

Shetland transmission project: Consultation response.

I am a Shetland resident as well as an investor in Energy Isles Limited, which is a consortium of local businesses looking to develop wind power in the Isles.

I feel very strongly that the future needs of both Shetland's economy and young people are intrinsically linked to renewable energy and the ability to export that energy. Having benefited from the oil and gas sector over the past 30-40 years, Shetland must now look to the future as that sector enters its twilight years. We must ensure that there are jobs for the next generation here in Shetland and the renewable sector offers huge potential for our young people.

I invested in Energy Isles with the future very much in mind. For me it represented an investment in the economy of my home, as well as contribution towards the job opportunities that will come with renewable energy development. The potential of Shetland's renewable energy sector is huge, and we must ensure that development potential is not limited by an unrealistically small link. This would be a clear mistake, both in terms of the local economy but also in terms of UK efforts to reduce carbon emissions.

Please see my responses below.

Best regards

Question 1: What are your views on the generation scenarios developed and updated by SHE-T? We are particularly interested in views on the likelihood of wind generation on the Shetland Isles developing to the levels predicted by SHE-T's scenarios and any further changes or updates since SHE-T's October 2018 Final Needs Case submission that you think should also be considered.

We note that the highest scenario within the consultation is 818MW as compared to 704MW in the previous consultation. We think this is an improvement.

However, as local developers, we still think this is an underestimate. It seems unrealistic to forecast that generation would not grow beyond year 2026, especially given Scotland's legislated 2045 Net Zero.

Question 2: What are your views on the demand sensitivity explored by SHE-T?

SHE-T and NGENSO are the only parties in a position to assess the likely demand as they are the organisations that parties seeking connections for demand must approach. Given that these discussions are confidential, we are not in a position to comment and we must take the forecast demand as given.

Question 3: What are your views on the link options considered by SHE-T? We are also interested in views on the options proposed by SHE-T to mitigate against the risks of a second link being needed.

We would have preferred to see a larger interconnector in order to cater for longer term renewable energy generation growth in Shetland, but given the choice between a 600 MW interconnector and no interconnector, we strongly support the 600 MW link.

With regards to the proposed mitigation options – we believe that the SHE-T statement in 2.40 is unacceptable and contradicts the Cost Benefit Analysis (CBA) presented. The CBA itself shows that, even if demand does not materialise, no mitigation is necessary until generation exceeds at least 818 MW.

Further, the CBA clearly shows that in all scenarios (without having to apply mitigation measures such as ANM or Queue Management) it is cheaper for the consumer to connect at least 818MW of generation to the 600MW link rather than it would be to build an 800MW link (which from the previous consultation document had an additional capital cost of ~7%).

Any proposal by SHET to build a new link (at an additional capital cost of at least 100%) for anything less than 818MW of generation would be contrary to the Least Worst Regrets analysis presented in the CBA.

In fact, given that the CBA selects a 450MW link as the best option for connecting 818MW of wind in several cases/scenarios, we would expect a 600MW link would be the best option for connecting $818/450 \times 600 = 1091$ MW of generation with constraints payments to impacted generators would be the best value for consumers before any consideration of an additional HVDC link.

Further comments on the proposed mitigation options presented are below:

2.40.1 Active Network Management

We believe that turning off viable and economic renewable energy generation because the proposed link is too small is completely unacceptable unless impacted generation is compensated via constraint payments.

2.40.2 New Demand

Ofgem and SHET are basing the size on new demand. If the new demand does not materialise in a timely manner then we would expect Ofgem, SHE-T and NGESO to fulfil their commitment and to make constraint payments to the impacted generation.

2.40.3 New Energy Storage

We do not understand how SHE-T can propose this as a mitigation when this is not within SHE-T's power and is instead a role for the market, therefore we disagree that this is a relevant mitigation.

2.40.4 Queue Management

We categorically reject this option. The process has not been developed or achieved industry or regulatory approval.

Question 4: What are your views on the technical design and costs of the proposed Shetland link?

An 800 MW converter station at Kergord would be the same size as the existing 800MW converter at Spittal which should be a lower cost design and delivered more quickly.

Please note, we are not asking for a larger interconnector than the 600 MW model proposed or for the project to be delayed in any way. We are in full support of the size and timeline.

What are saying is that an 800 MW converter station at Kergord would be more cost-effective and is possible within the proposed timescales.

Question 7: What are your views on our minded-to position to conditionally approve the revised Final Needs Case? Specifically:

- i) Do you agree with our proposal to approve a 600MW link subject to Ofgem being satisfied, by the end of 2020, that Viking Energy Wind Farm is likely to go ahead?**

Yes we are strongly supportive of this position, provided that Ofgem, NGESO and SHE-T follow the CBA which clearly shows that the 600MW link can connect at least 818MW of wind generation with constraint payments as the lowest cost scenario (even with no additional demand) and that the SHE-T statement in 2.40 must therefore be rejected.

- ii) Do you have any views on the type of evidence we should expect to see that would confirm that Viking Energy Wind Farm is likely to go ahead?**

We would expect Ofgem to have confirmation from the Board of Directors.

- iii) Do you agree with the factors we have considered to reach our minded-to position?**

In their response to this consultation Ofgem should make it clear to SHE-T that the CBA shows that there is no case for a second HVDC link until at least 818MW generation has connected.

- iv) Are there any other factors that you consider we should take into account when assessing this proposal?**

In their response to this consultation Ofgem should make it clear to SHE-T that the CBA shows that there is no case for a second HVDC link until at least 818MW generation has connected.