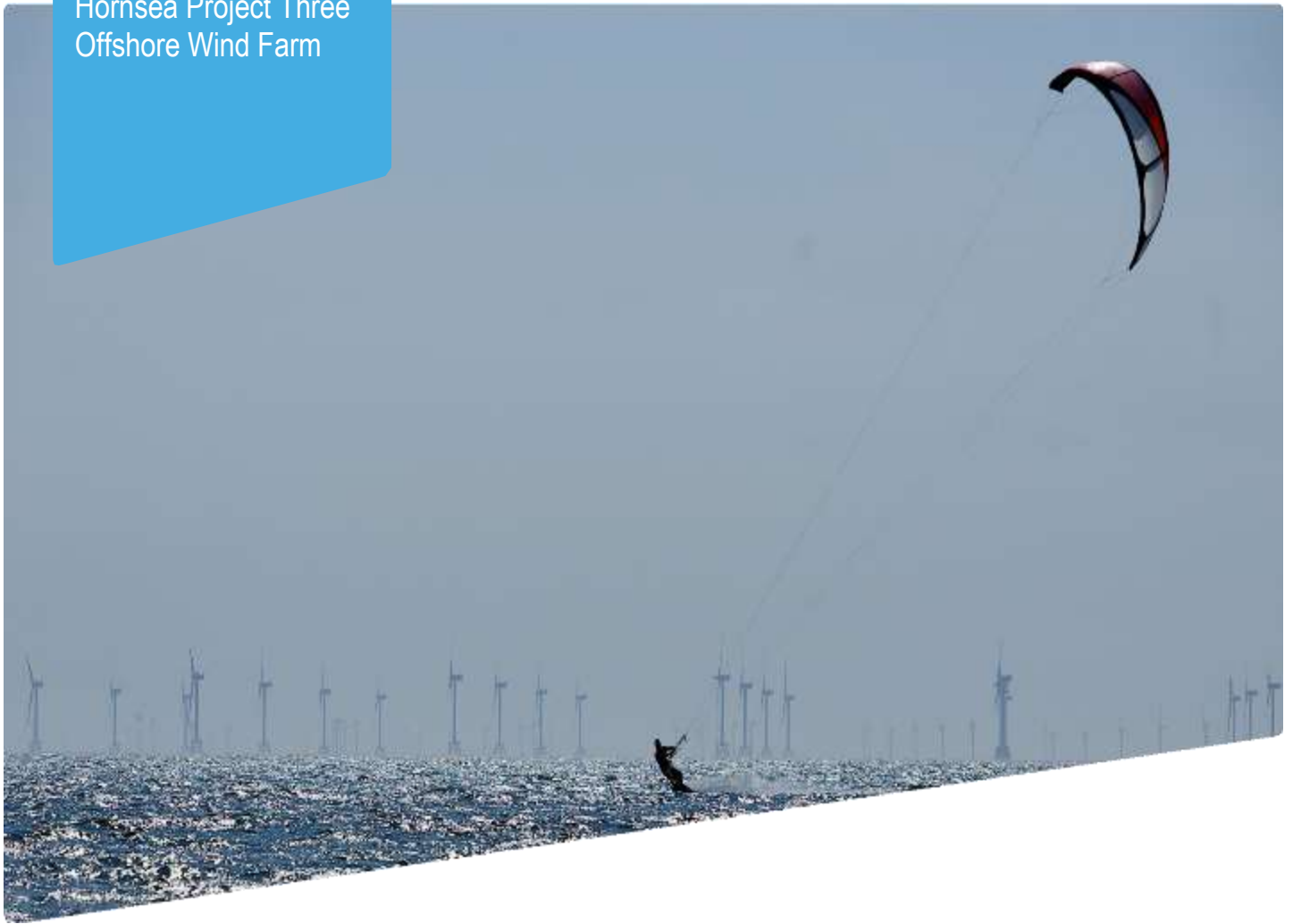


Hornsea Project Three  
Offshore Wind Farm



## Hornsea Project Three Offshore Wind Farm

Appendix 37 to Deadline I submission  
Applicant's Response to Ex.A Question Q1.4.19

Date: 7<sup>th</sup> November 2018

Hornsea 3  
Offshore Wind Farm

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Front cover picture: Kite surfer near a UK offshore wind farm © Ørsted Hornsea Project Three (UK) Ltd., 2018.

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## 1. Introduction

1.1 This note sets out the Applicant's response to Ex.A Question Q1.4.19:

*Q1.4.19: Table 4.4 of the Report to Inform the Appropriate Assessment [APP-051] differs from the maximum design parameters listed in table 3.14 of the ES [APP-075]. Please explain which values are correct for the number of link boxes and the dimensions of the substations and booster station.*

1.2 This note clarifies which design parameters are correct and confirms that there are no implications for the conclusions of the assessment.

1.3 This note is structured as follows:

- Section 2 confirms the correct maximum design scenario (MDS) parameters
- Section 3 confirms that there are no implications for the conclusions of the impact assessment

## 2. Confirmation of parameters

2.1 Table 2.1 summarises the differences between the MDS stated in the assessment of onshore ecology and nature conservation (Table 3.14 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]) and the Report to Inform Appropriate Assessment (Table 4.4 of APP-051). The differences relate to:

- The number of link boxes and their total area;
- The size of buildings required for the onshore HVAC booster; and
- The extent of the temporary works area and size of buildings required for the onshore HVDC converter/HVAC substation.

2.2 The parameters that differ are underlined in Table 2.1.

2.3 In each case it is confirmed that the correct values are those stated in Table 3.14 of APP-075.

Table 2.1: Clarification of MDS parameters for EIA and RIAA

Parameter	MDS as stated in EIA [APP-75] Table 3.14	MDS as stated in RIAA [APP-51] Table 4.4	Correct MDS
Link boxes	Up to <u>3,960</u> m <sup>2</sup> from link boxes (based on <u>440</u> link boxes (each link box: is 3 m x 3 m)).	Up to <u>2,970</u> m <sup>2</sup> from link boxes (based on <u>330</u> link boxes (each link box: is 3 m x 3 m)).	Table 3.14 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]

Parameter	MDS as stated in EIA [APP-75] Table 3.14	MDS as stated in RIAA [APP-51] Table 4.4	Correct MDS
Onshore HVAC booster station	Up to 30,407 m <sup>2</sup> for permanent area of site plus a temporary works area up to 25,000 m <sup>2</sup> .  Maximum building footprint of 9,000 m <sup>2</sup> (based on single building scenario ( <u>120</u> m length and 75 m width) and height up to 12.5 m).	Up to 30,407 m <sup>2</sup> for permanent area of site plus a temporary works area up to 25,000 m <sup>2</sup> .  Maximum building footprint of 9,000 m <sup>2</sup> (based on single building scenario ( <u>125</u> m length and 75 m width) and height up to 12.5 m).	Table 3.14 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]
Onshore HVDC converter/HVAC substation	Up to 149,302 m <sup>2</sup> for permanent area of site (including an area which may be used for landscaping) plus a temporary works area of approximately <u>91,000</u> m <sup>2</sup> .  Maximum building dimensions: up to 220 m length, 75 m width and 25 m height for main buildings. [Note that this is equivalent to footprint of <u>16,500</u> m <sup>2</sup> ]	Up to 149,302 m <sup>2</sup> for permanent area of site (including an area which may be used for landscaping) plus a temporary works area of approximately 70,000 m <sup>2</sup> .  Maximum building footprint <u>22,500</u> m <sup>2</sup> (based on HDVC converter station (two buildings each 75 m x 150 m)).	Table 3.14 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]

### 3. Implications for assessment

- 3.1 The discrepancies between Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement, Table 3.14 [APP-075] and the Report to Inform Appropriate Assessment, Table 4.4 [APP-051] with respect to link boxes, booster stations or substations have no implications for the assessment or conclusions contained in the RIAA [APP-051].

- 3.2 The potential impacts of onshore construction associated with the export cable and its associated link boxes, onshore booster stations and substations, are listed in Table 4.4 [APP-051] and include impacts associated with habitat loss, disturbance and damage of habitats and species and accidental pollution. In each of these cases the RIAA assessment draws on the relevant conclusions of the assessment of potential impacts on terrestrial habitats and species described in Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075], which is based on the MDS described in Table 3.14 [APP-075].
- 3.3 Although habitat loss could potentially occur where natural or semi-natural habitats are replaced with concrete and other manmade materials, i.e. at the location of the onshore HVAC booster station, the onshore HVDC converter/HVAC substation and link boxes, direct impacts on designated sites and their features have been, or will be, avoided through the application of the following design measures:
- Selection of the Hornsea Three onshore cable corridor so that all installation occurs outside designated site boundaries; or
  - Horizontal Directional Drilling (HDD), where the cable corridor cannot avoid a designated site.
- 3.4 Notwithstanding the discrepancy outlined in Section 2 above, there are no implications for the RIAA assessment or its conclusions.