meet the 2019 CFD bidding round. This could undermine the project that underpins the needs case for the Shetland interconnector project and Ofgem's minded position. This is not considered a desirable position and delay should be avoided. This would also delay a cost effective new energy solution for Shetland consumers and the replacement of the aging power station in Lerwick. Shetland Islands Council notes the Technical Note from Mott MacDonald (October 2018) which verifies the period of delay which an 800 MW connection would introduce. This delay means that an 800 MW link is less preferable to a 600 MW link on a "Least Worst Regrets" analysis.

The proposed 600 MW option and minded position from Ofgem is a good match to the scale of consented and contracted wind energy on Shetland, allowing for the development of sufficient renewables that will see the interconnector fully utilised. The 600 MW link would provide an adequate connection for the wind projects that currently have planning consent in Shetland when taking into account local on island demand and wind farm production outputs, it would be a good fit for those proposed contracted projects. There would be a strong likelihood that this scale of cable

would be fully utilised and provide a means of exporting renewable energy from Shetland. The minded position would also provide key infrastructure that is cost effective for the long term energy solution for electricity consumers on Shetland.

The additional capacity in the 800 MW scenario would allow for additional projects to connect but it is not clear how much more onshore wind generation would be considered acceptable on Shetland from a planning perspective, this is not to preclude the potential for marine based renewables such as wave and tidal power.

3 What are your views on SHE-T's approach to optioneering, are there other options that SHE-T should have considered?

SHE-T's approach to prioritising identifies the 600MW cable as the preferred option. This will allow capacity for the delivery of those consented projects, in a time frame that will allow for the VEWf to make a bid in the 2019 CfD round and achieve compatibility with a proposed connection date of end of March 2024. Additional projects with contracted generation will be able to utilise the capacity up to a level that will see the cable fully utilised, supporting the option of a 600MW interconnector and minimising any risk of the transmission asset being underutilised. This earlier delivery date also benefits the delivery of a low carbon and cost effective energy solution for Shetland by the end of Q1 2024.

4 What are your views on the CBA put forward by the ESO?

The CBA for the preferred 600MW option provides a strong justification for this option based on the consented wind energy and ability to deliver in line with a 2019 CfD round. The 600MW interconnector would allow delivery of the VEWf that is required to support the interconnector needs case and Ofgem's minded position, whilst providing better value for the consumer in security of supply on Shetland from a new energy solution to meet on island electricity demand. The 600 MW link is also designed to link into the Caithness-Moray link with the appropriate capacity and transmission of significant levels of renewable energy from Shetland to the National Grid. Shetland Islands Council notes that an 800 MW solution is only preferable if it could be delivered in a timescale equivalent to a 600 MW solution. Mott MacDonald's evidence clearly advises that it cannot.

5 What are your views on the technical design and costs of the proposed Shetland link?

No comment on the technical solution, but as the proposed link can also provide a supply of electricity to Shetland as part of a new energy solution this would indicate a good value option when benchmarked against costs previously provided for a smaller supply only cable. The 2017 Ofgem consultation on a new energy solution for Shetland indicated a capex cost for an 80 kV HVDC import supply only link of circa £278.6m as part of the favoured option.

6 Specifically do you agree with our proposal to approve a 600 MW link if Viking Energy Wind Farm secures a CfD in 2019?

We are in agreement with this proposal but it is important that Remote Island Wind developers, including Viking Energy are supplied with sufficient information in time to make an informed competitive bid for a 2019 CfD. Ofgem should be able to provide clarity on the financial contribution towards the cost of the link arising from SHEPD's recommendation for the new energy solution on Shetland, and how this relates to expected TNUOS charges on the transmission link and related cost underwrites for those bidding for a 2019 CfD. It is clear that the cable options larger than 600 MW would delay connection date and potentially preclude Shetland RIW projects from bidding in the CfD 2019 round including the VEWf that has a capacity of 412-457 MW.

7 Do you agree with our assessment of the Shetland project against the criteria for competition?

No comment

8 Do you agree with our proposal not to competitively tender the Shetland project using the SPV model or under our CATO framework unless there are significant delays to the delivery timelines?

We agree with Ofgem's proposal not to competitively tender the Shetland project as this could impact on the delivery of the project within the proposed timelines and could risk unravelling a process that has seen considerable investment of time and financial commitment over a protracted period of many years across Governments, regulator, developers, local authority and the system operators.

9 Do you agree that the Competition Proxy Model would deliver a favourable outcome for consumers relative to the status quo RIIO SWW delivery arrangements?

No Comment on the specific model. It is clear that delivering a joined up approach to providing a transmission link that will also deliver the key infrastructure of a future energy solution for Shetland will mutually benefit both the viability of remote island wind projects and the necessary replacement of the Lerwick diesel power station. This scenario ultimately benefits the UK Consumer in terms of value for money and providing an indigenous source of clean renewable generation from one of the UK's best wind resources.

10 What are your views on the way in which we have applied project specific updates to the Competition Proxy Model methodology to account for the specific characteristics of the Shetland project?

No comment