

I wish to state my **objection** to Ofgem granting permission for electricity companies to charge customers extra to pay for the Viking Energy wind farm transmission infrastructure, which is proposed in order to facilitate new generation capacity which electricity customers also have to pay extra for.

Ofgem, as a government agency in charge of protecting consumer interests, has to look very carefully at the huge economic cost of constructing wind farms, such as island wind projects, in remote locations.

These planned wind farms on Shetland will have to be built on prime peatland, one of the world's most valuable natural stores of CO₂. The environmental benefits of construction on peatland are extremely doubtful. It is akin to destroying huge tracts of the Amazon rainforest to build a wind farm, only peat moor is more of a far more valuable natural resource in preventing climate change.

I believe that this transmission project represents very poor value for money for UK electricity consumers, and a very inefficient means of reducing greenhouse gas emissions. The cost of the interconnector cable, which is currently estimated at £709,000,000 and which could easily run to one billion pounds, will ultimately be paid by UK electricity consumers.

The purpose of the cable is to connect generation capacity, which is as yet unbuilt. This new generation capacity, costing over £800m, if built, is based on a revenue model of getting Ofgem to allow a super-premium electricity price in the current Contract for Difference scheme (CfD) in order to make it viable. This super-premium CfD price is also borne by electricity consumers.

From a simple economics point of view, £709,000,000 would build a lot of generation capacity elsewhere in the UK, at a far lower cost to consumers without the need for such a long and expensive cable infrastructure.

Consumers underwriting a £1.5 billion build cost in order to pay extra for the electricity generated by the proposal scheme does not represent value for money to anyone. From a consumer point of view, why should consumers pay for a more expensive option when a cheaper one is available?

Environmentally, why settle for 600mw renewable transmission when, for example, a far higher renewable generation capacity could be achieved for the same cost elsewhere? Consumers underwriting a £1.5bn build cost in order to pay extra for the electricity generated by the proposal scheme does not represent value for money to anyone. Equally, the enhanced CfD required by any Shetland generation is in excess of what could be achieved by generation capacity built elsewhere.

Simple economics tell us that for cost per MW generated, more could be achieved for less by building generation capacity which is not reliant on an interconnector.

Two of the projects proposed for Shetland are proposed for the northern island of Yell, one (Beaw Field) already has planning permission. It is noted that Beaw Field has not applied for the increased height turbines that Viking Energy considers to be essential to be competitive in the CfD auction. Yell, and indeed Shetland, is almost as far away as it is possible to get from the potential electricity consumers.

Given the logistical problems of transporting giant turbines to Yell and the need for yet another sub sea cable from Yell to the Shetland mainland it is questionable if windfarms on Yell can ever be an economic proposition. The suspicion is that they are being used to help justify the inter-connector with no realistic chance of ever being constructed.

Environmentally, the generation of electricity from wind in Shetland is claimed to be around 52%, compared to a UK average of 39%, an improvement of 13 percentage points or 33%. However the

build costs of a wind farm in Shetland is estimated at double the cost of a comparable UK on-shore site. Thus the higher wind efficiency gained from building in Shetland is still less than the additional costs of building at a suitable site on the UK mainland.

Power loss arising from long transmission links will be significant. There is also the further complication of an untried switching station in Caithness to enable power from Shetland to be then transmitted via the inter-connector across the Moray Firth. There is no guarantee that power from Shetland will be utilised as the mainland grid infrastructure struggles to cope with power from existing windfarms during spells of windy weather. Constraint payments add millions more to consumer costs.

Viking Energy has been prone to making exaggerated claims about the prospects for wind energy on these islands. Wind on Shetland is of course just as unreliable as anywhere else. Even during the winter, when demand for power is high, there are likely to be prolonged spells of weather with little wind. The need for a back up power source will always be a necessity where wind power is a major component of the power supply. This leads to more expense for consumers and is not always factored into calculations used to justify wind power.

There are also proven medical issues for people living near wind farms, which is unavoidable in a small community like Shetland.