

Hornsea Offshore Wind Farm

Project Two

Applicant's response to CS14 – Status of Discussions with E.ON

**Appendix CC to the Response submitted for Deadline I
Application Reference: EN010053**

15 July 2015

smartwind.co.uk

Appendix CC: referred to in response to CS14 – Status of Discussions with E.ON

There is a substantial overlap between the Project and the unlicensed Block 48/3, offered for licence in the 28th licence round. Block 48/3, E.ON's other Southern North Sea oil and gas interests, and the Project are shown in figure 11.7 of Volume 2, Chapter 11: Infrastructure and Other Users of the ES (Doc Ref No: 7.2.11). Block 48/3 is a gas field block including the Joly, Newton and Dodgson prospects.

DECC (now the Oil and Gas Authority (OGA)) have indicated that E.ON have received the highest marks for this block and therefore E.ON expect to be offered this licence. The block is currently being held back for Appropriate Assessment and pending the results of this assessment, will be offered for licence in the 2nd tranche of the 28th licence round. OGA have not provided a date for the 2nd tranche announcements, but it is anticipated to be November 2015.

E.ON raised several comments with regard to the Project in their Section 56 Relevant Representation [RR-31].

The Applicant provided a written response to E.ON's Relevant Representation, sent by email on 8th May 2015, outlining their position with regard to each concern. The Applicant then met with E.ON at a consultation meeting on 12th May 2015 where each concern was discussed in turn. The current status of each item raised is discussed below.

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Access and logistics – aviation: Helicopter approaches to potential future development in Block 48/3</i>		
<p>Logistical access to block 48/3 will be by helicopter or shipping vessel. E.ON raised the concern that the Project turbines may infringe on the 7 NM radius required from the centre of a potential future development within Block 48/3 and thereby restrict helicopter access. E.ON notes that Chapter 8 of the ES discusses these points in relation to operational assets but does not consider the point for future developments. Further discussion will therefore be needed with the Applicant in order to reach an agreement which ensures that helicopter approaches to Block 48/3 are not obstructed by the Project.</p>	<p>Paragraphs 8.5.21, 8.6.52, 8.6.65 and 8.6.79 of Volume 2, Chapter 8: Aviation, Military and Communications of the ES (Doc ref No 7.2.8) discusses and calculates the potential restriction on high altitude access to known platforms whose 9 NM consultation zone overlap with Subzone 2 turbines. The Applicant notes that in order to assess the potential restriction on access to a proposed platform the potential platform location must be known. Once this information is known, the Applicant will be open to engagement with E.ON to discuss the logistics of the matter further. The sector of airspace which may then be restricted can be calculated based on the separation distance of the platform and the Subzone 2 turbines, the wind conditions, the anticipated high altitude access requirements to that platform, and the safety case requirements of that platform.</p> <p>Paragraph 8.6.53 of Volume 2 and Chapter 8 of the ES, identifies that visual low level flights from one platform to another are used in the industry as a means of platform access. This approach could potentially be used as an approach method from the Babbage platform for example to a proposed new platform in Block 48/3.</p>	<p>It was agreed in consultation between the Applicant and E.ON that no further assessment could be undertaken on a proposed platform in Block 48/3 until the location of the platform was known.</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Access and logistics – aviation: Helicopter and vessel access to the Babbage platform.</i>		
<p>E.ON operates the Babbage platform. E.ON raised the concern that the construction and operation of the Project is likely to lead to increased operational complexity and result in longer transit routes and times for helicopters and water vessels between this platform and its other installations in the North Sea, including any new developments in Block 48/3.</p>	<p>The Applicant notes that E.ON presently flies to the Babbage platform from Great Yarmouth. These flights would not be deviated by the presence of Subzone 2 turbines (Figure 8.8 of Volume 2 and Chapter 8 of the ES). Due to the location of E.ONs existing assets, cross zone transit across Subzone 2 is not anticipated (paragraph 8.6.41 of Volume 2 and Chapter 8 of the ES). The Applicant is unable, however, to assess the effect of the Project on transit from the Babbage platform to a future platform in Block 48/3 without knowing the location of the platform.</p> <p>The potential increase in vessels and displacement of vessels, leading to an increased collision risk, during construction of the Project has been assessed (paragraph 7.8.31 of Volume 2, Chapter 7: Shipping and Navigation of the ES (Doc ref No 7.2.7). There is the potential for some displacement of oil and gas service vessels transiting between the UK east coast ports and the Babbage platform, however the greatest impact from the Project construction traffic will be to the east of the Babbage platform, in the region of Subzone 2 and its 1 NM advisory safety zone (paragraph 7.8.32 of Volume 2 and Chapter 8 of the ES).</p>	<p>E.ON is currently considering the Applicant's response and will advise the Applicant if they are still concerned that there will be an impact on helicopter or water vessel operations to the Babbage platform from the Project.</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Access and logistics – shipping: Shipping Hazard Assessment</i>		
<p>The shipping hazard workshop did not include oil and gas operators, as such the movement patterns for oil and gas support vessels to its current and future installations has not been properly taken into account when assessing the baseline and so shipping hazards have not been properly assessed.</p>	<p>Oil and gas service vessels have been included in the shipping surveys from AIS and radar data undertaken in the Subzone 2 and cable route NRA (paragraph 16.2.3 of Volume 5, Annex 5.7.1: Subzone 2 and Offshore Cable Route NRA of the ES (Doc Ref No 7.5.7.1)) which has been used to inform the assessment within the ES.</p>	<p>E.ON is currently considering the Applicant's response and will advise the Applicant if they are still concerned that there will be an impact on vessel operations to the Babbage platform from the Project.</p>
<i>Access and logistics – aviation: Additional Helicopter Flights to Subzone 2</i>		
<p>Chapter 8 of the ES sets out that there will be an additional 5,360 helicopter flights to Subzone 2 per year and an additional 1,046 to accommodation platforms per year. This will increase the risk of an air transport accident. That risk needs to be adequately assessed and necessary steps to mitigate the risk needs to be agreed with E.ON.</p>	<p>The helicopter flight numbers presented in Volume 2 and Chapter 8 of the ES are based on the 120 larger wind turbines, which provide the maximum adverse scenario in relation to the impact of helicopter hoist operations. This scenario will result in approximately 17 additional helicopter flights per day from the UK. For 360 wind turbines the estimated helicopter round trips per year for the operation and maintenance phase is 16,726, which will result in approximately 46 additional helicopter flights per day from the UK.</p> <p>The ES assessed the impact of the Project on the Helicopter Main Routes (HMRs) in the vicinity of the Project during both construction (paragraph 8.6.26 of Volume 2 and Chapter 8 of the ES) and operation (paragraph 8.6.35 of Volume 2 and Chapter 8 of the ES), based on 120 larger wind turbines which provide the maximum adverse scenario for the specific impacts assessed. This assessment has been consulted on with all appropriate aviation stakeholders. The effect was assessed to be not significant for both the construction (paragraph 8.6.31 of Volume 2 and Chapter 8 of the ES) and operation phase (paragraph 8.6.39 of Volume 2 and Chapter 8 of the ES) of the Project. The impact of helicopter hoist operations on cross zone helicopter traffic during the operation of the Project (paragraph 8.6.46 of Volume 2 and Chapter 8 of the ES) was assessed to be not significant (paragraph 8.6.51 of</p>	<p>The Applicant advised that the ES has adequately assessed aviation risk as far as practical and that aviation risk is under the regulations of the Civil Aviation Authority (CAA).</p>

E.ON's Relevant Representation	The Applicant's Response	Status
	<p>Volume 2 and Chapter 8 of the ES).</p> <p>The aviation risk will be managed under separate established flight procedures and will be considered once the O&M strategy for the Project is confirmed. Aviation risk falls under the European Commission (on guidance from the European Aviation Safety Agency (EASA)) and the regulations of the Civil Aviation Authority (CAA). The management of risk is covered by a number of measures including regulatory controls and Air Traffic Control (ATC) (e.g., at airport of departure and NATS en route). Risk management is covered fully in the Air Operator Certificate (AOC) holder's Safety Management System (SMS).</p>	
<i>Access and logistics – shipping: Increase in traffic movement concurrent with activity in Block 48/3</i>		
<p>The construction of the scheme will be concurrent with the surveying and drilling to be undertaken in Block 48/3. This will lead to increased traffic movement and the potential for greater risk of collision.</p>	<p>The Subzone 2 and Offshore Cable Route NRA (Volume 5 and Annex 5.7.1: of the ES) has modelled the increased collision risk due to the presence of Project One and the Project during construction. The model considers both the current vessel traffic data ('base case') and also for a 'future case' scenario, which assumes a 10% increase in vessel traffic – which could be due for example to increased activity in Block 48/3. The results of this modelling have been used to inform the ES which considers increased collision risk for the Project during construction (paragraph 7.8.162 of Volume 2 and Chapter 7). With the additional proposed mitigation presented this risk is not considered significant in EIA terms (paragraph 7.8.169 of Volume 2 and Chapter 7 of the ES).</p>	<p>It was agreed in consultation between the Applicant and E.ON that no further assessment could be made of vessel activity in regard to future activity in Block 48/3 without further information in regard to the intended operations within Block 48/3.</p>
<i>Seismic Survey</i>		
<p>Before undertaking the development of Block 48/3, seismic surveys will need to be undertaken. E.ON is concerned</p>	<p>The effect of the Project on seismic data acquisition in Block 48/3 has been assessed in the ES, which has considered the block to be unlicensed, or to be offered for licence to an operator aware of the Agreement for Lease (AfL) for Subzone 2 (paragraph 11.6.91 of</p>	<p>It was agreed in consultation between the Applicant and E.ON that there is potential for</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<p>that it may not be possible to carry out these surveys during the construction and or operation of the Project. Further discussions will be required to ensure these surveys can proceed for mutual benefit alongside the construction and operation of the Project.</p>	<p>Volume 2, Chapter 11: Infrastructure and Other Users of the ES (Doc ref No 7.2.11).</p> <p>Seismic activity in Block 48/3 has been discussed with E.ON during the Project consultation (Consultation Report (Doc ref No 2.1)). During the pre-application consultation, E.ON advised that seismic data acquisition for Block 48/3 would be required in 2017. Whilst this is coincident with the proposed start date of construction for the Project, conventional seismic surveys could proceed subject to the required coverage of the survey and the final construction schedule for the Project. In addition E.ON advised Ocean Bottom Cables (OBC) or Ocean Bottom Nodes (OBN) or similar techniques are available for seismic data collection in areas where turbines have been constructed.</p>	<p>coexistence of seismic surveys within Block 48/3 through consultation on timing/build out of wind farm and seismic programme requirements. However should further seismic work be required for any development wells, this would be directly impacted by the physical presence of the wind farm. The seismic survey methodology would be hampered by the physical presence of the offshore infrastructure and while other techniques could be considered (like OBC) it could become technically very difficult.</p> <p>The Parties agree that there is a need for further consultation on award of Block 48/3 to discuss the potential for coexistence in regard to the exploration well seismic survey requirements.</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Drilling</i>		
<p>All drilling activity carried out in Block 48/3 will require both a main well and a relief well up to 1,000 m from the main well. Each well will require a minimum of a 500 m safety zone. The location and size of the exclusion zones will be dependent on the results of the seismic surveys. The wells and their exclusion zones could directly conflict with the Project. At present the ES does not make any provision for these. Discussion will be needed with the applicant to ensure E.ONs future drilling activity is not affected.</p>	<p>The effect of the Project on drilling activity in Block 48/3 has been assessed in the ES, which considers Block 48/3 to be unlicensed, or to be offered for licence to an operator aware of the AfL for Subzone 2 (paragraph 11.6.103 of Volume 2 and Chapter of the ES).</p> <p>Drilling activity in Block 48/3 has been consulted on during Phase 2 consultation (see Consultation Report). It was agreed with E.ON that exploration drilling may proceed in 2016/2017. Prior to construction of the Project, drilling is possible in Block 48/3, including within Subzone 2, subject to prior agreement between both parties. The requirement for a subsea well within the Project AfL will impact on the Project however. Drilling will also be possible in Block 48/3 once the Project construction has started, in the area outside and to the west of the Subzone 2 AfL. Any well that is drilled in Block 48/3 must be at a distance of 500 m from the AfL in order to not impact on the Project.</p>	<p>The Applicant discussed during consultation with E.ON the potential for coexistence of an exploration well located within the AfL of Subzone 2, if both parties agree to its type, access requirements, location and timing. A development well would be required to be drilled at least 500 m from the AfL or it would impact Subzone 2. Further consultation would be required once more detail is known about the exploration well and any development well requirements.</p> <p>It is agreed between the Parties that further consultation is required once a well location is known.</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Pipelines: Future</i>		
<p>Due to the fact that drilling within Block 48/3 (scheduled for 2018/2019) will commence one to two years after construction of Subzone 2 has started, any pipelines required for Block 48/3 development may be required to be laid over existing wind farm cables leading to greater risks to the safety of other marine users and more complex installation.</p>	<p>The effect of the Project on existing pipelines has been assessed (paragraph 11.6.67 of Volume 2 and Chapter 11 of the ES) and proposed pipelines have been considered in accordance with the cumulative effects screening note (Volume 4, Annex 4.5.1: Cumulative Effects Screening Note of the ES (Doc Ref No 7.4.5.1)).</p> <p>The effect of the Project on unknown future pipelines cannot be assessed unless their location is known. E.ON has advised that pipelines could be required to be laid over existing cables. Though the process of installation may be more complex, such a crossing would require a pipeline crossing agreement to be put in place, and the risk assessed to ensure it is acceptable to navigational safety, as standard practise within the industry.</p>	<p>The Applicant advised E.ON at the consultation meeting that they were in discussions with the operators of all pipelines intersecting the Project and that a crossing agreement would be prepared where required when sufficient information was known about the Project cables to do so. The Applicant further advised that a crossing agreement would be prepared where required to regulate the interface between the Project cables and any future pipelines.</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Pipelines: Existing</i>		
<p>E.ON have an equity share in two existing pipelines that run through the Project area and Block 48/3. E.ON is concerned that the developer refers to the need for crossing agreements to be made with the operator of these pipelines but makes no binding commitment to do so.</p>	<p>The Applicant understands that E.ON is referring to the Shearwater to Bacton Gas Pipeline PL1570 and to the Theddletorpe to Murdoch MD Gas Pipeline PL929. Both pipelines are owned by a consortium of companies and the Operator member for PL1570 is Shell UK Limited and the Operator member for PL929 is ConocoPhillips. The Applicant is currently consulting with both Operator members. The Applicant would expect to enter into discussions with the Operator members in respect of any required crossing/proximity agreements once the design of the Project's export cable has been undertaken in detail, an exercise which is expected to take place post consent.</p>	<p>The Applicant advised E.ON during consultation that they were in discussions with the operators of all pipelines intersecting the Project and that a crossing agreement would be prepared where required when sufficient information was known about the Project cables to do so. The Applicant further advised that a crossing agreement would be prepared where required to regulate the interface between the Project cables and any future pipelines.</p>

E.ON's Relevant Representation	The Applicant's Response	Status
<i>Decommissioning</i>		
<p>The design life of the wind farm of 20 years could cause issues for decommissioning as the operational life of the development within Block 48/3 could be longer or shorter than that of the windfarm and decommissioning of one may therefore affect the other. Without permission to leave infrastructure in situ, E.ON or the applicants decommissioning operations would need to carefully avoid cables or pipelines to avoid major effects to the operation of the Project or Block 48/3. This therefore needs to be discussed further with the applicant and necessary arrangements put in place.</p>	<p>The design life of the project is likely to be 25 years (paragraph 3.5.110 of Volume 1, Chapter 3: Project Description of the ES (Doc ref No 7.1.3). Decommissioning is considered to occur at the end of the operational lifetime of the wind farm.</p> <p>It is stated in the ES (paragraph 3.5.114 of Volume 1 and Chapter 3 of the ES) that the Energy Act 2004 requires that the construction of an offshore wind farm cannot commence until a decommissioning plan has been agreed by the Secretary of State. The decommissioning plan will be developed post consent and pre construction in accordance with Requirement 11 of Part 3 of Schedule A to the draft DCO. The decommissioning plan will include consideration of other relevant projects and activities which may be affected by the Project decommissioning. The decommissioning plan will be updated during the Project's lifespan to take account of changes in projects that may be impacted by the Project decommissioning, changing best practice and new technologies.</p>	<p>The Applicant advised E.ON during consultation that it is a condition of the Energy Act 2004 to prepare a decommissioning plan and consideration would be given to all other relevant projects and activities which may arise during the life of the Project which may be affected by the Project decommissioning,.</p> <p>The Parties agree that future consultation will be required as the Projects evolve in this area.</p>

It was agreed between the Applicant and E.ON during consultation that, following the Applicant's response to the Relevant Representation, and the information presented at the consultation meeting on 12th May 2015, E.ON would respond to the Applicant to advise if they had any remaining concerns with regards to the ES. The Applicant awaits E.ON's response.