

# Triton Knoll Offshore Wind Farm Limited Triton Knoll Electrical System

Outline Health and Safety Plan

April 2015

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Appendix Two to the Outline Code of Construction  
Practice

APFP Regulation 5(2)(q)

Triton Knoll Offshore Wind Farm  
Limited

## Triton Knoll Electrical System

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# 1 INTRODUCTION

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## Overview

- 1.1 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.
- 1.2 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.
- 1.3 All terms, acronyms and abbreviations used within this Plan are explained on first use, and / or set out in full within the Glossary appearing in the Environmental Statement (Application Document 6.2).

## The Applicant

- 1.4 TKOWFL is a joint venture between two leading international energy companies; RWE Innogy UK Limited and Statkraft UK Limited. RWE Innogy UK 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 UK Limited is the UK subsidiary of Statkraft Group, Europe's largest generator of renewable energy and the leading power company in Norway.

## Project Overview

- 1.5 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.
- 1.6 The Order Limits for the Triton Knoll Electrical System are shown on the Order Limits Plans (Application Document 2.1).
- 1.7 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 Outline HSP**

- 1.8 This Outline Health and Safety Plan (HSP) is provided as an Appendix to the Outline Code of Construction Practice (CoCP) which forms part of the application to PINS for a DCO for the TKES.
- 1.9 This Outline HSP is being provided in an indicative form to provide the Examining Authority and parties to the examination with an outline of the matters which will be addressed within the final HSP submitted as part of the

final CoCP for any part of the TKES in accordance with Requirement 14 of the draft DCO. This HSP sets out health and safety objectives which may be implemented by TKOWFL and its contractors during the construction of the TKES, and should be read in conjunction with the Outline CoCP and all of its supporting appendices.

- 1.10 Requirement 14 of the draft DCO requires the CoCP and its supporting appendices to be submitted for each stage of the works permitted by the Order. This Outline HSP will therefore be adapted and submitted separately for each stage of works as part of the CoCP for that stage. For certain stages of works it may be the case that a particular environmental plan is not required for that specific stage of works, and in those cases the undertaker will agree with the relevant planning authority which of the appendices to the CoCP are (not) required for such works. It may therefore be that this Outline HSP is not provided for a particular stage of works.

### **Scope of this Outline HSP**

- 1.11 This Outline HSP relates to the onshore elements of the TKES for the proposed TKOWF, landward of Mean Low Water (MLW). This document does not relate to offshore works seaward of MLW, or any works above MLW that are principally marine activities.

## 2 HEALTH AND SAFETY

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### Objectives

- 2.1 TKOWFL fully understands its duties under health and safety legislation including the Health and Safety at Work etc Act 1974, the Construction (Design and Management) Regulations 2015 (CDM 2015) and the Management of Health and Safety at Work Regulations 1999.
- 2.2 TKOWFL is committed to protecting employees, contractors and third parties (including visitors and the general public) from ill-health, injury or harm arising from construction of the onshore works and appropriate management controls will be developed to manage and control risk, provide safe systems of works and reduce the consequences of failures and harm to people.
- 2.3 TKOWFL is committed to:
- integrating Health and Safety (H&S) into how TKOWFL do business;
  - working systematically to understand and manage all risks related to TKOWFL's business activities;
  - taking responsibility for our own and others' safety and security, including stopping unsafe acts and conditions. This will be done by establishing a just, fair and open safety culture that rewards safe and responsible behaviour;
  - providing a safe and attractive place to work and a healthy working environment characterised by respect, trust and cooperation;
  - establishing H&S management systems incorporating work processes, goals and performance indicators in the overall management of business;
  - assessing TKOWFL's H&S performance by adopting continuous improvement processes based on surveys and risk assessments. Industry best practice, as a minimum, shall be used for benchmarking;
  - demonstrating the importance of H&S through hands-on leadership and behaviour;
  - ensuring that all employees are made aware of their respective duties and responsibilities for H&S management by effectively communicating TKOWFL's Policy to all employees, ensuring that they are made aware of their individual obligations;
  - providing TKOWFL employees with the necessary resources, equipment and training to deliver according to designated responsibilities, and

- ensuring that all Contractors have the systems in place to comply with TKOWFL's H&S Policy;
- cooperating with TKOWFL's contractors and suppliers based on mutual trust;
  - ensuring that TKOWFL's emergency preparedness, in the case of accidents, shall do the utmost to reduce injury and loss; and
  - ensuring necessary quality in TKOWFL's plants and maintenance to prevent accidents.
- 2.4 TKOWFL H&S policy will be implemented in line with corporate integrated Management Systems that incorporate the parent company's H&S Principles.
- 2.5 TKOWFL will make suitable arrangements for managing the H&S related aspects of the project. Project governance procedures for H&S will be developed, adjusted and implemented throughout the construction of the project in accordance with the construction phase plan [the].
- 2.6 CDM 2015 sets out duties and requirements on clients, principal contractors, contractors and designers in order to integrate H&S into the planning and management of projects. The focus being on planning and management throughout construction projects from design concept through to decommissioning.
- 2.7 TKOWFL shall comply with CDM 2015. The intention is to ensure that:
- safety is given the highest priority;
  - CDM principles/duties are adopted at an early stage and at the appropriate level;
  - legislative compliance is achieved; and
  - an auditable and robust approach is adopted for project design development and competence of designers.
- 2.8 TKOWFL will ensure that a principal designer and principal contractor according to CDM 2015 are appointed.