

Triton Knoll Offshore Wind Farm Limited

TRITON KNOLL ELECTRICAL SYSTEM

Environmental Protection Information - Statement of Engagement

April 2015

Document Reference 5.2

Pursuant to: APFP Reg. 5(2)(f)

Triton Knoll Electrical System

Environmental Statement

Application Document 5.2 Environmental Protection Information - Statement of Engagement

April 2015

Drafted By:	Burgess Salmon LLP
Approved By:	Kim Gauld-Clarke
Date of Approval	April 2015
Revision	A

Triton Knoll Offshore Wind Farm Ltd
 Trigonos
 Windmill Hill Business Park
 Whitehill Way
 Swindon
 SN5 6PB

T +44 (0)845 720 090
 F +44 (0)845 720 050
 I www.rweinnogy.com

www.rweinnogy.com/tritonknoll
 tritonknoll@rwe.com

Triton Knoll Offshore Wind Farm Limited
Copyright © 2015 RWE Innogy UK Ltd
All pre-existing rights reserved.

Liability

In preparation of this document Triton Knoll Offshore Wind Farm Limited (TKOWFL), a joint venture between RWE Innogy UK (RWE) and Statkraft UK, subconsultants working on behalf of TKOWFL, have made reasonable efforts to ensure that the content is accurate, up to date and complete for the purpose for which it was prepared. Neither TKOWFL nor their subcontractors make any warranty as to the accuracy or completeness of material supplied. Other than any liability on TKOWFL or their subcontractors detailed in the contracts between the parties for this work neither TKOWFL or their subcontractors shall have any liability for any loss, damage, injury, claim, expense, cost or other consequence arising as a result of use or reliance upon any information contained in or omitted from this document.

Any persons intending to use this document should satisfy themselves as to its applicability for their intended purpose. Where appropriate, the user of this document has the obligation to employ safe working practices for any activities referred to and to adopt specific practices appropriate to local conditions.

Triton Knoll Offshore Wind Farm Limited have been awarded EU TEN-E funding to support the development of the Triton Knoll Offshore Wind Farm Electrical System located in both UK Territorial waters and the UK's Exclusive Economic Zone.

The funding which is to be matched will support a number of surveys, engineering reports, and environmental impact assessment studies for the Triton Knoll Electrical System. The studies will form part of the formal documentation that will accompany the Development Consent Order which will be submitted to the Planning Inspectorate. The sum of €1,159,559 has been granted and the process to reclaim this funding is ongoing.

Table of Contents

1	SUMMARY	2
2	INTRODUCTION	3
	Overview	3
	The Applicant	3
	Project Overview	3
	Purpose of this Statement	4
3	STATEMENT OF ENGAGEMENT	5
	Potential Effects	5
	Mitigation	7
4	CONCLUSION	7

1 SUMMARY

- 1.1 This Statement of Engagement is submitted on behalf of Triton Knoll Offshore Wind Farm Limited as part of its application for a Development Consent Order (DCO) for the Triton Knoll Electrical System under the Planning Act 2008. The Triton Knoll Electrical System would connect the consented Triton Knoll Offshore Wind Farm to the National Grid substation at Bicker Fen, Boston, and would comprise offshore and onshore export cable circuits, landfall infrastructure, an onshore electrical compound, an onshore substation and works at the Bicker Fen substation.
- 1.2 This statement addresses section 79(1) (statutory nuisances and inspections thereafter) of the Environmental Protection Act 1990.
- 1.3 The construction of the Triton Knoll Electrical System may potentially engage section 79(1). Therefore, the DCO that accompanies the application (Application Document 3.1) contains a provision at article 7 that would provide a defence to proceedings for statutory nuisance under section 82 of that Act.
- 1.4 The Environmental Statement (Application Document 6.2) has considered the potentially significant environmental effects of the Triton Knoll Electrical System, including the matters provided for in section 79(1) and set out in section 2 of this statement, and it addresses how the Applicant proposes to mitigate or limit those effects. The only impacts which it is considered could engage the provisions of section 79(1) relate to construction noise from works associated with trenchless cable installation techniques; Application Document 6.2.3.11 provides further details.
- 1.5 It is not expected that the operation or maintenance of the Triton Knoll Electrical System would engage any of those matters provided for in section 79(1).

2 INTRODUCTION

Overview

- 2.1 Triton Knoll Offshore Wind Farm Limited (TKOWFL) is submitting an application to the Planning Inspectorate (PINS), on behalf of the Secretary of State for Energy and Climate Change, for a Development Consent Order (DCO) for the Triton Knoll Electrical System (the proposed development) under the Planning Act 2008. The Triton Knoll Electrical System (TKES) would connect the consented Triton Knoll Offshore Wind Farm (TKOWF) to the National Grid substation at Bicker Fen, Boston, and would comprise offshore and onshore export cable circuits, landfall infrastructure, an onshore electrical compound, an onshore substation and works at the Bicker Fen substation.
- 2.2 The TKOWF is located approximately 33km (20.5 miles) east of the Lincolnshire coast. The Secretary of State granted a DCO for the TKOWF on 12th July 2013.
- 2.3 All terms, acronyms and abbreviations used within this statement are explained on first use, and / or set out in full within the Glossary appearing in the Environmental Statement – Application Document 6.2.1.

The Applicant

- 2.4 TKOWFL is a joint venture between two leading international energy companies; RWE Innogy and Statkraft. RWE Innogy UK Ltd is the UK subsidiary of the German renewable energy company RWE Innogy (part of RWE AG), a company with a strong and diversified position in renewable energy development. Statkraft is Europe's largest generator of renewable energy and is the leading power company in Norway.

Project Overview

- 2.5 The components of the TKES, which are needed to connect TKOWF to the National Grid, comprise:
- Up to six offshore export cable circuits – to transmit the high voltage alternating current (HVAC) electricity from the offshore substations to the transition joint bays at the landfall;
 - Landfall infrastructure just north of Anderby Creek, Lincolnshire – including transition joint bays which house the connection between the offshore cables and the onshore cables;

- Up to six onshore export cable circuits (up to 220 kV) – to transmit the HVAC electricity from the transition joint bays at the landfall to the proposed Triton Knoll Substation via the Intermediate Electrical Compound;
 - An Intermediate Electrical Compound near to Orby Marsh – to provide compensation for reactive power to allow more efficient transmission to minimise losses;
 - A substation near the existing Bicker Fen National Grid Substation – to step-up the voltage to the voltage used by the National Grid and provide additional compensation for reactive power built up over the export transmission;
 - Up to four onshore export cable circuits (400 kV) – to transmit the electricity from the proposed Triton Knoll Substation to the existing National Grid substation at Bicker Fen, Boston; and
 - Unlicensed Works within the existing National Grid substation compound comprising up to two bays each accommodating electrical equipment.
- 2.6 The Order Limits for the Triton Knoll Electrical System are shown on the Order Limits Plans - Application Document 2.1.
- 2.7 Any works at the National Grid substation near Bicker Fen required to connect the power produced by TKOWF will be consented, constructed and operated by National Grid (the 'Enabling Works'). National Grid has not yet completed the engineering studies necessary to define the Enabling Works required at their existing Bicker Fen substation. However, it is anticipated that these works will only involve modifications to the existing infrastructure within the existing site boundary.

Purpose of this Statement

- 2.8 This statement forms part of the application for a DCO for the TKES. Its purpose is to confirm whether the proposed development engages one or more of the matters set out in section 79(1) (statutory nuisances and inspections thereafter) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate any such matters, in accordance with Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations).

3 STATEMENT OF ENGAGEMENT

- 3.1 Regulation 5(2)(f) of the APFP Regulations requires an applicant for a DCO to state whether the proposal engages one or more of the matters set out in section 79(1) (statutory nuisance and inspections therefor) of the Environmental Protection Act 1990, and if so, how the applicant proposes to mitigate or limit any such matters.
- 3.2 Section 79(1) deals with the following matters:
- any premises in such a state as to be prejudicial to health or a nuisance;
 - smoke emitted from premises so as to be prejudicial to health or a nuisance;
 - fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
 - any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
 - any accumulation or deposit which is prejudicial to health or a nuisance;
 - any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
 - any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;
 - artificial light emitted from premises so as to be prejudicial to health or a nuisance;
 - noise emitted from premises so as to be prejudicial to health or a nuisance; and
 - noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street.
- 3.3 Save for the potential impact of construction noise from works associated with trenchless cable installation techniques TKOWFL does not consider that any of the matters in section 79(1) are engaged by the proposed TKES. This is supported by the conclusions of the Environmental Statement (Application Document 6.2).

Potential Effects

- 3.4 The Environmental Statement explains that the significance of effects from the construction of the TKES is generally not significant (negligible or minor) for onshore elements (Volume 3, Chapters 2-11). Significant effects have

- been identified for temporary disruption to marginal agricultural land holdings (moderate adverse; Volume 3, Chapter 5); temporary visual effects for two residential properties close to the IEC (moderate adverse); for cable route construction on a single landscape unit (moderate adverse) and for users of public access areas near to the landfall (moderate adverse); and for three viewpoints at the Substation (moderate adverse); Volume 3, Chapter 2, Tables 2-32, 2-33 and 2-35. Significant construction effects have also been identified for two aspects of construction related to noise along the cable corridor where trenchless techniques are undertaken at night time (moderate adverse) and also during the day time at properties between 50 and 70 m from the works (moderate adverse); Volume 3, Chapter 11, Table 11-21). No significant effects were identified for any offshore construction activities, all of which were found to be minor or negligible (Volume 2, Chapters 2-12).
- 3.5 The significance of effects from the operation of the TKES is considered to be not significant for all offshore and the majority of onshore elements, with effects being identified as minor adverse or less. Significant operational effects (temporary until the landscape planting has established) are concluded for visual receptors at the IEC (two residential properties; moderate adverse) and for three viewpoints at the Substation, also moderate adverse (Volume 3, Chapter 2, Tables 2-32 and 2-33 respectively)
- 3.6 The Environmental Statement explains that the significance of effects from the decommissioning of the TKES is not significant for all aspects, both onshore and offshore, effects found ranging from minor to negligible in all cases.
- 3.7 Notwithstanding the mitigation which has been embedded within the scheme for the TKES, or will otherwise require to be provided as part of the DCO, there are some potential effects identified within the ES that may occur and are of relevance to the matters in section 79(1) of the Act. These are summarised at Table 11-21 of Volume 3 of the ES (Application Document 6.2.3.11) and all relate to noise from works associated with trenchless cable installation techniques. The specific effects are:
- Daytime trenchless installation works at 50m to 70m from a residential property; the effects of which have been assessed to be adverse short term, temporary and moderate;
 - Night-time trenchless installation works, the effects of which have been assessed to be adverse short term, and major. With the further mitigation measure of temporary re-housing of residents expected to experience major night-time noise impacts that effect is reduced to an adverse short term, temporary, moderate effect; and

- Micro-bore / pipe jacking at rail and drain crossings, the effects of which have been assessed to be adverse short term, temporary and moderate.

Mitigation

- 3.8 The TKES has been designed to minimise the environmental effects of the scheme and includes a variety of measures to mitigate any potential impacts.
- 3.9 These measures are described in the Environmental Statement, and other project documentation, and are secured by the requirements contained in Schedule 1 Part 3 to the draft DCO (Application Document 3.1).
- 3.10 These requirements cover a number of relevant matters, including:
- The agreement of and adherence to a code of construction practice for each stage of the onshore works prior to their commencement (requirement 14). That code is to include a construction method statement which will address the exercise of trenchless techniques in general, and will specifically control noise emissions within the permitted working hours; and
 - the restriction of working hours for the construction of the proposed development (requirement 16).

4 CONCLUSION

- 4.1 This statement identifies the matters set out in section 79(1) (statutory nuisances and inspections thereafter) of the Environmental Protection Act 1990 and considers whether the proposed TKES would engage one or more of those matters.
- 4.2 This statement confirms that, save for works associated with trenchless cable installation techniques, none of the matters set out in section 79(1) are engaged.
- 4.3 In respect of works associated with trenchless cable installation techniques, the DCO that accompanies the Application (Application Document 3.1) contains a provision at Article 7 that would provide a defence to proceedings for statutory nuisance under section 82 of that Act where it can be shown that the conditions specified in Article 7 are satisfied.