

Orkney Final Needs Case Consultation - Response

Question 1: Do you agree that the current network on Orkney needs reinforcing in order to connect additional generation?

Response 1: Yes, this is evident from the inability of SSEPD to accept new generation connections. In addition to the constraints over export to the Scottish mainland, which this transmission upgrade would address, there remain “pinch points” within the existing distribution network which result in curtailment of generators connected through the active network management scheme and which themselves prevent connection of new generation. In the event that the proposed link to the Scottish mainland does not go ahead, I would hope to see proposals for upgrading the existing distribution system brought forward.

Question 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 progressing without subsidy support and the likelihood of tidal generation around Orkney developing to the levels predicted by SHE-T’s scenarios.

Response 2: I would consider all the generation scenarios summarised in table 1 of the consultation document to be optimistic. Whilst Orkney has a large generation potential for wind, the limiting factor is likely to be gaining planning consent. Orkney at present has around 50MW of installed wind generation (see footnote) in a geographically limited area. The rural areas have a low but widely spread population whilst much of the hill ground has some form of conservation status. The Heart of Neolithic Orkney world heritage site and various scenic area designations in other areas pose further constraints. As more sites are developed for wind generation, it will be increasingly difficult to find sites which respect the planning authority’s guidance on minimum separation from dwellings and which are acceptable to statutory consultees. Cumulative impact will also become an issue. The recent refusal of planning consent for the Costa Head and Hesta wind farms (which this new link is intended to serve) suggests that public opposition will also increase. Speaking to friends and neighbours, I may be in a minority in thinking that Orkney can accommodate much more wind generation, but my feeling is that the consentable volume (above Costa and Hesta, should their appeals be successful) is probably no more than the 50MW which is already in place. It would probably take several years for this volume to work through the planning and appeals system.

Although tidal energy is in its’ infancy, Orkney is at the forefront of development testing and would be a likely location for early demonstration arrays. Ten or twenty MW by 2032 might be achievable, but given the immaturity of the sector, the high costs of marine operations and subsea cabling and at present the lack of any certain form of revenue support, I agree that larger scale deployment is very unlikely.

Footnote: Section 2.6 of the consultation document states there is around 75MW of renewable generation in Orkney. The SSE ANM webpage (<https://www.ssen.co.uk/ANM/>) shows the total renewable capacity to be 57.1MW. This will include the EMEC wave and tidal test sites, leaving an installed wind capacity a bit less than 50MW.

Question 3: What are your views on the technical design and costs of the proposed Orkney link?

Response 3: I find it astonishing that design and planning for a 220MW link has progressed so far (to the extent that SSE have recently submitted more than 20 Necessary Wayleave Applications to the Scottish Government) before properly firm capacity has been identified.

The consultation appears to be trying to establish a minimum capacity to justify the already designed link, rather than seeking to ensure that a link is designed to meet actual requirements, plus some future contingency. Given my view of likely new generation in response to question 2, I think that the link is significantly over-sized and therefore likely not to represent best value.

Regarding the overall design, I support the decision to run the 220kV cables underground.

Question 4: Do you agree with our concerns that a constraints-based CBA may not robustly demonstrate the true consumer cost/benefit of a radial extension to the transmission network?

Response 4: Yes. I fail to see how a constraints-based CBA can produce a meaningful result when there are no existing constraint costs to be relieved.

Question 5: What are your views on the 'additional CBA', outlined in this chapter, which has been used to sense check the results of the original constraints-based CBA?

Response 5: It seems reasonable.

Question 6: What are your views on our proposed conditions of approval? Specifically:

i. Do you agree with our view that the information available does not demonstrate that building a 220MW connection to Orkney would be beneficial for GB consumers if only 70MW of generation came forward to use the link? Do you agree with our proposal to set a minimum-generation threshold of 135MW?

Response 6(i): I agree that the 220MW link is unlikely to be the best option if only 70MW of generation comes forward.

My concern is to make it possible for viable projects coming forward in the next few years to connect (where "viable" includes obtaining planning consent, as a test of local acceptability) without leaving under-utilised and over-sized assets to the detriment of the customer and the Orkney landscape.

It seems very unlikely that 135MW of generation will be able to satisfy the requirements for planning and finance (which I broadly support) within the end-of-2019 timescale in your proposed conditions. The present consultation on use of system charges compounds the issue by introducing delay into finalisation of financial calculations. These considerations suggest that the link is unlikely to be consented if the proposed conditions apply. I would like to understand what Ofgem and SSE consider would happen next (a) to ensure that the smaller volume of viable projects are given the opportunity to connect and (b) to reinforce the existing distribution system to alleviate existing constraints and facilitate connection of projects (e.g. single turbines) to the existing network as far as possible.

ii. Do you agree that the fact of a generator signing up to SHE-T's 'Alternative Approach' does not provide an adequate level of certainty that the generator will progress to full commissioning?

Response 6(ii): I agree

iii. Do you agree that the award of a CfD to a generator would provide an adequate level of

certainty that the generator will progress to full commissioning?

Response 6(iii): I agree

iv. Do you agree that, in the absence of a CfD, a generator securing planning consent and finance to construct a project is a good indicator of a project's likelihood of progressing to commissioning?

Response 6(iv): I agree

v. If you answered no to questions (iii) and (iv) above, can you propose any alternative ways to assess, to an adequate level of certainty, whether a generation project will progress to commissioning?

Questions 7 - 10:

Response: I have no comments on the delivery model



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