NORTH FALLS

Offshore Wind Farm

Outline Offshore Operations and Maintenance Plan

Document Reference:	7.20
Volume:	7
APFP Regulation:	5(2)(q)
Date:	July 2024
Revision:	0

NORTH FALLS
Offshore Wind Farm

Project	North Falls Offshore Wind Farm
Document Title	Outline Offshore Operations and Maintenance Plan
Document Reference	7.20
APFP Regulation	5(2)(q)
Supplier	Royal HaskoningDHV
Supplier Reference No	PB9244-RHD-ZZ-OF-RP-OF-0284

Revision	Date	Status/Reason for Issue	Originator	Checked	Approved
0	July 2024	Submission	RHDHV	NFOW	NFOW

Contents

Glossary of Acronyms/Abbreviations

CAA	Civil Aviation Authority
DCO	Development Consent Order
DML	Deemed Marine Licence
DoB	Depth of Burial
ES	Environmental Statement
Gen	Generation
HRA	Habitats Regulations Assessment
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IPMP	In-Principle Monitoring Plan
MBES	Multibeam-echo sounder
MMO	Marine Management Organisation
O&M	Operation and Maintenance
OCP	Offshore Converter Platform
Ofcom	Office of Communications
OOMP	Offshore Operations and Maintenance Plan
OSP	Offshore Substation Platform
OTNR	Offshore Transmission Network Review
PEMP	Project Environmental Management Plan
ROV	Remotely Operated Vehicle
SCADA	Supervisory Control and Data Acquisition
SNCB	Statutory Nature Conservation Body
SSS	Side Scan Sonar
Trans	Transmission
UK	United Kingdom
UPS	Uninterruptible Power Supply
UXO	Unexploded Ordnance
VHF	Very High Frequency
WTG	Wind Turbine Generator

Glossary of Terminology

400kV onshore cables	The cable circuits which take the electricity from the onshore substation on to the National Grid connection point. These comprise High Voltage Alternative Current (HVAC) cables, buried underground.
400kV onshore cable route	Onshore route within which the onshore substation to National Grid connection point onshore export cables and associated infrastructure would be located.
Array area	The offshore wind farm area, within which the wind turbine generators, array cables, platform interconnector cable, offshore substation platform(s) and/or offshore converter platform will be located.
Array cables	Cables which link the wind turbine generators with each other, the offshore substation platform(s) and/or the offshore converter platform.
Landfall	The location where the offshore export cables come ashore at Kirby Brook.
National Grid connection point	The grid connection location for the Project. National Grid are proposing to construct new electrical infrastructure (a new substation) to allow the Project to connect to the grid, and this new infrastructure will be located at the National Grid connection point.
Offshore cable corridor	The corridor of seabed from the array area to the landfall within which the offshore export cables will be located.
Offshore converter platform	Should an offshore connection to a third party High Voltage Direct Current (HVDC) cable be selected, an offshore converter platform would be required. This is a fixed structure located within the array area, containing HVAC and HVDC electrical equipment to aggregate the power from the wind turbine generators, increase the voltage to a more suitable level for export and convert the HVAC power generated by the wind turbine generators into HVDC power for export to shore via a third party HVDC interconnector cable.
Offshore export cables	The cables which bring electricity from the offshore substation platform(s) to the landfall, as well as auxiliary cables.
Offshore project area	The overall area of the array area and the offshore cable corridor.
Offshore substation platform(s)	Fixed structure(s) located within the array area, containing HVAC electrical equipment to aggregate the power from the wind turbine generators and increase the voltage to a more suitable level for export to shore via offshore export cables.
Onshore cable corridor(s)	Onshore corridor(s) considered at PEIR within which the onshore cable route, as assessed at ES, is located.
Onshore export cables	The cables which take the electricity from landfall to the onshore substation. These comprise High Voltage Alternative Current (HVAC) cables, buried underground.
Onshore project area	The boundary within which all onshore infrastructure required for the Project will be located (i.e. landfall; onshore cable route, accesses, construction compounds; onshore substation and cables to the National Grid substation).
Onshore substation	A compound containing electrical equipment required to transform and stabilise electricity generated by the Project so that it can be connected to the National Grid.
Platform interconnector cable	Cable connecting the offshore substation platforms (OSP) or the OSP and offshore converter platform (OCP)
The Applicant	North Falls Offshore Wind Farm Limited (NFOW).
The Project Or 'North Falls'	North Falls Offshore Wind Farm, including all onshore and offshore infrastructure.
Wind turbine generator	Power generating device that is driven by the kinetic energy of the wind.

1 Outline Offshore Operations and Maintenance Plan

1.1 Introduction

1. North Falls Offshore Wind Farm Limited (NFOW) ('the Applicant') has submitted a Development Consent Order (DCO) application for the North Falls Offshore Wind Farm (hereafter 'North Falls').
2. North Falls is a Nationally Significant Infrastructure Project, located in the southern North Sea, approximately 40km from the East Anglian coast, and is an extension to the west of the existing Greater Gabbard Offshore Wind Farm.
3. North Falls would make an important contribution towards the achievement of the United Kingdom's (UK) low carbon policies and net zero statutory targets through the generation of clean, low carbon, renewable electricity (see Chapter 2 Need for the Project, Volume I).

1.2 Purpose of this document

4. This outline Offshore Operations and Maintenance Plan (OOMP) has been drafted with specific reference to the interpretation of the definition of "maintain" within the Project's draft DCO (Document Reference: 6.1):

    - "maintain" includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace any component of any offshore work including any cable, and the onshore works described in Part 1 of Schedule 1 (authorised development), to the extent assessed in the environmental statement and any derivative of maintain must be construed accordingly;

5. The purpose of this document is to provide an outline of reasonably foreseeable offshore maintenance activities, the broad approach to be taken for each activity and to clarify whether additional licencing is likely to be required in order to undertake the activity (provided in Appendix A of this document).

    - The final OOMP would be prepared following post-consent detailed design as required under Conditions of the Deemed Marine Licences (DMLs) – included within the draft DCO (Document Reference: 6.1):*" "An offshore operation and maintenance plan substantially in accordance with the outline offshore operations and maintenance plan shall be submitted to the MMO for approval in consultation with the relevant SNCB at least six months prior to the commencement of the operation of the licensed activities. All operation and maintenance activities shall be carried out in accordance with the approved plan."*

6. The OOMP will include details of the:

    - Operation and Maintenance (O&M) requirements of the Project, including all activities, equipment, structures and associated infrastructure, in accordance with design and manufacturer recommendations;
    - Operational health, safety and environment management;
    - Accessibility and constraints;

- Logistical set up of the O&M base;
- O&M staff requirement, including numbers and skills;
- Spare parts and availability; and
- Planning of scheduled and unscheduled maintenance.

7. The Applicant has assessed the following reasonably foreseeable offshore operation and maintenance activities within the Environmental Statement (ES):

- Operation:
  - The operation and control of the wind farm would be managed remotely by a Supervisory Control and Data Acquisition (SCADA) system, connecting each wind turbine generator (WTG) to an onshore control room.
- Inspections:
  - Visits would be undertaken from vessels (e.g. service operations vessel, crew transfer vessel etc.) or helicopters.
- Scheduled Maintenance:
  - Each WTG will require regular servicing;
  - Scheduled maintenance would be undertaken from vessels (e.g. service operations vessel, crew transfer vessel etc.) or helicopters.
- Unscheduled Maintenance:
  - During the operational period it is anticipated that unscheduled maintenance activity may be required to deal with fault finding and repairs of the WTGs, cables (i.e., array cables, offshore export cables and platform interconnector cables) and associated offshore infrastructure.

8. The operational impacts are assessed in each relevant offshore technical chapter of the ES (discussed further in Appendix A).

1.3 Project Overview

9. The following three grid connection options are included in the Project design envelope.

- Option 1: Onshore electrical connection at a National Grid connection point within the Tendring peninsula of Essex, with a project alone onshore cable route and onshore substation infrastructure.
- Option 2: Onshore electrical connection at a National Grid connection point within the Tendring peninsula of Essex, sharing an onshore cable route and onshore duct installation (but with separate onshore export cables) and co-locating separate project onshore substation infrastructure with Five Estuaries; or
- Option 3: Offshore electrical connection, supplied by a third party.

10. Options 1 and 2 would be the same for the offshore project infrastructure and associated works. For option 3 there would be no project export cables. Within the array area, under options 1 and 2 there would be up to two offshore substation platforms (OSPs); whereas for option 3 there would be one offshore converter platform (OCP) and up to one OSP, i.e. under all scenarios there would be a maximum of two platforms (described further in ES Chapter 5 Project Description (Document Reference: 3.1.7)).

11. The North Falls project area comprises:

- The offshore project area:
  - The offshore wind farm area (hereafter the 'array area') - within which the WTGs, offshore substation platform(s), offshore converter platform (if required), platform interconnector cable and array cables will be located; and
  - Offshore cable corridor (for options 1 and 2 only) - the corridor of seabed from array area to the landfall within which the offshore export cables will be located.
- The onshore project area (not applicable to this document).

1.4 Discharging the Consent Condition

1.4.1 Activity List during the Operation and Maintenance phase

12. The list of activities to be undertaken during the O&M phase is provided as Appendix A. This O&M list is a live document which will be updated and agreed with the Marine Management Organisation (MMO) as required.

13. For each activity, a 'traffic light system' is used to provide clarity as to those activities that can be carried out under the existing DCO/DMLs.

- **Green** indicates that an additional Marine Licence is not required, however a subsequent approval from the MMO may be required and/or notification should be provided to the MMO on works being undertaken;
- **Amber** indicates that an additional Marine Licence may be required if proposed works exceed those assessed within the ES or described within the DCO; or
- **Red** indicates that an additional Marine Licence would likely be required. This would be dependent on the works to be undertaken (e.g. scale and methodology), subject to agreement with the MMO.

Appendix A. Operations and Maintenance List

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
WTGs and platforms (topsides and foundations)						
Annual WTGs maintenance	Gen[1]	Yes	Within scheduled and unscheduled maintenance activities assumed for the NFOW project, a worst case considers that up to 1,222 maintenance vessel trips per annum would be required. There are a number of potential maintenance strategies for the proposed NFOW project which will be determined by the final design of array area infrastructure and procurement of the maintenance contractors. The array areas infrastructure could be maintained from shore using a number of varying O&M vessels (e.g. crew	ES Chapter 5 Project Description (Document Reference: 3.1.7); ES Chapter 8 Marine Geology, Oceanography and Physical Processes (Document Reference: 3.1.10); ES Chapter 9 Marine water and sediment quality (Document Reference: 3.1.11); ES Chapter 10 Benthic and Intertidal Ecology (Document Reference: 3.1.12); ES Chapter 11 Fish and Shellfish Ecology (Document Reference: 3.1.13);	No	No
WTG troubleshooting	Gen	Yes			No	No
WTG repair	Gen	Yes			No	No
Blade inspection	Gen	Yes			No	No
Blade and hub repair	Gen	Yes			No	No
Blade replacement	Gen	Yes			No	No
Transition piece repair	Gen	Yes			No	No
Transition piece maintenance	Gen	Yes			No	No
Transformer replacement	Gen	Yes			No	No
Gearbox repair and replacement	Gen	Yes			No	No
Generator replacement	Gen	Yes			No	No

[1] Generation DML

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
Paint and repair	Gen & Trans[2]	Yes	transfer vessels, supply vessels), possibly supported by helicopters. Alternatively, the wind farm could be maintained from an accommodation vessel(s), with crew transfer vessels used to transfer personnel to or from WTGs and the accommodation vessel(s). Typical maintenance activities would include general servicing; oil sampling / change; UPS (uninterruptible power supply)-battery change; service and inspections of WTGs safety equipment, nacelle crane, service lift, high voltage (HV) system, blades. Although it is not anticipated that large components (e.g. WTGs blades or substation transformers) would frequently require replacement during the operational phase, the	ES Chapter 12 Marine Mammal (Document Reference: 3.1.14); ES Chapter 13 Offshore Ornithology (Document Reference: 3.1.15); ES Chapter 14 Commercial Fisheries (Document Reference: 3.1.16); ES Chapter 15 Shipping and Navigation (Document Reference: 3.1.17); ES Chapter 16 Offshore Archaeology and Cultural Heritage (Document Reference: 3.1.18); and ES Chapter 18 Infrastructure and Other Users (Document Reference: 3.1.20).	No	No
J-Tube and ladder cleaning	Gen & Trans	Yes			No	No

[2] Transmission DMLs

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			failure of these components is possible. Should this be required, large jack-up vessels may need to operate continuously for significant periods to carry out these major maintenance activities. A separate item regarding groundwork activities to facilitate jack-up vessel leg placement is provided below under 'Other' activities. An estimated 177 major component replacement activities may be required per year, using jack up vessels and/or anchoring, with an estimated footprint of 292,050m^2 per year.			
Removal of organic material	Gen & Trans	Yes	Marine growth / guano will accumulate on the offshore infrastructure, this must be regularly removed to protect the exterior parts of the WTG. This would involve scraping and/or jet washing marine growth and bird guano from the WTG structures. The jet washing would be done with seawater and therefore only natural	ES Chapter 5 Project Description (Document Reference: 3.1.7)	No	No

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			materials would enter the marine environment.			
Addition of antifouling devices	Gen & Trans	No	Anti-fouling devices such as passive bird scarers and bird spikes can be used on the offshore infrastructure to discourage birds and other animals from establishing themselves on or soiling the external surfaces. Such devices are required to ensure safe access and functionality of the infrastructure. It is important to note that the devices are not designed to actively or passively harm wildlife.	N/A	No	No
Platform general maintenance work, e.g. oil replacement, mechanical works, external surface preparation and protective coating repair / repainting.	Trans	Yes	Within the assumed maintenance activities per annum for scheduled and unscheduled maintenance as described above. Monitoring to inform maintenance is discussed in the Offshore In-Principle Monitoring Plan (IPMP) (Document Reference: 7.10), including monitoring the condition of surface infrastructure and	ES Chapter 5 Project Description (Document Reference: 3.1.7).	No	No
Platform major component replacement	Trans	Yes			No	No
Substation switchgear replacement	Trans	Yes			No	No

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
Inspections including geophysical surveys (MBES, magnetometer, SSS) to inspect subsea assets	Gen & Trans	Yes	geophysical surveys of subsea assets.		No	No
Sub-bottom profiling (i.e. chirp or pinger)	Gen & Trans	Yes			No	No
Foundation replacement	Gen & Trans	No	Replacement of a foundation is not expected, as a foundation failure is considered to be a highly unlikely event. Should such an occurrence take place then consent for the replacement of the failed foundation would be obtained from the MMO prior to commencement.	N/A	Yes	Yes
Replacement or addition to scour protection around foundations.[3]	Gen & Trans	Yes	Scour protection is included in the reasonable worst case scenario for 100% foundations requiring scour protection. The maximum area and volume of scour protection included in the ES and	ES Chapter 5 Project Description (Document Reference: 3.1.7); ES Chapter 8 Marine Geology, Oceanography and Physical Processes	Potentially	Yes

[3] The total scour protection installed over the life of the Project cannot exceed the values included the DCO.

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			DCO application for the life of the project is (based on gravity base foundations, excluding the foundation footprint): • WTG/OSPs/OCP scour protection area per foundation: 83,774m^2; • WTG scour protection total area: 4,775,118m^2; • WTG scour protection total volume: 9,313,113m^3; • OSPs/OCP scour protection total area: 167,548m^2; and • OSPs/OCP scour protection total volume: 326,776m^3.	(Document Reference: 3.1.10); ES Chapter 10 Benthic and Intertidal Ecology (Document Reference: 3.1.12); ES Chapter 11 Fish and Shellfish Ecology (Document Reference: 3.1.13); ES Chapter 12 Marine Mammal (Document Reference: 3.1.14); ES Chapter 13 Offshore Ornithology (Document Reference: 3.1.15); ES Chapter 14 Commercial Fisheries (Document Reference: 3.1.16); and ES Chapter 16 Offshore Archaeology and Cultural Heritage (Document Reference: 3.1.18).		

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
Cables (array, platform interconnector and offshore export)						
Additional cable laying for repairs	Gen & Trans	Yes	During the life of the project, cable repairs may be required, and periodic inspections, including through the use of geophysical surveys, will be undertaken. Periodic surveys would also be required to ensure the cables remain buried and if they do become exposed, re-burial works would be undertaken. An estimated four repairs of the export cables (applicable to options 1 and 2 only) and five repairs of the array cables over the Project life is included in the EIA. It is assumed 600m would be removed and replaced in the event of a repair operation. In most cases a failure would lead to the following operations: • Vessel anchor placement; • Exposing / unburying the cable;	ES Chapter 5 Project Description (Document Reference: 3.1.7); ES Chapter 8 Marine Geology, Oceanography and Physical Processes (Document Reference: 3.1.10); ES Chapter 9 Marine water and sediment quality (Document Reference: 3.1.11); ES Chapter 10 Benthic and Intertidal Ecology (Document Reference: 3.1.12); ES Chapter 11 Fish and Shellfish Ecology (Document Reference: 3.1.13); ES Chapter 12 Marine Mammal (Document Reference: 3.1.14); ES Chapter 13 Offshore Ornithology (Document Reference: 3.1.15);	Potentially	Yes
Cable re-burial	Gen & Trans	Yes			Potentially	Yes
Cable inspection including geophysical surveys (Multibeam-echo sounder	Gen & Trans	Yes			No	Yes

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
(MBES), magnetometer, side scan sonar (SSS)) and Depth of Burial (DoB) surveys to inspect subsea assets.			• Cutting the cable; • Lifting the cable ends to the repair vessel; • Jointing a new segment of cable to the old cable; • Lowering the cable (and joints) back to the seabed; and • Cable burial, where possible. Cables can become exposed due to moving sand waves but also sometimes due to erosion of other soft / mobile sediment (not just sand waves). During the life of the project, periodic geophysical surveys would be required to ensure the cables remain buried and if they do become exposed, re-burial works would be undertaken. The following estimated reburial over the life of the Project is included, although the aim would be to avoid requirement for reburial by using sand	ES Chapter 14 Commercial Fisheries (Document Reference: 3.1.16); ES Chapter 15 Shipping and Navigation (Document Reference: 3.1.17); ES Chapter 16 Offshore Archaeology and Cultural Heritage (Document Reference: 3.1.18); ES Chapter 18 Infrastructure and Other Users (Document Reference: 3.1.20).		
Sub-bottom profiling (i.e. chirp or pinger)	Gen & Trans	No			No	Yes
Geotechnical survey	Gen & Trans	No			Potentially	Yes

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			wave levelling / pre-sweeping during cable installation: • Reburial of c.2.75% of array cable length • Reburial of c.2.75% of platform interconnector cable • Reburial of c.4% of export cable			
Additional cable protection [4]	Gen & Trans	Yes	Cable protection is included in the reasonable worst case scenario for 20% of the array and platform interconnector cable length and 10% of the offshore export cable length. The maximum area and volume of cable protection included in the ES and DCO application for the life of the Project is:	ES Chapter 5 Project Description (Document Reference: 3.1.7); ES Chapter 8 Marine Geology, Oceanography and Physical Processes (Document Reference: 3.1.10); ES Chapter 10 Benthic and Intertidal	Potentially	Yes

[4] The total cable protection installed during construction and operation cannot exceed the values included in the DCO.

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			• Array cable protection area: 204,000m^2; • Array cable protection volume 119,000m^3; • Platform interconnector cable protection area: 24,000m^2; • Platform interconnector cable protection volume: 14,000m^3; • Offshore export cables protection area 75,240m^2; and • Offshore export cables protection volume 43,890m^3.	Ecology (Document Reference: 3.1.12); ES Chapter 11 Fish and Shellfish Ecology (Document Reference: 3.1.13); ES Chapter 12 Marine Mammal (Document Reference: 3.1.14); ES Chapter 13 Offshore Ornithology (Document Reference: 3.1.15); ES Chapter 14 Commercial Fisheries (Document Reference: 3.1.16); ES Chapter 15 Shipping and Navigation (Document Reference: 3.1.17); and ES Chapter 16 Offshore Archaeology and Cultural Heritage (Document Reference: 3.1.18).		
Other						
Crane inspection	Gen & Trans	Yes			No	No

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
Fuel replenishment to crew transfer vessel	Gen & Trans	Yes	Within the assumed maintenance activities per annum as described above.	ES Chapter 5 Project Description (Document Reference: 3.1.7).	No	No
Re-fuelling of generator on the offshore electrical platforms	Gen & Trans	Yes			No	No
Grout and corrosion works (including cathodic protection inspection, grouting core samples and re-grouting)	Gen & Trans	Yes			No	No
Retro-fitting of cathodic protection	Gen & Trans	No			No	No
Crane transfers from vessel to either WTG or to quayside O&M Building or vice-versa	Gen & Trans	Yes			No	No
UXO clearance via detonation	Gen & Trans	Yes	The estimated UXO clearance operations over the lifetime of the project is assessed: • Pre-construction ○ 25 in the offshore cable corridor ○ 15 in the array area • During operation ○ 1 per year anywhere in	ES Chapter 5 Project Description (Document Reference: 3.1.7); ES Chapter 8 Marine Geology, Oceanography and Physical Processes (Document Reference: 3.1.10); ES Chapter 9 Marine water and sediment	Yes	Yes

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			the offshore project area	quality (Document Reference: 3.1.11); ES Chapter 10 Benthic and Intertidal Ecology (Document Reference: 3.1.12); ES Chapter 11 Fish and Shellfish Ecology (Document Reference: 3.1.13); and ES Chapter 12 Marine Mammals (Document Reference: 3.1.14).		
Transport and transfer of individuals and load by air	Gen & Trans	Yes	100 helicopter round trips for routine and planned operation and maintenance during the O&M period.	ES Chapter 5 Project Description (Document Reference: 3.1.7); ES Chapter 13 Offshore Ornithology (Document Reference: 3.1.15); and ES Chapter 17 Aviation and Radar (Document Reference: 3.1.19).	No	No
Recovery of dropped objects	Gen & Trans	No	In accordance with the draft DCO (Document Reference: 6.1), dropped objects will be reported to the MMO using the	N/A	No Dropped objects will be reported to the MMO using the	No

Potential offshore maintenance activity	Relevant DML	Included in the ES?	Realistic worst case assessed in the ES	Location in the application document (where applicable)	Additional Licence likely to be required	Consultation required with the MMO and relevant SNCB
			Dropped Object Procedure Form. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out if reasonable to do so and the MMO may require obstructions to be removed from the seabed if reasonable to do so.		Dropped Object Procedure Form.	
Rope access	Gen & Trans	No	Rope access work could be required to provide access for both routine and extra ordinary operations.	N/A	No	No
Use of drones for offshore inspection	Gen & Trans	No	The use of drones for inspections of blades, transition pieces and the splash zone.	N/A	Drone operation will require permission under the jurisdiction of the Civil Aviation Authority (CAA).	

NORTH FALLS

Offshore Wind Farm

HARNESSING THE POWER OF NORTH SEA WIND

North Falls Offshore Wind Farm Limited

A joint venture company owned equally by SSE Renewables and RWE.

To contact please email contact@northfallsoffshore.com

North Falls Offshore Wind Farm Limited Registered Address: Windmill Hill Business Park, Whitehill Way, Swindon, Wiltshire, SN5 6PB, United Kingdom

Registered in England and Wales Company Number: 12435947