

MULBARTON PARISH COUNCIL

Hornsea Project Three

Onshore Converter Substation

Introduction

Appendix 1 overleaf provides a comparison of alternative sites for the onshore converter substation. This is discussed further below, building upon the interested party submission of July 2018 (RR-049), and later submissions.

Mulbarton Parish Council has also received independent advice. This is contained in a separate representation by letter to the Examining Authority, dated 20th March 2019.

Comparison of sites

Option E has three important advantages:

- compliance with national and local planning policies;
- a cost benefit advantage from the use of existing infrastructure;
- scope to resolve long-standing objections to the use of DC transmission.

The implications of DC transmission are far-reaching. As other parties have pointed out, it offers a much reduced level of public harm across the whole of Norfolk. For example, the AC booster station at Little Barningham would not be required, and fewer onshore cables would be laid. This in turn has an impact on vehicle movements. There would still be many important benefits if the project is built in two phases, with the first using AC transmission, and the second DC transmission, as may prove to be the case.

Options A and E offer further benefits in conjunction with landscaping and mitigations, and the effect on local heritage assets. These are highlighted, for example, in some of the statements of common ground, where agreement with the applicant has not been reached, partly due to the specific location and topography of the site (Option B). On the other hand, it is fair to suggest that not enough information is available to properly compare the relative merits of Option A and Option E.

By contrast, Option B does not seem to be a suitable location for the site of the onshore converter substation. It is difficult to convey to members of the public when, why, or how it is has come to be considered, when other private companies are receiving permission to install new equipment alongside Norwich Main.

Conclusion

Option B is an unsuitable location for the onshore converter substation, and does not need to appear within the Development Consent Order. It is not required for the successful completion of the project, is unlikely to be effectively mitigated, and weighs against the use of DC transmission. There is no overall compelling public interest to justify its inclusion.

**Onshore Converter Substation
Comparison of Options**

	Option A	Option E	Option B
<u>Topography</u>			
Height of ground above sea level	25 rising to 30m	30 rising to 35m	30 rising to 35m
Site orientation (direction of gradient)	Facing south	Facing south	Facing north-west
Visual impact	Low	Moderate	High
<u>Heritage</u>			
Number of sites potentially affected	2	2	4
Mitigation effectiveness	Good	Moderate	Poor ¹
<u>Construction access</u>			
Main access route for HGV movements	A47 A140 -	A47 A140 -	A47 A140 B1113
Local traffic impact (increase in HGVs)	+ 25%	+ 25%	+ 94%
Site entrance for construction	Existing (from A140)	Existing (from A140)	New (from B1113)
Hedgerow removal for visibility splays	Minimal (over-running only)	Minimal (over-running only)	430m (plus over-running)
<u>Other factors</u>			
Cost benefit advantage	Moderate	Good	Poor
Policy compliance	Yes	Yes	No
DC transmission	Yes	Yes	No
<u>Summary</u>			
Ranking	2	1	3

¹ With limited pre-planting (Ref. EN010080-001883), and site gradient facing towards key heritage assets.