

Attn. James Norman, Head of New Transmission Investment

Dear Mr Norman,

Shetland transmission project: Consultation on proposed Final Needs Case and Delivery Model

I would like to respond to the above consultation. Below are answers to some of the questions.

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.*

Answer: I think the generation scenarios developed and updated by SHE-T, specifically relating to the Viking Wind Farm do not represent good value for money for the consumer.

You will be aware of the proposal by BWSC for a LNG power plant to replace the existing Lerwick power station. <https://www.shetnews.co.uk/2020/05/01/gas-fired-power-station-proposed-as-low-cost-island-friendly-alternative-to-viking-wind-farm-and-interconnector/> This certainly deserves to be seriously considered as an alternative to the generation scenarios developed and updated by SHE-T.

BWSC claim the plant would cost less than 10 per cent of the proposed transmission link, which is currently priced at £632 million.

A gas plant would be substantially "greener" than the current oil fired power station.

Local district heating schemes would also benefit from low cost waste heat and gas from the plant.

As the total cost of the Viking Wind Farm (land based infrastructure + the interconnector) will be over 1 billion pounds this project offers substantial savings.

Meanwhile Scottish and Southern Energy are ploughing ahead with construction of roads and other development work for the Viking Wind Farm, even though all planning consents are not yet in place, as if the decision to grant them permission is a foregone conclusion.

It almost appears to indicate they intend to pressure Ofgem into a position where the only achievable solution to Shetland's energy needs in the required timescale is the one that they are developing and to promote that they have gone too far, and done

too much, to stop. The responsible developer would surely wait for permission before pushing too far ahead.

Any money spent on the Viking Wind Farm will inevitably be clawed back by Scottish and Southern Energy in the form of higher energy bills to the consumer. Also inevitably, with any major project with a price tag of 1 billion pounds, final costs will be higher than this – perhaps substantially higher.

A huge part of the Viking Wind Farm is proposed to be built on peat land – a much better natural carbon store than the Amazon rainforest. This will require removing hundreds of thousands of tons of one of the world's best natural carbon stores and replacing it with hundreds of thousands of tons of concrete in the name of “green” energy.

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

Answer: As a factor in demand sensitivity is availability of substitutes I would refer again to the proposed power plant by BWSC as offering much better value for the consumer.

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.*

Answer: The proposed transmission link - interconnector cable - is currently priced at £632 million. This is a huge sum when compared to projects on the Scottish mainland which have far shorter connection links. The cost will inevitably be passed on to consumers in the form of higher energy bills.

The interconnector cable also passes right across two major shipping routes north of Scotland – the Pentland Firth and the Fair Isle Channel. This area is blasted by major storms every winter.

The fully laden oil tanker Braer had to drop anchors to slow her progress when her engines failed south of Shetland in 1992 and she dragged them a long way over the seabed before grounding onshore.

This scenario could happen again anywhere between Caithness and Shetland. Needless to say a fully laden cargo ship or tankers massive anchors dragging in a winter storm would soon cause a major rupture in a subsea cable.

If this cable is the only electricity link to Shetland it could take months to repair during the winter at a massive cost.

The proposed power plant by BWSC would remove the need for a cable and provide Shetland with a continuous supply of low carbon energy.

The link also passes very close to existing shellfish farms near to Weisdale Voe – near to where the cable terminates in Shetland. There has been considerable objection from local shellfish farmers as the disruption in laying the cable could cause serious problems for these farms seriously impacting the tonnage of production and possibly incur job losses.

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

Answer: The proposed costs of £632 are excessive and there are alternatives available as outlined above. Can it really be justified to spend over 1 billion pounds on the construction of the interconnector cable and Viking Wind Farm when a LNG power plant could be constructed for £60 million?

Wind farms and inter-connectors do not ensure security of supply and back up will have to be provided, at additional expense, for the days when there is no wind or when there is too much wind for the turbines to safely turn.

The current back-up plan appears to be a fleet of diesel power generators which is neither “green” nor forward thinking.

Question 5: *What are your views on the CBA (Cost Benefit Analysis) put forward by the ESO?*

Answer: I think the proposed LNG power plant will offer better value for money than the proposed Viking Wind Farm and transmission link.

What benefit to energy consumers can there be in building wind farms on remote locations hundreds of miles from demand and costing 1 billion pounds before even any energy is produced?

It is extremely doubtful if the Viking Wind Farm can be viable without subsidy and there is no guarantee of subsidy with future governments and changes in energy production.

Best regards,