



Triton Knoll Offshore Wind Farm Limited Triton Knoll Electrical System

**Appendix 7: Written
Representation Response to Mrs
Helen Bowler**

Date: 27 October 2015

**Appendix 7 of the Applicant's
Response to Deadline 2**

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Triton Knoll Electrical System

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| Date of Approval: | 27 October 2015 |
| Revision: | 1.0 |

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1. MRS HELEN BOLWER

1.1 The Written Representation submitted by Mrs Helen Bowler on behalf of residents of Bicker Parish raised a number of specific issues and concerns regarding potential impacts arising from the proposed development, structured into the following categories:

1. Cumulative effect (especially Bicker Parish)
2. Gross visual intrusion
3. Vast environmental damage
4. Loss of larges areas of prime agricultural land
5. Effects of the proposed total volume of electrical wiring in Bicker Parish on the health of residents through electromagnetic radiation.
6. Unacceptable traffic volumes, disturbance and distress to residents.
7. Suitable connections and capacity for 1. & 2. available elsewhere
8. Increased flood risk confirmed by Environment Agency

1.2 The Written Representation also referred to consultation in respect of four projects:

“Triton Knoll Electrical System ENO20019

Viking Link Electrical System

Ecotricity Turbines & Electrical System

Sleaford PV Panels Wiring – Solar Array”

1.3 With regards to the proposed development, the Written Representation states that *“there has been inadequate consultation”*.

1.4 The Applicant notes that Mrs Bowler submitted a Relevant Representation (reference RR-039) to which the Applicant responded.

Consultation

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- 1.5 The Applicant notes the comments regarding the lack of consultation for the Viking Link, Ecotricity scheme and Sleaford Solar Array which should properly be addressed by those projects.
- 1.6 The Triton Knoll Electrical System (TKES) Consultation Report (document reference 5.1) details the extensive non-statutory and statutory consultations undertaken with stakeholders, including parish councils and the changes made to the proposed TKES development as a result of those consultations. Attention is drawn particularly to:
- a) Section 2, Non Statutory Consultation commencing prior to s42/s47 consultation, which includes
 - i. A subsection entitled ‘*The Alternatives Consultation*’ - a consultation on shortlisted sites for the above ground infrastructure and associated cable corridors, which included 7 public exhibitions attended by 888 visitors;
 - ii. A subsection entitled ‘*2014 public, landowner and Parish Council consultations*’. This subsection includes an explanation of the ‘*Onshore cable route consultation*’, which was an iterative process of onshore cable route alignment.
 - b) Section 5, Community Consultation under section 47, which includes 6 public exhibitions attended by 293 people;
 - c) Section 8, Non Statutory Consultation after s42/s47 Consultation.
- 1.7 The Applicant has undertaken a robust consultation on the proposed development in accordance with the statutory requirements under the Planning Act 2008 and has made some significant amendments to the scheme following statutory and non-statutory consultation.

1) Cumulative effect

- 1.8 The Written Representation raised concerns regarding cumulative impacts:

“The cumulative effect of the four schemes proposed would have a devastating effect on Bicker Parish, turning an agricultural area into a large industrial zone. This is against Government Policy as set out by the Secretary of State for Communities and Local Government. Bicker Parish already has numerous 400kv towers, 132kv and 11kv poles, two sub-stations (National Grid and Western Power Distribution) thirteen wind turbines. Added would be two further sub-stations and associated wiring, 28

Heckington Turbines by Ecotricity very close, and associated wiring and Sleaford PV Solar Farm wiring which is unfair and unacceptable”.

- 1.9 The Planning Statement (document reference 8.4) sets out how the proposed development is in accordance with relevant policies.
- 1.10 The Applicant’s response to Question **EOn 1.1** of the ExA’s First Written Questions highlights that, as stated in paragraph 1.61 of Volume 1, Annex 3.1 *Approach to Cumulative and Inter-relationships Impact Assessment for the Triton Knoll Electrical System* (document reference 6.2.1.3.1) of the ES, the Viking Link project has been classed as a Tier 3 project. To clarify, and as set out in paragraph 1.58 of Volume 1, Annex 3.1 of the ES, Tier 3 projects comprise those for which a developer has notified the relevant planning authority in writing that they intend to submit an application in the future. This includes projects where a scoping report may be available, but where data presented is limited and / or data confidence is low. In the case of the Viking Link, no information has been available to the Applicant to undertake a cumulative assessment or to update the assessment presented in the ES. This is a point of agreement between the Applicant and National Grid Viking Link Limited, as set out in paragraphs 3.7 and 3.8 of Appendix 22 of the Applicant’s response to Deadline 1 and confirmed in the responses to the ExA’s First Questions from National Grid Viking Link dated 08 October 2015.
- 1.11 In response to question **DCO 1.34** of the ExA’s First Written Questions, the Applicant has provided clarification of the consideration that has been given to the cumulative impacts of the TKES and the Viking Link Interconnector Project.
- 1.12 The proposed Heckington Fen Wind Park Grid Connection project is listed as a Tier 2 project in Table 2-22 of Volume 3, Chapter 2 of the ES. The Heckington Fen Wind Farm itself is located outside the cumulative assessment study area (limited to within 3.0 km from the substation) and therefore is not considered within the cumulative assessment.
- 1.13 The Written Representation refers to “*Sleaford PV Solar Farm wiring*”. Without further information the Applicant is unable to ascertain which project is being referred to, since a number of solar developments are proposed for the Sleaford area. The Applicant notes that Sleaford is located outside the cumulative assessment study area. The onshore cumulative assessment study area is provided as Figure 2 (Maps 1-11) and set out in tabular form at Appendix 1 and 2 of Volume 1, Annex 3.1 of the ES.

2) Visual intrusion

- 1.14 The Written Representation raised concerns regarding visual effects:
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“Residents and other areas within a ten mile plus radius suffer visual intrusion from the 13 existing and proposed 28 additional wind turbines. In Bicker there are all the items set out in (1) above and the two new sub-stations will add to the visual intrusion of the Parish turning a prime agricultural area into an industrial zone, which is unfair and unacceptable.”

- 1.15 The Applicant has assessed potential landscape and visual impacts arising from the proposed development in Volume 3, Chapter 2 *Landscape and Visual* of the ES (Document Reference 6.2.3.2). Paragraphs 2.769 – 2.771 of Volume 3, Chapter 2 of the ES assess the cumulative landscape and visual impacts at the substation, with the conclusion that:

“...given the level of existing large-scale electrical infrastructure development within the immediate vicinity of the site (i.e. Bicker Fen wind turbines and lines of pylons) and the limited number of cumulative projects that have been identified, it is not considered that there will be adverse visual cumulative effects during either the construction or operational phases.”

- 1.16 The Applicant directs the ExA to the Statement of Common Ground (SoCG) with Boston Borough Council (BBC) (Appendix 27 of the Applicant’s response to Deadline 1) which concludes in paragraphs 6.22 - 6.24 that:

“It is agreed that the predicted long term residual landscape and visual effects at the substation as set out Table 2-33 in Volume 3, Chapter 2 of the ES, are Neutral during the construction and decommissioning phase, which is Not significant.”

“It is agreed that the predicted long term residual landscape effects at the substation during the operation phase as defined in Table 2-33 in Volume 3, Chapter 2, of the ES are Not significant.”

“It is agreed that predicted long term residual visual effects at the substation during the operation phase as defined in Table 2-25 in Volume 3, Chapter 2 of the ES are Neutral, which is Not significant.”

- 1.17 Paragraph 6.29 of the SoCG states;

“It is agreed that given the generally low level of effect likely to be experienced by Landscape and Visual receptors when including embedded mitigation during the construction, operation and decommissioning of the project, no further specific applied mitigation or monitoring is required.”

- 1.18 The Applicant therefore maintains that the proposed development would not create an industrial zone at Bicker Fen.
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3) Environmental damage

- 1.19 The Written Representation asserts that the proposed development would cause environmental damage and questions the selection of the interface point at Bicker Fen:

“There will be an unacceptable loss of agricultural land across Lincolnshire, especially Bicker Parish. One resident will lose just to RWE 12 ½ acres out of 90, and lose more again to Viking Link, Ecotricity and Sleaford Solar farm. The total loss will be a severe handicap to his agricultural business, and this will be repeated across Lincolnshire. A large part of this environmental damage could be avoided by the use of existing connections and capacity near Grimsby. The only criteria appears to be cost, which is unacceptable, and should be the last consideration.”

- 1.20 The Applicant has assessed the potential impacts which could arise from the construction, operation and decommissioning of the proposed development, including on receptors in and around Bicker in the ES. The assessments considered the amount of existing development at Bicker through the establishment of an environmental baseline. Assessments of cumulative impacts relevant to any given environmental topic are presented in that topic specific chapter of the ES.
- 1.21 Volume 3, Chapter 1, *Onshore Project Description of the ES* (Document Reference 6.2.3.1) describes the extent and duration of the proposed development and explains the reasons for the scale of the works and the timescales involved. In particular, Table 1-2 provides indicative construction periods for the proposed development.
- 1.22 The Applicant has described the site selection process in Volume 1, Chapter 4 *Site Selection and Alternatives of the ES* (Document Reference 6.2.1.4). Further detail is provided in the *Site Selection and Design Report* (document reference 8.17). The Applicant is confident that the concerns raised in the Written Representation with regards to site selection and cable routing are addressed by the Application documents referred to.
- 1.23 The Applicant directs the ExA to its response to Question **Alt 1.1** of the ExA’s first written questions which explains that National Grid Electricity Transmission (NGET), as holder of a Transmission Licence (under the Electricity Act 1989) and the Applicant in planning the offshore transmission network have, amongst other things, two key obligations:
- a) Section 9 of the Electricity Act requires all licence holders to ensure that the design of all elements of the transmission network is economic and efficient as set out in paragraph 2.1.3 of Document Reference 8.18, *Interface Selection Assessment Report*.

- b) Schedule 9 of the Electricity Act requires all licence holders to ensure that the natural environment is protected as set out in paragraph 2.1.12 of Document Reference 8.18, *Interface Selection Assessment Report*.

1.24 NGET considered the transmission network reinforcement requirements for each of the existing National Grid substation (Interface Connection Point) options and then worked with the Applicant to undertake an economic and environmental appraisal of the relative merits of these options, including the likely offshore transmission network requirements. This fed into the overall appraisal, which also included engineering and environmental issues, and considered both the required reinforcements to NGET's network and the risks and effects relating to the Triton Knoll connection. That process led to the identification of Bicker Fen as the appropriate connection point for the proposed development.

4) Loss of larges areas of prime agricultural land

1.25 The Written Representation asserts that the proposed development would have socio-economic effects.

“There will be an unacceptable loss of agricultural land across Lincolnshire, especially Bicker Parish. One resident will lose just to RWE 12 ½ acres out of 90, and lose more again to Viking Link, Ecotricity and Sleaford Solar farm. The total loss will be a severe handicap to his agricultural business, and this will be repeated across Lincolnshire. A large part of this environmental damage could be avoided by the use of existing connections and capacity near Grimsby. The only criteria appears to be cost, which is unacceptable, and should be the last consideration.”

1.26 The ES generally, including Volume 3, Chapter 5, *Land Use, Soils and Agriculture* of the ES (Document Reference 6.2.3.5) includes loss of agricultural land as part of the assessment. Paragraph 5.6 of Volume 3, Chapter 5 of the ES concludes that:

“Following the full reinstatement of areas impacted by construction activities, the effect on agricultural operations is assessed to be negligible.”

1.27 Paragraphs 5.57-5.59 of Volume 3, Chapter 5, *Land use, Agriculture and Soils* of the ES (Document Reference 6.2.3.5) state:

“Construction will involve the temporary stripping and storage of topsoil and subsoil to excavate trenches to the required width and depth to install cable circuits. Following completion of the works, the working width will be fully reinstated as near as practically possible to its former condition. Full reinstatement will allow normal farming practices to continue (i.e. crop growth, ploughing, machine loads).”

- 1.28 The rights and restrictions on activities, which are being sought for the cable corridor are proportionate and will not prevent the existing use of the land from continuing once the installation is complete. As paragraph 5.85 in Volume 3, Chapter 5, *Land Use, Soils and Agriculture* (Document Reference 6.2.3.5) explains:

“There will be no permanent land take associated with the operational cable with the exception of the man-hole covers associated with the jointing bay link boxes and a raised area of land associated with the transition joint bays and permanent access track at the landfall.....”

- 1.29 The Applicant is seeking to mitigate impacts on farm operations where reasonably practicable. For example, Table 5-7 in Volume 3, Chapter 5, *Land Use, Soils and Agriculture* (document reference 6.2.3.5) states:

“Following the completion of all cable construction works, the land within the working width will be fully reinstated as near as practically possible to its former condition.

- 1.30 TKOWFL will discuss with affected parties and secure commercial terms with them including the loss of any ongoing payments or fines relating to agri-environmental stewardship schemes that may be affected by the permanent land restrictions or any cable maintenance or repair work.”
- 1.31 The Applicant’s proposal to landowners for private treaty agreements contain a commitment to compensate for any damages or losses caused as a direct result of the use of the cable corridor.
- 1.32 In addition, socio-economic impacts of the proposed development are assessed in Volume 3, Chapter 3 *Socioeconomics, Tourism and Economics* of the ES (Document Reference 6.2.3.3).

5) Electromagnetic fields and health.

- 1.33 The Written Representation raises concerns about electromagnetic fields (EMF) and health, particularly with regards to the cumulative effects of a number of infrastructure projects.

“Residents cannot find a full comprehensive report on the electrical wiring overall in Bicker Parish, if all four additional schemes are given permission. With four sub-stations and very substantial volumes of overhead and underground wiring, what is the effect on resident’s health of all the electromagnetic radiation? A full comprehensive report is required before any of the four new schemes is approved. On a personal note, I have both 11kv overhead wiring, and wiring joining the existing 13 wind turbines to the grid within a few feet of my house and already suffer serious ill health.”

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- 1.34 The Applicant has given consideration to the electromagnetic fields (EMFs) that may arise from the onshore power cables of the proposed development in paragraphs 1.109 – 1.113 of Volume 3, Chapter 1, *Onshore Project Description* of the ES (Document Reference 6.2.3.1).
- 1.35 Paragraph 1.113 in Volume 3, Chapter 1 of the ES states that “*Potential electromagnetic fields from the onshore electrical circuits will comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) recommended exposure limits for the public, or those outlined by the appropriate EU directive as in effect at the time*”.
- 1.36 In addition, the Applicant has submitted a clarification note (Appendix 10 of the Applicant’s response to Deadline 1) providing further detail on how EMFs and health impacts in general have been assessed within the Application. Furthermore, Appendix 24 of the Applicant’s Response to Deadline 1 includes a letter from Public Health England confirming that “*the documentation confirms that the EMF levels will comply with the recommended exposure guidelines. Public Health England (PHE) is now able to confirm that we have no further concerns regarding this aspect of the application.*”

6) Unacceptable traffic volumes, disturbance and distress to residents.

- 1.37 The Written Representation raises concerns regarding traffic connected with the proposed development.
- 1.38 Table 2 of Appendix 1 of the Applicant’s response to Deadline 1 states that the potential impacts on traffic and access have been assessed in Volume 3, Chapter 9 *Traffic and Access* of the ES (document reference 6.2.3.9), concludes at paragraph 9.189 that:
- “...there are no significant adverse effects associated with the construction, operation or decommissioning phases of the proposed development.”*
- 1.39 In addition, Requirement 18 of the draft Development Consent Order (DCO) (Document Reference 3.1) secures a construction Traffic Management Plan (TMP) and a contractor travel plan. The Applicant submitted an Outline TMP with the application (document reference 8.9) which the final TMP will be drafted in accordance with.
- 1.40 The Applicant directs the ExA to the Statement of Common Ground with Boston Borough Council (BBC) (Appendix 19 of the Applicant’s response to Deadline 2) and

with East Lindsey Borough Council (ELDC) (Appendix 20 of the Applicant's response to Deadline 2) which conclude in paragraphs 10.9 and 10.8 respectively that:

"With respect to mitigation measures it is agreed that in accordance with paragraph 9.189 of Volume 3 Chapter 9 of the ES, given there are no significant adverse effects predicted on traffic and access as a result of the construction, operation and decommissioning of the project, no further specific mitigation is required beyond that which is already embedded into the project design and secured through the management plans that will be secured under the DCO"

- 1.41 The Applicant's response to Question **TT 1.12** of the ExA's First Written Question explains that Section 4 of the *Outline Traffic Management Plan* (Document Reference 8.9) includes an outline of the common control measures that will be agreed between the principal contractors and the relevant planning authority before commencement of any stage of the Authorised Development. This plan is secured by Requirement 18 of draft DCO (document reference 3.1). Requirement 23(1) of the draft DCO obliges the Applicant to comply with the details approved. The final construction traffic management plan will include the precise method of monitoring and enforcement for routing of construction vehicles. Although these details are yet to be agreed, there are a number of techniques that could be applied, such as vehicle marking systems, number plate recognition, and a reporting hotline.

7) Interface connection

- 1.42 The Written Representation queries the interface connection point of Bicker Fen, and suggests Grimsby as an alternative.
- 1.43 The Applicant has described the site selection process in Volume 1, Chapter 4 *Site Selection and Alternatives* of the ES (document reference 6.2.1.4). Further detail is provided in the *Site Selection and Design Report* (document reference 8.17).
- 1.44 The Applicant has also provided clarification with regards to alternative connection points in its responses to Questions **Alt 1.1, 1.4, 1.5, 1.7** and **1.8** of the ExA's First Written Questions.
- 1.45 The Applicant is confident that the concerns raised in the Written Representation with regards to site selection and cable routing are addressed by the Application documents referred to.
- 1.46 The ExA is also referred to the Statement of Common Ground (SoCG) submitted by the Applicant at Deadline 2 with BBC and ELDC (Appendices 19 and 20 (respectively) of the Applicant's response to Deadline 2) which indicate that those parties agreed that

the interface point chosen is the best location for the connection of TKOWF to the wider national grid.

8) Increase flood risk

- 1.47 The Written Representation comments on the risk of flooding on local fens.
- 1.48 Volume 5, Annex 7.3 *Flood Risk Assessment* (FRA) of the ES (document reference 6.2.5.7.3) has assessed the potential flood risks arising from the proposed development.
- 1.49 Table 7-10 of Volume 3, Chapter 7 *Hydrology and Flood Risk* of the ES (reference 6.2.3.7) provides detail of the mitigation measures that have been embedded into the project design in order to minimise potential hydrology and flood risk impacts.
- 1.50 Requirement 10 of the draft DCO (Document Reference 3.1) requires a surface water drainage scheme to be submitted and approved by the lead local flood authority, the drainage boards and the relevant planning authority. The FRA includes a surface water drainage strategy which outlines the principles which the final scheme shall be in accordance with. The surface water drainage scheme will minimise risk of flooding.
- 1.51 The detailed FRA was agreed with the Environment Agency and other review panel stakeholders during the Evidence Plan process, as captured in the EIA Evidence Plan (Document Reference 8.16).