

**Hornsea Project Three Offshore Wind Farm - Responses to the Examining Authority's Written Questions**

Question Ref	Topic	Examining Authority's Question
Q1.1.11	Alternatives and design flexibility	<p>The ES describes the locations considered for connecting the project to the national grid [APP-092] (paragraph 2.2.1.1). It states that NGET's decision making took into account technical, commercial, regulatory, environmental, and socio-economic aspects.</p> <p>Please provide an explanation of NGET's reasons for selecting the connection point at Norwich Main.</p>
<b>NGET Response</b>		
<p>When a wind farm developer wishes to connect to the national transmission network, there is a joint assessment to identify a cost-effective connection point. The regulatory framework requires the wind farm developer, acting as Offshore Transmission Owner, to work with National Grid to find an economic and efficient connection option. The wind farm developers look at offshore and onshore routing considerations for the wind farm cables and National Grid as System Operator looks at the network reinforcements that may be needed, taking account of the capacity sought and timing of the connection. These assessments are carried out in line with the framework set by government and the Regulator.</p> <p>The assessment for the Ørsted Hornsea Three project concluded that the wind farm developer would cable below ground to the National Grid network, rather than National Grid extending its network of overhead lines across Norfolk to the coast.</p> <p>When Ørsted applied for the Hornsea Three connection, National Grid (as System Operator and the Transmission Owner) and Ørsted (the Developer) reviewed all feasible sites available for the connection between Bicker Fen and Eye. Please see Figure 2.1, Grid Connection and Indicative Route Options, in Ørsted's Environmental Statement Volume 4 Annex 4.1 for the sites considered at Bicker Fen, Weston Marsh, Walpole, Necton, Norwich Main and Eye.</p> <p>We then looked at the effect on the electricity network of connecting Hornsea 3 on the various locations to identify the extent of works required. The assessment looks at technical, commercial, regulatory, environmental, planning and deliverability aspects. These were considered for each individual option and then compared between the options. In addition to that, we also compared the overall cost between the options.</p> <p>Necton was discounted because when the assessment was made, Necton had been contracted as the connection point for a total of approximately 5.3GW. Connecting Hornsea Three to Necton would overload the current capacity there, requiring at least a further 5 bays extension and a new 400kV line.</p> <p>Taking into consideration all the above, Norwich Main was chosen as the preferred option due to it having the overall shortest export cable route, lower flood risk and lowest environmental risk.</p>		
Q1.1.12	Alternatives and design flexibility	<p>A relevant representation [RR-106] has suggested that Hornsea Project Three, rather than Norfolk Vanguard, should be connected to the national grid at Necton. The ES states that, during NGET's offer preparation for Hornsea Project Three, a connection offer made to another developer meant that the connection point at</p>

		<p>Necton reached capacity. The Necton option was therefore discounted from further consideration.</p> <p>Was NGET in the position of considering connection requests at Necton from more than one developer at the same time?</p> <p>If so, was NGET's assessment of the technical, commercial, regulatory, environmental, and socio-economic aspects carried out on a comparative basis?</p> <p>What were the reasons for offering a connection to another developer rather than Hornsea Project Three?</p>
<b>NGET Response</b>		
<p>Multiple connection applications will be assessed at the same time if the timing of the applications coincide with each other.</p> <p>This was not done for Ørsted Hornsea 3 and Vattenfall Norfolk Vanguard/Boreas because Ørsted applied after Vattenfall.</p> <p>For the above reason, there was no comparative assessment.</p> <p>When Ørsted Hornsea Three's application was received, we were finalising the Vattenfall Norfolk Vanguard and Boreas connections. Hence Hornsea Three was assessed behind Norfolk Vanguard.</p>		